

# **Strategy Implementation in Icelandic Fisheries**

Obstacles, key success factors and competitive advantages

**Kristján Reykjalín Vigfússon**

Thesis for the degree of PhD  
in business administration

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# Innleiðing Stefnu í Íslenskum Sjávarútvegi

Hindranir, velgengnisþættir og samkeppnisforskot

Kristján Reykjalín Vigfússon

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# Ágrip

Innleiðing stefnu er mjög mikilvæg fyrir fyrirtæki og stofnanir þar sem markmiðið er að nýta auðlindir á hagkvæman hátt og skila rekstrarlegum árangri. Sjávarútvegur er umfangsmikil atvinnugrein á heimsvísu sem skapar fjölda starfa en yfir hálfur milljarður fólks hefur lífsviðurværi sitt af atvinnugreininni með einum eða öðrum hætti. Afurðir frá sjávarútvegi sjá fólki fyrir næringu og er atvinnuvegurinn því mikilvægur hlekkur í að draga úr fátækt og að tryggja fæðuöryggi í heiminum. Doktorsritgerð þessi samanstendur af fjórum birtum fræðigreinum en í þeim eru velgengnisþættir og hindranir við innleiðingu stefnu sem og þróun samkeppnisforsks hjá stærstu fyrirtækjum í íslenskum sjávarútvegi rannsakaðir. Ritgerðin er sett í víðara samhengi stefnumótunar og veitir innsýn í sérstakar aðstæður atvinnugreinar sem og fræðileg grundvallaratriði við innleiðingu stefnu. Fyrsta grein ritgerðarinnar er kerfisbundin fræðileg samantekt (e. systematic literature review). Í henni eru eingöngu greindar fyrirliggjandi empírískar rannsóknir (e. empirical studies) um innleiðingu stefnu. Greinar tvö, þrjú og fjögur í ritgerðinni eru tilviksrannsóknir með áherslu á sjávarútveg (e. industry focused case study). Í þeim greinum er byggt á frumgögnum (e. primary data) og fyrirliggjandi gögnum (e. secondary data).

Í fyrstu greininni er inntak 35 ritrýndra greina frá árunum 1980 til 2020 skoðað, en þær fjalla um innleiðingu stefnu og helstu velgengnisþætti og hindranir þar að lútandi. Markmiðið er að undirstrika velgengnisþætti við innleiðingu stefnu sem og helstu hindranir sem koma í veg fyrir eða draga úr líkum á að stefnu sé hrint í framkvæmd. Jafnframt er sérstök áhersla á að greina eyður í fyrirliggjandi fræðilegri umræðu. Niðurstöðurnar benda til þess að fyrri rannsóknir hafi greint 16 hindanir og 18 velgengnisþætti sem hafa áhrif á innleiðingu stefnu. Ennfremur dregur þessi grein fram í dagsljósið ákveðna þætti sem hafa tvíþætt eðli, þ.e. taka bæði til hindrana og velgengnisþátta.

Önnur greinin fjallar um þær hindranir sem íslensk sjávarútvegsfyrirtæki standa frammi fyrir við innleiðingu stefnu. Meginmarkmið greinarinnar er að bera kennsl á mikilvægar innri og ytri hindranir sem fyrirtækin þurfa að takast á við í innleiðingu stefnu séð frá sjónarhóli forstjóra. Byggt á úrvalsviðtölum (e. elite interviews) við forstjóra í stærstu sjávarútvegsfyrirtækjum á Íslandi komu í ljós áður óþekktar innri hindranir, þ.e. tungumálhindranir og hversu flókið það getur verið að stjórna fólki í fjölmenningarlegu vinnuumhverfi. Auk þess eru í rannsókninni greindar ytri hindranir sem ekki er að finna í fyrri rannsóknum, þar á meðal skortur á skýrri sýn stjórnvalda fyrir atvinnugreinina, árekstra við eftirlitsstofnanir, tíðar breytingar á regluverki, mikla og viðvarandi pólitíska óvissu, tímafreka hagsmunagæslu og ósanngjarna stjórn mála- og

fjölmíðlaumræðu. Þessar niðurstöður hafa fræðilega þýðingu og dýpka þekkingu á innleiðingu stefnu með því að greina og flokka innri og ytri hindranir sem draga úr líkum á farsælli innleiðingu. Auk þess stuðla niðurstöðurnar að dýpri skilningi á áskorunum í íslenskum sjávarútvegi og veita jafnframt mikilvæga innsýn fyrir stefnumótendur og forstjóra fyrirtækjanna.

Þriðja greinin fjallar um velgengnisþætti sem eru mikilvægir fyrir skilvirka innleiðingu stefnu innan íslenskra sjávarútvegsfyrirtækja. Meginmarkmið greinarinnar er að flokka og bera kennsl á helstu velgengnisþætti sem hafa áhrif á innleiðingu stefnu, auk þess að meta áherslu og mikilvægi heimsmarkmiða Sameinuðu þjóðanna um sjálfbæra þróun hjá fyrirtækjunum. Greinin byggir á viðtölum við forstjóra stærstu sjávarútvegsfyrirtækja landsins, en niðurstöður leiddu í ljós að innleiðingu stefnu mætti bæta með því að nýta fjóra mikilvæga velgengnisþætti. Í fyrsta lagi mikilvægi þess að virkja starfsfólk í innleiðingarferlinu, í öðru lagi að efla nýsköpun sem og samskipti milli starfsfólks og stjórnenda, í þriðja lagi að samræma stefnu fyrirtækja við heimsmarkmið Sameinuðu þjóðanna og í fjórða lagi með því að innleiða aðgerðaráætlanir með skýrum, mælanlegum og forgangsöröðuðum markmiðum og tímaáætlunum. Niðurstöðurnar hafa fræðilegt gildi þar sem rannsóknin greinir velgengnisþætti við innleiðingu stefnu en þær eru teknar saman í hugtakaramma (e. conceptual framework) sem tengist viðfangsefni greinarinnar. Auk þess veitir hugtakaramminn stjórnendum hagnýta innsýn við innleiðingu stefnu og gefur þeim tækifæri til að samþætta markmið og bæta árangur í rekstri greinarinnar.

Fjórða grein ritgerðarinnar fjallar um þætti sem stuðla að samkeppnisforski í íslenskum sjávarútvegsfyrirtækjum. Tilgangurinn er að greina samkeppnisforski í einni mikilvægustu atvinnugrein þjóðarinnar og kanna hvort og þá hvernig samkeppnisforskið er að þróast innan ramma auðlindamiðaðrar (e. resource-based view) og markaðsmiðaðrar nálgunar (e. market-based view). Þessi rannsókn byggir á viðtölum við forstjóra stærstu sjávarútvegsfyrirtækjanna. Niðurstöðurnar gefa til kynna tilfærslu frá auðlindamiðuðum áherslum yfir í markaðsmiðaðri áherslur sem gæti styrkt framtíðar samkeppnisforski í greininni. Þessar breytingar gerast hins vegar í smáum skrefum m.a. vegna skorts á sérfræðiþekkingu innan fyrirtækjanna, reynslu sem nauðsynleg er til að ná árangri á neytendamarkaði, ófullnægjandi fjárfestingar í markaðshluta greinarinnar og takmarkaðra vaxtarmöguleika innan núverandi fiskveiðistjórnunarkerfis. Greining á inntaki viðtalanna bendir til þess að framtíðar samkeppnisforski fyrir sjávarútveginn byggji á samþættum styrkleikum frá hvoru tveggja auðlindamiðaðri og markaðsmiðaðri nálgun. Rannsóknin veitir einnig hagnýta innsýn fyrir forstjóra og hagsmunaaðila í íslenskum og alþjóðlegum sjávarútvegi.

Mikilvægt heildarframlag ritgerðarinnar er að kynna og leggja til líkan sem lýsir fimm þrepa nálgun við innleiðingu stefnu. Líkanið er í takt við viðurkenndar meginreglur við innleiðingu stefnu innan stjórnunarfræðanna. Með rökréttum hætti skapar líkanið hagstæðar aðstæður fyrir undirbúning stefnu (1. áfangi) yfir í að skilgreina og móta

stefnu (2. áfangi), undirbúa framkvæmd (3. áfangi), innleiða stefnu (4. áfangi) og viðhalda ábyrgð með eftirliti (5. áfangi). Að auki felst framlag ritgerðarinnar í greiningu á þeim þáttum sem ættu að einkenna sjávarútvegsfyrirtæki framtíðarinnar og leggur til hugtakaramma þar sem innri auðlindir, svo sem stjórnunarþekking, aðgangur að fiskistofnum og aukin áhersla á sjálfbærni er nýtt samhliða markaðsmiðaðri nálgun með vöxt greinarinnar að markmiði.

Heildarritgerðin býður ennfremur upp á einstakt en jafnframt heildstætt sjónarhorn á innleiðingu stefnu í sjávarútvegi. Sérstök áhersla er lögð á þá mikilvægu hvata sem stuðla að innleiðingu sem og hindranir sem greinin stendur frammi fyrir. Auk þess er þróun samkeppnisforskots greinarinnar metin byggt á sjónarhorni auðlindamiðaðra kenninga og markaðsmiðaðrar nálgunar. Þessi nálgun býður upp á innsýn fyrir aðrar atvinnugreinar sem reiða sig á náttúruauðlindir og undirstrikar samspil innri auðlinda og ytri markaðsafla við mótun samkeppnisforskots.

Fræðilegt framlag ritgerðarinnar birtist í því að hún styrkir og þróar hugtakaramma um innleiðingu stefnu með sérstakri áherslu á skipulags- og stofnanakenningar. Ennfremur felst fræðilegt framlag í notkun auðlindamiðaðra kenninga (e. resource-based theory) og markaðsmiðaðrar nálgunar (e. market-based view) við að meta þróun samkeppnisforskots greinarinnar. Samþætting þessara fjögurra greina býður ennfremur upp á hagnýtt framlag til skilnings á innleiðingu stefnu og samkeppnisforskoti, sérstaklega innan auðlindaháðra atvinnugreina. Ritgerðin leggur til hugtakaramma og líkan sem brúa bilið milli fræðilegs skilnings og hagnýtrar útfærslu og býður upp á hagnýta innsýn fyrir stjórnendur og aðra stefnumótendur.

**Lykilorð:** Stefna, innleiðing, velgengnisþættir, hindranir, sjávarútvegur, forstjórar, samkeppnisforskot

# **Abstract**

Strategy implementation is crucial for companies and organizations to utilize resources effectively and facilitate business results. The fishery industry is a major global sector that creates millions of jobs; globally, more than half a billion people earn their livelihoods from fishing. Fisheries also provide essential nutrition for people and serve as an important link in alleviating poverty and ensuring global food security. This doctoral thesis comprises four published academic articles examining strategy implementation in the Icelandic fishing industry, focusing on key success factors, obstacles, and competitive advantages. The thesis is situated within the broader landscape of strategic management, offering valuable insights into industry-specific conditions and strategic principles. The first article of this thesis is a systematic literature review. It exclusively analyzes empirical studies on strategy implementation. Articles two, three, and four are industry-focused case studies on the fisheries sector. These articles are drawn on both primary and secondary data.

The first article of the thesis presents a comprehensive review of existing research on strategy implementation, synthesizing findings to generate new insights. The paper reviews 35 peer-reviewed articles published between 1980 and 2020. The aim is to highlight the main success factors and obstacles hindering strategy implementation while paying particular attention to existing literature gaps. The results indicate that previous research identified 16 obstacles and 18 success factors influencing strategy implementation. Furthermore, this brings forth certain dualistic factors showing that some obstacles can simultaneously be viewed as success factors and vice versa.

The second article focuses on the challenges Icelandic fisheries face in implementing their strategy. The study aims to identify and understand the critical internal and external obstacles companies encounter during the strategy implementation process, as perceived by their Chief Executive Officers (CEOs). Through elite interviews with the CEOs of some of the largest fisheries companies in Iceland, the research uncovers several noteworthy findings. It reveals two previously identified internal obstacles, language barriers, and the complexities of managing a multicultural workforce. Additionally, the study identifies external obstacles not commonly documented in earlier research, including the absence of a clear governmental vision for the industry, confrontations with regulatory bodies, persistent changes in industry regulations, high levels of political uncertainty, time-consuming lobbying efforts, and often, unsupportive political and media discourse. These results have theoretical significance and deepen knowledge of strategy implementation by identifying and classifying internal and external obstacles that reduce the likelihood of successful implementation. These

findings contribute to a better understanding of the fisheries challenges and provide valuable insights for policymakers and CEOs in the industry.

The third article focuses on the key success factors necessary for efficient strategy implementation within the Icelandic fisheries industry. The article aims to classify and identify the main success factors that influence strategy implementation, with the secondary goal of evaluating the focus and importance of the United Nations' Sustainable Development Goals (SDGs) for the Icelandic fisheries industry. The article is based on interviews with the CEOs of some of the largest fisheries in Iceland. The results indicated four important areas where strategy implementation can be improved: including all employees in the implementation process; promoting innovation and communication between employees and managers; aligning company policies with the United Nations' SDGs; and implementing action plans with clear, measurable, and prioritized goals and timelines. The findings have a theoretical contribution as the study identifies success factors of strategy implementation, enriching existing literature through a conceptual framework. In addition to the study's theoretical contributions, the framework provides fisheries industry practitioners with actionable insights to enhance policy implementation, improving strategic alignment and organizational performance.

The fourth article investigates factors contributing to competitive advantage in Icelandic fisheries. This study is based on interviews with CEOs of some of the largest fisheries in Iceland. The findings suggest a transition from a resource-based view to a market-based view that strengthens the companies competitive advantage in the industry. These changes, however, occur gradually due to obstacles such as a lack of expertise and experience necessary to navigate the consumer market, insufficient investment within the market, and restricted growth possibilities within the Individual Transferable Quota management system. The identified future competitive advantage integrates strengths from the resource-based view with a market perspective for the industry. The theoretical contribution of the study proposes a conceptual framework showing the prospective competitive advantage of the industry. This study offers actionable insights and recommendations for CEOs and stakeholders in Icelandic and international fisheries, highlighting a shift from a resource-based view to a market-based view while underscoring the importance of internal resource integration for sustaining competitiveness.

An important overall contribution to the thesis is to introduce and propose a framework that outlines a five-phase approach to strategy implementation. The framework logic aligns with widely accepted principles of strategic management. It sequentially moves from creating enabling conditions (Phase 1) to defining strategy (Phase 2), preparing for execution (Phase 3), implementing strategy (Phase 4), and sustaining accountability through monitoring (Phase 5). In addition, the findings of this thesis identify the characteristics of a future fisheries company and propose a framework that leverages

internal strengths, such as management expertise, access to fishing stocks, and sustainability emphasis, alongside market-based approaches to industry growth.

While aiming to provide a comprehensive perspective on strategy implementation in the fisheries industry, special emphasis is placed on industry obstacles and on the important incentives that facilitate implementation. Additionally, the development of the industry's competitive advantage is evaluated from both resource-based *theory and* market-based perspectives. This thesis offers valuable insights for industries reliant on natural resources, highlighting the dynamic interplay between internal resources and external market forces in shaping competitiveness.

The theoretical contribution of the thesis lies in strengthening and further developing the conceptual framework of strategy implementation, with particular emphasis on organizational and institutional theories. Additionally, it advances theoretical understanding by employing the lens of resource-based theory and the market-based perspective to evaluate competitive advantage within the industry. The integration of these four articles offers practical contributions to our understanding of strategy implementation and competitive advantages, particularly within resource-dependent industries. The thesis proposes frameworks and models bridging the theoretical knowledge gap and practical implementation, offering actionable insights for industry leaders and policymakers.

**Keywords:** Strategy, implementation, key success factors, obstacles, fishery, CEOs, competitive advantage

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# Contents

|                                                                                                           |             |
|-----------------------------------------------------------------------------------------------------------|-------------|
| <b>Ágrip</b> .....                                                                                        | <b>iii</b>  |
| <b>Abstract</b> .....                                                                                     | <b>vi</b>   |
| <b>Acknowledgments</b> .....                                                                              | <b>ix</b>   |
| <b>Contents</b> .....                                                                                     | <b>ix</b>   |
| <b>List of Abbreviations</b> .....                                                                        | <b>xii</b>  |
| <b>List of Figures</b> .....                                                                              | <b>xiii</b> |
| <b>List of Tables</b> .....                                                                               | <b>xiv</b>  |
| <b>List of Original Papers</b> .....                                                                      | <b>xv</b>   |
| <b>Declaration of Contribution</b> .....                                                                  | <b>xvi</b>  |
| <b>1 Introduction</b> .....                                                                               | <b>1</b>    |
| 1.1 Why is it important to research strategy implementation and competitive advantage in fisheries? ..... | 1           |
| 1.2 Icelandic Fisheries .....                                                                             | 3           |
| 1.3 Research Focus and Structure .....                                                                    | 4           |
| <b>2 Research Paradigm and Theories of the Thesis</b> .....                                               | <b>9</b>    |
| 2.1 Research Paradigm .....                                                                               | 9           |
| 2.2 Resource-Based Theory and Market-Based Perspective .....                                              | 15          |
| 2.3 Industry studies .....                                                                                | 19          |
| 2.4 Summary of Theories and Perspectives .....                                                            | 23          |
| <b>3 Strategic Management</b> .....                                                                       | <b>25</b>   |
| 3.1 Strategic Process .....                                                                               | 25          |
| 3.2 Strategy Implementation .....                                                                         | 28          |
| 3.3 Strategy Implementation Obstacles .....                                                               | 31          |
| 3.4 Key Success Factors of Strategy Implementation .....                                                  | 34          |
| 3.5 Strategy Implementation Models and Frameworks .....                                                   | 36          |
| <b>4 Methodology</b> .....                                                                                | <b>39</b>   |
| 4.1 Research Approach .....                                                                               | 39          |
| 4.2 Articles – Common Methodological Approaches .....                                                     | 41          |
| 4.3 Case Study Method .....                                                                               | 41          |
| 4.4 Case Selection .....                                                                                  | 42          |
| 4.5 Data Collection .....                                                                                 | 43          |
| 4.6 Interviews .....                                                                                      | 44          |
| 4.7 Systematic Literature Review (SLR) .....                                                              | 47          |

|          |                                                             |            |
|----------|-------------------------------------------------------------|------------|
| 4.8      | Data Analysis .....                                         | 48         |
| 4.9      | Research Quality .....                                      | 51         |
| <b>5</b> | <b>Summary and Main Findings.....</b>                       | <b>53</b>  |
| 5.1      | Paper I.....                                                | 53         |
| 5.2      | Paper II .....                                              | 55         |
| 5.3      | Paper III .....                                             | 58         |
| 5.4      | Paper IV.....                                               | 60         |
| <b>6</b> | <b>Discussion .....</b>                                     | <b>65</b>  |
| 6.1      | Dualistic Strategy Implementation Factors .....             | 65         |
| 6.2      | Framework of Strategy Implementation .....                  | 66         |
| 6.3      | Characteristics of the Fisheries Company of the Future..... | 72         |
| <b>7</b> | <b>Academic and Practical Contributions .....</b>           | <b>81</b>  |
| 7.1      | Academic Contributions.....                                 | 81         |
| 7.2      | Practical Contributions .....                               | 82         |
| 7.3      | Limitations and Further Research .....                      | 82         |
| 7.4      | General Conclusion.....                                     | 86         |
|          | <b>References.....</b>                                      | <b>87</b>  |
|          | <b>Article 1.....</b>                                       | <b>115</b> |
|          | <b>Article 2 .....</b>                                      | <b>137</b> |
|          | <b>Article 3 .....</b>                                      | <b>151</b> |
|          | <b>Article 4 .....</b>                                      | <b>179</b> |

## **List of Abbreviations**

|      |                                          |
|------|------------------------------------------|
| BSC  | Balanced Scorecard                       |
| CA   | Competitive Advantage                    |
| CEO  | Chief Executive Officer                  |
| EBFM | Ecosystem-Based Fishery Management       |
| EU   | European Union                           |
| FAO  | Food and Agriculture Organization        |
| IBV  | Institutional-Based View                 |
| ITQ  | Individual Transferable Quota            |
| KPIs | Key Performance Indicators               |
| KSFs | Key Success Factors                      |
| MBV  | Market-Based View                        |
| RBV  | Resource-Based View                      |
| RBT  | Resource-Based Theory                    |
| SDGs | Sustainable Development Goals            |
| SI   | Strategy Implementation                  |
| SPMS | Strategic performance management systems |
| SLR  | Systematic Literature Review             |
| TAC  | Total Allowable Catch                    |
| UN   | United Nations                           |

## List of Figures

|                                                                                                                      |    |
|----------------------------------------------------------------------------------------------------------------------|----|
| <b>Figure 1.</b> Model of the strategic management process.....                                                      | 26 |
| <b>Figure 2.</b> Theoretical approach .....                                                                          | 40 |
| <b>Figure 3.</b> Design of interview framework .....                                                                 | 42 |
| <b>Figure 4.</b> Text analysis sample from qualitative data analysis .....                                           | 49 |
| <b>Figure 5.</b> Strategy implementation obstacles and success factors.....                                          | 54 |
| <b>Figure 6.</b> Internal and external strategy implementation obstacles .....                                       | 56 |
| <b>Figure 7.</b> Framework for integrated strategy implementation in the fisheries<br>industry.....                  | 60 |
| <b>Figure 8.</b> Integrating Resource-Based and Market-Based Strategies in the<br>Icelandic Fisheries Industry ..... | 62 |
| <b>Figure 9.</b> Framework for integrated strategy implementation.....                                               | 71 |
| <b>Figure 10.</b> Characteristics of the fisheries company of the future .....                                       | 77 |

## List of Tables

|                                                                                                |    |
|------------------------------------------------------------------------------------------------|----|
| <b>Table 1.</b> Overview of academic papers .....                                              | 6  |
| <b>Table 2.</b> Fisheries studies on SI, RBV, and MBV as competitive advantage<br>source ..... | 21 |
| <b>Table 3.</b> Definitions of strategy implementation .....                                   | 30 |
| <b>Table 4.</b> Selection criteria .....                                                       | 43 |
| <b>Table 5.</b> Summary of data collection .....                                               | 44 |
| <b>Table 6.</b> Interview profile .....                                                        | 46 |
| <b>Table 7.</b> Process for analyzing strategy implementation literature .....                 | 50 |
| <b>Table 8.</b> KPIs for integrated CA .....                                                   | 63 |
| <b>Table 9.</b> Key success factors from articles synthesized in the 5Ps Model .....           | 69 |
| <b>Table 10.</b> Balanced Scorecard for the fisheries company of the future .....              | 77 |

## List of Original Papers

This thesis is based on the following original publications, which are referred to in the text as follows:

### Article #1:

Vigfússon, K. R., Jóhannsdóttir, L., Ólafsson, S. (2021). Obstacles to strategy implementation and success factors: A review of empirical literature. *Strategic Management*, 26(2), pages 12-30, doi.10.5937/StraMan2102012V.

### Article #2:

Vigfússon, K. R., Jóhannsdóttir, L., Ólafsson, S. (2023). Strategy implementation obstacles: Iceland fishery CEO perspectives. *Marine Policy*, 147, 105353, doi.org/10.1016/j.marpol.2022.105353.

### Article #3:

Vigfússon, K. R., Jóhannsdóttir, L., Ólafsson, S., Köseoglu, M. A. (2024). Key Success Factors for Implementing Strategy in the Icelandic Fisheries Industry. *Journal of Strategy and Management*, 18(1), pages 32-56, doi.org/10.1108/JSMA-04-2023-0069.

### Article #4:

Vigfússon, K. R., Jóhannsdóttir, L., Ólafsson, S., Köseoglu, M.A. (2025). Integrating resource-based and market-based views in the Icelandic fisheries Industry – CEO perspectives. *Marine Policy*, 171, 106454, doi.org/10.1016/j.marpol.2024.106454.

## **Declaration of Contribution**

Paper I. Obstacles to strategy implementation and success factors: A review of empirical literature. Kristján Vigfússon: Conceptualization, data curation, investigation, formal analysis, method, writing - original draft, review, and editing. Lára Jóhannsdóttir: Conceptualization, project administration, method, validation, review, and editing. Snjólfur Ólafsson: Conceptualization, validation, and review.

Paper II. Strategy implementation obstacles: Iceland fishery CEO perspectives. Kristján Vigfússon: Conceptualization, data curation, investigation, formal analysis, method, writing - original draft, review, and editing. Lára Jóhannsdóttir: Conceptualization, project administration, method, validation, review, and editing. Snjólfur Ólafsson: Conceptualization, validation, and review.

Paper III. Key Success Factors for Implementing Strategy in the Icelandic Fisheries Industry. Kristján Vigfússon: Conceptualization, data curation, investigation, formal analysis, method, writing - original draft, review, and editing. Lára Jóhannsdóttir: Conceptualization, project administration, method, validation, review, and editing. Snjólfur Ólafsson: Conceptualization, validation, and review. Mehmet Köseoglu: Review.

Paper IV. Integrating resource-based and market-based views in the Icelandic fisheries Industry – CEO perspectives. Kristján Vigfússon: Conceptualization, data curation, investigation, formal analysis, method, writing - original draft, review, and editing. Lára Jóhannsdóttir: Conceptualization, project administration, method, validation, review, and editing. Snjólfur Ólafsson: Conceptualization, validation, and review. Mehmet Köseoglu: Review.

# 1 Introduction

The presented doctoral thesis examines the historical and empirical context and profound influence of strategy implementation (SI) while placing specific emphasis on obstacles and key success factors (KSFs) on the path to successful implementation in the fisheries industry. Additionally, the thesis considers how competitive advantage (CA) in the industry is evolving from a Resource-Based View (RBV) to a Market-Based View (MBV).

## 1.1 Why is it important to research strategy implementation and competitive advantage in fisheries?

The importance of strategy in the world's fisheries is underscored by several key factors contributing to sustainable development and the overall health of marine ecosystems. Effective fisheries strategies are essential for ensuring the sustainable use of fish stocks (FAO, 2022). Fisheries contribute to nutritional needs, improve food security, decrease poverty, and offer important livelihoods to families (Martuscelli, 2022). By implementing sound harvest strategies, fisheries management can help maintain fish populations' health, prevent overfishing, and allow for recovery when stocks are depleted (Fisheries Sustainability, n.d.). According to the Food and Agriculture Organization (FAO), this is crucial for the long-term viability of the fisheries and the communities that depend on them for their livelihoods (FAO, 2020).

Fisheries and aquaculture are important global industries, producing a record 214 million tons of food in 2020, with an estimated 58.5 million people directly employed and around 600 million livelihoods partially dependent on the industry (FAO, 2022). The amount of fish and ocean products destined for human consumption has increased from 9.9 kg per capita in the 1960s to 20.2 kg per capita in 2020; further growth is expected to reach 21.4 kg per capita by 2030. The growth in the industry comes mainly from aquaculture, creating about half of the total industry revenue in 2020 (FAO, 2022).

Despite the increase in consumption of fish and ocean products, resource availability continues to decline due to over-exploitation of fish resources. In 2020, approximately 35% of the global fishery stock was biologically unsustainable (FAO, 2022). In this context, it is worth mentioning the United Nations (UN) Sustainable Development Goals (SDGs), founded in 2015, which highlight the enormous challenges of ending poverty, improving food and nutrition security, and protecting natural resources, biodiversity, and ecosystems (United Nations, 2016). An essential part of reaching the UN's SDGs is reflected in SDG 14, "Life Below Water," which aims to conserve and sustain the use of

the ocean, seas, and marine resources (United Nations, 2016), and as such, is highly relevant to the fisheries industry. These include increased ocean acidification, impacting species like oysters, corals, some fish species, and seaweed (NOAA Fisheries, 2023). Ocean pollution and waste released to air and land by human activity are, furthermore, the most significant cause of disease on a global scale and are responsible for nine million premature deaths every year (Landrigan et al., 2020). In addition, marine transportation still uses mainly fossil fuels (Bocken & Short, 2021).

Developing practical fisheries strategies often necessitates collaborating with diverse stakeholders, including scientists, managers, and local communities, to achieve sustainable and inclusive outcomes (Kokorsch et al., 2015). Such a collaborative approach enhances decision-making by incorporating a wide array of perspectives, ensuring that the interests of all parties are represented. This inclusivity fosters equitable and effective management practices, which contribute to the long-term economic stability of the fisheries industry (Wester et al., 2022). Establishing clear management objectives and decision-making frameworks, such as harvest strategies, can further bolster transparency and predictability within fisheries management (Forsberg, 2023). These factors are critical for reducing operational risks, enabling industry and associated businesses to plan and invest in their operations confidently (Parlee & Foley, 2022; Vigfusson et al., 2023). A long-term, cohesive vision is imperative to counteract uncertainty, address regulatory challenges, and promote sustainable governance (Bastardie et al., 2024). External factors such as governmental subsidies (Wicaksono, 2019) and currency fluctuations also significantly shape fisheries competitiveness in global markets (Emery et al., 2012). Additionally, risk and uncertainty in fisheries management, particularly concerning stock assessments, necessitate precautionary approaches. Incorporating uncertainty buffers into management strategies can mitigate these risks and enhance resilience, as highlighted by Mildemberger et al. (2022). By addressing such uncertainties, fisheries can strengthen their adaptive capacity and maintain a CA in the global marketplace.

Fishery strategies are increasingly crucial in addressing climate change and must be implemented in fisheries management legislation. Ojea et al. (2017) argue that effective fisheries governance, informed by comprehensive regulatory frameworks, enhances resilience to climate change impacts. Effective management is required to help fisheries adapt to changing ocean conditions and remain resilient in environmental shifts. Understanding how climate impacts fish distribution and abundance is vital for maintaining production levels and supporting local dietary needs (Bryndum-Buchholz et al., 2021). Individual harvest rights can significantly influence sustainable fisheries management, and when coupled with public research and monitoring, these rights can enhance the sustainability of fisheries by leveraging internal resources (Grafton et al., 2006). Strategic management can ensure that fish stocks are harvested sustainably, which is essential for maintaining fish as a food source. Additionally, integrating fish and aquatic foods into broader agricultural research agendas can help improve

nutrition and health outcomes globally (FAO, 2022). A well-structured fisheries strategy contributes to the conservation of marine biodiversity. By managing fish stocks and their habitats effectively, fisheries can help protect the broader ecosystem, which is important for maintaining ecological balance and supporting various marine species (NOAA Fisheries, 2023). In summary, strategies in world fisheries and their implementation are vital for promoting sustainability, economic stability, climate resilience, food security, biodiversity conservation, and collaborative governance. These elements are essential for ensuring that fisheries can continue to benefit society while maintaining the health of marine ecosystems (NOAA Fisheries, 2023).

## 1.2 Icelandic Fisheries

Iceland ranks 19<sup>th</sup> globally in fishing production, accounting for approximately 1% of the world's total output. Despite its relatively small share, Iceland is recognized as a significant player among maritime capture-producing nations, as highlighted by the FAO (2020). Over the past century, Iceland has implemented two pivotal fisheries management systems to safeguard its marine resources. The first, introduced in 1968, was a total allowable catch (TAC) system, established in response to the collapse of herring stocks due to overfishing (Danielsson, 1997). The second, an individual transferable quota (ITQ) system, was launched in 1984 to regulate catches of cod and other vital demersal species following a severe cod overfishing crisis (Hannesson, 2004). These two systems aimed to address the challenges of overfishing and overcapitalization. Gunnlaugsson and Agnarsson (2019) noted that implementing such management systems would produce long-term efficiency gains within the fisheries. Furthermore, the same study underlined that introducing the ITQ has led to higher revenue and profits in the industry, lower costs, smaller fleets, and more sustainable fishing stocks (Gunnlaugsson & Agnarsson, 2019).

The fisheries management system has continued to evolve. A uniform ITQ system was implemented in 1990, which included nearly all of Iceland's fisheries (Arnason, 1996). The uniform ITQ system is based on individual transferable quotas, and all fisheries are subject to vessels' catch quotas and represent shares in the TAC. The quotas are permanent and transferable (Runolfsson & Arnason, 1996). This is significant as the Icelandic national economy has historically been driven by fisheries, which have fluctuated from 5% of GDP to more than 13% over the last 30 years (Statistics Iceland, 2021). Additionally, the country's fishing industry has been seen as a "laboratory" for fisheries elsewhere (Eythórsson, 2000; Kokorsch et al., 2015). The largest fishing company in 1990/91 held 4.3% of the total allocated quota, rising to 10.2% in 2023. The share of the five largest companies of the total allocated quota rose from 14% in 1992 to 33% in 2023. More precisely, fifty of the largest fisheries companies in Iceland hold 91.3% of the total fishing quota allocated by the government in 2022/23, while the remaining holders are small operators (Fiskistofa, n.d.).

Ensuring the long-term sustainability of fishing stocks is paramount for fisheries, in addition to meeting the challenges of climate change (Mason et al., 2023). The ITQ system was implemented to regulate catch levels and oversee demersal fisheries (Hannesson, 2004). Chu (2009) posited that the primary objective behind adopting these systems is to promote sustainable fishing practices and restore fish stocks. These concerted efforts have yielded positive outcomes, particularly within the context of Icelandic demersal fishing stocks, which have exhibited growth trends since 2000 (Gunnlaugsson & Valtýsson, 2022). Furthermore, a study conducted by Vigfusson et al. (2024) indicates a shift towards an increased emphasis on sustainability as a pivotal determinant of success in the industry. Part of the sustainability development and future emphasis is the recent innovation transformation in the industry, which revolves around generating added value by maximizing the use of fewer fish resources while fostering the development of sustainable global fisheries (Saviolidis et al., 2020; Sigfusson, 2020).

Icelandic fisheries are critical due to the industry's central role in the economy and unique operating environment. The industry contributes significantly to Iceland's GDP, exports, and employment, and is essential for economic stability (Chambers & Carothers, 2017). Examining SI obstacles and KSFs in Icelandic fisheries provides insights into how the industry can align its strategic objectives with operational realities. Additionally, identifying CA in the fisheries industry and understanding its evolution highlights the dynamic interplay between environmental, regulatory, and market forces shaping CA in the industry.

### **1.3 Research Focus and Structure**

The thesis directs its attention to the current state of SI in the fisheries industry in Iceland, adopting a comprehensive perspective of SI in the academic field of strategic management. The overarching objective is to analyze SI within fisheries and explore how it can improve the efficiency of the implementation and overcome implementation obstacles within the industry. Another aim is to identify CA in the industry and study how the advantage is evolving within strategic management's RBV and MBV. This comprehensive research effort has resulted in one literature review article exploring empirical data of SI from 1980 to 2020, and three scholarly articles based on empirical data collection procedures in the fisheries industry in Iceland. This thesis comprises four interconnected articles. These articles are arranged chronologically, progressing from a broad overview (Article #1) to a detailed examination grounded in empirical data (Articles #2, #3, and #4). The first articles laid the theoretical foundation for the research, while the latter three offer empirical insights. Article #1 employed a systematic literature review (SLR). Articles #2, #3, and #4 utilized a single case study approach within fisheries, drawing insights from interviews with CEOs.

The first article, "Obstacles to Strategy Implementation and Success Factor: A Review of the Empirical Literature," was published in *Strategic Management* in January 2021. Its purpose was to identify obstacles and KSFs from empirical studies affecting SI and to provide an overview of the literature from 1980 to 2020. SLR was used to analyze 35 peer-reviewed articles. The second article, "Strategy Implementation Obstacles: Iceland Fishery CEO Perspective," was published in *Marine Policy* in January 2023. Its primary objective was to analyze the internal and external challenges encountered by CEOs of Icelandic fisheries industry during the SI process. The third article, "Key Success Factors for Implementing Strategy in the Icelandic Fisheries Industry," was published in the *Journal of Strategy and Management* in January 2024. The primary purpose was to focus on SI and KSFs identified by the CEOs within the industry and uncover the level of priority that companies place on dimensions of the UN's SDGs. The fourth article, "Integrating resource-based and market-based views in the Icelandic fisheries Industry – CEO perspectives," was published in *Marine Policy* in January 2025. The paper aimed to identify CA in the industry and uncover how CA is evolving within the RBV and MBV of strategic management. Notably, all three articles present original empirical findings.

The aim of this research is therefore:

1. systematically identify and synthesize obstacles and KSFs influencing SI based on empirical studies published between 1980 and 2020, thereby providing a comprehensive overview of existing literature
2. empirically uncover the specific obstacles encountered by CEOs in selected Icelandic fisheries companies during the process of strategy implementation
3. identify and analyze the KSFs perceived by CEOs of Icelandic fisheries companies during the implementation of their strategy, and develop a specific framework for SI in fisheries
4. investigate and analyze how CA is evolving within the theoretical lenses of RBV and MBV, as perceived by the CEOs, while developing a specific framework of potential future CA for the industry

**Table 1.** Overview of academic papers

| <b>Overarching Research Question:</b><br><b>What are the obstacles and key success factors in strategy implementation within Icelandic fisheries? How is competitive advantages in the industry evolving?</b> |                                                                                                                                                                                                     |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                               | <b>Article 1</b>                                                                                                                                                                                    | <b>Article 2</b>                                                                                                                                                                                                        | <b>Article 3</b>                                                                                                                                                                                                                                                                                                             | <b>Article 4</b>                                                                                                                                                                                                                   |
| <b>Key concepts</b>                                                                                                                                                                                           | Strategy, implementation, execution, obstacles, barriers, and success factors                                                                                                                       | Strategy implementation<br>Obstacle, Barrier, Iceland, Fishery, Chief Executive Officer                                                                                                                                 | Strategy, Implementation, Key success factors, Fisheries industry, CEO, SDGs                                                                                                                                                                                                                                                 | Competitive advantage, Strategy, Strategy Implementation, Resource-based view, Market-based view, Fishery, CEO                                                                                                                     |
| <b>Research questions</b>                                                                                                                                                                                     | 1. What are the main obstacles affecting strategy implementation in empirical literature?<br><br>2. What are the main success factors facilitating strategy implementation in empirical literature? | 1. What are the internal and external strategy implementation obstacles perceived by CEOs in Icelandic fisheries companies?<br>2. How do these findings reflect on the literature of strategy implementation obstacles? | 1. What are the key success factors employed by Icelandic fishery CEOs during strategy implementation?<br><br>2. Which UN SDGs hold significance in strategy implementation within fisheries companies?<br><br>3. Can identified KSFs be integrated into a conceptual framework for strategy implementation, and if so, how? | 1. How is competitive advantage in the Icelandic fishing industry evolving?<br><br>2. How can empirical evidence improve the understanding of competitive advantage in Market-based and Resource-Based Views in academic research? |
| <b>Theoretical approach</b>                                                                                                                                                                                   |                                                                                                                                                                                                     | Organizational/ Institutional theory                                                                                                                                                                                    | Organizational theory                                                                                                                                                                                                                                                                                                        | Resource-Based theory                                                                                                                                                                                                              |
| <b>Conceptual framework</b>                                                                                                                                                                                   | 5Ps model of strategy implementation                                                                                                                                                                |                                                                                                                                                                                                                         | 5Ps model of strategy implementation                                                                                                                                                                                                                                                                                         | Market-based perspective                                                                                                                                                                                                           |
| <b>Method</b>                                                                                                                                                                                                 | Systematic Literature Review                                                                                                                                                                        | Industry focused – Case Study                                                                                                                                                                                           | Industry focused – Case Study                                                                                                                                                                                                                                                                                                | Industry focused – Case Study                                                                                                                                                                                                      |

Source: Created by author

The thesis begins with Article #1 and reviews the empirical literature on SI obstacles and KSFs from 1980 to 2020. An updated SLR was needed to focus on the empirical literature. Older reviews were a mixture of conceptual and empirical studies, and none focused solely on empirical research (Alharthy et al., 2017; Noble, 1999; Yang et al., 2010). The findings derived from the analysis presented in Article #1 shed light on the stage of research on SI, where a limited number of empirical studies have been conducted thus far. The findings from Article #1 provide a comprehensive synthesis of empirical research conducted between 1980 and 2020, revealing 16 obstacles and 18 KSFs that influence SI. Additionally, the study emphasizes the presence of dualistic factors, which possess both characteristics of obstacles and KSFs. Consequently, these dualistic factors should be considered within the SI process. The theoretical implications of this research lie in its ability to offer an overview of significant empirical studies about obstacles and KSFs in SI, extending the scope beyond previous literature reviews that encompassed conceptual and empirical research up until 2010. By including a comprehensive range of empirical papers, this SLR provides a holistic understanding of implementation obstacles, success factors, and dualistic factors. Moreover, the paper contributes to practical knowledge by enhancing comprehension of these factors for practitioners involved in SI, such as managers and other implementers. Additionally, studies that combine the identification of obstacles with the exploration of viable solutions remain limited. Furthermore, a significant gap exists in the literature concerning the impact of employees on SI, encompassing both positive and negative aspects. Understanding the reasons behind the frequent failure or occasional success of SI projects may depend on gaining deeper insights into employee influence. To enhance the existing body of SI literature, it is imperative to conduct additional studies utilizing observation, focus groups, and panel discussions. These research methods can furthermore contribute novel perspectives and add value to our understanding of the subject. Furthermore, the variances in implementation experiences across industries, countries, and cultures have not been extensively explored, presenting an avenue for further exploration and analysis.

The thesis continues with Article #2 and findings suggest that the fisheries industry in Iceland must deal with several internal and external obstacles hindering SI. This study highlights external obstacles absent from earlier studies, including a lack of governmental vision for the industry, perceived hostile regulatory bodies, frequent regulatory changes, high political uncertainty, time-consuming lobbying efforts, and a perception of unsympathetic political and media discussion. The research reveals that fisheries CEOs encounter internal obstacles like those faced by their counterparts in other sectors. However, it also uncovers two distinct internal challenges: the role of a multicultural workforce in SI and the prevalence of language barriers that hinder communication and implementation. This study contributes to the literature on SI by offering a novel conceptualization of internal and external obstacles, categorizing them as industry specific. These findings offer valuable insights for policymakers and CEOs,

aiding them in understanding and mitigating the impact of SI obstacles. The study can serve as a reference for developing more comprehensive policies and supporting CEOs and policymakers in the industry to formulate efficient strategies. Moreover, the findings can assist policymakers in building consensus on fisheries management, ultimately benefiting both the fisheries industry and society at large.

While Article #2 explores the SI obstacles in the fisheries industry, Article #3 identifies and analyzes the KSFs for SI within the industry in Iceland, as perceived by CEOs. The primary objective is to categorize KSFs that affect SI comprehensively. Additionally, the study seeks to assess the level of priority that the industry assigns to the various dimensions of SDGs. The findings suggest that SI within the industry can be enhanced in four key areas: fostering all employees' active engagement and involvement in the implementation process; promoting bottom-up innovation and communication; aligning strategy with the UN's SDGs by proposing a dedicated framework for implementing strategies in the fisheries industry; and, adhering to rigorous action plans that include explicit, measurable, and prioritized objectives and timelines for managers. This study advances the theoretical discussion on KSFs critical to SI within a specific industry by proposing a conceptual framework for integrated SI for the fisheries sector. The framework also enriches the understanding of SI by synthesizing industry-specific factors with broader theoretical insights. In practical terms, the findings provide actionable guidance for industry managers, equipping them with a structured approach to achieve successful SI. By adopting the proposed framework, managers in the fisheries industry can navigate the complexities of implementation more effectively, ensuring alignment with strategic objectives while addressing industry challenges.

Article #4 investigates the concept of CA within the Icelandic fisheries industry through a single case study, drawing on empirical data gathered from interviews with CEOs. The findings of Article #4 suggest a transition from an RBV to an MBV to strengthen the industry's CA. Key findings stress the significance of growth strategy, enhancing integration, value chain control, and brand development within the MBV perspective. Furthermore, the identified prospective CA integrates strengths from the RBV with a market perspective for the industry. By considering these research views jointly, understanding the synthesized companies' strategic behaviors and outcomes in a specific industry is expanded. The study proposes a model showing the prospective CA of the fisheries industry. Additionally, it contributes to the ongoing discussion on CA and provides valuable industry-specific insights. Moreover, this study offers actionable insights and recommendations for top management and stakeholders in the Icelandic fisheries industry, highlighting a shift from RBV to MBV approach and underscoring the importance of internal resource integration for sustaining competitiveness.

## **2 Research Paradigm and Theories of the Thesis**

Chapter 2 establishes the theoretical foundation of this thesis by presenting the foundational paradigms and frameworks. It emphasizes key theories and perspectives from strategic management and organizational and institutional theory, situating the research within the broader academic discourse on SI and CA. Chapter 3 delves into the strategic management dimensions pertinent to SI, exploring critical elements influencing this process. Chapter 4 outlines the research methodology, detailing the approaches and methods employed to address the research questions. Chapter 5 synthesizes the academic papers' main findings of the thesis. Chapter 6 engages in a comprehensive discussion of findings, integrating theoretical and practical insights. Finally, Chapter 7 concludes the thesis and highlights the research's academic contributions, practical implications, and the conclusion.

### **2.1 Research Paradigm**

Strategic management emerged as an academic field in the mid-20th century (Furrer et al., 2008). During this period, the emphasis was mainly on strategic planning. Thinkers such as Igor Ansoff and Alfred Chandler laid the foundation for strategic management. Ansoff introduced concepts like strategic gap analysis and the product/market matrix (Ansoff, 1965), while Chandler highlighted the significance of organizational structure in SI (Chandler, 1969). Later scholars like Michael Porter and Henry Mintzberg contributed to developing strategic management as a formal discipline, emphasizing concepts such as CA (Porter, 1979), strategic process (Mintzberg, 1977), and organizational structure (Mintzberg, 1989; Porter, 1980b). Following this development, a shift towards broader approaches to strategy emerged, expanding beyond process and planning to encompass concepts such as CA (Barney, 1991; Porter, 1980b). For organizations grappling with escalating complexity and rapid change, attention turned toward the effective implementation of strategy (Hrebiniak & Joyce, 1984). The Balanced Scorecard (BSC), pioneered by Robert Kaplan and David Norton, emerged as a popular framework for aligning strategic objectives with operational activities and measuring and evaluating strategy performance (Kaplan & Norton, 1995).

Though the attention of researchers has been on strategic planning and decision-making, the SI research landscape has undergone significant changes in recent years, as numerous scholars have advocated for increased attention to SI as a subject (Greer et al., 2017), execution of SI (De Oliveira et al., 2019), and recognizing SI as an emergent topic in strategic management and organization theory literature (Kastanakis

et al., 2019). There is still no common definition of SI; the concept has been defined in many ways (Amoo et al., 2019). Different approaches to defining SI have been proposed, evidenced by several definitions found in the literature (Hrebiniak & Joyce, 1984; MacLennan, 2010; Noble, 1999).

Yang, Sun and Eppler (2010) analyzed 60 articles from leading academic journals on SI and execution, and observed that "strategy implementation" was the preferred keyword. In contrast, "strategy execution" was seldom used. None of these articles distinguished between the two concepts and the study revealed that no universally accepted definition of SI existed (Yang et al., 2010). The distinction between SI and execution remains unclear, with many scholars treating these terms as synonymous (Hrebiniak, 2006). SI has yet to receive the same scholarly focus as strategic decision-making and strategic planning (Tawse & Tabesh, 2021).

Emerging SI research focuses on strategy as a practice (Jarzabkowski & Whittington, 2008) and argues that strategy is something that people do in organizations (Jarzabkowski et al., 2022; Jarzabkowski & Spee, 2009) as both an alternative and a complement to traditional economic strategy research (Li & Jarzabkowski, 2025). In the last twenty years or so, some research has emerged on different methods and implementation techniques, like visualization and using strategic maps for executing, implementing, and monitoring strategic decisions (Eppler & Platts, 2009; Kernbach et al., 2015; Lengler & Eppler, 2007; Paroutis et al., 2015). Recent studies have been critical of traditional SI research, arguing that the research focused too much on factors that hindered or facilitated implementation, and at the same time, knowledge about the actual process of SI has been treated as a "black box" with limited explanations (Merkus et al., 2019).

SI is grounded in a range of paradigms and theoretical frameworks, including organizational theory (Noble, 1999), contingency theory (Govindarajan, 1988), pragmatic theory (Brinkschröder, 2014), and institutional theory (Tawse & Tabesh, 2021). In their literature review of SI, Yang et al. (2010) approach is rooted in organizational theory, although it takes a broad and integrative approach by synthesizing multiple theoretical perspectives. Their review examines the structural, cultural, and leadership factors that contribute to effective SI, aligning closely with organizational theory's emphasis on the role of organizational design, resource allocation, and alignment in achieving strategic goals. They identified and categorized SI into three primary perspectives based on the findings of various scholars; the process perspective, which views SI as a series of meticulously planned steps (Lehner, 2004; Schaap, 2006); the behavior perspective, a set of behaviors or a series of coordinated and parallel actions that warrant examination (Hrebiniak & Joyce, 1984; Noble, 1999); and the hybrid perspective that integrates process and behavioral approaches (D. T. Singh, 1998; Smith & Kofron, 1996). Yang et al. (2010) also draw on various organizational theories to highlight factors like communication processes,

commitment, and organizational control mechanisms, which are essential for ensuring the strategy is implemented across different levels. Their review emphasizes the need for cohesion between organizational elements and strategic objectives, echoing principles from contingency theory and RBV within organizational theory. Given the diverse theoretical perspectives applicable to SI, a unified explanation of the processes connecting various managerial actions to the effectiveness of SI still needs to be discovered (2010).

In a separate literature review on SI, Tawse and Tabesh (2021) incorporate elements of institutional theory, especially regarding how institutional pressures can shape strategic actions and implementation processes within organizations. Their review highlights that organizations often face external pressures to conform to established norms, industry standards, and regulatory frameworks, which can impact managers' SI choices. They emphasize how these institutional pressures can either facilitate or constrain the flexibility needed for effective strategic adaptation. Their work underscores how organizations must navigate internal alignment and external legitimacy when implementing strategy by examining the role of regulatory, normative, and cognitive pressures—critical tenets of institutional theory. For example, organizations in highly regulated industries may have less autonomy in resource reallocation or process restructuring, affecting the speed and agility of SI. Tawse and Tabesh's review suggests that understanding institutional contexts is crucial, as organizations that effectively align strategic initiatives with institutional expectations tend to have higher implementation success (Tawse & Tabesh, 2021).

Resource dependency and institutional theory provide insights into how external pressures and resource constraints shape an organization's strategic choices and ability to implement them effectively (Hillman et al., 2009). By integrating these theoretical perspectives into SI research, we can gain a nuanced understanding of the internal and external factors that influence how strategies translate into actionable outcomes within organizations (Legimai et al., 2022). This cultural alignment can support a collective orientation in the workforce, where employees see sustainable practices as both a strategic and moral obligation, enhancing buy-in during implementation phases (Gamage & Gooneratne, 2017). Institutional theory plays a critical role, as Iceland's cultural and societal expectations drive fisheries toward sustainable practices, which have become embedded within their strategic priorities. Understanding these unique traits and their interplay with strategic priorities can illuminate how Icelandic fisheries optimize SI through structures, cultures, and processes aligning with local and global imperatives (Knox-Hayes et al., 2021).

In a literature review on the eclectic roots of SI, Noble characterizes SI as a paradigm that implies conceptualizing it as a foundational framework or model facilitating the implementation of strategies within an organization. Within Noble's conceptual framework, SI encompasses the processes, actions, and structures required to

effectively translate strategic plans into tangible outcomes and results (1999). Noble's research identified three primary areas of focus: managerial behavior, revealing that self-interested actions by managers could impede successful implementation efforts: the critical role of strategic consensus among managers and key external stakeholders: and, the importance of early employee engagement, the necessity for businesses to adapt their cultures in response to environmental changes, and the impact of managerial leadership styles on the overall process (Noble, 1999). Noble identified a range of views among scholars in defining the concept of SI and developed three predominant views to explain the most common approaches. The first and most widely recognized approach is the structural view, which has a dual focus. It emphasizes the role of organizational structure and perceives implementation as a straightforward execution of a well-defined plan (1999). This perspective is reflected in the research of several researchers (Gupta, 1987; Moullin et al., 2020), and it also addresses the evaluation of performance during and after implementation through the establishment of control systems (Jaworski et al., 1993; Kaplan & Norton, 2008). The second approach is the interpersonal process view, which underscores the significance of achieving consensus on strategy and its implementation (Floyd & Wooldridge, 1992; Köseoglu et al., 2020) while exploring leadership and implementation styles (Håkonsson et al., 2012). The third approach is the communication and iteration processes view, where scholars concentrate on the interaction and communication between managers both vertically and horizontally (Günther, 2016; Hambrick & Cannella, 1989; Obeidat et al., 2017) as well as the defensive mechanisms within organizations that impede learning and growth (Argyris, 1989; Crittenden & Crittenden, 2008).

Tawse and Tabesh (2017) defined managerial capabilities and referred to the essential capabilities that empower managers to create optimal conditions for SI. These capabilities comprise the following three key elements: *managerial cognition* encompassing knowledge structures that shape how managers interpret and anticipate the consequences of strategic decisions; *managerial social capital* about goodwill generated through relationships that managers can leverage to access valuable resources and information; and, *managerial human capital* involving managers' accumulation of knowledge, education, experience, and skills that are critical for effective decision-making and leadership (Tawse & Tabesh, 2017). Later, they found that actions taken by managers to influence the SI process are categorized into structural actions, such as formal organizational structures, policies, controls, and systems, and interpersonal actions such as communication, coaching, and team building. They also defined conditions for SI effectiveness:

- Competence: Knowledge, skills, and abilities required to execute tasks supporting strategic objectives.
- Commitment: The determination of organizational members to execute their implementation responsibilities.
- Coordination: The process of integrating interdependent tasks to achieve strategic goals (Tawse & Tabesh, 2021).

Rani (2019) presented a conceptual overview grounded in organizational theory, identifying key factors and outlining structured processes essential for effective SI. In the study, SI involves transforming plans into organizational actions, requiring personnel, resources, culture, systems, and structure to work cohesively. The model outlines a five-step framework for implementation (Rani, 2019):

1. strategy evaluation and communication
2. structuring implementation frameworks
3. developing supportive programs and policies
4. resource allocation
5. operational function discharge

According to Rani, effective SI often hinges on leadership quality, open communication, and precise role distribution among team members. Leaders need to engage employees fully to ensure alignment with the strategic mission. Rani emphasizes that poor communication, lack of accountability, and weak management are frequent causes of implementation failure. Additionally, the study underlines an organization's dependency on well-coordinated steps, wherein each phase builds on previous phases to ensure a smooth transition from strategy to implementation (2019). The study also identifies potential failure points (or obstacles), namely, ineffective leadership, unaligned communication, and insufficient employee ownership. Rani concludes that clear objectives, ample resources, and participative management are essential for translating strategy into action (Rani, 2019).

Connecting SI with organizational theory necessitates an in-depth exploration of how organizational structures, cultures, and processes shape the success of strategic initiatives (Casey & Goldman, 2010). Organizational theory offers critical insights into the design and management of organizations, which underpin effective SI (Barney, 1991; Galbraith, 2014). A key concept within this theory is the distinction between mechanistic and organic organizational structures, which influence operational strategies. Mechanistic structures, defined by rigid hierarchies and standardized procedures, often falter when implementing strategies that require adaptability and

responsiveness (Ambrose & Schminke, 2003). In contrast, organic structures, characterized by decentralized decision-making and fluid processes, are better suited to dynamic strategies that demand agility in evolving environments (Mallén et al., 2016). Equally significant is the role of organizational culture in aligning employee behaviors and motivations with strategic goals. Cultures fostering collaboration, innovation, and shared vision enhance employee engagement and facilitate seamless SI (Al-Sada et al., 2017).

Organizations use performance measures to ensure they are moving in the right direction and achieving their goals and objectives. These measures evaluate and control overall business operations (Ghalayini & Noble, 1996; Parmenter, 2015). Scholars have been highlighting the relationship between SI and realized performance, as successful implementation is not measured solely by the completion of planned actions, but by the achievement of intended results, Hrebiniak and Joyce (1984) Kaplan and Norton (1996) argued that an outcomes-based perspective shifts the focus from inputs and processes to the tangible value created. Research by Hrebiniak (2013) further supports this, highlighting a significant implementation gap where strategies fail in their design and execution, underscoring the critical need to measure success by tangible results. Simons (1994) outlined crucial levers of control mechanisms that managers rely on to monitor the SI. Among those control mechanisms, managers rely on critical performance measures to monitor SI and to diagnose deviations from their preset standards of performance (Simons, 1994).

Traditionally, organizations use mostly financial measures to measure performance (Parmenter, 2015). The BSC was launched by Kaplan and Norton in 1996, marking a significant milestone, offering a systematic approach to assess and manage performance through four key perspectives: financial, customer, internal processes, and learning and growth. Tawse and Tabesh (2023) observed a positive correlation between adopting the BSC and firm performance, exploring the specific conditions under which the BSC is an effective SI tool. Still, there are problems of over-reliance on financial-oriented performance measures within organizations (Phillips & Moutinho, 2018). Formalizing Key Performance Indicators (KPIs) as a core element of strategic performance management, integrating financial and non-financial measures to align operations with strategy, has become crucial for businesses and industries (Parmenter, 2015). Framework, which translates an organization's strategic objectives into KPIs, provides the practical tools for a results-driven approach (Tangkesalu & Suseno, 2018). Furthermore, effective dashboard design and performance measurement implementation require management to arrange work and establish decision-making processes, together with the communication of renewal strategies (Allio, 2012). The use of KPIs and the BSC is crucial in this dynamic context, as they provide a continuous feedback loop that allows managers to monitor progress and make real-time adjustments (Parmenter, 2015). In addition, strategic performance management systems (SPMS) are becoming instrumental in operationalizing an organization's strategy with

measurable performance metrics, which link strategy and performance measures in an economic and competitive environment (Phillips & Moutinho, 2018).

Although there is still lack of empirical studies in the SI literature specifically on industry-specific challenges (Madumuse & Qutieshat, 2024), empirical studies highlight that strong organizational cultures can drive employee commitment and active participation, which is vital for improving overall performance (Ambrose & Schminke, 2003). Furthermore, broad-based participation, including input from middle management and employees, is integral to effective SI, as it builds organizational cohesion and reduces resistance to change (Weiser et al., 2020). This participatory approach is particularly critical in navigating the complexities of Iceland's multicultural workforce, where addressing language barriers and fostering inclusivity are critical to successful implementation (Castaneda & Bateh, 2012). Furthermore, middle managers and skilled employees must support implementation, particularly within a multicultural and linguistically diverse workforce (Marschan-Piekkari et al., 1999). Internal KSFs, such as employee engagement and developing a supportive organizational culture, are central to sustaining strategic initiatives (Ploscaru et al., 2023). Conversely, in contexts like water resource management, the absence of forward-looking strategies due to short-sighted governmental policies underestimating domestic, commercial, and industrial demand for water has demonstrated the inefficiencies and challenges that arise when long-term benefits are not prioritized (Tortajada et al., 2013). These insights underscore the interconnectedness of organizational theory, culture, and SI as essential components for driving sustainable outcomes.

## **2.2 Resource-Based Theory and Market-Based Perspective**

CA is a fundamental concept in strategic management, serving as a cornerstone for much of the discipline's theoretical and empirical work (Furrer et al., 2008). The origins, drivers, and mechanisms that sustain CA have been extensively analyzed and debated within literature, with scholars examining the concept from diverse perspectives. CA can manifest itself through various strategic approaches firms employ to achieve superior performance relative to their rivals. One well-recognized CA results from economies of scale, where firms reduce per-unit costs by increasing production volume, thereby distributing fixed costs across a more extensive output base (Stigler, 1958). Other research has explored how economies of scale can serve as a CA, particularly when coupled with effective management practices and innovation strategies (Nguyen & Chau, 2017). Economies of scope represent another significant source of CA, enabling cost efficiencies when firms diversify their product offerings and share resources across different product lines (Helfat & Eisenhardt, 2004; Teece, 1980). Research has explored how firms can achieve CA through cooperative strategies that leverage economies of scope, highlighting the importance of resource sharing among firms to enhance their competitive positioning (Hartarska et al., 2023). Additionally, improved integration and coordination within the value chain can create a

CA, which enhances efficiency across production and distribution stages (Johansson & Newman, 2009).

Innovative business models also serve as a critical source of CA, allowing firms to differentiate themselves in the marketplace (Steininger et al., 2011). Operational efficiencies achieved by optimizing internal processes further strengthen competitive positioning (P. K. Singh, 2012). Findings have also shown that CA is not static but can evolve by integrating both RBV and MBV elements, adapting to changing environments and organizational contexts (Violinda & Jian, 2016). Finally, developing core competencies, unique and hard-to-replicate capabilities or strengths, is vital in establishing and sustaining a firm's competitive edge (Christensen, 2001; Prahalad & Hamel, 1999).

Numerous scholars have proposed varying definitions of CA, reflecting the diverse perspectives within the strategic management literature (Barney, 1991; Luo & Child, 2015; Neckebrouck & Kryscynski, 2024; Peteraf, 1993; Porter, 1979). Rumelt (2003) observed that value creation is a recurring central theme in these definitions. However, there remains limited consensus on the specifics of the value creation, including its intended beneficiaries (Rumelt, 2003). Two dominant theoretical approaches frame the understanding of CA. The first is the structural approach, rooted in the industrial organization perspective, initially introduced by Bain (n.d.) and later developed by Caves and Porter (1977) and Porter (1979). This approach, often called the MBV, emphasizes industry structure and positioning as determinants of CA. The second approach is the RBV or resource-based theory (RBT), which emerged as a complement to the MBV (Barney, 1986; Grant, 1991; Peteraf, 1993; Rumelt, 1997). While Porter's work, particularly the five forces framework (1979), laid the foundation for the MBV by focusing on external industry dynamics, the RBV, championed by scholars such as Barney (1991) and Grant (1991), shifted the focus to internal firm resources and capabilities as sources of sustained CA. Together, these perspectives underscore that CA is central to strategy and deeply interconnected with external market conditions and internal resource configurations (Grant, 1991).

RBV has its roots in the foundational work of Chandler (1969) and Ansoff (1965), who classified firm resources into physical, monetary, and human assets. Building on this foundation, later scholars expanded the framework to include intangible organizational resources such as skills, knowledge, and technical expertise (Hofer & Schendel, 1978) and posited organizational resources as primary determinants of its performance (Wernerfelt, 1984). As the RBV theory matured, it advanced the idea that a firm's unique, inimitable, and immobile resources serve as the key drivers of sustained CA (Barney, 1986; Rumelt, 1997). The core of the RBV, as seen by Barney, was that internal resources that are scarce and valuable simultaneously can create CA. The resources available and under the control of a particular firm determine productive opportunities for the firm to gain CA; resources are heterogeneous and vary by firm in the same

industry (1991). Later, Hamel and Prahalad (1996) saw firm resources as tangible and intangible elements utilized to produce goods and services collectively constituting the organization's resources. Tangible resources, such as buildings, land, machinery, equipment, and the workforce, represent physical assets that contribute to the operational capacity of the business. On the other hand, intangible resources encompass elements such as brand equity, patents, organizational knowledge, experience, corporate image, and identity, which define non-physical assets (1996). The effective utilization of these resources is referred to as the business's capabilities (Grant, 1991), which are a critical determinant of performance differences among firms. While businesses may possess similar or vastly different resources, the efficiency and effectiveness with which these resources are leveraged ultimately lead to variations in performance outcomes (Lieberman et al., 2017). However, one of the enduring criticisms of the RBV lies in its lack of a precise definition of "resources," which has led to theoretical ambiguities and limited its adoption among some marketing scholars (Collis, 1994; Priem & Butler, 2001; Srivastava et al., 2001).

In contrast, the MBV emphasizes external factors, such as industry dynamics and market conditions, as the primary determinants of a firm's performance. Advocates of the MBV argue that firms achieve CA by effectively positioning themselves within their industries (Bain, 1968; Porter, 1979). According to this perspective, market forces, external market conditions, and industry structures are the principal drivers of performance and competitive success. Thus, firms should align their strategic decisions with prevailing market trends to extract value and gain CA (Caves & Porter, 1977; Porter, 1980b). Porter asserts that CA is a crucial determinant of superior performance (Porter, 1979, 1985). A firm can outperform its competitors if it can establish and maintain distinct propositions in the market by choosing one of the three generic strategies of low cost, differentiation, or focus (Porter, 1980a). If a firm can offer something unique that it can preserve and sustain, it may create more value through differentiation, or the firm may pursue a low-cost strategy. Depending on the chosen strategy, the firm may be able to charge higher unit prices, create superior margins, or generate higher volumes, leading to increased profitability. According to Porter, CA grows from the value a firm can create for its customers that exceeds its cost. Porter treats CA as an outcome of positioning and believes it should be pursued as an end (Porter, 1980b; Takata, 2016). The MBV aligns closely with strategy theories articulated by Mintzberg and Lampel (2005), highlighting the critical role of external alignment in strategic management.

Scholars in strategic management have increasingly recognized the profound influence of external environments on firm behavior and performance (K. E. Meyer et al., 2009; Peng et al., 2009). Building on insights from various theoretical traditions, the institution-based view (IBV) has emerged as one of the leading perspectives in strategic management (Peng et al., 2023). The IBV argues that firm behavior and performance are determined, at least in part, by the institutional conditions and transitions confronting the firm, fundamentally shaped by formal and informal rules, regulations,

policies, and enforcement mechanisms in the environment (Peng et al., 2009). Unlike the MBV (McGee, 2015; Porter, 1980b), focusing on industry structure, or the RBV (Barney, 1991; Helfat et al., 2023), which emphasizes internal firm resources, both perspectives overlook the significant influence of institutional contexts. IBV highlights that institutions are not mere background conditions but active forces that can determine SI and CA (Peng et al., 2009). These institutions encompass formal constraints, such as laws, regulations, and contracts, and informal constraints, including norms, cultures, ethics, and values. For SI, the IBV suggests that firms must understand and adapt to the prevailing institutional framework to achieve legitimacy, reduce uncertainty, and gain a CA (Marquis & Raynard, 2015). Therefore, successful SI often involves navigating these institutional complexities, potentially through alliances, lobbying, or adopting practices to align with local norms, secure support and resources, and mitigate risks (Peng et al., 2009).

Supporters of RBV have been critical of external analysis applied by the MBV, which assumes that companies within an industry are identical and have all strategically relevant resources they control and pursue, and therefore, will find that heterogeneity developed by new entrants is short-lived as the resources to implement strategies are highly mobile (Barney, 1991). The RBV emphasizes the importance of a firm's resources in the strategy-making process, and empirical evidence, like that from Makhija (2003), demonstrates that these resources play a vital role in establishing a firm's value, especially in unstable market environments. Critics of the MBV argue that simply focusing on market positioning is inadequate and that the firm's internal resources should be seen more transparently (Barney, 2001). The MBV suggests that a firm's success is not determined by its internal characteristics, but rather by the environment in which it operates and the structure of its industry. It posits that opportunities for achieving a sustained CA are found within the industry structure and through effective value chain management (Porter, 1996). Researchers have criticized Porter's five forces model (Grundy, 2006). However, a number of them have criticized the model, arguing that it has been frozen in time and misses out on changes in the competitive environment, and it is primarily helpful for textbooks but less for real-life cases (Isabelle et al., 2020) and difficult for bigger companies to apply (Bruijl, 2018). Critics have also described the model as just providing a snapshot of industry competitive forces at a particular point and do not easily account for dynamic changes in industries over time, such as the threat of digitalization, exposure of globalization, and innovation changes (Isabelle et al., 2020), and in addition for difficulty in operationalization (Pangarkar & Prabhudesai, 2024).

Research indicates that internal and external factors are important for CA (Steininger et al., 2011). Consequently, there has been a debate among scholars about how much internal resources (Prahalad & Hamel, 1999) versus external factors (Porter, 1979) matter regarding CA. It has been stated that the RBV disregards the nature of the market and other external factors and focuses only on internal factors (Kraaijenbrink et al., 2010). The traditional assumptions of fixed firm resources in MBV and fixed consumer demands and valuations in RBV are now considered outdated (Priem &

Butler, 2001). Maier and Remus found out that external and internal factors should not be separated, meaning that a fit or balance should be found (2001). Although these fundamental perspectives differ in approach, both offer complementary viewpoints for developing strategic theory and contribute to the literature on CA (Madhani, 2010; McGee, 2015).

Attempts have been made by Srivastava et al. (2001) and Steininger et al. (2011) to bridge the relationships between the RBV and the MBV, advancing the integration of these perspectives. Chen et al. (2021) compared and contrasted the external strategic behavior of a firm with the RBV, discovering that some aspects of these perspectives are interconnected. Srivastava et al. identified links between the RBV and marketing factors, focusing on creating and maintaining customer value, and developed a conceptual framework to further integrate the RBV and marketing (2011). Steininger et al. (2011) employed content analysis to study various business models from both the RBV and MBV perspectives. They found that value configuration, core competency, and partner networks are firmly or very strongly connected to the RBV. In contrast, target customer, revenue model, value proposition, distribution channels, relationships, and cost structure showed strong or moderate connections to MBV. These findings support a business model that integrates both RBV and MBV perspectives by linking these concepts (Steininger et al., 2011), which aligns with the findings of Hedman and Kalling (2003). Uyanik (2023) emphasized the importance of marketing efforts within the RBV framework for achieving sustainable CA. The study illustrates that the RBV can serve as a theoretical lens to examine the impact of marketing activities on organizational performance. Recent research has used the RBV and MBV frameworks to investigate their relationships and effects on firms' performances. For instance, Patel (2024), using the MBV framework, found that a higher level of trademark intensity in the product market positively correlates with organizational performance. Additionally, a study on small and medium-sized enterprises indicated that a strong marketing orientation leads to improved CA, supporting the principles of the MBV (Parnell, 2018).

## 2.3 Industry studies

A few studies have been conducted in the fisheries industry focused on business strategy, using RBV and MBV as theoretical perspectives for assessing CA. However, with a few exceptions, most of these studies have been conducted in Norwegian and Icelandic fisheries (Bertheussen, 2021; Nilssen et al., 2015). Table 2 provides an overview of critical studies in the fisheries industry that explore SI, the RBV, and the MBV as sources of CA. Table 2 offers a structured overview of key studies that investigate CA within the fisheries sector, revealing how existing research has conceptualized and empirically examined CA through the distinct yet complementary perspectives of the RBV and MBV. This table synthesizes current knowledge and serves as an analytical tool to identify gaps in the literature, thereby reinforcing the originality and unique contributions of the thesis.

Bertheussen (2021) conducted a substantial study examining the sustained CA of the Norwegian pelagic harvesting and processing sector, focusing on industry-specific

institutional frameworks. The findings indicated that harvesters generated nearly double the return on assets compared to processors, attributed to a sector-specific institutional framework. Notably, the harvesting industry benefits from no costs associated with fish input quotas. In a comparative analysis of mackerel exports from Norway and Iceland to international markets, Bertheussen et al. (2020) found that Norway consistently achieved higher export prices over time. This pricing advantage was primarily due to the favorable biological characteristics of the fish at the time of capture. A comparative study conducted by Björgvinsson et al. (2015) on the whitefish industries in Iceland and Norway, which produce and export similar products to global markets, found that the Icelandic industry has been more profitable. The study identified different marketing and harvesting strategies, noting that the Icelandic strategies were influenced by factor conditions and the institutional framework that enables vertical integration of the value chain in Icelandic fisheries (Björgvinsson et al., 2015).

Nilssen et al. (2015) investigated CA within the fish processing sector in Norway, revealing that certain companies outperformed competitors by prioritizing a significant share of fresh fish caught using hook and line fishing methods. Furthermore, Bertheussen's research explored institutional and financial barriers that new entrants face in the Norwegian fisheries sector. The study concluded that legal and financial barriers for new entrants have diminished (Bertheussen et al., 2021). Bertheussen et al. highlighted that the origin of resource rent in this industry is primarily shaped by fishery management institutions and harvesting regulations, particularly when companies have free or affordable access to fish resources (Bertheussen, 2023). Bertheussen and Vassdal (2023) examined how value creation in Norwegian fisheries is contingent upon the ownership of natural resources and the fisheries management system (Bertheussen & Vassdal, 2023). In Australia, Quartey explored the knowledge-based view of sustainable CA within the fishing industry. The study revealed that knowledge plays a critical strategic, organizational, and commercial role in establishing CA, positing that it may be the sector's most significant source of sustainable CA (Quartey, 2019).

The ITQ system has also undergone rigorous academic scrutiny from various perspectives related to CA. Scholars have investigated its effectiveness and performance (Arnason, 1996; Runolfsson & Arnason, 1996), wealth generation within the industry (Gunnlaugsson & Valtýsson, 2022), and the concentration and consolidation of quotas across species (Byrne et al., 2020). Other areas of focus include profitability and resource rent (Gunnlaugsson et al., 2020; Gunnlaugsson & Agnarsson, 2019), financial performance assessments (Gunnlaugsson & Saevaldsson, 2016) value chain analysis (Knútsson et al., 2016) and identifying sustainability opportunities within Icelandic fisheries (Byrne et al., 2020). Additionally, several market-based management instruments have been applied to analyze objectives for improving fisheries management, considering economic, biological, social, regional, and political factors (Leadbitter, 2008), as well as strategies for protecting marine ecosystem services in wild-caught fisheries (Varadarajan, 2023).

**Table 2.** Fisheries studies on SI, RBV, and MBV as competitive advantage source

| Study                              | Source of Competitive Advantage                                                                                                                                                                                                                       |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Bertheussen, 2021)                | Harvesters (quota owners) have close to twice the return on investment than processors (without quota) and protection from new entrants and low-cost fish input.                                                                                      |
| (Bertheussen et al., 2020)         | Norwegian exporters of mackerel achieved higher export prices than Icelandic exporters because of biological conditions (time).                                                                                                                       |
| (Nilssen et al., 2015)             | Fresh fish caught and sold with hooking gear outperformed competitors.                                                                                                                                                                                |
| (Bertheussen et al., 2021)         | Legal and financial barriers exist in Norwegian fisheries that protect incumbents.                                                                                                                                                                    |
| (Bertheussen & Vassdal, 2023)      | Resource rent is created and based on fishery management institutions and harvesting rules if access is free.                                                                                                                                         |
| (Bertheussen, 2023)                | Value creation in Norwegian fisheries is dependent on natural resources and fisheries management.                                                                                                                                                     |
| (Quartey, 2019)                    | Strategic, organizational, and commercial influence of knowledge is a source of CA.                                                                                                                                                                   |
| (Arnason, 2005)                    | Experience of ITQs in Iceland strongly suggests substantial economic benefits.                                                                                                                                                                        |
| (Gunnlaugsson & Valtýsson, 2022)   | The economic performance of fisheries in Iceland has improved, and the value of fishing rights is making it difficult for new entrants to enter the industry since companies are increasingly vertically integrated.                                  |
| (Gunnlaugsson & Agnarsson, 2019)   | Resources rent as capture of fishing fees emerged after 2008 in Iceland and have been fluctuating from 13% to 29% of the total rent until 2016.                                                                                                       |
| (Gunnlaugsson & Saevaldsson, 2016) | The financial health of the Icelandic fisheries is sound and has improved since 2008, mostly because of the ITQ management system.                                                                                                                    |
| (Knútsson et al., 2016)            | The Icelandic fishing industry has outperformed fishing industries in neighboring countries. Long-run profitability is based on regulatory changes: abolition of export barriers, introduction of the ITQ system, and establishment of fish auctions. |
| (Kvamsdal et al., 2016)            | By implementing robust management strategies that consider market dynamics, fisheries can better position themselves competitively.                                                                                                                   |
| (Kristofersson et al., 2012)       | The Icelandic ITQ management system has increased efficiency and profit in the industry – Icelandic fisheries are more market-driven than Norwegian fisheries, which are mostly driven by catching.                                                   |
| (Byrne et al., 2020)               | Consolidation in the Icelandic fishing industry is highest in the pelagic sector and lowest in the fishing of cod and haddock.                                                                                                                        |

|                             |                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Saviolidis et al., 2020)   | The fishing industry has opportunities for blue growth for the next years, but there are drivers and barriers for investment in the industry.                                                                                                                                                                                                                                         |
| (Vigfusson et al., 2023)    | Icelandic fisheries are facing SI obstacles such as a lack of governmental vision for the industry, hostile regulatory bodies, frequent regulatory changes, high political uncertainty, time-consuming lobbying efforts, and often unsympathetic political and media discussion.                                                                                                      |
| (Vigfússon et al., 2024)    | Icelandic fisheries CEOs find it important in SI to foster all employees' active engagement and involvement in the implementation process, promoting bottom-up innovation and communication, by aligning corporate strategy with the UN SDGs and last, by adhering to rigorous action plans that include explicit, measurable, and prioritized objectives and timelines for managers. |
| (Parlee & Foley, 2022)      | Privatization policies of limited entry licensing and individual quotas were developed alongside owner/operator and fleet separation policies, which provide robust institutional protection to prevent consolidated corporate ownership and vertical integration over fisheries in Newfoundland and Labrador.                                                                        |
| (Vigfússon et al., 2025)    | The findings suggest a transition from an RBV to an MBV to strengthen the industry's CA. Key findings stress the significance of growth strategy, enhancing integration, value chain control, and brand development within the MBV perspective. The study proposes a model showing the industry's prospective CA.                                                                     |
| (Björgvinsson et al., 2015) | A comparative study indicates that Icelandic whitefish companies have implemented more advanced and integrated strategies for harvesting and marketing than those employed by their Norwegian counterparts, resulting in enhanced value capture and higher export profitability.                                                                                                      |

Source: Vigfusson et al. 2025, Adapted by author

A few studies have been conducted in specific industries using RBV and/or MBV as theoretical perspectives for assessing CA (Khanra et al., 2022; M. Peters et al., 2011; Tokarczyk et al., 2007; Zahra, 2021). In a study of the source of CA in family business companies, multiple interviews with family owners and managers suggested that intangible and other unique resources contribute to CA. These include resources like strategic focus, customer orientation, relationships, and operational efficiency (Tokarczyk et al., 2007). In the case of startup companies, study findings suggest that the importance of time-based competition has to be recognized and that the resource management process is important as it embodies learning and resourcefulness, supporting competitive advantages (Zahra, 2021). Khanra et al. found that applying the RBV on sustainability aspects could make green innovation a valuable firm resource and CA and contribute to sustainable development and the SDGs (2022). Other studies have been conducted on specific resources like customer information (Varadarajan, 2020), and at least one attempt has been made to compare RBV and MBV by explaining changes in the privatization of state-owned enterprises in

the Czech Republic. The study revealed that RBV variables explained better firm performance than MBV variables in a changing environment (Makhija, 2003).

Though there is a gap in the literature and a lack of specific industry studies (Gellweiler, 2018), the tourism industry may be the primary source of research employing lenses of MBV and RBV to analyze CA. For instance, in their analysis of alpine tourist destinations in Italy, Peter, Siller, and Matzler (2011) discovered that the MBV approach demands significantly greater financial investment to create a compelling brand image than the RBV approach. Additionally, their research emphasized that authenticity, when examined through the RBV lens, is a vital resource that promotes more sustainable strategies, particularly beneficial for products targeting niche markets. A study by Hossain et al. (2021) on the hotel industry indicates that strategic flexibility is a direct driver of CA. Additionally, innovativeness significantly enhances the positive relationship between strategic flexibility and sustainable CA. Simarmata et al. (2022) examined a specific tourist destination currently facing a decline due to a lack of sustainable competitiveness. This decline is primarily attributed to the destination's failure to meet tourist expectations and growing disinterest among industry professionals. The situation is affected by unfavorable government policies, and pollution is affecting its main attraction. To achieve greater sustainability, the destination must leverage its valuable internal resources to create unique tourist experiences. Additionally, a new study has revealed that organizations in the tourism sector can achieve a sustainable CA by systematically leveraging their knowledge assets, addressing industry challenges, and enhancing their effectiveness. This study offers a roadmap highlighting the crucial role of knowledge management in the strategic management of tourism enterprises (Ogotu, 2025).

## **2.4 Summary of Theories and Perspectives**

Organizational theory complements the approach conducted in this thesis by examining how internal structures, behaviors, and cultural dynamics influence the translation of strategic goals (Casey & Goldman, 2010). It highlights the role of organizational design as a hierarchy and workflow process in facilitating or hindering SI (Rani, 2019). Institutional theory adds depth by exploring how norms, values, and external pressures impact strategic alignment and employee commitment, emphasizing the role of regulatory and societal expectations in shaping organizational behavior. Additionally, institutional constraints can promote or limit adaptation, depending on the degree of alignment with these external pressures (Tawse & Tabesh, 2021). The MBV underscores the importance of understanding competitive positioning and customer demands, which drive strategic decision-making and shape the adaptation of organizational strategies in response to market forces (Porter, 1979, 1980b). Meanwhile, the RBV focuses on the unique resources and capabilities that contribute to CA, mainly when and how these assets are deployed during SI (Barney, 1986, 1991). These theories support a holistic view of the internal and external dynamics essential to successful SI.

Integrating organizational theory with institutional theory, the market-based perspective, and the RBV provides a comprehensive framework for analyzing internal and external influences on SI.

Research on SI has traditionally focused on recurring obstacles and success factors, with seminal works like Alexander (1985) and Wernham (1985) laying foundational insights. However, there is a lack of recent empirical studies, especially those addressing industry-specific challenges (Madumuse & Qutieshat, 2024). The fisheries industry remains remarkably underexplored despite its unique strategic dynamics. Integrating SI models like Pryor's 5Ps (2007) – Purpose, Principles, Processes, People, and Performance – and CA frameworks, such as the MBV and RBV, into SI research is limited. These frameworks provide a deeper understanding of how fisheries navigate industry dynamics and leverage internal capabilities to implement strategies effectively. This gap highlights the need for an empirical study that focuses on SI obstacles and KSFs, while integrating CA frameworks and addressing underrepresented industries, such as fisheries. To advance theoretical understanding and provide practical guidance for overcoming SI challenges and sustaining CA, the research presented in this thesis enhances the understanding of SI in the Icelandic fisheries industry.

## **3 Strategic Management**

This chapter outlines the theoretical concepts in strategic management that are relevant to this research. The chapter begins by describing the strategic process in a three-phase conceptual framework. Then it discusses SI obstacles and KSFs. The chapter ends with a discussion of SI models and frameworks.

### **3.1 Strategic Process**

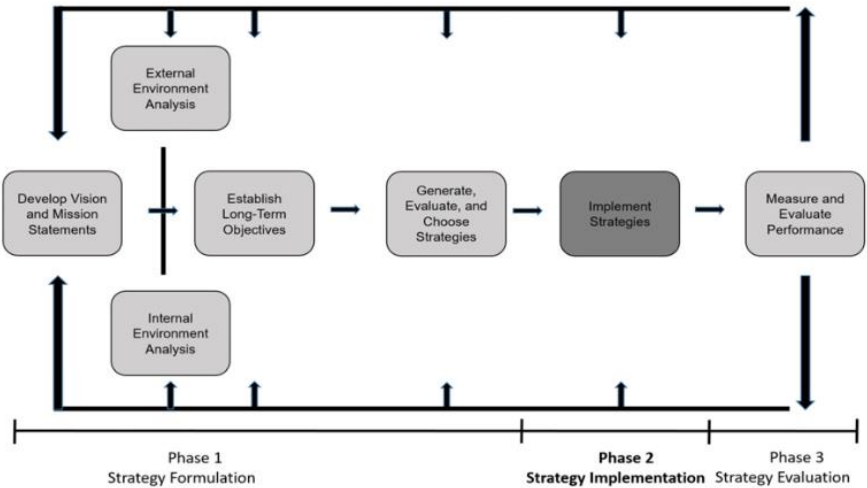
This thesis adopts an approach that seeks to identify and analyze SI within a specific industry while concurrently examining the industry's sources of CA. To achieve this, it is essential to delineate and critically evaluate the processes necessary for formulating, implementing, and evaluating strategy. Despite its pivotal role in organizational success, the strategic management process, particularly its implementation phase, still needs to be explored further in the literature, as the effectiveness of SI has a profound influence on organizational performance (Greer et al., 2017).

David and David (2013) presented a model in their seminal work on strategic management. They proposed a streamlined three-phase model comprising (a) strategy formulation, (b) strategy implementation, and (c) strategy evaluation (David & David, 2013). This model emphasizes SI as a distinct and critical phase, even though it is also the least comprehensively studied. The three steps are interconnected, and the strategy must be formulated before implementation (Hrebiniak, 2006). The research focus in this thesis is on the SI phase in David and David's model (see Figure 1), which emphasizes its role as a critical and complex bridge between strategy formulation and organizational outcomes. Inside these phases, they identified seven steps that must be completed in sequence: developing the organization's vision and mission, conducting internal and external environmental analysis, setting objectives, selecting strategies, and implementing and evaluating the strategy's performance (David & David, 2013).

This first phase in the strategic management model has been researched by several researchers (Chanas et al., 2019; Miller & Friesen, 1978; Pettigrew, 1992). Strategy formulation is a critical component of the strategic management process, necessitating a deliberate engagement as missteps during this initial phase can significantly impact subsequent stages, including SI and control, and undermine the overall effectiveness of the strategic plan (Shala, 2020). Others have studied the role of structure and the strategy process since the early days of SI research (Al-Kandi et al., 2013; Galbraith & Nathanson, 1978) as well as the structural and interpersonal processes of SI (Noble, 1999). By emphasizing the SI stage, Rani (2019) highlights the integral role of the strategy process as a cohesive link between strategic planning and SI. His conceptual framework enhances the understanding of how organizations can effectively address

the complexities associated with SI, thereby underscoring the critical importance of a well-structured strategy process in achieving organizational objectives (Rani, 2019). Similarly, the third phase, strategy evaluation, has received considerable attention, with notable contributions from Phillips and Moutinho (2018), Littler et al. (2000), and Simons (1994). The evaluation of strategy performance, often viewed as an integral part of strategy evaluation, has also been the subject of numerous studies. Kaplan and Norton, for instance, have focused on the BSC as a tool for mapping, measuring, and monitoring business or corporate strategy (Kaplan & Norton, 2000, 2004, 2008). Strategy evaluation is increasingly seen as a continuous process involving real-time feedback (Olson et al., 2018), including the necessity of continuous evaluation and feedback in the SI process. This reinforces the view that business strategy evaluation is an ongoing process that benefits from real-time insights. Ansari (2023) emphasizes aligning institutional goals with social and economic interests in healthcare policy evaluation, which underlines the importance of context-specific approaches.

Despite the widespread adoption of processes similar to David and David's framework in textbooks and practice, it has faced criticism for treating the actual process of SI as a "black box" and merely as a step in the strategy model without further elaboration (Merkus et al., 2019).



**Figure 1.** Model of the strategic management process (the strategy implementation phase is bolded to underline that it is the subject of this thesis)

Source: David and David 2013, p. 61

The strategy formulation phase involves five critical actions to develop a practical strategic framework. The foundational contribution to external environment analysis is often attributed to (Aguilar, 1967), who introduced the "PEST" framework – political, economic, social, and technological (and later, legal and environmental) dimensions – for assessing external organizational contexts. Subsequently, Porter's seminal works,

including the five forces model (Porter, 1979) and his exploration of CA (1985), emphasized the criticality of analyzing the external competitive environment. Porter's insights laid a foundation for integrating market- and resource-based perspectives into strategy formulation.

Complementing external analysis, Wernerfelt (1984) pioneered the RBV in his influential article, positing that an organization's resources are the primary determinants of its performance and competitive positioning. This perspective was further refined by Barney (1991), who argued that internal resources and capabilities, when valuable, rare, inimitable, and non-substitutable, are pivotal for achieving CA. Mintzberg's (1987) contributions also underscore the necessity of aligning strategic actions with external and internal dynamics, reinforcing the interplay between competitive environment analysis and resource-based considerations during the strategy formulation phase.

The concept of "vision" in strategic management has yet to have a universally agreed-upon definition, consequently impacting empirical research and leading to potential confusion among practitioners (Kantabutra & Avery, 2007). Different perspectives exist. Some view vision as transformative leadership (Caldwell et al., 2012), and others as a plain task for top managers (Niehoff et al., 1990). Hallinger and Heck (2002) see an organizational mission as a shared vision. Meanwhile, Levin (2000) argues that vision is a directional approach that should go beyond philosophy and portray ideals in action. Collins and Porras (1996) set forth vision as a component, emphasizing the interplay of stable ideology and dynamic change. Common amongst most definitions is that a vision should embody an idea of what the respective organization desires to be and the potential it can achieve (O'Brien & Meadows, 2001).

In their literature review, O'Brien and Meadows (2001) discovered that the advice for developing a vision is not harmonious. They came up with five dimensions of views based on different methods, the advice of visioning, and the mode of execution. The first dimension argues that analyzing the current organization's situation is inherently geared towards anchoring the organizational vision in realism. This process serves the dual purpose of imparting a nuanced comprehension of the present organizational positioning and furnishing insights conducive to future strategic directions. The second dimension encompasses a tripartite perspective, delving into whether action should be taken and when, how to implement, and how external assessments should be integrated into the broader strategic processes. The third dimension debates conceptualizing a singular organizational vision versus exploring multiple visions. The fourth dimension scrutinizes whether the vision should be contrasted with the current state of the organization or not. The fifth dimension directs attention towards the internal and external contextual landscapes. Specifically, it evaluates the feasibility of the envisaged vision vis-à-vis the internal core capabilities of the organization and the robustness given the potential external environment (O'Brien & Meadows, 2001). More recent studies underscore the importance of flexibility in planning, which is crucial in dynamic

environments, and thus, advocate for iterative planning that adapts to market uncertainties while emphasizing responsiveness as a key to successful formulation (Luís et al., 2021). Other studies highlight the cognitive aspects of strategic change, categorizing influences at the team and individual levels and calling for a deeper exploration of cognitive processes in strategy formulation (Prezenski et al., 2017). Competitive intelligence plays a pivotal role in the strategic process, according to Rahmi et al. (2020), as demonstrated in their study of how universities integrate competitive intelligence to enhance decision-making, particularly in strategy selection and evaluation.

Mission statements are widespread in most industries and broadly used in practice, but hardly studied in theory (Alegre et al., 2018). In a strategy process, a mission is a foundational statement that defines the organization's purpose, core values, what it aims to achieve, and whom it serves (Drucker, 1986). Mintzberg (1987) argued that an organization's mission statement reflects its collective mindset and identity. It serves as a lens through which the organization interprets its environment and guides its strategic decisions and actions. According to Mintzberg, a well-crafted mission statement can help align the organization's culture, behavior, and resource allocation with its overarching goals and values (Mintzberg, 1987). Mission statements come from two primary streams of literature (Babnik et al., 2014): strategic management literature, which aims to identify what works and what should be changed to improve organizational performance and the identity and image of an organization (Klemm et al., 1991). Based on the mission and the vision developed in the process, Drucker underscored the critical importance of formulating long-term objectives within the strategic planning framework. He posited that these objectives must be congruent with the organization's overarching mission and purpose, thereby directing decision-making processes and the allocation of resources (Drucker, 1986).

### **3.2 Strategy Implementation**

According to Hrebiniak and Joyce (1984), SI is a critical field that has a crucial influence on organizations. Not only do implementations have a vital impact on organizations, they are also fundamental to the effectiveness and function of any organization and the success of the business strategy (Hrebiniak, 2006; Schilit, 1987). Historically, the scholarly focus has predominantly centered on planning and processes (Mintzberg, 1994), formulation (Barney, 1991; Porter, 1979; Prahalad & Hamel, 1999; Rumelt, 2012), nature and definitions of strategy (Noble, 1999; Yang et al., 2010), with comparatively less attention given to SI (Blahová & Knápková, 2010). Additionally, strategy textbooks have a noticeable bias, prioritizing strategy formulation while often overlooking the critical aspect of effective SI within organizations (Hitt et al., 2017). Despite its critical importance, the conceptual framework for SI remains underdeveloped (De Oliveira et al., 2019), and there is no universally accepted model for advancing theoretical knowledge in this domain (Amoo et al., 2019). Consequently,

practitioners and managers consistently identify SI as the most challenging task (Hrebiniak, 2013). In contrast, researchers need to understand the factors that enable certain firms to implement strategies more effectively than others (Greer et al., 2017). Effective SI is a critical factor in why companies outperform others, and even high-quality strategy formulation cannot guarantee success if it is not implemented properly (Hitt et al., 2017; Raes et al., 2011). SI is listed as one of the top emergent topics in strategic management and organization theory literature (Kastanakis et al., 2019). Lee and Puranam (2016) state that one way to define SI is to study the extent to which an organization's implemented strategies correspond to its strategic intentions. They argue that the implementation of strategy follows strategy formulation and its effectiveness depends on how closely outcomes match what was intended in the strategic plan (E. Lee & Puranam, 2016). Many scholars have put forward their definitions of SI, and a few of the definitions are displayed (see Table 3). Yang et al. (2010) definition of SI is most useful for this thesis as it frames SI as a dynamic, iterative, and complex process, capturing its adaptive and non-linear nature. Unlike more structural views (Weiser et al., 2020), it also emphasizes the active roles of both managers and employees, aligning with the thesis focus on how strategy is enacted through everyday practices across organizational levels.

**Table 3.** Definitions of strategy implementation

| Scholars                   | Definition of Strategy Implementation (SI)                                                                                                                                    |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Hrebiniak & Joyce, 1984)  | Implementation involves interventions concerning organizational structures, key personnel actions, and control systems designed to control performance for desired ends.      |
| (Floyd & Wooldridge, 1992) | The managerial interventions that align organizational action with strategic intention.                                                                                       |
| (Noble, 1999)              | The communication, interpretation, adoption, and enactment of strategic plans.                                                                                                |
| (Lehner, 2004)             | SI may be viewed as a process inducing various forms of organizational learning because environmental threats and strategic responses are prime triggers for these processes. |
| (Schaap, 2006)             | Implementation is operationally defined as the senior-level leadership behaviors and activities that transform a working plan into a concrete reality.                        |
| (Hill & Jones, 2008)       | SI is about designing appropriate organizational structure and control systems to put the organization's chosen strategy into action.                                         |
| (Yang et al., 2010)        | A dynamic, iterative, and complex process comprised of various activities by managers and employees to turn strategic plans into reality to achieve strategic objectives.     |
| (E. Lee & Puranam, 2016)   | SI effectiveness is the extent to which an organization's implemented strategies correspond to its strategic intentions.                                                      |
| (Moloi & Marwala, 2021)    | The way an organization should develop, utilize, and amalgamate firm structure, control systems, and culture to follow strategies that lead to CA and better performance.     |

Source: Created by author

Implementation remains a critical phase, often marred by high failure rates (Cândido & Santos, 2019). Cândido and Santos (2015) identify obstacles such as resource inadequacies, resistance to change, and misaligned organizational culture. They stress the importance of fostering a supportive culture and ensuring transparent communication. Andersen and Nielsen (2009) illustrate the need for adaptive strategies, demonstrating how an emergent approach can foster adaptive behavior. Early research on SI predominantly focused on defining the concept of strategy in organizations, elucidating its role in enhancing competitiveness, contributing to CA, and improving organizational performance (Bourgeois, 1980; Hrebiniak & Snow, 1982; Nutt, 1983; Waterman et al., 1980). While the body of literature on SI remains relatively underdeveloped, numerous scholars have approached the topic from diverse

perspectives (Galbraith & Nathanson, 1978; Hrebiniak, 2006; Lorange, 1998; Noble, 1999). The persistent difficulty of translating strategic plans into actionable results underscores the importance, and as Olson, Slater, and Hult (2005) noted, the “doing” strategy is inherently more complex than “dreaming”. If a formulated strategy is effectively implemented, the resources, use of time, and effort invested in its development are well spent. This highlights the need for further exploration into the obstacles and KSFs of SI, which remains a cornerstone of achieving organizational objectives.

Mintzberg (1987) sees strategy formulation and implementation as interlinked and inseparable. There is a common understanding that strategy is about deciding how to allocate resources to compete and sustain a CA. However, researchers differ on the strategy formulation process, as Mintzberg, Lempel, and Ahlstrand stipulate in their book *Strategic Safari*, where strategy is divided into three main categories: prescriptive, descriptive, and integrative (Mintzberg et al., 2005). According to (Grant, 2016) in its simplest form, strategic management can be viewed as a two-step process: formulating and implementing the strategy. These are interlinked and must be in place before they can be implemented or executed. However, it is also possible to see the interdependence of the two concepts as part of an overall process of planning and finally implementing the proposed strategy. This means that formulating and planning affect the implementation, and changes to strategy over time (Hrebiniak, 2006).

Most research on SI has approached the role and importance of top management and middle management in the implementation process (Greer et al., 2017; Raes et al., 2011) as well as exploring the relationships and essential constructs (Wooldridge et al., 2008). However, there is practically no research on lower-level management or employees’ influence and involvement in implementation, although there is some research on who does what with what consequences in strategic practice when it comes to implementation (Hendry et al., 2010; Hoon, 2007; Jarzabkowski & Spee, 2009). Several scholars in this field admit that the influence and participation of lower-level managers and employees are crucial to understanding SI more fully, and further research is necessary (Alexander, 1985; Noble, 1999; Nutt, 1986).

### **3.3 Strategy Implementation Obstacles**

Various scholars have extensively explored research on obstacles to SI (Alexander, 1985; Beer & Eisenstat, 2000; Cater & Pucko, 2010; Gębczyńska, 2016; Wernham, 1985). Early studies highlighted the recurring nature of certain obstacles across different organizations and industries, emphasizing the need for systematic identification and analysis. For instance, Alexander’s (1985) investigation into SI obstacles and Wernham’s (1985) analysis of factors influencing implementation are seminal works in this domain. Wernham’s research particularly underscores the significant roles of middle and senior managers in influencing SI bad plan outcomes.

Alexander (1985) identified various obstacles, including underestimated time requirements, lack of coordination, insufficient employee capabilities, inadequate staff training, poor leadership, unclear task definitions, and the influence of uncontrollable external factors. Subsequent studies, such as by Al-Ghamdi (1998), have reaffirmed these findings as central challenges to SI. Notably, Alexander's research revealed that 10 out of 22 potential implementation problems were encountered by at least 50% of the sample firms, highlighting the systemic nature of these issues. The study also underscored the adverse effects of substantial implementation implications for organizational outcomes (Alexander, 1985). Alexander (1985) concluded that while an effective plan has the potential to salvage an inherently flawed idea, a poorly conceived plan is capable of undermining even the most promising concept. This assertion retains significant relevance in contemporary strategic management discourse. Other significant obstacles included a lack of employee commitment, insufficient resource allocation, and adverse effects of external environmental factors, which impacted 60% of the firms in the study. These findings underscore the complexity of SI and the need for a structured, resource-supported approach to overcome these challenges effectively (Alexander, 1985). Beer and Eisenstat (2000) found that coordination across organizational functions should be improved. They also found, like Alexander, that a lack of leadership affects implementation and poor vertical communication through the organization. They also discovered that ineffective senior management teams could hinder successful implementation. The critical lesson is that there are leading "killers" of SI in most organizations and managers often avoid confronting them. There are several other obstacles identified by different researchers who found that poor coordination across functions in an organization is often lacking, as well as a lack of leadership, poor vertical communication, and ineffective senior management teams (Lorange, 1998; Pella et al., 2013; Rumelt, 2012).

Several researchers have identified SI obstacles and pitfalls based on empirical research, and some of the most common are communication problems, poor coordination (Rapert et al., 2002), and lack of consensus among executives (Bourgeois, 1980; Wooldridge & Floyd, 1990). Early research focused on single-factor research affecting SI, like the research of Woolridge and Floyd (1989) on the importance of consensus when it comes to SI and of Guth and Macmillan (1986) on how self-interests of middle managers can affect implementation if compromised. Additionally, (Hambrick & Cannella, 1989) emphasized the importance of selling the strategy in-house before and throughout implementation. Few studies identified obstacles to SI while offering proposed solutions. For instance, Hrebiniak (2006) highlighted a significant disconnect between strategy formulation and implementation, noting that CEOs are often actively involved in the formulation phase but absent during implementation. This disconnect creates critical challenges, as these leaders may need more skills or experience to design feasible strategies. Hrebiniak further argues that this issue stems from a systemic training gap, as managers are typically trained to plan

strategies rather than to execute them effectively. In addition to diagnosing these obstacles, Hrebiniak offers logical, actionable solutions to overcome them, emphasizing the need for alignment between formulation and implementation phases and the cultivation of managerial capabilities that support planning and implementation. According to Hrebiniak, successful implementation is critical to strategic success, and most managers know more about strategy formulation than SI. Therefore, they know more about planning than doing, which causes problems with making strategy work and makes them unable to manage change accordingly. The other key lesson is that managers must be aware of many obstacles, such as a lack of information sharing, ownership, and unclear communication and responsibility. Lastly, managers need to build a roadmap for executing strategic decisions (Hrebiniak, 2006, 2013).

Existing literature on SI has predominantly emphasized internal obstacles, which Cândido and Santos (2019) define as organizational challenges within the control of management. In contrast, relatively few studies have addressed the role of external obstacles in hindering SI (Baumgartner, 2014; Hrebiniak, 2006; Köseoglu et al., 2020). Cândido and Santos conducted an extensive analysis, identifying 65 distinct obstacles to SI, which they categorized into 14 thematic groups based on their origin and nature. Of these, 13 themes were classified as internal, encompassing factors such as deficiencies in leadership skills, ineffective communication, inadequate management capabilities, resistance to change, organizational culture, resource constraints, structural issues, and lack of coordination. Only one theme was considered external, covering unanticipated events, competitive pressures, technological advancements, and broader macro-environmental, political, and social influences (Cândido & Santos, 2019). This classification highlights the predominance of internal barriers in SI discourse while underscoring the need for greater attention to external contextual factors in future research.

Several studies have explored SI obstacles within specific industries, contributing valuable insights to the field (Mollahoseini & Ahmadvani, 2012; Ocak et al., 2022; Okumus, 2001; Vigfusson et al., 2023). Okumus (2001) proposed a comprehensive SI framework incorporating the internal and external organizational context, strategic content, implementation processes, and outcomes in an influential study focusing on the hotel services industry. This framework aims to provide organizations with a systematic and practical approach for analyzing and addressing complex implementation challenges. Another study in the hotel industry identified key obstacles to SI, including frequent interventions by hotel owners, insufficient strategic analysis preceding decision-making, limited strategic planning, and inadequate training for implementers (Köseoglu et al., 2018). These findings align with broader SI research emphasizing the importance of strategic consensus (Aaltonen & Ikavalko, 2002), effective communication (Alexander, 1985), shared organizational values (Schaap, 2006), and stakeholder commitment (Brenes et al., 2008). However, the hotel industry study diverges from earlier findings by downplaying the significance of time constraints

and resource limitations highlighted in previous research as critical obstacles to successful SI (Alexander, 1985).

Recent research highlights persistent and recurring obstacles to SI across diverse organizational contexts and industries, emphasizing the critical need for systematic identification and analysis of such barriers (Waltz et al., 2019). Participatory practices have been shown to facilitate the inherently complex process of strategizing, effectively mitigating these recurring challenges. This approach aligns with a broader organizational imperative to systematically recognize and address implementation barriers, underscoring that these obstacles often transcend specific organizational and industrial boundaries (Doeleman et al., 2021). Moussa et al. (2021) further extend this discussion by identifying a consistent set of barriers that frequently hinder SI, including insufficient planning, inadequate internal support, limited knowledge, and the lack of robust feedback mechanisms. Observations during SI processes highlight the importance of adopting systematic approaches to identifying and analyzing SI obstacles, ensuring more effective implementation outcomes (Cândido & Santos, 2019).

### **3.4 Key Success Factors of Strategy Implementation**

Organizations often face recurring challenges in SI, highlighting the consistent obstacles that undermine success. Scholars have long emphasized the critical importance of overcoming these barriers, as most strategies fail during implementation (Atkinson, 2006; Cândido & Santos, 2019). Several researchers have explored KSFs influencing effective SI (Aaltonen & Ikavalko, 2002; López-Torres et al., 2023; Shah, 2005; Tawse et al., 2019). For instance, Zagotta and Robinson (2002) proposed a practical framework for CEOs, emphasizing open communication, commitment measures, strategic planning, progress reporting, and regular evaluation. Numerous studies have sought to identify the factors that contribute to effective SI, for example, Waterman et al. (1980), the 7-S framework of structure, systems, shared values, skills, style, and staff outlining essential organizational elements for successful SI and robust structural alignment. They found that firm structure, operational systems, management style, staff organization, skill development, and strategic planning affect an organization's ability to change. One of their main conclusions was that all elements needed for successful implementation are interlinked (Waterman et al., 1980). Effective implementation relies on an integrated approach, addressing multiple KSFs rather than focusing narrowly on isolated elements (Obeid, 2023). Effective SI is contingent upon several critical success factors, including reinforcing strategic objectives, fostering commitment across organizational levels, cultivating a supportive organizational culture, and leveraging managerial competencies. Additionally, the process necessitates clear and consistent communication and robust coordination; management must complement these efforts to ensure alignment (López-Torres et al., 2023).

Shah (2005) analyzed data from 104 managers and identified 11 significant KSFs to SI. His findings underscore the need for a well-designed strategy, sufficient resource allocation, strong managerial commitment and leadership, employee engagement and commitment, and the integration of financial incentives with performance outcomes. Crittenden and Crittenden (2008) echoed these themes in their study on local and international companies, finding that successful implementation was based on a mixture of various strategic elements, such as supportive policies and systems. Aaltonen and Ikavalko (2002) further highlighted the necessity of aligning organizational systems and structures with strategic objectives. Other studies have drawn attention to specific KSFs, including strategic consensus (Bourgeois, 1980; Schaap, 2006), frequent and transparent communication (Alamsjah, 2011), and fostering trust and commitment within management teams and the strategic process (Lampaki & Papadakis, 2018; Malkamäki et al., 2021).

The influence of leadership across all levels, mainly middle and top management, has also been pivotal in driving successful implementation efforts (Greer et al., 2017; Raes et al., 2011; Wooldridge et al., 2008). These studies offer a comprehensive view of the multifaceted factors essential for effective SI. Alamsjah (2011) investigated KSFs for SI across various industries, highlighting the critical role of organizational culture in influencing the outcomes of SI. Nutt (1983) explored implementation tactics like persuasion and participation, and their effects on different types of changes. Mintzberg and Waters (1985) introduced different types of approaches for various situations when implementing a strategy. Other researchers, such as Allio (2005) and Schaap (2006), have advocated for straightforward approaches emphasizing frequent communication, consensus-building, and clear objectives. Weiser et al. (2020) suggested an integrative approach to implementation involving an interplay of conceptualizing and enacting, with a focus on the roles of different actors and coordinating strategic action.

Aaltonen and Ikavalko (2002) found that aligning systems and structure with strategy is crucial. They suggested that top-down SI is insufficient and recommended two-way communication. Strategic change must be defined so that members of the organization know whether to follow a set of rules or think strategically in different situations. Goals and objectives should be set for different levels in the organization and linked to daily activities. If strategy emerges over time, middle managers play a vital role in strategy communication and need skills and motivation to succeed (Aaltonen & Ikavalko, 2002).

Two studies specifically focused on KSFs for implementing sustainability strategies are noteworthy. Johannsdottir and McNerney (2018) conducted a qualitative study examining how Nordic insurance companies integrate environmental sustainability into their corporate sustainability practices. They outline five critical success factors: commitment, configuration, core business, communication, and continuous improvement, which provide a practical guide for companies with limited resources. Günther (2016) revealed that while corporate sustainability is perceived as crucial in

almost every firm regardless of industry or region, many organizations failed to integrate sustainable initiatives into their business strategies adequately. Regarding KSFs for implementing a sustainable strategy, respondents in Günther's study identified several crucial aspects. First, clear directives and mandates from management were deemed essential. Second, critical factors included alignment with the firm's broader business strategy, financial goals, and regular performance reviews. Third, management should establish clear objectives and communicate relevant information to involve employees in planning and implementation. Fourth, the study emphasized the significance of management consensus and strong leadership abilities in successful implementation (Günther, 2016). The findings of KSFs in Günther's study align with those identified in earlier research.

Research has also provided valuable insights into the enablers of successful SI. Vigfússon et al. (2021) identified leadership support, stakeholder engagement, and effective communication as critical success factors. Leaders who see organizational culture as a key task and understand that alignment with organizational strategies is more likely to succeed (Warrick, 2017). Damschroder et al. (2020) emphasize the role of tailored strategies that address specific organizational needs, while Villamarín and Pinzon (2017) identified 13 KSFs that improve the planning and implementation of business intelligence projects in organizations. Recent literature comprehensively explains SI dual challenges and opportunities (Prezenski et al., 2017) and the importance of understanding obstacles, KSFs (Leyh & Sander, 2015), and their organizational context when implementing (Nimawat & Gidwani, 2020), where factors such as organizational readiness (Weiner, 2020) and stakeholder engagement can either promote or impede successful outcomes (Yadua et al., 2024).

### **3.5 Strategy Implementation Models and Frameworks**

Researchers and practitioners have traditionally relied on established frameworks to guide strategic management processes. Models such as Ansoff's SWOT analysis and Porter's five forces (1979) have been foundational for strategy formulation, while tools like Kaplan and Norton's BSC (1995) and the McKinsey 7-S Framework (T. J. Peters & Waterman, 1984) have supported strategy evaluation and alignment. Despite their widespread adoption, these frameworks primarily focus on formulation and analysis, leaving a notable gap in management guidelines explicitly tailored to SI. This gap has led to increased calls for robust SI models that address implementation complexities while providing actionable insights for practitioners (Hrebiniak, 2006; Rani, 2019). In response to his demands, Hrebiniak extended his earlier work to propose an integrated SI framework (2013). This framework emphasizes the critical interplay between leadership practices, operational processes, and strategic alignment. By highlighting the importance of cohesive leadership and clearly defined roles, it offers a structured approach to overcoming the common barriers that hinder successful SI. Baroto et al. (2014) also proposed an integrated model based on the model of (Waterman et al.,

1980) that combines the RBV with the industrial organization perspective. Their findings suggest that more than one perspective is required to address SI challenges; however, integrating them alongside tools like the BSC provides a comprehensive solution. This integrated approach highlights the need for a holistic perspective, leveraging internal capabilities and external market dynamics to overcome implementation obstacles effectively.

Few researchers have attempted to develop SI frameworks to bridge this gap in the past. Waterman et al. (1980) emphasized the interconnected nature of elements critical to implementation, including firm structure, management style, staff organization, and strategic planning. Mintzberg and Waters (1985) argued for situational adaptability in SI, while Bourgeois and Brodwin (1984) proposed a five-process model consisting of managing change, a top-down commander approach, the need for collaboration with middle management and employees, a bottom-up approach to ensure buy-in, and a recognition of cultural factors in shaping SI, focusing on values, beliefs, and behaviors. This model highlights that implementation is not a one-size-fits-all process and that organizations may need different approaches depending on their context. Kaplan and Norton (Kaplan & Norton, 1995, 1996, 2000, 2004, 2008) expanded strategic performance measurement with their BSC, incorporating financial, customer, internal process, and human resource dimensions to facilitate monitoring and implementation. Their model remains a cornerstone for aligning organizational objectives with actionable metrics. Further contributions include Hambrick and Fredrickson's (2001) strategy design framework, which outlines five essential elements: activity domains, pathways, CA, implementation speed, and return expectations. Okumus (2003) developed an SI framework in the hotel industry, emphasizing the organization's internal and external contexts as critical factors. Allio (2005) advocated for translating strategic goals into actionable and measurable steps, while Higgins (2005) enhanced the McKinsey 7-S model by adding strategic performance, creating the 8-S framework for execution-focused management.

Many existing SI frameworks are primarily conceptual and descriptive, offering limited practical applicability (Engert & Baumgartner, 2016). Among the pragmatic models is the 5Ps SI Model proposed by Pryor et al. (2007), which identifies five critical elements for successful implementation: purpose, principles, processes, people, and performance. This model leverages practical insights from diverse business disciplines, providing a structured and integrated approach that incorporates critical organizational factors such as structures, systems, leadership behaviors, human resource policies, culture, and management practices. The model emphasizes alignment among these elements to optimize efficiency in strategy execution. In the present study, the 5Ps model is an analytical framework for identifying factors that facilitate or hinder SI (Pryor et al., 2007).

Johannsdottir and McNerney (2018) extended this line of inquiry by developing the “Five Cs” framework through a qualitative study of Nordic insurance companies. The model, which is embedded in internal and external driving forces, explains how companies can integrate environmental sustainability into their corporate practices and provides a practical guide for companies with limited resources to embed sustainability into daily operations (Johannsdottir & McNerney, 2018). Consistent with Engert et al. (2016), this framework highlights the integration of corporate sustainability into strategic management, focusing specifically on the relationship between sustainability and core business activities such as underwriting, risk management, and investments. It also considers internal and external pressures driving sustainability initiatives. Similarly, the dynamic capabilities framework by Teece has gained prominence for its ability to address rapid environmental changes, highlighting adaptability and resource alignment as critical for successful SI (Teece et al., 1997). In parallel, the Agile SI approach integrates methodologies from Agile project management, focusing on iterative processes, stakeholder engagement, and rapid responsiveness to evolving needs. Another influential perspective is the Strategy-as-Practice framework, which emphasizes the micro-level activities of individuals and groups within organizations (Jarzabkowski & Whittington, 2008). Whittington et al. (2017) highlight the importance of routine practices and collective sensemaking in ensuring the practical realization of strategic objectives, shifting the focus from top-down to a more participatory, bottom-up, and action-oriented implementation.

## 4 Methodology

This chapter describes the thesis research approach. The case study and the SLR are outlined, as well as the thesis data collection and analysis. The chapter concludes with a discussion on research quality assurance.

### 4.1 Research Approach

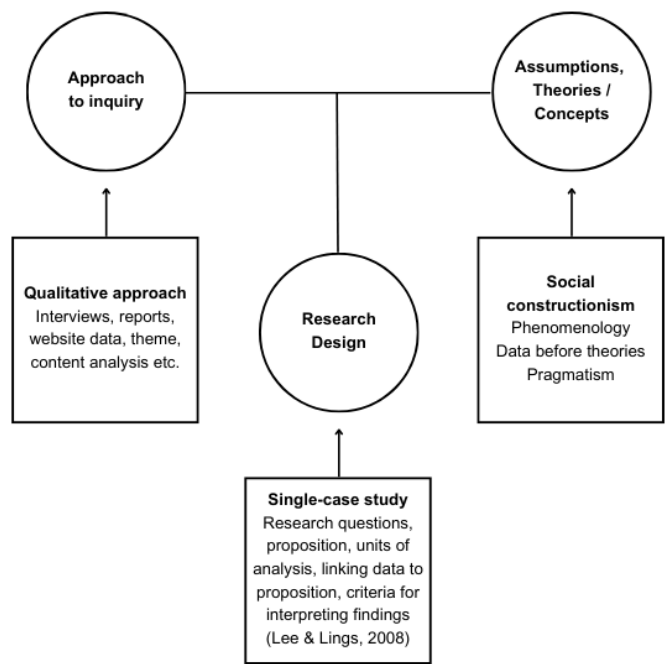
Research usually starts with a selection of topics, problems, and or areas of interest of the researcher. The researcher brings his history, ethics, politics, and worldviews (Creswell & Poth, 2016). These beliefs are called ontologies or the nature of reality (Crotty, 1998). The methodological approach of the thesis aligns with the principles of phenomenology and pragmatism (Gallagher, 2022). Phenomenology emphasizes the understanding of phenomena as experienced by individuals, seeking to reveal the essence of these experiences in specific contexts. This resonates with the qualitative and exploratory nature of the methodologies employed in the thesis (Groenewald, 2004). Phenomenology is the appropriate view in several significant ways, mainly through its focus on uncovering CEOs lived experiences and perspectives in the fisheries industry. The use of semi-structured elite interviews (Goldstein, 2002; Harvey, 2011) with CEOs mirrors the phenomenological emphasis on capturing first-person accounts to understand phenomena more deeply. By prioritizing the CEOs perspectives, the research uncovers nuanced insights into the SI obstacles, KSFs, CA, and integration of SDGs, reflecting a phenomenological commitment to exploring subjective experience (Ladkin, 2005). Phenomenology often examines phenomena within their natural context (Neubauer et al., 2019). It was appropriate that purposive sampling was chosen to identify the primary interviewees, and the selected sample was based on judgment and the purpose of the research (Campbell et al., 2020). The thesis's emphasis on understanding SI within the specific industry environment, in a single case study methodology, was chosen (Creswell & Poth, 2016) which focuses on the Icelandic fisheries industry, and aligns with phenomenology's contextual focus.

In this thesis, pragmatism is useful based on its proposition that research should use the methodological approach that works best for the particular research being studied by emphasizing practical, context-specific solutions and its commitment to addressing real-world problems (Morgan, 2014) within the Icelandic fisheries industry. Pragmatism as a research philosophy prioritizes actionable knowledge grounded in practical outcomes (Leanne M & Cordeiro, 2020), and in this case, flexibility was needed for access to industry companies. This is reflected in several aspects of the methodological approach since the research addresses strategic issues such as SI obstacles, KSFs, CA, and SDG

integration, which are critical to the Icelandic fisheries industry’s success. This practical orientation embodies pragmatism’s core of using inquiry to solve concrete problems (Legg & Hookway, 2008). The thesis uses the most suitable methods to achieve practical insights, balancing theoretical depth with empirical applicability. Pragmatism encourages methodological pluralism, and the combination of SLR, case study analysis, and semi-structured elite interviews illustrates a flexible, goal-oriented approach to methodology (Morgan, 2014).

Epistemology is an important part of every research paradigm and can be conceived as the theory of knowledge and how knowledge is captured (Creswell & Poth, 2016). In this research, the epistemology is as follows: a) data are derived from the perspective of individuals involved in managing fisheries (CEOs) dealing with strategy, SI, and operation; b) because of this, the principal researcher actively engaged with these interviewees during the data collection process.

The theoretical approach outlines the qualitative research design framework, integrating the approach to inquiry, foundational assumptions, and single case study methodology in the thesis (see Figure 2). It emphasizes a qualitative approach supported by social constructionist perspectives, such as phenomenology and pragmatism, and adopts Lee & Lings (2008) single case study structure to link data, propositions, and interpretive criteria systematically.



**Figure 2.** Theoretical approach

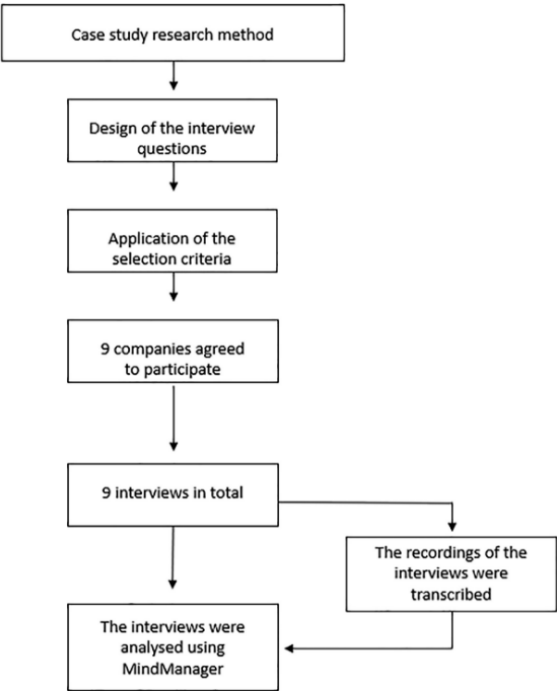
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## 4.2 Articles – Common Methodological Approaches

The four articles in this thesis share several common methodological approaches, all emphasizing systematic, qualitative analysis to explore strategic issues in the Icelandic fisheries industry and SI context. The methodology employed in the four articles within this thesis aimed to rigorously review empirical studies on SI, conduct a single case study within the industry, and explore the perspectives of CEOs regarding SI obstacles, KSFs, CA, and SDGs integration. Across these articles, methodologies employed a combination of SLR, single case study analysis, and elite interviews. Each approach tailored its data collection and analysis methods to suit the specific objectives, leveraging software tools for data organization, coding, and thematic analysis (Riger & Sigurvinsdottir, 2016). The SLR, as proposed by Torraco (2016), ensured a comprehensive understanding of existing empirical studies, while the single case study and elite interviews offered insights into real-life SI within the Icelandic fisheries industry, enriching the academic discourse on SI obstacles, KSFs, CA, and SDGs integration. These four articles provide comprehensive insights into the challenges and opportunities in SI in the Icelandic fisheries by integrating a literature review, a single case study, and semi-structured interviews.

## 4.3 Case Study Method

Qualitative research seeks to examine individuals' experiences in depth through various methods, such as in-depth interviews, observations, content analysis, visual methods, and life histories. This approach facilitates the identification of issues from the interviewee's perspective, enabling researchers to understand the meanings and interpretations interviewees attribute to behaviors and events (Hennink et al., 2020). A case study explores real-life cases through collected data involving multiple sources of information and encapsulates case themes and descriptions (Cresswell et al., 2013). A single case study is appropriate for this research when studying a single industry with several companies (N. Lee & Lings, 2008), as it facilitates the examination of real-life cases by gathering data from various sources and providing a comprehensive portrayal of case-specific themes and details (Creswell & Poth, 2016). This method is widely recognized in the social sciences as a robust empirical inquiry (Yin, 1994) and has been extensively applied in studies of SI, including those by Köseoglu et al. (2018), Nutt (1989), and Okumus's (2001). Such an approach is often referred to as interpretive, as it emphasizes understanding the subjective experiences of individuals. Within qualitative research, the single case study method is particularly suitable for investigating specific industries, such as fisheries, as it enables the exploration of real-life cases through the systematic collection and thematic analysis of data (Creswell & Poth, 2016). See (Figure 3) the structure of data collection and analysis in the thesis.



**Figure 3.** Design of interview framework

Source: Adopted from Vigfusson et al., 2024

### 4.4 Case Selection

Purposive sampling was used in this thesis. This method is used in qualitative research to identify and select information-rich cases or people to help provide answers to the research questions proposed (N. Lee & Lings, 2008). Representatives from the fisheries industry were selected based on formal criteria. The purposive sampling method used in this research is based on guiding criteria (see Table 4): size of the company in the industry, the company’s revenue, the number of employees, and the type and nature of the company operations.

**Table 4.** Selection criteria

| Issue               | Criteria                                                                             |
|---------------------|--------------------------------------------------------------------------------------|
| Size of the company | One of the 15 largest fishing quota holders in Iceland                               |
| Company revenue     | Listed as one of the 120 largest companies in 2020                                   |
| Number of employees | Having more than 200 employees                                                       |
| Company operation   | Fishing, processing, marketing, and selling fish and fish products on global markets |

Source: Adopted from Vigfusson et al., 2023

This resulted in a total of 15 companies. Of those, nine of the fifteen most prominent companies in the Icelandic fishing industry agreed to participate. The nine companies hold 49.9% of the fishing quota allocated in Iceland in 2023–2024. The rationale behind focusing on companies of this magnitude in the Industry, coupled with the minimum employee threshold of over 200, was to ensure a more realistic likelihood of substantial strategy formulation and implementation having taken place within the selected companies. All the companies are in the business of fishing, processing, marketing, and selling their products on the global market. The interview framework only allowed CEOs to participate in the research, resulting in CEOs from nine companies participating. All CEOs were offered an assistant during the interview, and two of the CEOs had their Human Resources (HR) managers with them during the interview.

**4.5 Data Collection**

The source of primary data collection provided for the thesis was interviews that were applied to Article 2#, Article 3#, and Article 4#. Secondary data sources for Article 2#, Article 3#, and Article 4# consisted of published articles, business documents from interviewees, annual reports, slideshows, media news, and websites. Article 1# employed a Systematic Literature Review following guidelines from Nakano and Muniz (2018) to compile and analyze empirical studies and identify SI obstacles and KSFs from empirical studies. Table 5 summarizes how the data were collected.

**Table 5.** Summary of data collection

| Data collection            | Data type                                                                                           | Used to analyze                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Semi-structured interviews | Recorded audio material<br><br>Nine interviews                                                      | SI obstacles, success factors, and CA of the fisheries industry |
| Follow up interviews       | Notes and summaries                                                                                 | Practical impacts of the findings                               |
| Secondary data             | Systematic literature review of published articles                                                  | SI obstacles and KSFs of SI                                     |
| Secondary data             | Reports, slideshows, media news, websites, annual reports, and business documents from interviewees | Triangulation and validation                                    |

Source: Created by author

All three empirical Articles in this thesis draw on the same dataset of nine CEO interviews; however, each Article applies a distinct analytical lens and addresses a separate theoretical question within the broader field of SI and CA. Each Article was framed to contribute uniquely. Article 2# focuses on implementation obstacles, Article 3# on KSFs, and Article 4# on industry-specific interpretations of CA, thereby ensuring theoretical and empirical differentiation across the studies.

Secondary data from the companies was used for triangulation. These secondary data sources included website content, annual reports, strategic and policy documents sourced from employees and staff members, observations made during on-site visits to the companies, and information derived from media sources. In addition, observational notes were taken down during and after interviews based on the emphasis on the use of all senses in making observations (Bailey, 2021).

## 4.6 Interviews

In alignment with the perspective articulated by Lee and Lings (2008), qualitative methods such as interviews are well-suited for the interpretive aspects of this research to investigate how SI obstacles, KSFs, and CA in the fisheries industry are based on the interviewees' perspectives. The thesis employs an in-depth elite interview method (Goldstein, 2002; Harvey, 2011). According to Goldstein, the researcher must have comprehensive knowledge of the research subject, construct sound questions, establish a rapport with respondents, know how to write up their notes, and code responses accurately and consistently. In addition, a well-prepared and personable researcher

should be able to control an open-ended and wide-ranging interview while establishing a strong informal rapport (Goldstein, 2002). Harvey draws up key strategies that include gaining trust, setting the right interview tone, effectively presenting oneself, and balancing open- and closed-ended questions. Researchers should carefully determine interview length and whether to tactfully record and handle complex scenarios. Managing unresponsive participants, maintaining engagement, and seeking feedback are also crucial. Elites may control interviews and selectively answer questions, requiring tailored approaches from the researcher (Harvey, 2011).

While data was collected by interviewing individual CEOs, the unit of analysis is mainly at the company level, while conclusions on the industry level were drawn where relevant. Individual perceptions are treated as proxies for company-level strategic practices and outcomes, which aligns with prior research that aggregates executive insights to reflect organizational phenomena (Kumar, Stern & Anderson, 1993). While the CEOs served as primary informants in this study, their participation was instrumental not merely as representatives of their respective companies but, in most cases, as deeply engaged actors in the processes of SI and the cultivation of CA. The data collected through CEO interviews revealed that these executives maintained high involvement in operational and strategic decision-making. This involvement was particularly evident in their detailed understanding of their companies' structures, functions, and strategic priorities, knowledge derived from an average of more than 30 years of managerial experience within the fisheries industry. Most of the CEOs reported active participation in formulating and implementing strategic initiatives. They all comprehensively understood the company-specific resources and market conditions underpinning their companies' competitive positioning. This approach assumes that CEOs' views are sufficiently informed and representative to support company and industry-level inferences.

The interview framework for the three empirical studies employed a semi-structured design, enabling data collection from organizations while allowing the researcher to uncover new and emergent themes not immediately apparent from employees' personal experiences (Burgess, 1982). The interviewees were pre-identified, and all interviewees were asked a consistent set of questions. These questions focused on general strategy knowledge, strategy formulation, SI, strategy evaluation, sustainability, CA, and the use of strategic tools. The interview framework ensured comparability and procedural rigor; to minimize variations in interview administration, the same interviewer conducted all the interviews (Kitto et al., 2008). Semi-structured interviews also enabled the researcher to delve deeply into specific subjects of interest (Höglund et al., 2019).

Nine interviewees representing nine companies were interviewed (see Table 6). The interview duration ranged from 40 minutes to three hours, and each session was recorded with the interviewee's explicit consent. Among the elite interviews conducted (Goldstein, 2002), three occurred face-to-face at the interviewee's workplace, while five

were facilitated via Microsoft Teams video conferencing software for the interviewee's convenience and due to the COVID-19 pandemic. Additionally, one interview was conducted via telephone to accommodate logistical considerations. All scheduled interviews were diligently conducted as planned to gain and retain the trust of respondents to collect high-quality data from respondents who have limited time (Harvey, 2011).

**Table 6.** Interview profile

| Characteristics              | Total                 | Comments                                         |
|------------------------------|-----------------------|--------------------------------------------------|
| Total interviews             | 9                     |                                                  |
| Total companies              | 9                     |                                                  |
| Total number of interviewees | 11                    | Companies 3 and 6 had HR managers for assistance |
| Gender                       | 9 males, 2 females    |                                                  |
| Max duration                 | 02.45.00              |                                                  |
| Min duration                 | 00.39.57              |                                                  |
| Microsoft Teams video        | 5                     |                                                  |
| Telephone                    | 1                     |                                                  |
| Face-to-face                 | 3                     |                                                  |
| Asked to remain anonymous    | 9                     |                                                  |
| Position                     | 9 CEOs, 2 HR managers |                                                  |

Source: Adopted from Vigfússon et al., 2023

Studies have shown that two to 10 interviewees or research subjects are sufficient to reach saturation (Munhall, 2001), and Groenewald (2004) recommends extended interviews with up to 10 people for a phenomenological study. Data saturation became apparent after the sixth interview; however, all pre-scheduled interviews were completed to validate the central findings further. Subsequent interviews, although conducted after data saturation, proved invaluable by offering corroborative insights into the central concepts under examination (N. Lee & Lings, 2008). This approach ensured the comparability and structure of the interviews while offering flexibility to explore specific topics in greater depth. To maintain reliability, all interviews were conducted by the same interviewer. The recordings were transcribed, and the resulting

data were analyzed using MindManager software to create maps and identify overarching themes, providing a structured visualization of the findings.

Anonymity was assured for all interviewees. Notably, all interviewees were assured of anonymity, a measure taken to safeguard the principles of confidentiality and ethical standards throughout the research process (Randall & Gibson, 1990). To ensure ethical research, the principal researcher secured informed consent verbally at the beginning of each interview (Groenewald, 2004), including the explanation of the following:

- The interviewee's role within the research
- The purpose of the research
- The procedures of the research
- The risks and benefits of research
- The voluntary nature of research participation
- The procedures to protect confidentiality
- Data storing and retention (audio recording with deletion after use)

#### **4.7 Systematic Literature Review**

An important objective of the thesis was to conduct a comprehensive review of empirical studies on SI and leverage existing research to generate new insights (Torraco, 2016). This part of the thesis adheres to the methodological guidelines for conducting SLR in empirical research (Nakano et al., 2018). In pursuit of constructing a standalone synthesis of empirical SI literature and identifying knowledge gaps in SI within organizations, relevant studies were systematically reviewed. The research methodology involved systematically collecting and analyzing empirical, peer-reviewed scholarly articles on business SI. To ensure methodological rigor, the study followed the standardized approach of Nakano and Muniz (2018) proposed for conducting a standalone SLR. This method provides a structured framework for identifying, analyzing, and synthesizing relevant literature.

The primary databases for sourcing peer-reviewed studies included Scopus, Web of Science, and ProQuest. Searches were conducted within the designated search interfaces of each database using advanced search tools and filters; the search process involved multiple rounds of filtering and snowballing techniques (Wohlin, 2014) to ensure comprehensive coverage. Predefined inclusion and exclusion criteria guided the selection process, and articles were prioritized based on relevance, determined by assessing titles, abstracts, and keywords. To enhance the comprehensiveness of the SLR, an additional search was conducted following the technique recommended by Webster and Watson (2002), which involves identifying relevant references cited in key articles. This approach allowed for the inclusion of studies that, while outside the initial search scope, were closely aligned with the research topic based on their titles, authors, and the journals in which they were published. As a result, 35 articles were incorporated into the final review, comprising 20 articles identified through the initial

focused search and 15 additional articles retrieved through this supplementary process. Google Scholar was utilized to locate these 15 additional studies. The selection criteria for this SLR ensured that all 35 studies had utilized primary data collected directly from the organizations under investigation.

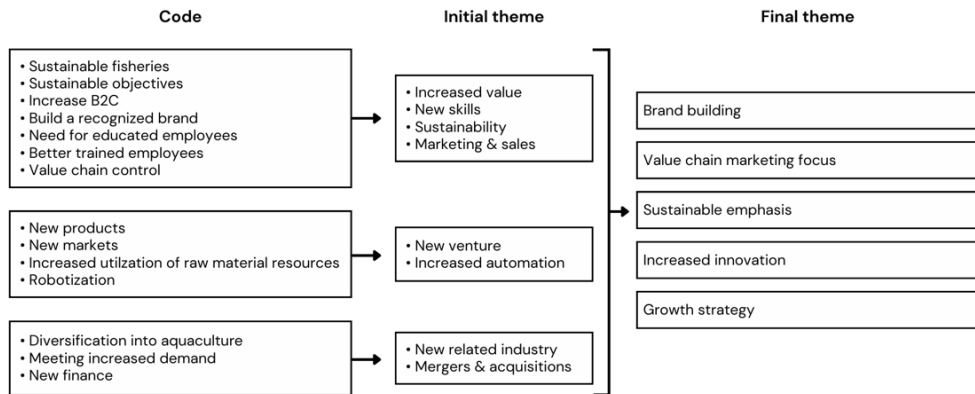
## **4.8 Data Analysis**

This thesis conducted thematic analysis, as in several strategic management studies (Egelhoff, 1993; Höglund et al., 2019). Thematic analysis using a rigorous six-step process to ensure a systematic and in-depth data exploration was conducted (Riger & Sigurvinsdottir, 2016). This analysis was common across all three empirical articles (N. Lee & Lings, 2008), ensuring a structured approach to identifying SI obstacles, KSFs, and CA within the fisheries industry. Codes and themes were developed iteratively using software like MindManager to ensure consistency in analyzing interview transcripts and secondary data. Case analysis has been used in other SI studies (Okumus, 2001). As Lee and Lings state, qualitative approaches like interviews are, from a natural standpoint, appropriate for the interpretive process (N. Lee & Lings, 2008). Thematic analysis is used to search for themes and enables the researcher to identify common themes in multiple interviews. The six steps of the method are the following (Braun & Clarke, 2006):

- Immersing oneself in the data by reading and transcribing the interviews
- Once familiar with the data, a researcher can generate initial codes
- Once data has been coded, a researcher can start searching for themes
- Themes need to be reviewed and refined
- Defining and naming themes based on thematic maps of the data
- When the themes are identified, a research report is written

The first phase, familiarization with the data, involved thoroughly reviewing the raw data to understand the content, patterns, and context. This phase included repeated reading of transcripts, field notes, and other textual materials. In transcribing the interviews, the lead author immersed himself deep in the data, identifying commonalities and differences between interviews. The second phase focused on generating initial codes, where data segments were systematically labeled to capture meaningful features related to the research questions. Coding was facilitated using tools such as MindManager and Microsoft Office software, enhancing the organization and retrieval of coded data. In the third phase, codes were analyzed to identify potential themes by grouping similar codes that reflected broader patterns or central ideas within the data. These initial themes were reviewed and refined in the fourth phase to ensure coherence and alignment with the data. This iterative process involved cross-checking themes against the coded data and the overall dataset, ensuring that each theme accurately represented the underlying data.

In the fifth phase, the themes were further defined and named to capture their essence and provide clarity for interpretation. This step involved articulating the boundaries of each theme and its relevance to the research objectives. Finally, the sixth phase involved producing the final report, which integrated the themes into a coherent narrative supported by illustrative quotes and findings. Digital tools such as MindManager and Microsoft Office further streamlined the thematic analysis process, ensuring transparency and consistency in data coding, theme development, and reporting (Riger & Sigurvinsdottir, 2016). Using the six-step process from (Braun & Clarke, 2006) helped identify the SI process, obstacles, KSFs, and CA relevant for this thesis. As the data became well known, notes were taken, generating codes and quotes from the interviews. During the next stage, codes were merged into broader themes based on commonalities. After reviewing themes based on the coding substance, they were clarified, defined, and named (see example in Figure 4).



**Figure 4.** Text analysis sample from qualitative data analysis

Source: Adopted from Vigfusson et al., 2025

All interviews were transcribed word-by-word in Word, including research notes and memos. Each transcript was subjected to detailed line-by-line reading as part of an open coding process to identify emergent themes directly from the data (Glaser et al., 1968). This inductive approach allowed for a grounded interpretation of the material developed iteratively through close engagement with the textual content. MindManager, a mind-mapping software, supports theme visualization and conceptual organization. It aids in the iterative development and revision of thematic maps, aligning with Braun and Clarke's (2006) interpretive approach to theme generation. Parallel to the coding process, mind maps were constructed for each company using MindManager to facilitate a structured visualization of the emerging thematic patterns. These mind maps served as analytical tools to organize and cluster related concepts, enabling the researcher to trace connections among themes and incorporate supporting details drawn directly from the data (Creswell & Creswell, 2007). This approach contributed to developing a comprehensive and nuanced understanding of company-specific insights

within the broader thematic framework. Excel is useful for thematic analysis as it can code textual data through a matrix format where rows represent individual data segments and columns capture codes, categories, and memos. This structured and transparent organization of data is particularly effective for smaller datasets or preliminary inductive analysis (D. Z. Meyer & Avery, 2009). Its accessibility, customizability, and widespread familiarity made it a pragmatic choice for the researcher. In addition, Excel and Word sheets were used to build frameworks and figures for the thesis and previously published articles.

The data analysis for the SLR was conducted by focusing on different aspects of the selected articles (Nakano et al., 2018). The analysis encompassed three steps: context analysis, content analysis, and categorization of articles, utilizing Microsoft Excel and MindManager software for data organization. The methodology followed a structured approach (see Table 7) to ensure a comprehensive examination of the research on SI. The steps were as follows (Nakano et al., 2018):

**Table 7.** Process for analyzing strategy implementation literature

| Step                                                                           | Description                                                                                                                                                                          | Key Elements Considered                                                                                                                                          |
|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Step One:</b> Analysis of Research Context                                  | The contextual characteristics of the articles were assessed based on the information provided within each study.                                                                    | <ul style="list-style-type: none"> <li>Organizational type studied</li> <li>Strategic level</li> <li>Industry</li> <li>Countries</li> <li>Perspective</li> </ul> |
| <b>Step Two:</b> Examination of Research Objectives, Findings, and Methodology | The selected studies were analyzed following guidelines for conducting literature reviews in empirical research (Nakano & Muniz, 2018).                                              | <ul style="list-style-type: none"> <li>Author</li> <li>Objectives of the research</li> <li>Main findings</li> <li>Methodology</li> </ul>                         |
| <b>Step Three:</b> Analysis of Obstacles and KSFs in SI                        | The 35 articles were categorized based on their focus and systematically analyzed using Microsoft Excel for data organization and MindManager software for conceptual visualization. | <ul style="list-style-type: none"> <li>Studies on SI obstacles</li> <li>Studies on SI success factors</li> </ul>                                                 |

Source: Adopted from Vigfusson et al., 2021

## 4.9 Research Quality

The quality of this research has been ensured through rigorous methodologies, systematic approaches, and the use of established frameworks and tools. The SLR methodology followed established guidelines (Nakano et al., 2018; Torracco, 2016) employing a structured approach to identifying and analyzing relevant empirical studies on SI. Multiple rounds of filtering, including backward and forward snowballing (Wohlin, 2014), aided in achieving extensive coverage of the literature. Data organization and thematic analysis were supported by software tools (e.g., Microsoft Excel, MindManager), ensuring consistency and traceability in the analytical process.

The case studies employed purposive sampling (N. Lee & Lings, 2008) to select companies representing diverse characteristics (e.g., size, revenue, operations), ensuring a robust dataset for examining SI within the Icelandic fisheries industry. Data triangulation was achieved by combining primary data from the elite interviews (Goldstein, 2002; Harvey, 2011) with secondary data (e.g., company reports and strategic documents), enhancing validity and reliability. Semi-structured interviews were conducted using a predefined framework, ensuring consistency and alignment with research objectives across all interviews. Data saturation was achieved, indicating a thorough exploration of the themes. Interviews were supplemented with thematic analysis (Riger & Sigurvinsdottir, 2016). A method similar to the Gioia approach (Gioia et al., 2013) was employed, based on the work of Braun and Clarke (2006), as both methods transition from raw data to abstract concepts.

The research integrated well-regarded methodological frameworks (Harvey, 2011; N. Lee & Lings, 2008) to structure data collection, analysis, and interpretation. The single case study methodology adopted a social constructionist perspective, ensuring alignment between theoretical foundations and research design. Ethical rigor was maintained by securing informed consent from interviewees and ensuring anonymity where applicable (Groenewald, 2004).

The study is designed to conduct in-depth interviews, as qualitative research seeks a deep understanding of a phenomenon, in this case, the fisheries industry (N. Lee & Lings, 2008), with elite interviewees, in this case, industry CEOs representing the leading companies within the industry (Goldstein, 2002). The chosen methodology is suitable for addressing the research questions designed for the selected research topic (Leung, 2015). These interviewees were chosen for the depth of insight they provide and the unique expertise each interviewee brings to the research topic (Harvey, 2011). CEOs perspectives offer critical, context-specific knowledge that quantitative data alone has difficulty capturing (N. Lee & Lings, 2008). For qualitative research, a sample of nine interviews presents a key challenge, such as achieving data saturation. With such a small sample, the risk of not gathering a full range of experiences and perspectives can lead to incomplete or superficial findings (Saunders et al., 2018). A limited sample can also weaken the transferability of the findings, making it difficult to argue that the insights are relevant to similar contexts beyond the specific participants (Fusch & Ness, 2015). However, generalizability is not the purpose of qualitative research (Carminati, 2018). The achievement of thematic saturation after the first six interviews confirms that

the core themes and insights were sufficiently explored. In contrast, the subsequent interviews served to validate and enrich the findings. This approach demonstrates that in qualitative research, quality and depth of data can be prioritized over sample size (Groenewald, 2004). The importance of elite interviews in qualitative studies is relevant, as access to top management, in this case, CEOs, is often challenging. However, given the senior management status, functional responsibility, and industry experience, fewer interviews are required than if managers or employees were interviewed (Goldstein, 2002). In the context of this study, these nine interviews with 11 interviewees represent companies that collectively hold nearly 50% of Iceland's total fishing quota, indicating significant coverage of the sector.

Despite implementing quality assurance measures, potential biases arising from subjective interpretation, industry-specific focus, and limited stakeholder inclusion may influence the research findings. There is no universal consensus in qualitative research on whether methodological procedures can ensure that the study yields definitive conclusions or answers. A key challenge is the inherent difficulty of replication, as qualitative research is context-dependent, and interviewees in a replicated study may not express or behave identically to those in the original study (Marczyk et al., 2010). Furthermore, researchers are inevitably shaped by their worldviews, cultural experiences, and personal backgrounds, which can introduce interpretive biases into the analysis (Bhaskar, 2008).

The methodology employed in this thesis is robust, combining SLR, case studies, and elite interviews to explore SI within the Icelandic fisheries industry. However, several limitations warrant consideration. First, subjectivity in qualitative analysis is an inherent challenge (Frost et al., 2010), as the identification of themes and coding relies on the researcher's interpretation, even with software tools like MindManager. Second, the generalizability of findings can be limited, given the industry-specific focus and single case study design, making it challenging to extend conclusions to other industries or regions (MacPhail et al., 2016). Third, the sample scope emphasizes interviewees' perspectives, potentially overlooking insights from other stakeholders, such as employees or policymakers (DiCicco-Bloom & Crabtree, 2006).

The SLR methodology, while rigorous, may have excluded relevant studies due to database reliance (e.g., Scopus, Web of Science), risking publication bias or omission of grey literature. Additionally, time and resource constraints during data collection restricted the number of interviews and companies involved, potentially impacting the breadth of findings (Baker & Edwards, 2012). Secondary data, used for triangulation, may not fully align with real-world practices, reflecting organizational intent rather than actual outcomes (Russ, 2011).

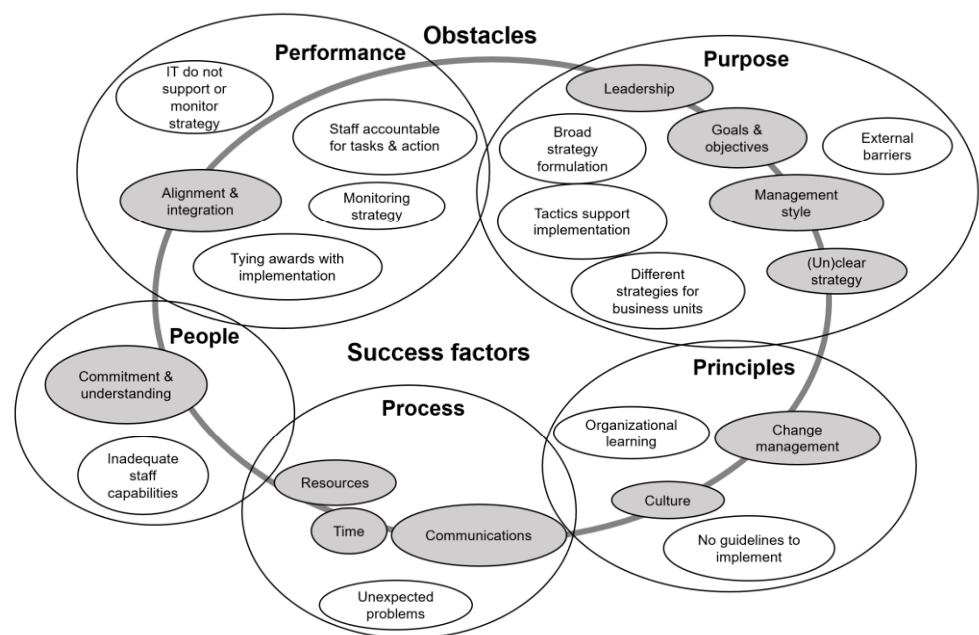
Despite these limitations, the principal researcher strove to uphold high-quality research through systematic methodologies, robust data triangulation, and adherence to established frameworks, producing reliable and insightful contributions to the discourse on SI.

## 5 Summary and Main Findings

This chapter synthesizes key findings from four peer-reviewed published articles. The articles, despite their distinct contributions and findings, influenced one another in various ways. Each article advances the overarching research aim: What are the obstacles and KSFs in SI within Icelandic fisheries? How is CA in the industry evolving?

### 5.1 Paper I

The first paper of this PhD thesis is titled: "Obstacles to strategy implementation and success factors: A review of empirical literature." The paper was published in *Strategic Management* in 2021. The findings of Article #1 indicate that empirical studies have identified 16 obstacles and 18 essential success factors that can aid in the implementation process. Moreover, this study sheds light on certain factors with a dual nature, encompassing obstacle and success-inducing aspects. Among the total of 16 obstacles and 18 success factors identified, 11 of them exhibited dualistic characteristics. As seen in (Figure 5), the identified obstacles and KSFs have been categorized into the 5P model of Pryor et al. (2007) – purpose, principles, process, people, and performance. Furthermore, the 11 factors with dualistic characteristics have been highlighted in grey. The first dualistic factor in the "Purpose Oval" is "Leadership" which focuses on leadership support, motivation, and style that influence SI; studies have shown that support and involvement of top management are important for SI (Shah, 2005) and the lack of it can be an obstacle to successful implementation (Cater & Pucko, 2010). The first dualistic factor in the "Principle Oval" is "Change Management." Hrebiniak (2006) found the organizational inability to manage change and resistance to change in the implementation process was one of the main obstacles to SI. Imran et al. (2017) concluded that developing readiness for change and reducing employee cynicism can facilitate successful SI. The first dualistic factor in the "Process Oval" is "Communication," which has been highlighted as very important since frequent and clear communication with employees and implementers regarding the proposed strategy throughout the organization can facilitate success (Alamsjah, 2011). (Schaap, 2006) also emphasized that horizontal and vertical communication were essential. The only dualistic factor in the "People Oval" emphasizes the importance of "Commitment and shared understanding" to the strategy and its implementation (Rapert et al., 2002). Building up consensus fosters shared attitudes and values, thus increasing the likelihood of successful SI (Schaap, 2006; Weller et al., 2020). The only dualistic factor in the "Performance Oval" is "Alignment and integration," which refers to the importance of linking the organization's resources and structure with its strategy and external business environment (Aaltonen & Ikavalko, 2002; Håkansson et al., 2012).



**Figure 5.** Strategy implementation obstacles and success factors

Source: Vigfússon et al., 2021

This study reviewed 35 empirical articles on SI, identifying obstacles and success factors that influence the process. Among key findings is the presence of dualistic factors, which can act as obstacles and enablers, underscoring the need for a nuanced approach to SI. These dualistic factors are critical to understanding why specific strategies succeed or fail. The study categorizes these factors using the 5Ps model (Pryor et al., 2007) –purpose, principles, processes, people, and performance – offering practical insights for managers and practitioners. It emphasizes that successful implementation requires attention to these interconnected components, especially considering the internal and external forces that shape SI.

The review highlights significant gaps in the literature, in addition to the practical implications emphasized. Notably, more research must be done on overcoming obstacles and understanding employee influence in the implementation process. Furthermore, cross-industry and cross-cultural comparisons still need to be explored, suggesting a need for future studies in these areas (Doeleman et al., 2021; Waltz et al., 2019). The limitations of this study include potential selection bias and the exclusion of non-English literature, which may restrict the generalizability of its findings. Nonetheless, it contributes valuable theoretical and practical insights for advancing SI research. This synthesis focuses on the core findings, practical implications, gaps in the literature, and study limitations, providing a cohesive summary.

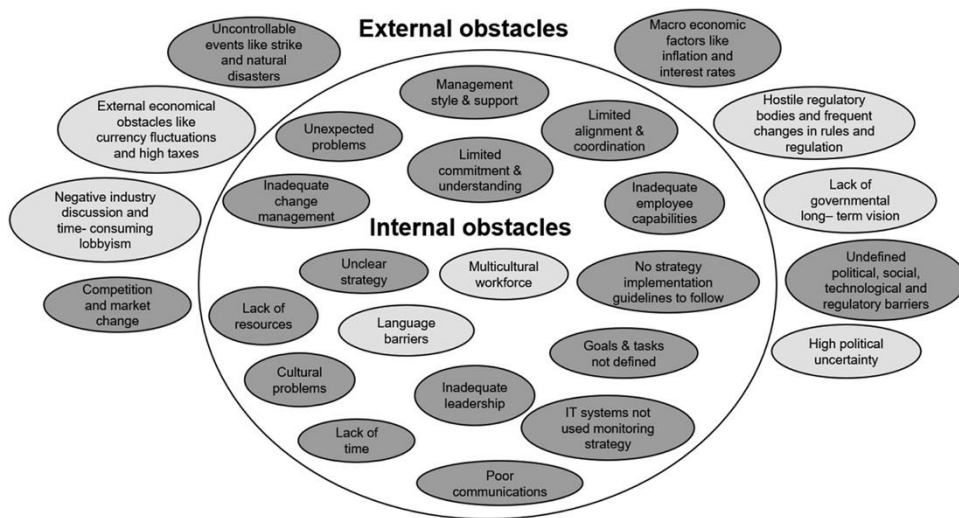
## 5.2 Paper II

The findings from Article #2 (see Figure 6) revealed several internal obstacles in the fisheries industry, similar those identified in earlier studies (Alexander, 1985; Beer & Eisenstat, 2000; Köseoglu et al., 2018). Most of the interviewees claimed that the lack of resources (i.e., time, expertise, and untrained employees) hindered successful implementation in line with other research (Cater & Pucko, 2010; Heide et al., 2002; Mollahoseini & Ahmadvhani, 2012; Saviolidis et al., 2020). SI that took more time than anticipated was also a common obstacle, resulting in a strategy not being fully implemented or not implemented at all, thus supporting the findings of Alexander (1985) and Al-Ghamdi (1998). Most of the interviewees noted problems with vertical communication, meaning that communication “down the line” was inadequate, which supports the findings of Beer Eisenstat (2000) and Hrebiniak (2006). Communicating and top-down implementation from the company leaders to the employee level was perceived as an SI obstacle. Some of the interviewees communicated strategic decisions down the line if they believed it was important. All except two of the industry companies are family-run, thus most often with an informal organizational structure and communication channels that can affect vertical communication, in line with the findings (Heide et al., 2002).

The CEO interviewees generally expressed satisfaction with their current managers; however, there was an apparent demand for more qualified employees in operational roles to support SI. Interviewees emphasized the necessity of a more prepared management team as a critical step in the continued development of these companies, particularly in response to advancements in technology (Gunnlaugsson & Saevaldsson, 2016). These findings align with previous research, identifying the shortage of skilled and trained employees as a key barrier to effective SI. Specifically, the lack of personnel with university-level education and the requisite competencies for successful SI has been recognized as a significant challenge (Beer & Eisenstat, 2000; Saviolidis et al., 2020; Shah, 2005). In all the companies examined, SI is primarily led by a small top management team of three to seven individuals, in some cases with limited leadership and managerial expertise.

Furthermore, SI frequently relies on informal processes. Middle management plays a minimal role in implementation, yet interviewees acknowledged the value of middle managers and expressed a desire for more precise strategic direction from senior leadership (Wooldridge & Floyd, 1990). In many cases, the insufficient training of both managers and employees in strategy formulation and implementation has led to the development of only limited strategic objectives (Hrebiniak, 2006).

This empirical study addresses the limited research on SI obstacles within a specific industry, focusing on Icelandic fisheries. The study uncovers internal and external obstacles not previously identified in the literature through in-depth interviews. This process culminated in formulating a model that identifies and integrates 17 internal and nine external obstacles.



**Figure 6.** Internal and external strategy implementation obstacles (identified in the primary data are highlighted in light grey)

Source: Vigfússon et al., 2023

The key internal obstacles include the challenges of managing a multicultural workforce and language barriers, which are factors unique to the context of Icelandic fisheries. These findings differ from the literature, which did not recognize significant hurdles in SI. The data suggests that a multicultural workforce in the fisheries industry significantly impacts SI. Additionally, interviewees emphasized that language barriers were perceived as a constraint on employee participation in the implementation process. The interviewees acknowledged that the industry has undergone substantial structural, cultural, and operational transformations over the past decades (Kokorsch & Benediktsson, 2018). For instance, Icelandic workers predominantly seek higher-paying roles on fishing vessels or in managerial positions, leading to increased complexity in workforce management due to the growing linguistic diversity and multicultural staff composition. Furthermore, technological advancements and automation have reshaped the industry, increasing the demand for a more highly educated workforce (Knúttsson et al., 2016). Interviewees also noted that there is often an implicit assumption that employees possess the necessary knowledge and direction to execute tasks based on prior experience; however, this assumption does not always hold. These findings align with the broader demographic and socio-economic shifts in Icelandic fishing communities, where fisheries related occupations have become less attractive to younger generations, necessitating greater reliance on migrant labor in processing facilities (Kokorsch & Benediktsson, 2018). Moreover, these findings resonate with Argyris' (1989) framework on defensive routines, identifying barriers to learning and organizational growth that impede effective SI.

Externally, the study highlights obstacles that prior research on other industries has not noted, making them particularly relevant for fisheries. As illustrated above, five external obstacles emerged from the fisheries industry data, highlighting the need for the industry to address these challenges proactively. These obstacles include high political uncertainty, a lack of long-term governmental vision, frequent regulatory changes, negative industry discourse, and time-intensive lobbying efforts. These have not been previously identified as SI obstacles in the existing literature, but external economic barriers such as currency fluctuations and high taxation have been identified in earlier research (Köseoglu et al., 2018, 2020; Mollahoseini & Ahmadkhani, 2012; Obeidat et al., 2017).

While existing literature on SI has identified various internal and external obstacles, the findings highlight a distinct set of external challenges identified, like lack of governmental vision for the industry, hostile regulatory bodies, and persistent change of industry regulations, high political uncertainty, time-consuming lobbyism, and unsympathetic political and media discussion, particularly relevant to the institutional context. Industry-specific findings indicate that interviewees perceived political uncertainty and the absence of a long-term governmental vision as significant impediments to SI. This uncertainty is viewed as both an investment and operational risk, particularly in fisheries management, where inconsistent political direction exacerbates financial and strategic instability. Interviewees expressed a strong desire for greater political stability and a long-term vision for fisheries governance, advocating for a more integrated and holistic approach aligned with the transformative marine governance model proposed by (Kelly et al., 2018). The lack of consensus on the future of fisheries management, previously identified in research (Eythórsson, 2000; Kokorsch et al., 2015) was emphasized by interviewees as a key driver of industry consolidation, often motivated by fear rather than efficiency. This may explain the rapid consolidation of certain fisheries. While previous studies have recognized the impact of political obstacles on SI, they have not explored these obstacles in depth (Heide et al., 2002). The persistent political uncertainties and lack of vision for the industry can be attributed to ongoing parliamentary debates in Iceland regarding fisheries management systems, particularly the long-standing criticism of the ITQ system over the past three decades.

These findings resonate with and extend the theoretical insights offered by institutional theory. Tawse and Tabesh (2021) underscore how institutional pressures, comprising regulatory, normative, and cognitive elements, profoundly shape organizations strategic actions and implementation processes. Their review highlights that organizations often face external pressures to conform to established norms, industry standards, and regulatory frameworks, directly impacting managers' SI choices. They emphasize that these institutional pressures can either facilitate or constrain the flexibility essential for effective strategic adaptation. This perspective is critical, as organizations must navigate internal alignment and external legitimacy when implementing strategy. For instance, within the fisheries industry, organizations operating in such a highly regulated industry

may experience reduced autonomy in resource reallocation or process restructuring, significantly affecting SI speed and agility (Tawse & Tabesh, 2021). The findings of the thesis regarding high political uncertainty, a lack of long-term governmental vision, frequent regulatory changes, negative industry discourse, and time-intensive lobbying efforts highlight critical institutional challenges for SI in fisheries. These external obstacles directly exemplify how institutional pressures can constrain flexibility. Specifically, these newly identified obstacles underscore how the unique characteristics of fisheries regulatory bodies, such as their inherent political sensitivity, susceptibility to short-term policy shifts, and the fragmented nature of stakeholder engagement, can create a dynamic and often unpredictable environment that profoundly complicates SI for companies operating within the fisheries industry. Furthermore, resource dependency theory (Hillman et al., 2009) complements institutional theory by providing insights into how external pressures and resource constraints collectively shape an organization's strategic choices and capacity for effective implementation. By integrating these theoretical perspectives into SI research, a more nuanced understanding of the internal and external factors influencing how strategies translate into actionable outcomes within organizations can be achieved (Legimai et al., 2022). In addition, the study findings align with the IBV articulated by Peng (2009), which emphasizes the profound impact of formal and informal institutions on companies' behavior and performance.

The research provides valuable insights for academics and practitioners by categorizing relevant obstacles as industry-specific, thus contributing to a new conceptualization of SI obstacles within fisheries. The findings have practical implications, guiding policymakers and CEOs to create more holistic and efficient strategies. By addressing internal and external obstacles, the study can help build consensus on fisheries management and strengthen policymaking, benefiting industry and society.

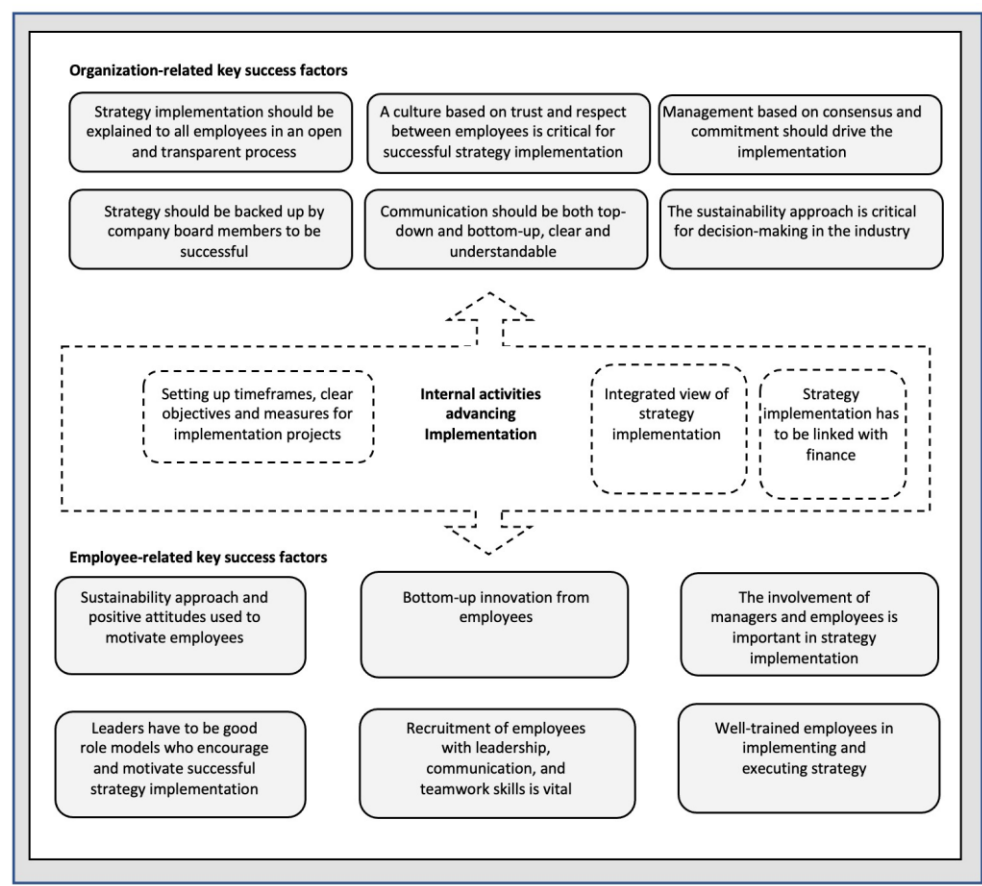
### **5.3 Paper III**

This study identifies KSFs critical for SI in the fisheries industry based on in-depth interviews with fishery CEOs. It contributes to the limited research on industry-specific KSFs, offering theoretical and practical insights. The findings emphasize that KSFs should be systematically identified and accounted for before and during implementation. Effective SI requires a holistic and integrated approach that extends beyond considering a single component while neglecting other KSFs (Atkinson, 2006). As illustrated, internal organizational activities serve as a critical foundation, shaping internal conditions and supporting a cohesive approach to SI in the industry. These activities are further characterized by specific, measurable performance indicators (Brenes et al., 2008; Sabourin, 2015) that are aligned with well-defined timeframes and precise objectives (Aaltonen & Ikavalko, 2002), ensuring coherence with the organization's strategic vision. Furthermore, the framework underscores a purpose-driven and sustainability-oriented perspective at both organizational and employee

levels, necessitating the active engagement of employees through continuous motivation (Johannsdottir et al., 2015) and alignment with SDGs (Johannsdottir & McInerney, 2018). At the organizational level, fostering clear and transparent communication throughout hierarchical structures is critical (Köseoglu et al., 2020; Schaap, 2006). Simultaneously, bottom-up innovation emerges as an essential competency at the employee level, fostering adaptability and strategic responsiveness (Weiser et al., 2020). Organizational support from board members (Brenes et al., 2008) is also pivotal, alongside the cultivation of consensus and commitment in the implementation process (Günther, 2016; Köseoglu et al., 2020) and the reinforcement of an organizational culture rooted in trust and respect (Malkamäki et al., 2021).

On the employee level, the direct involvement of managers and employees is a key determinant of successful SI (Cadwallader et al., 2010; Hambrick & Cannella, 1989; Köseoglu et al., 2020). This people-centric approach highlights the importance of motivational leadership, where leaders act as role models, driving the successful implementation of strategy. Additionally, recruiting and developing highly skilled employees with leadership, communication, and teamwork expertise is fundamental to ensuring effective implementation (Brenes et al., 2008; Crittenden & Crittenden, 2008; Sorooshian et al., 2010).

The findings of Article #3 (see Figure 7) suggest four important areas where the industry can strengthen the implementation of strategic planning, including all employees in the implementation process (Johannsdottir et al., 2015); promoting innovation and communication from the bottom up (Weiser et al., 2020); aligning company policies (Aaltonen & Ikavalko, 2002; Sabourin, 2015) with the UN SDGs (Johannsdottir & McInerney, 2018); and, implementing strict action plans with clear, measurable, and prioritized goals and timelines (Schaap, 2006; Tawse et al., 2019). The research also proposes a conceptual framework tailored to the fisheries industry, emphasizing the need to integrate SDGs with core business strategies (Berrone et al., 2023; Johannsdottir & McInerney, 2018), particularly those related to CSR. This alignment improves SI and contributes to broader global goals, such as poverty and hunger reduction, by embedding sustainability into business practices. The framework categorizes the KSFs into three dimensions: organizational-related KSFs (top part of the figure), employee-related KSFs (bottom part of the figure), and other internal activities advancing implementation (middle part of the figure), resulting in a framework for SI in the fisheries industry.



**Figure 7.** Framework for integrated strategy implementation in the fisheries industry

Source: Vigfusson et al., 2024

The study suggests that actors from all organizational levels must be involved in the implementation process and create clear, time-bound action plans to achieve success. However, the research underscores the need for comparative studies across industries and further empirical work to deepen the understanding of KSFs in SI. By doing so, managers can gain better insights into overcoming implementation challenges. This study offers valuable guidance for top management in the fisheries industry, with practical strategies for aligning business goals with global sustainability objectives, ensuring successful SI, and contributing to global social impact.

**5.4 Paper IV**

This study examines the CA in Icelandic fisheries, a sector historically driven by access to natural resources, traditional fishing, and processing and selling the products to wholesalers. The research aims to understand how CA is evolving through the RBV (Barney, 1991; Grant, 1991) and MBV (Porter, 1979), providing empirical evidence to enrich academic discourse on these frameworks. The study captures the interviewee

insights to explore this transition and the strategic behaviors shaping competitiveness by employing a qualitative case study based on in-depth interviews (Goldstein, 2002; Harvey, 2011).

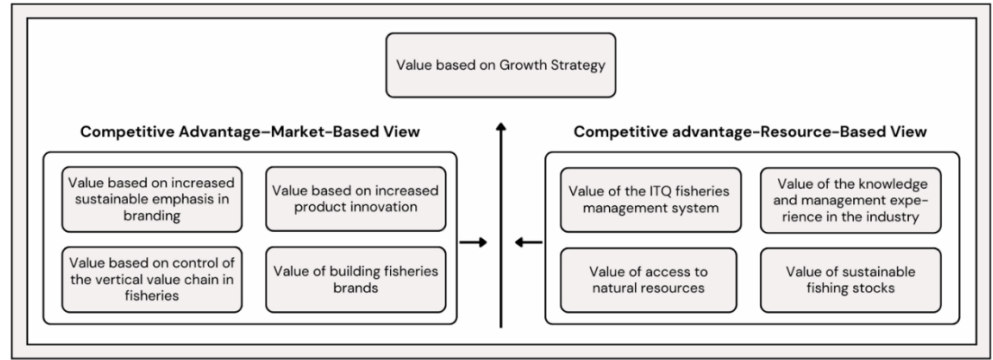
The findings reveal that CA evolves through transitioning from a resource-based approach initially centered on natural resources to a market-based approach emphasizing growth, value chain control and integration, consumer marketing, product innovation, and brand development. These results align with previous research that links marketing-based assets and capabilities to RBV resources, demonstrating the interdependence of internal and external strategic factors (Srivastava et al., 2001). The integration of RBV and MBV perspectives underscores the potential for the industry as a whole to enhance competitiveness by leveraging internal resources and market orientation, reinforcing that these dimensions should not be treated as independent constructs but rather as complementary strategic approaches (Maier & Remus, 2001). In addition, the findings align with the IBV articulated by Peng (2009), which underscores the critical role of formal and informal institutions in shaping companies' behavior and influencing performance outcomes. While the CA of fisheries companies, as perceived by CEOs, is grounded in both the MBV and the RBV through factors such as market positioning and company-specific resources, the results suggest that these advantages are also embedded in and shaped by the institutional context. Specifically, formal institutions such as parliamentary legislation, fisheries research institutions, and fisheries management mechanisms, including the ITQ and TAC regulations, constitute an integral part of the institutional environment that structures strategic opportunities and constraints. These institutional arrangements do not merely provide a backdrop for competitive activity but actively configure the field within which companies compete, allocate resources, and maintain their strategic positions.

By examining this dual perspective (Steininger et al., 2011), the study provides deeper insights into the industry's strategic behaviors and performance outcomes, proposing a prospective CA framework that incorporates industry-specific characteristics. The findings suggest that increased transitioning from the RBV to an MBV approach can strengthen CA in the industry (Violinda & Jian, 2016). However, this gradual transformation faces several structural challenges, including a shortage of expertise and experience necessary for consumer market engagement, inadequate market investment, and constrained growth opportunities within the ITQ fisheries management system. Furthermore, the results indicate that CA is dynamic and can evolve by integrating RBV and MBV elements (Chen et al., 2021). In a study by Makhija, RBV variables explained better company performance than MBV variables (Makhija, 2003), which resonates with the findings that internal resources such as innovation, managerial experience, industry-specific knowledge, and access to natural resources are the foundation that serves the transition into an MBV growth strategy.

As illustrated below (see Figure 8), integrating these perspectives enhances competitive positioning in the fisheries sector. The transition process, represented by the central arrow (see Figure 8), highlights how combining RBV-based strengths with the MBV approach fosters an industry-wide CA rooted in growth and market expansion. The framework integrates both perspectives, providing a clearer understanding of how internal resources and external market conditions together shape strategic outcomes. However, challenges to this transition remain, including a lack of market expertise, limited investment, and growth constraints imposed by the ITQ system. Despite these obstacles, the study provides practical insights for top management, emphasizing the importance of aligning internal strengths with external market opportunities to create a sustainable CA.

The research contributes to academic discourse by integrating the RBV and MBV and proposing a framework that bridges internal resource advantages with a market-based approach. This model enriches the theoretical understanding of CA in resource-dependent industries. Furthermore, the study provides empirical insights specific to Icelandic fisheries, fostering comparative research opportunities across countries and regulatory environments. Future studies could extend this work by exploring diverse stakeholder views, tracking competitive dynamics over time, and examining MBV applicability as a comprehensive theory for competitive analysis in varying contexts.

Practically, the framework offers actionable recommendations for Icelandic fisheries management and stakeholders. It highlights the importance of integrating regulatory frameworks, management knowledge, and brand development within the value chain to enhance market competitiveness. The findings also suggest pathways for future growth, which can help industry leaders navigate strategic transitions while maintaining sustainability and CA.



**Figure 8.** Integrating Resource-Based and Market-Based Strategies in the Icelandic Fisheries Industry

Source: Vigfusson et al., 2025

The RVB and MBV integration in the framework illustrated in Figure 8 can be summarized as follows. The RBV emphasizes the inherent strengths of fisheries, such as their valuable knowledge, management experience, access to sustainable fishing stocks, and a robust ITQ management system. These resources can be challenging for competitors to replicate, forming the foundational capabilities that enable fisheries to operate efficiently and responsibly. By securing and leveraging these resources, fisheries can establish a CA rooted in their operational and knowledge-based strengths, ensuring the long-term viability of both their businesses and natural resources. On the other hand, the MBV aspect of the model strategically applies these internal strengths to the external market. The CA of fisheries is partially based on sustainable fishing stocks, which can be transformed into value through an increased emphasis on sustainability in branding. By controlling the vertical value chain, fisheries can meet market demand while ensuring transparency and quality, which they actively market to consumers. Their accumulated knowledge and industry experience support enhanced product innovation, allowing the creation of new offerings that address market needs.

In conclusion, the ability to build strong fisheries brands results from effectively integrating internal resources into a market-based approach. This process transforms a commodity-based industry into a more value-driven one, demonstrating that the success of fisheries relies on utilizing their unique internal resources to capitalize on and shape external market opportunities. Furthermore, integrating these strengths into an SPMS enables fisheries to define and measure KPIs (see Table 8) that reflect their operational effectiveness and market responsiveness, ensuring continuous improvement and alignment with sustainability goals.

**Table 8.** KPIs for integrated CA

| KPI                                                        | Measure                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sustainable Resource Management Index (RBV)</b>         | This KPI measures how effectively a fisheries manages its foundational, difficult-to-replicate resources, particularly sustainable fishing stocks. This is a core component of its CA. The index could include metrics on stock health, adherence to quotas, and the efficiency of the ITQ system.                                 |
| <b>Operational Efficiency and Knowledge Leverage (RBV)</b> | This KPI assesses the use of internal strengths like valuable knowledge, management experience, and a robust IT system. It reflects the fisheries' ability to operate efficiently and responsibly. Metrics could include operational cost per unit of fish, return on knowledge investment, and a measure of process optimization. |

|                                               |                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Brand Value and Perception Score (MBV)</b> | This KPI evaluates the success of marketing efforts to transform a commodity-based product into a value-driven brand. It directly measures how the market perceives the company's commitment to sustainability and quality. The score could be derived from customer surveys, brand equity studies, and sentiment analysis on social media.                      |
| <b>Product Innovation Rate (MBV)</b>          | This KPI tracks the fisheries ability to apply its internal knowledge and experience to create new offerings that meet market demands. It demonstrates the direct link between internal capabilities and external market success. It can be measured by the number of new products launched yearly or the percentage of total revenue generated by new products. |
| <b>Vertical Value Chain Control (MBV)</b>     | This KPI measures the effectiveness of a fisheries in managing its entire supply chain, from the fishing grounds to the consumer. Strong vertical control ensures transparency and quality, which are key selling points for the brand. Metrics could include the degree of vertical integration or efficiency gains within the chain.                           |

## **6 Discussion**

An in-depth examination of SI and the evolution of CA within the Icelandic fisheries industry provides crucial insights into the industry's competitiveness. The Icelandic fisheries sector has successfully leveraged resource management and technological innovation to maintain a strong competitive position in global markets. Worldwide, the fisheries industry can learn from the Icelandic experience as key strategic factors, such as the implementation of the ITQ system, investments in advanced processing technologies, and the emphasis on sustainable fisheries management, have played a vital role in enhancing efficiency and value creation (Gunnlaugsson & Saevaldsson, 2016). Given Iceland's prominent role in sustainable fisheries management, understanding the strategic mechanisms that underpin its fisheries industry can yield broader implications for industry stakeholders and policymakers both in Iceland and abroad (Sigfusson, 2020). Still, challenges remain. Therefore, this thesis is significant, as it seeks to analyze the critical factors that contribute to Iceland's fisheries and offer frameworks that can inform strategic development in similar resource-dependent industries facing competitive and environmental pressures.

### **6.1 Dualistic Strategy Implementation Factors**

While identifying obstacles and KSFs related to successful SI, this thesis uncovers dual challenges and opportunities. This is most prevalent in Article #1, which found several dualistic factors from 16 obstacles and 18 success factors; the dualistic factors can either facilitate or hinder implementation depending on the context. This finding also aligns with the assertion that contextual elements significantly influence whether a factor functions as an obstacle or facilitator (Nimawat & Gidwani, 2020) and where factors such as organizational readiness (Weiner, 2020) and stakeholder engagement (Yadua et al., 2024) can either promote or impede successful outcomes. These dualistic factors are crucial to SI and establish the groundwork for understanding SI broader challenges and enablers across industries (Leyh & Sander, 2015). The dualistic framing enhances the applicability of these findings across industries. The thesis has also provided valuable insights into the enablers of successful SI. Vigfússon et al. (2021) identify leadership support, employee engagement, and effective communication as success factors. Leaders who see organizational culture as a key task and understand that alignment with organizational strategies is more likely to succeed (Warrick, 2017). Damschroder et al. (2020) emphasize the role of tailored strategies that address specific organizational needs. Across sectors, systematic approaches, strong leadership, clear strategic objectives, and contextual awareness emerge as central to successful implementation.

## 6.2 Framework of Strategy Implementation

The thesis utilizes the 5Ps SI model (Pryor et al., 2007), which is focused on five internal dimensions rooted in the organizational theory as an analytical lens in Articles #1 and #3, specifically focusing on the “purpose” dimension, which emphasizes leadership and goal alignment. Shah (2005) underscores the critical role of top management in SI, highlighting leadership support and motivation as foundational elements. Practical goal setting, which aligns strategic objectives with overarching business goals, remains challenging due to a frequent lack of clear performance indicators, as noted by Aaltonen and Ikavalko (2002) and Pella et al. (2013). Furthermore, Wernham (1985) and Beer and Eisenstat (2000) emphasize the importance of senior management’s active engagement, with Corboy and O’Corrbui (1999) cautioning that the absence of such engagement significantly undermines implementation efforts. The “principles” element in the model identifies change management and culture as essential. Hrebiniak (2006) and Cater and Pucko (2010) reveal that managers often need more change management skills to confront organizational resistance. Research shows that culture significantly influences SI; one study highlights the critical role of cultural flexibility in SI, explaining that flexible cultures influence policy formation and structural factors and enhance implementation effectiveness (Ahmadi et al., 2012). Broadly, the authors confirm organizational culture’s role as a dualistic factor (Brenes et al., 2008; Köseoglu et al., 2018).

In the “process” element, communication and time management are vital. Alamsjah (2011) and Schaap (2006) agree that the strategy must be communicated clearly across the organization to facilitate implementation. Setting realistic timeframes is also essential, as studies indicate that SI is often more time-intensive than anticipated (Alexander, 1985). Additionally, the availability and allocation of resources are crucial, with Crittenden and Crittenden (2008) emphasizing the need for strategic resource deployment. The “people” element in the model underscores the importance of commitment and shared understanding. Rapert et al. (2002) suggest that aligning team values with strategic goals enhances implementation, supported by Schaap’s (2006) call for consensus-building to strengthen shared attitudes. Finally, “performance” focuses on alignment and coordination, essential for connecting organizational resources with strategy in external conditions (Aaltonen & Ikavalko, 2002; Håkonsson et al., 2012). This comprehensive approach reflects the interconnected nature of effective SI, where alignment across purpose, principles, processes, people, and performance (Pryor et al., 2007) is critical for overcoming obstacles and achieving success.

The insights emphasize that much of the existing research has focused on strategy formulation, leaving a gap in understanding the implementation phase. This gap is critical, as implementation is often where strategies fail (Cândido & Santos, 2019). Identifying dualistic factors like leadership, communication, and resource allocation as obstacles and enablers provides a crucial lens for subsequent studies, particularly when

contextualizing these dynamics in specific industries, as seen in Articles #2 and #3. By categorizing these factors within the 5Ps (Pryor et al., 2007), the thesis offers a holistic approach to SI (see Table 9), which displays individual and dualistic KSFs identified from Article #1 and KSFs identified in Article #3 categorized by the 5Ps model (Pryor et al., 2007).

In most strategic management process models, the SI phase has been treated like a “black box” (Merkus et al., 2019). In addition, strategy textbooks have a noticeable bias, prioritizing strategy formulation while often overlooking the critical aspect of effective SI within organizations (Hitt et al., 2017). Article 1 underscores the critical role of employee involvement in successful SI and is therefore included in the framework for integrated SI. While the analysis provides valuable theoretical insights into why and how employee involvement matters, the empirical foundation of the thesis is based exclusively on interviews with CEOs in the fisheries industry, thereby privileging a top-down managerial view. This perspective is often difficult to obtain, given limited access to people at such a high level within companies, which highlights the unique nature of this research (Goldstein, 2002). As a result, the study does not capture the lived experiences, resistance, or alternative strategy interpretations among employees. This omission limits the empirical scope of the analysis and suggests promising avenues for future research. Incorporating employee-level data would offer a more comprehensive understanding of the dynamics of SI by comparing managerial intent with bottom-up, on-the-ground interpretations and practices (Tawse & Tabesh, 2021).

Based on the results in Article #1 and Article #3 as displayed in Table 9, a synthesized SI framework is suggested (see Figure 9). The proposed five-phase framework for SI follows a structured and logical process (Rani, 2019), ensuring that organizations effectively transition from strategic planning to SI. Each phase is interdependent (David & David, 2013) but still interconnected (Hrebiniak, 2013), addressing critical organizational factors (Rani, 2019) that enhance the likelihood of successful implementation.

The first phase, critical organizational characteristics (see Figure 9), establishes foundational organizational conditions facilitating SI. Organizational learning fosters adaptability and responsiveness, which are crucial for dynamic strategic environments (Lehner, 2004; Okumus, 2001). A leadership style ensures that the whole executive structure is involved, successfully communicating new strategies and their implementation (Sorooshian et al., 2010) and ensuring top management actively supports and drives the implementation process (Rani, 2019). Board-level endorsement reinforces strategic legitimacy (Brenes et al., 2008) while integrating sustainability in decision-making with the overall strategy ensures long-term viability and stakeholder expectations (Günther, 2016; Johannsdottir & McInerney, 2018). The first phase requires that SPMS be set up to operate the company strategy with measurable

performance metrics, which link strategy and performance measures in the economic and competitive environment (Phillips & Moutinho, 2018). KPIs are crucial in this context, as they provide a continuous feedback loop that allows the board members and CEOs to monitor progress and make real-time adjustments (Parmenter, 2015).

The second phase of the framework on strategy formulation requires broad employee participation (Ambrose & Schminke, 2003; Cadwallader et al., 2010) to enhance understanding and commitment (Günther, 2016; Köseoglu et al., 2020) and reduce resistance to change (Floyd & Wooldridge, 1992). A clearly defined and understandable strategy (Köseoglu et al., 2018) ensures alignment across organizational levels (Håkonsson et al., 2012; Sabourin, 2015). This participatory approach strengthens commitment, making the strategy more feasible when transitioning to implementation. This third phase of preparation for SI focuses on building organizational readiness. One study shows that flexible cultures are more positively associated with successful SI than market or hierarchy cultures (Ahmadi et al., 2012). Training employees on strategic intent fosters a shared culture (Crittenden & Crittenden, 2008) establishing communication structures ensures clarity and coordination (Alamsjah, 2011; Al-Kandi et al., 2013) and should be exercised bottom-up and top-down simultaneously (Schaap, 2006). Allocating sufficient resources guarantees that personnel can effectively implement strategic objectives without operational constraints (Crittenden & Crittenden, 2008; Sorooshian et al., 2010).

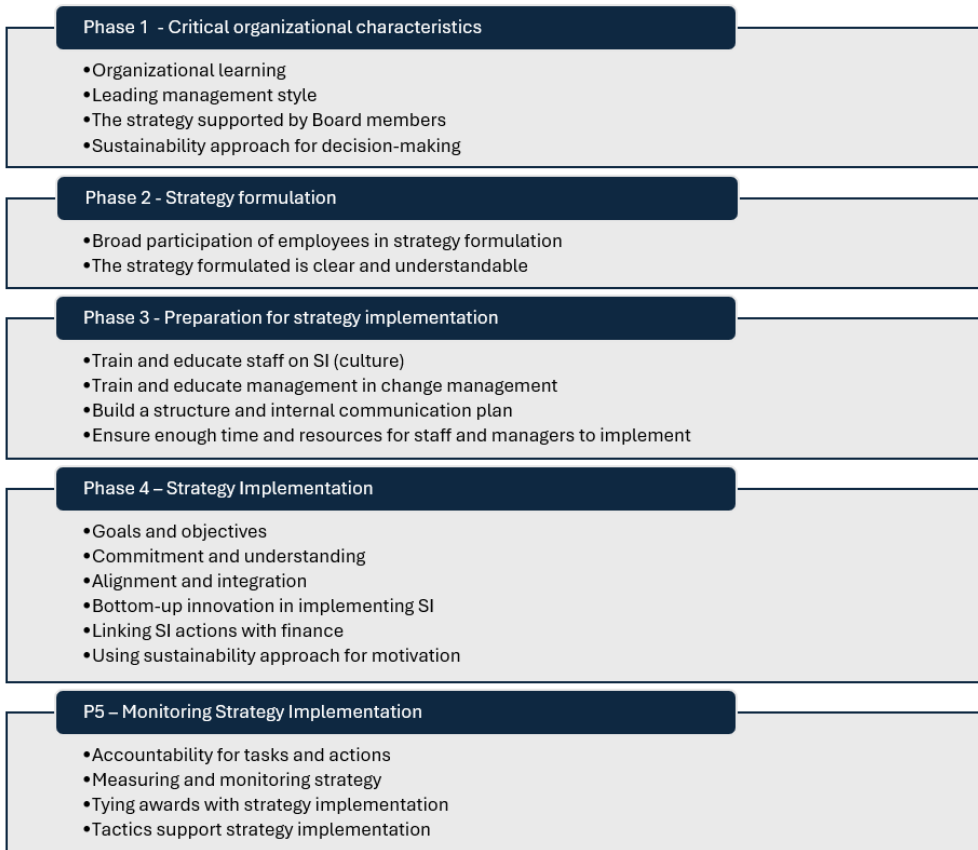
**Table 9.** Key success factors from articles synthesized in the 5Ps Model (Pryor et al., 2007)

|                    | <b>Individual factors</b>                                                                                 | <b>Dualistic factors</b>                                                                 | <b>Key success factors</b>                                                                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>     | Broad strategy formulation<br><br>Tactics supporting SI<br><br>Different strategies for business units    | Leadership<br><br>Goals and objectives<br><br>Management style<br><br>(Un)clear strategy | Leaders as role models and motivators<br><br><br><br>Management based on consensus                                                                                                                     |
| <b>Principles</b>  | Organizational learning                                                                                   | Change management<br><br>Culture                                                         | The board should back up the strategy<br><br>Culture should be based on trust and respect for effective SI<br>The sustainability approach is critical for decision-making and for motivating employees |
| <b>Process</b>     |                                                                                                           | Resources<br>Time<br>Communications                                                      | SI is linked with finance<br><br>Communication should be top-down and bottom-up<br>SI should be explained to all employees                                                                             |
| <b>People</b>      |                                                                                                           | Commitment and understanding                                                             | Involvement of managers and employees in SI is important<br><br>Well-trained employees in SI<br>Recruitment of educated employees<br><br>Bottom-up innovation from employees                           |
| <b>Performance</b> | Staff accountable for tasks and action<br><br>Monitoring strategy<br><br>Tying awards with implementation | Alignment and integration                                                                | Integrated view of SI<br><br>Setting up timeframes, clear objectives, and measures                                                                                                                     |

Source: Created by author

At the core of the framework is the fourth phase, which operationalizes the strategy. Clear goals and objectives guide performance expectations (Rani, 2019; Tawse et al., 2019), while commitment and understanding through participation in strategy formulation ensure employee engagement. Management integration across functions and levels promotes coherence in the implementation (Rani, 2019). Cultures encouraging bottom-up innovation foster employee engagement, linking SI with emergent improvement and facilitating SI (Al-Sada et al., 2017). The thesis findings indicate that few fisheries companies utilize the BSC or other strategic management frameworks. It was also found that most companies rely solely on financial KPIs within their organizations, as noted in previous research (Phillips & Moutinho, 2018). Additionally, it is suggested that companies address the lack of performance measures in areas such as sustainability measures, internal processes, employee satisfaction, and learning and growth by using and defining specific KPIs tailored to their industry. The BSC is recommended as an effective tool for SI in companies (Phillips & Moutinho, 2018) and could be aligned with the SPMS, adding important metrics to the system. The fifth phase involves monitoring to ensure continuous assessment and accountability for SI and its success (Crittenden & Crittenden, 2008). While structured monitoring mechanisms allow timely adjustments (Kaplan & Norton, 2008), alignment ensures that operational activities remain consistent with strategic goals and that employees are accountable for strategic tasks and actions (Alamsjah, 2011; Sabourin, 2015).

This framework follows the strategic management process by incorporating analysis, formulation, implementation, and control (David & David, 2013). It effectively operationalizes strategic planning and contemporary dynamic SI theories, ensuring an integrative approach to achieving organizational objectives (Rani, 2019). It sequentially moves from creating enabling conditions (Phase 1) to defining strategy (Phase 2), preparing for implementation (Phase 3), implementing strategy (Phase 4), and sustaining accountability through monitoring (Phase 5).



**Figure 9.** Framework for integrated strategy implementation

Source: Created by author

### **6.3 Characteristics of the Fisheries Company of the Future**

This thesis identifies important internal obstacles affecting organizational resources (Casey & Goldman, 2010) and external obstacles based on the external environment (Hillman et al., 2009) to SI in the fisheries industry, drawing on prior research and unique industry-specific challenges. Internally, interviewees highlight limited resources, including time, skilled labor, and specialized expertise, as critical obstacles. Such limitations align with findings from Alexander (1985) and Al-Ghamdi (1998), who observed similar obstacles in other sectors. Interviewees report that small management teams, often juggling day-to-day operations and strategic tasks, struggle to allocate time for thorough implementation. Additionally, issues with vertical communication, often hindered by informal structures in family run companies, make it challenging to convey strategic objectives to frontline employees, mirroring findings from Beer and Eisenstat (2000). The need for middle managers and skilled employees to support implementation, particularly in a multicultural and linguistically diverse workforce, is significant (Marschan-Piekkari et al., 1999). Iceland's fisheries, now reliant on foreign labor due to shifting local employment preferences, face additional challenges in bridging language gaps, inhibiting effective SI (Vigfusson et al., 2023).

Externally, the thesis identifies obstacles unique to Iceland's fisheries based on the perception of the interviewees, such as lack of governmental vision for the industry, hostile regulatory bodies, and persistent changes to industry regulations, high political uncertainty, time-consuming lobbying, and often, unsympathetic political and media discussion (Vigfusson et al., 2023). These issues, not widely noted in broader SI research, create investment risks and impede long-term strategic planning. Interviewees emphasize that political instability surrounding the fisheries management system, including the ITQ model, negatively affects operational continuity (Gunnlaugsson & Valtýsson, 2022). Parlee and Foley (2022) discuss how regulatory changes can simultaneously enhance and restrict access to fisheries, complicating the narrative around governance in fisheries management. Their research has also highlighted how regulatory changes can create opportunities and obstacles for fisheries stakeholders, particularly small-scale harvesters (Parlee & Foley, 2022). This reflects the complexities of Iceland's situation, where frequent regulatory shifts may lead to instability and uncertainty for the biggest fisheries, and resonates with findings in broader fisheries management literature. Interviewees perceive a lack of long-term vision for the fisheries industry as a significant obstacle to SI.

Although limited research has focused on this issue within the fisheries, parallels can be drawn from other industries. For example, in construction, Zusman et al. (2021) demonstrated that the absence of a government long-term vision impedes planning, coordination, and sustainable growth. Similarly, in water resource management, short-sighted governmental policies have been shown to result in inefficiencies and hinder the effective SI aimed at long-term industry benefits (Tortajada et al., 2013). The

significance of stakeholder engagement in developing regulatory frameworks is well established. Wester et al. (2022) highlight how scientists' and stakeholders' collaborative efforts influence policy recommendations, particularly in fisheries management. This underscores the importance of a unified long-term vision among policymakers to foster meaningful stakeholder involvement. Without such a vision, the fisheries industry may face persistent challenges stemming from fragmented governance and inadequate collaboration. Additionally, the critical role of adaptive management strategies in addressing ecological and social dimensions is emphasized in the literature. Ojea et al. (2017) argue that effective fisheries governance, informed by comprehensive regulatory frameworks, enhances resilience to climate change impacts. This perspective aligns with the need for a cohesive long-term vision in fisheries management in the EU to counteract political uncertainty and mitigate regulatory challenges. A unified approach could strengthen governance and promote the industry's sustainability (Bastardie et al., 2024).

Economic challenges further complicate SI, high corporate taxes, and fishing fees, which have increased significantly since 2010 due to a rise in resource rent. These are viewed as restrictive for the capital intensive fisheries industry (Gunnlaugsson & Valtysson, 2022). Interviewees also note currency fluctuations as a destabilizing factor affecting the competitiveness of Icelandic fisheries in global markets (Emery et al., 2012). Moreover, a hostile public discourse surrounding the ITQ system, amplified by media criticism, requires companies, according to the CEOs, to spend resources on lobbying rather than strategic initiatives (Vigfusson et al., 2023).

As mentioned, the thesis outlines KSFs for SI in the Icelandic fisheries industry, grounded in the 5Ps model (Pryor et al., 2007). Effective implementation relies on an integrated approach, addressing multiple KSFs rather than focusing narrowly on isolated elements (Obeid, 2023). Within this framework, companies are encouraged to set specific, measurable objectives that align with their core purpose (Aaltonen & Ikavalko, 2002; Atkinson, 2006). Internal KSFs emphasize employee engagement and the establishment of a supportive organizational culture (Ploscaru et al., 2023). Communication plays a vital role, with interviewees highlighting the need for clear, top-down messaging that includes feedback mechanisms. However, findings suggest that a more balanced two-way communication could enhance strategy alignment (Schaap, 2006). Engaging employees at all levels (Rani, 2019) is critical, echoing research suggesting that broad participation fosters effective SI (Hambrick & Cannella, 1989; Weiser et al., 2020). Furthermore, involving employees and middle management in the process can help navigate a multicultural workforce and address language barriers that complicate implementation (Castaneda & Bateh, 2012). Leadership and organizational culture also significantly impact SI. Interviewees highlight that a supportive culture based on respect and trust enables constructive dialogue and innovation (Malkamäki et al., 2021). Consistent with prior research, a flexible, people centered culture facilitates alignment between business strategy and corporate culture, fostering an environment

for strategy (Brenes et al., 2008). However, the industry's top-down implementation approach limits employee involvement, which could otherwise contribute to more effective outcomes (Crittenden & Crittenden, 2008).

Sustainability remains central, with the fisheries industry actively supporting responsible resource management in alignment with CSR policies and UN SDGs (Gunnlaugsson & Valtýsson, 2022). The emphasis on sustainability extends to efficient resource utilization, where by-products formerly viewed as waste are now turned into high-value products, reinforcing CA through innovation (Sigfusson, 2020). Interviewees support sustainable practices and seek to enhance their brands around Iceland's reputation for clean and sustainably sourced seafood. Interviewees also advocate for policy changes supporting sustainable growth to maintain competitiveness without compromising the ITQ system's integrity. These policies include incentives for ecological practices and broader management strategies, such as Ecosystem-Based Fishery Management (EBFM), which could align ITQ goals with environmental sustainability (Emery et al., 2012). Overall, while the ITQ system has proven effective in creating economies of scale and sustainable practices (Gunnlaugsson & Valtýsson, 2022). The quota ceiling and challenges related to market expansion and consumer branding continue to shape the strategic landscape of Iceland's fisheries industry. While some fisheries have embraced CSR initiatives aligned with select SDGs, there is room to deepen the focus on societal aspects like poverty and hunger, potentially enhancing the industry's social impact (Johannsdóttir & McInerney, 2018). According to interviewees, a key strategic direction for Icelandic fisheries is to move towards an increased market-based approach, although resource constraints and regulatory uncertainties present challenges.

Interviewees emphasize that transitioning from wholesale to consumer-focused branding requires substantial financial and human capital. Nonetheless, some companies have taken initial steps to control more of the value chain, increasing vertical integration by adopting sales and marketing functions previously managed by intermediaries. Although full integration is limited, the industry is gradually developing its consumer-oriented approach, aligning with broader strategic goals of value chain integration under the ITQ system (Gunnlaugsson & Valtýsson, 2022). This transition mirrors studies showing that an established fishery brand identity resonates more with wholesalers than consumers, a limitation that hinders direct to consumer sales growth (Agnarsson et al., 2021).

The thesis also reveals that the evolving CA in the Icelandic fisheries industry is rooted in internal resources and a market-based approach. Historically, the industry's competitive edge has been derived from access to natural resources, such as fish stocks, supported by the ITQ system (Agnarsson et al., 2021; Vigfússon et al., 2025). Grafton et al. (2006) emphasize that sustainable fisheries management can be significantly influenced by the community and individual harvest rights specification,

which aligns with the RBV framework. They argue that these rights, when coupled with effective public research and monitoring, can enhance the sustainability of fisheries by leveraging internal resources (Grafton et al., 2006). This underscores the importance of internal capabilities in maintaining a competitive edge in industry. Moreover, MBV suggests that CA is influenced by its market position and strategies to respond to market demands. Kvamsdal et al. (2016) discuss the importance of harvest control rules in modern fisheries management, which can be seen as a market-based approach that enhances transparency and adaptability in response to market conditions. The ITQ system provides Icelandic fisheries with secure access to fish stocks, thereby incentivizing sustainable practices and promoting long-term resource management. Furthermore, the literature indicates that uncertainty in fisheries management can impact the CA of the industry. Mildenberger et al. (2022) emphasize the importance of incorporating precautionary approaches and uncertainty buffers in fisheries management, which can help mitigate risks associated with stock assessments and management decisions. By addressing these uncertainties, fisheries can enhance their resilience and competitive positioning in the market.

The thesis underscores a gradual transition from RBV to MBV, emphasizing the integration of internal resources like innovation, experience, and sustainable practices with external market-based approaches, including CA through value chain integration (Björgvinsson et al., 2015) and consumer-oriented branding (Vigfússon et al., 2025). Companies are exploring diversification through aquaculture investments and innovative by-products derived from previously undervalued resources. Empirical evidence from the fisheries industry demonstrates the synergistic potential of combining RBV and MBV perspectives to enhance CA (Chen et al., 2021; Uyanik, 2023). The findings of this thesis propose a framework for prospective CA (see Figure 10) where internal strengths, such as managers' experience and knowledge, and access to resources, are leveraged alongside market-based approaches. Despite regulatory and operational obstacles discussed earlier, the industry's trajectory toward a sustainable and market-based approach underscores its evolving CA. This dual framework offers valuable insights for industries reliant on natural resources, highlighting the dynamic interplay between internal resources and external market forces in shaping long-term competitiveness. The insights from SI, CA, and sustainability in Figure 10 present a synthesized summary of the empirical findings derived from the data. The integrative perspective of proposing a fisheries company of the future and its characteristics by merging these concepts represents a normative interpretation rather than an empirical conclusion.

This thesis proposes the characteristics of the fisheries of the future as:

*The responsible fishery of the future must embed sustainability into its operations to remain competitive and efficient. Branding and product innovation will differentiate the company, while control over the vertical value chain and access to sustainable fishing stocks through efficient ITQ management will secure long-term competitiveness. A culture of trust, respect, and transparency, driven by open communication and employee involvement, will be crucial, with leaders serving as role models to inspire teamwork and sustainability-focused practices. Clear objectives, measurable outcomes and impacts, and alignment with financial and operational goals will ensure SI projects deliver tangible results. Sustainability must be central to decision-making, with consensus-driven management fostering a unified vision.*

This description is formulated to be universally applicable, encompassing organizations engaged in various stages of the fisheries value chain, including harvesting, processing, distribution, and marketing, irrespective of their scale or geographic location. Moreover, the proposed description extends beyond the fisheries sector, allowing for key ideas to be applied to organizations operating in other industries (see Figure 10).

| Characteristic                                                                         | SI | CA | Sustainability |
|----------------------------------------------------------------------------------------|----|----|----------------|
| • Sustainable emphasis on branding                                                     |    | x  | x              |
| • Continuous product innovation                                                        |    | x  |                |
| • Value of building fisheries brands                                                   |    | x  |                |
| • Control of the vertical value chain                                                  |    | x  |                |
| • Value-based on ITQ management system                                                 |    | x  | x              |
| • Access to natural resources                                                          |    | x  | x              |
| • Access sustainable fishing stocks                                                    |    | x  | x              |
| • Value of knowledge and management experience in the industry                         | x  | x  |                |
| • SI should be explained to all employees in an open and transparent process           | x  |    |                |
| • Company board members back up SI                                                     | x  |    |                |
| • Company culture based on trust and respect between employees is critical for SI      | x  |    |                |
| • Communication should be both top-down and bottom-up, clear and understandable        | x  |    |                |
| • Management based on consensus and commitment should drive SI                         | x  |    |                |
| • The sustainability approach is critical for decision-making in the industry          | x  | x  | x              |
| • The sustainability approach and positive attitudes used to motivate employees        | x  | x  | x              |
| • Bottom-up innovation from employees                                                  | x  | x  |                |
| • Involvement of all employees in SI                                                   | x  |    |                |
| • Leaders as role models should motivate SI                                            | x  |    |                |
| • Recruitment should be focused on skills like leadership, communication, and teamwork | x  | x  | x              |
| • Employees must be well-trained for SI                                                | x  |    |                |
| • Setting up time frames clear objectives and measures for SI projects                 |    | x  | x              |
| • Managers need to have an integrated view of SI                                       | x  | x  |                |
| • SI actions have to be linked with finance and operation                              | x  | x  |                |

**Figure 10.** Characteristics of the fisheries company of the future

Source: Created by author

To successfully implement the envisioned description of the fisheries company of the future and adapt to the changing dynamics of the industry, fisheries companies must establish clear measures that align with their strategic goals. It is recommended that the BSC be used as a comprehensive performance management framework (see Table 10). This approach will enable fisheries companies to track their progress and make informed decisions by incorporating metrics from various perspectives: financial, customer, internal processes, and learning and growth.

**Table 10.** Balanced Scorecard for the fisheries company of the future

| Perspective                                                                  | KPI                                                | Description                                                                                                                             |
|------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Customer Perspective (Market &amp; Brand Perception)</b>                  | Brand Value/Equity Score                           | Captures sustainable emphasis on branding and long-term market reputation.                                                              |
|                                                                              | Customer Survey<br>Loyalty / Repurchase Rate/Image | Indicates the retention effects of sustainability efforts.                                                                              |
|                                                                              | % Revenue from Sustainable-Branded Products        | Links sustainability positioning directly to financial outcomes.                                                                        |
| <b>Internal Business Processes Perspective (Operations &amp; Efficiency)</b> | Supply Chain Traceability Index                    | Demonstrates control and transparency across the vertical value chain.                                                                  |
|                                                                              | Sustainable Sourcing / ITQ Compliance Rate         | Tracks adherence to sustainable quota management and access to certified fishing stocks.                                                |
|                                                                              | Project Completion Rate for SI Initiatives         | Evaluates the timeliness and effectiveness of sustainability projects.                                                                  |
|                                                                              | Internal Communication Effectiveness Score         | Assesses organizational clarity, consistency, and bidirectional communication.                                                          |
| <b>Learning &amp; Growth Perspective (Innovation &amp; Growth)</b>           | Rate of New Product Development / Innovation       | Reflects the company's capability for continuous product innovation.                                                                    |
|                                                                              | Employee Survey<br>Sustainability Literacy Score   | Measures employees' understanding of sustainability concepts, ensuring workforce satisfaction, engagement, and alignment with SI goals. |
|                                                                              | Number of Bottom-Up Innovation Initiatives         | Monitors employee-driven suggestions and implemented projects.                                                                          |
|                                                                              | R&D Investment in Sustainable Technology           | Captures the company's financial commitment to build knowledge and technological capacity.                                              |

|                                                                 |                                                    |                                                                                                                |
|-----------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Learning &amp; Growth Perspective (People &amp; Culture)</b> | Employee Engagement / Trust Score                  | Reflects a culture of respect and trust, essential for long-term SI.                                           |
|                                                                 | Leadership Role Model Score                        | Based on 360-degree feedback, it measures how leaders embody and promote sustainability values.                |
|                                                                 | Talent Acquisition Sustainability                  | Tracks the recruitment of employees with strong leadership, teamwork, and communication skills relevant to SI. |
|                                                                 | Retention Rate of Sustainability-Trained Employees | Indicate the company's ability to retain staff, which is crucial for embedding sustainability knowledge.       |
| <b>Financial Perspective (Strategic Outcomes)</b>               | Revenue Growth from Sustainable Markets            | Measures the financial benefits of strong sustainability positioning.                                          |
|                                                                 | Cost Savings from Efficiency Gains                 | Captures improved resource allocation and reduced waste from sustainable operations.                           |
|                                                                 | Return on R&D in Sustainable Technology            | Links knowledge and technology investment to tangible financial returns.                                       |

Source: Created by author



## **7 Academic and Practical Contributions**

This chapter begins by outlining the academic contribution of the thesis. Thereafter, the chapter describes the practical contribution, limitations, and future research and finishes with a conclusion.

### **7.1 Academic Contributions**

This thesis contributes to and adds knowledge to the academic discussion of SI and CA, emphasizing a specific industry. It makes a methodological contribution through its novel application of elite CEO interviews to capture strategic insights in a traditionally closed industry. This approach provides a template for future research in industries with limited access.

The thesis makes a significant theoretical contribution by offering the first comprehensive overview of empirical research on internal and external obstacles and success factors related to SI from 1980 to 2020 (see Figure 5). It addresses a gap in the literature by including empirical papers overlooked in previous reviews. The thesis provides a comprehensive synthesis of empirical research revealing 16 obstacles and 18 KSFs that influence SI. Additionally, the thesis introduces the concept of "dualistic factors" and draws attention to 11 dualistic factors, which possess characteristics of both obstacles and KSFs. Consequently, these dualistic factors should be considered within the SI process as they enrich understanding of how organizational elements influence SI outcomes. The thesis categorizes obstacles and KSFs factors based on the 5Ps model, providing a structured academic framework.

It introduces a new conceptualization framework (see Figure 6) of internal and external obstacles and emphasizes the uniqueness of challenges in the industry. In addition, the thesis identifies previously undocumented external obstacles in the industry, including a lack of governmental vision, regulatory instability, and time-consuming lobbying efforts. This expands institutional theory by demonstrating how industry-specific external pressures shape strategic implementation capabilities.

Another key objective is to categorize industry-specific KSFs that influence SI systematically. As a result, a conceptual framework for integrated SI in the fisheries industry is proposed. The thesis comprehensively examines SI within the industry, focusing on key incentives that facilitate successful implementation (see Figure 7). This framework synthesizes organizational theory perspectives with practical implementation mechanisms, providing a more holistic theoretical framework for understanding successful SI. Additionally, this thesis investigates the prioritization and integration of

SDGs in the fisheries industry, advancing organizational theory by providing a lens through which to analyze the relationship between sustainability and strategic management.

The thesis contributes to RBV and MBV literature by assessing the evolution from a resource-dependent to a market-based approach in the industry. The proposed framework for integrating RBV and MBV perspectives provides new theoretical insights into how traditional resource-based industries can develop sustainable CA through market orientation. Through this interdisciplinary approach, the thesis offers theoretical insights for organizations operating in dynamic and resource-intensive environments (see Figure 8).

This thesis introduces a five-phase framework for SI (see Figure 9), aligning with established strategic management principles. The framework follows a logical progression and a structured approach, which provides a systematic methodology for organizations seeking to enhance SI effectiveness. Beyond SI, this thesis also identifies characteristics of the fisheries company of the future. It proposes a descriptive framework (see Figure 10) emphasizing the interplay between internal resources and market-based approaches. This framework offers valuable insights, particularly for industries reliant on natural resources, by demonstrating how internal strengths can be leveraged with external market dynamics to sustain CA.

This thesis theoretical contributions extend to SI theories, organizational theory, and institutional theory. The analysis of CA is grounded in RBV theory and MBV perspective, which allows for a comprehensive evaluation of how CA is evolving within these theoretical domains.

## **7.2 Practical Contributions**

The thesis offers actionable insights to guide policymakers and CEOs in developing more efficient policies and strategies, directly addressing current gaps in SI within the Icelandic fishing industry. The thesis enriches practical knowledge by providing a holistic overview of SI internal and external obstacles, success factors, and dualistic factors based on the 5Ps model (see Figure 5). Dualistic factors identification demands a more nuanced approach to strategy, in which these factors must be carefully managed and leveraged during implementation.

The thesis contributes practically by identifying industry-specific obstacles and KSFs in the fisheries, aiding CEOs and policymakers in developing more efficient and profitable strategies (see Figure 6). The thesis is a reference point for creating integrated policies supporting the fisheries industry, altering current SI approaches. The thesis provides concrete, actionable recommendations for fisheries CEOs (see Figure 7), proposing an integrated framework for improved SI in the industry, emphasizing:

## Employee level:

- comprehensive employee and manager involvement in SI
- fostering bottom-up innovation from employees
- recruitment of employees with crucial education and skills needed
- train employees and managers for SI
- sustainability approach for employee motivation

## Organization level:

- aligning strategies with the SDGs
- implementing actionable, time-bound plans with clear objectives and measures for SI
- linking SI with finance
- emphasizing both top-down and bottom-up internal communication
- fostering a culture based on trust and respect should drive SI
- adopting management based on consensus and commitment should drive SI
- explaining SI to all employees in an open and transparent process

KSFs underscore the value of sustainable, socially responsible practices in achieving strategic objectives, providing a clear pathway for fisheries to embed CSR into their core strategies. The practical implications extend to a call for more empirical studies on KSFs in various industries to help top management overcome failures and achieve efficient and successful SI.

The thesis provides practical insights into the industry's current and potential future CA for CEOs, policymakers, and other stakeholders. Findings provide vital insights into the CA evolution of Icelandic fisheries, noting a shift from RBV to MBV. One of the core contributions of this thesis is the development of a framework that integrates RBV and MBV perspectives (see Figure 8). Findings suggest that integrating internal resources, such as regulatory frameworks and management knowledge, is crucial for maintaining competitiveness; efforts to enhance integration and gain further control over the value chain and brand development are imperative to strengthen CA within the MBV perspective. To operationalize, fishing companies could prioritize investments in

advanced data analytics to leverage internal knowledge better and actively seek strategic partnerships for vertical integration and co-branding initiatives to enhance CA. These findings can help CEOs build a data-driven foundation of KPIs (see Table 8) on resource allocation, regulatory evolution, and focus on long-term sustainability and value creation. Furthermore, these findings could help policymakers to build consensus on fisheries management.

The structured five-phase implementation framework offers organizations a comprehensive approach to enhance strategy implementation effectiveness, providing detailed guidelines that span from initial strategy development through implementation and monitoring phases. This framework is particularly valuable for industries operating in dynamic and resource-intensive environments, such as fisheries, by ensuring strategic alignment between internal resources and market-driven demands. This practical framework helps bridge the persistent gap between strategic planning and implementation by providing a roadmap for CEOs to translate strategic intent into concrete operational actions in five integrated steps (see Figure 9).

The thesis identifies characteristics of the fisheries company of the future and proposes a descriptive framework (see Figure 10). The framework has profound practical implications as the future company must proactively integrate sustainability as an operational principle to maintain competitiveness. Securing access to sustainable fishing resources via the ITQ system, alongside control over the vertical value chain, will provide CA. Differentiation will be achieved through strong branding and continuous product innovation, enhancing market positioning. Organizational culture will play a pivotal role, necessitating an environment of trust, respect, and transparency, fostered by open communication and active employee participation. Leadership will be instrumental in setting this tone, with managers as role models promoting collaboration and sustainability-driven practices. SI will require the establishment of clear objectives, measurable performance indicators, and alignment with financial and operational goals to ensure tangible outcomes. To facilitate, it is recommended that fisheries companies implement a BSC that includes customer, internal processes, learning and growth, and financial KPIs metrics (see Table 10). Furthermore, sustainability must be embedded within decision-making processes, supported by a consensus-driven management approach that unites stakeholders around a shared vision for long-term resilience and responsible resource utilization.

This thesis provides prescriptive, actionable guidance for policymakers and CEOs in the Icelandic fishing industry. By offering practical insights from elite interviews, the thesis seeks to improve SI and significantly enhance CA by directly altering current working practices and strategic approaches within the industry.

### 7.3 Limitations and Further Research

This thesis acknowledges several limitations that warrant consideration. A key limitation is the relatively small number of interviewees due to the challenges of gaining access to CEOs. Additionally, the primary data for these studies were gathered in 2019 and 2020, which may not fully capture evolving industry dynamics and strategic challenges. Further limitations pertain to the potential for selection bias and subjectivity in the systematic review, particularly in the exclusion criteria applied during the selection of articles. The reliance on English-language publications and the number of analyzed articles further constrain the breadth of insights derived. Expanding the scope of research through additional quantitative data collection and incorporating perspectives from middle management could enhance the comprehensiveness of the findings.

The need for broader research across industries and comparative studies remains critical to advancing knowledge on SI obstacles and KSFs. Investigating strategies to overcome these obstacles, particularly by examining the role and influence of employees, and using SPMS to support SI, represents a crucial avenue for future research. Furthermore, while the research has identified industry-specific KSFs, the limited literature on SI across different industries highlights a gap that future studies could address. Empirical investigations in varied industrial contexts contribute to a more nuanced understanding of SI and support managerial efforts in achieving effective and sustainable SI.

In the context of CA, future research could extend the analysis by comparing findings from the fisheries industry with those of other sectors. Exploring CA in fisheries operating under different regulatory environments would also provide valuable insights. Additionally, longitudinal studies tracking CA trends and examining strategies to overcome industry-specific obstacles could enhance understanding CA dynamics. Expanding the scope of research would allow for the refinement and validation of the proposed model in diverse contexts. From a theoretical perspective, further development of MBV as a comprehensive framework for competitive analysis could strengthen its applicability across industries. Employing mixed methods approaches, expanding the sample to include multiple stakeholders would offer further insights into the complexities of SI and CA.

The practical implications of future research are significant, particularly in refining strategies to improve SI through diverse methodological approaches such as observation, focus groups, and panel discussions. Integrating findings from multiple research methods would contribute to a more holistic understanding of SI and its implications for organizations.

## **7.4 General Conclusion**

This thesis advances our understanding of SI and CA within the fisheries industry through four interconnected research articles. The synthesis reveals the essential dynamics of SI while identifying industry-specific challenges and opportunities. The analysis identifies 16 obstacles and 18 success factors critical to SI, applying the established 5Ps framework of purpose, principles, processes, people, and performance. A key theoretical contribution emerges in identifying 11 dualistic factors that function as both success factors and obstacles, highlighting the contextual nature of SI.

The thesis uncovers previously unidentified implementation challenges specific to fisheries through elite interviews with industry CEOs. These include internal obstacles such as language barriers and multicultural workforce management, as well as external obstacles like regulatory uncertainty, political instability, and unfavorable media narratives. This understanding of industry-specific obstacles enables more targeted and effective strategic planning. These findings underscore the need for strategies tailored to address fisheries internal and external obstacles, offering a framework specific to the sector that expands the discussion and addresses unique industry-specific challenges. The thesis further develops our understanding of KSFs for SI in fisheries by proposing an integrated framework emphasizing employee engagement, bottom-up innovation, and alignment with UN SDGs. This framework demonstrates how integrating sustainability principles within core strategies can enhance implementation effectiveness while contributing to broader societal goals.

The thesis examines CA through the dual lens of RBV and MBV, documenting a gradual shift from resource dependency toward a market-based approach. This transition emphasizes growth strategies, value chain control, and brand development. The resulting integrated framework provides strategic pathways for the industry to enhance its competitive positioning by combining internal resource strengths with external market strategies.

The integration of these four articles offers theoretical and practical contributions to the understanding of SI and CA, particularly within resource-dependent industries. The thesis proposes frameworks bridging the gap between theoretical understanding and practical implementation, offering actionable insights for CEOs and policymakers. By examining fisheries unique challenges and opportunities, this research provides valuable lessons for similar industries navigating the complex balance between resource management, market demands, and sustainable development.

The findings underscore the importance of systematic approaches to SI while acknowledging the need for flexibility and adaptation to industry-specific contexts. This research establishes a foundation for future studies examining SI across different industrial and cultural contexts, particularly in sectors managing the transition from resource-based to market-based approaches.

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## **Article 1**

### **Article #1: Obstacles to strategy implementation and success factors: A review of empirical literature**

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# Obstacles to strategy implementation and success factors: a review of empirical literature

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## Abstract

The purpose of this study is to identify obstacles and success factors evident from empirical studies affecting strategy implementation and to provide an overview of the empirical literature. A systematic literature review (SLR) was used to analyze thirty-five peer-reviewed empirical articles. All of the 35 research papers selected in this review use primary data gathered from the organizations studied. This study of empirical research has identified 16 obstacles that can hinder strategy implementation and 18 success factors that can facilitate implementation. This study highlights factors that are dualistic, meaning that they contain both elements of obstacles and key success factors. The dualistic factors should therefore be considered in the strategy implementation process. Research gaps are identified. They include lack of studies on how to overcome obstacles to strategy on the one hand and on employee influence on implementation on the other. The differences among industries, countries, or cultures regarding implementation have not yet been explored at any depth. The paper adds to theoretical and practical knowledge based on the systematic overview it provides on strategy implementation from 1980 until 2020. The paper enriches the practical knowledge relevant to those implementing strategies, as it captures and identifies the dualistic factors affecting strategy implementation.

## Keywords

strategy, implementation, execution, obstacle, barrier, success factor

## Introduction

Strategy formulation has been studied and discussed in academia for half a century, but less attention has been paid to the implementation of a strategy (Aaltonen & Ikävalko, 2002; Alexander, 1985; Al-Ghamdi, 1998; Noble, 1999a). Unlike strategy formulation, strategy implementation is extremely difficult and its research history has been seen as fragmented and eclectic (Blahová & Knápková, 2010). Strategy implementation, nevertheless, is seen as a very important field having a crucial influence on organizations and

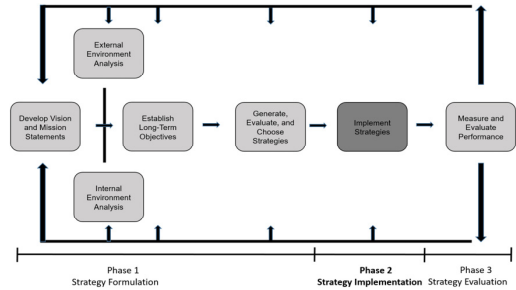
their performance (Hrebiniak & Joyce, 1984). Implementation is also fundamental for the effective functioning of any organization and for a business strategy to succeed (Hrebiniak, 2006; Schilit, 1987) and can be a crucial element for creating a competitive edge, which is the core aim of any strategy formulation and implementation (Giles, 1991). Multiple scholars have consequently called for more research on strategy implementation to fill the identified knowledge gap (Atkinson, 2006; Beer & Eisenstat, 2000; Noble, 1999a). Although attention of academics has increased on strategy implementation over the last

decade, managers are still facing remarkably similar problems concerning implementation (Hrebiniak, 2013).

Research has shown that a relatively small percentage of planned strategies in organizations are implemented (Mintzberg & McHugh, 1985) and too many strategies seem to fail in the implementation stage because either implementation is poorly managed or has not taken place. Therefore, scholars have underlined the importance of avoiding implementation barriers and pitfalls, since most strategies falter during implementation (Allio, 2005). It is not an overstatement to say that if the strategy formulated never gets implemented, the time, resources and capital of the company have been wasted. This is, for instance, highlighted by Olson, Slater and Hult (2005, p. 47.) who state that “doing” is much harder than “dreaming.” Hrebiniak (2006) agrees with Olson et al. (2005), as he emphasizes that managers know how to plan and formulate a strategy, but not how to implement it. Studies have shown a very high failure rate of strategy implementation, ranging between 50% and 90% (Kaplan & Norton, 2001; Miller, 1997). A more recent study suggested that some of the evidence supporting these percentages is outdated, fragmentary, or lacks scientific rigor and, therefore, numbers should be taken with caution (Cândido & Santos, 2015).

Differences between strategy implementation and strategy execution are not so clear in the literature, as many scholars use the concepts as synonyms (Hrebiniak, 2006). For instance, Li, Guo-Hui and Eppler (2010) report in their research that there seemed to be a consensus of using strategy implementation as a key word in the field of strategy implementation/execution, and that few generally use strategy execution concept (Li et al., 2010). Therefore, in this study, strategy implementation and execution will be used synonymously, in line with Hrebiniak's (2006) and Li et al. (2010) conclusion.

As depicted in Figure 1, the strategic management process can be described in three main phases: *formulation, strategy implementation, and evaluation* (David & David, 2013). Inside these phases, the authors identified the following seven steps that have to be completed during the process: developing the vision and the mission for the organization, scanning the internal and external environment, setting objectives, choosing strategies, and implementing and evaluating its performance.



**Figure 1** Model of the strategic management process (the strategy implementation phase is bolded to underline that it is the subject of this article).

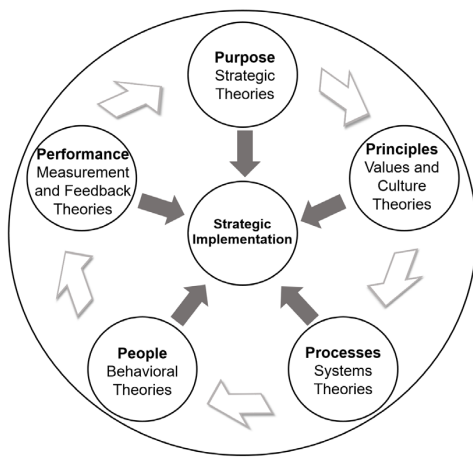
Source: David & David, 2013, p. 61

The first phase of the strategic management model (i.e., formulation) has been well studied (Miller & Friesen, 1978; Mintzberg & Lampel, 1999; Pettigrew, 1992) as has the role of structure and the strategy process (Galbraith & Nathanson, 1978; Noble, 1999b). The third phase, strategy evaluation, has also been studied by a number of scholars, including Daft and Macintosh (1984), Littler, Aisthorpe, Hudson and Keasey (2000), and Simons (1994). Concerning measurement and evaluating strategy performance, which can be seen as part of the strategy evaluation method, a number of studies have also been carried out. Kaplan and Norton are among the scholars focusing on this aspect, but their emphasis has mostly been on the balanced scorecard, which is widely used to map, measure, and monitor business or corporate strategy (Kaplan & Norton, 2000, 2004, 2008). The second phase, strategy implementation, is understudied in the literature.

A call has been made by managers for strategy implementation guidelines (Hrebiniak, 2006). To respond to this call, scholars have introduced frameworks and conceptual models of strategy implementation (Brenes, Mena & Molina, 2008; Hrebiniak, 2013; Okumus, 2003; Pryor, Anderson, Toombs & Humphreys, 2007; Safdary et al., 2014). However, most of these frameworks are conceptual and descriptive and have limited practical implications (De & Janssen, 2001; Engert & Baumgartner, 2016).

The 5Ps model of strategy implementation, suggested by Pryor et al. (2007) is a tool that can help organizations to achieve implementation as a core competency (See Figure 2). The 5Ps model has five critical elements surrounding the concept of strategy implementation: purpose, principles, processes, people, and performance. The model also focuses on sub-elements or specific activities

and functions, such as structures, systems, leadership behaviour, human resource policies, culture, values, and management. To ensure successful strategy implementation, the 5Ps model provides an integrated structure, which needs to be fully aligned for maximum efficiency (Pryor et al., 2007). In this study, the 5Ps model is used as an analytical framework to identify success factors and obstacles facilitating or hindering strategy implementation. The 5Ps model was chosen because not only is it conceptual but also based on integration of theory and experience from diverse business disciplines, providing an effective and pragmatic approach for strategy implementation (Pryor et al., 2007).



**Figure 2** 5Ps model of strategy implementation.

Source: Pryor et al., 2007, p. 8.

At least four literature reviews on strategy implementation have been carried out, i.e. by Noble (1999a), Li et al. (2010), Alharthy, Khan, Rashid & Pagliari (2017) and Tawse and Tabesh (2020). First, Noble (1999a) performed a mixed-conceptual and empirical implementation-related review and found implementation to be a complex phenomenon and that strategy formulation and implementation are intertwined processes. Noble's findings showed three main themes of enquiry. The first theme concerned managers' behaviour, especially when managers may engage in self-interest behaviour that can impair the implementation. The second theme covered strategic consensus among managers and key external stakeholders. The third theme related to involvement of employees as early as possible in the process, the adaptation of businesses and their culture to the changing environments, as well as managers' leadership styles (Noble, 1999a).

Second, Li et al. (2010) conducted also a mixed study of both conceptual and empirical papers, largely supporting the conclusions of Noble's (1999a). Their findings indicate that people issues received the most attention, and most of the studies explored middle managers and their influence on strategy implementation. The reviewed studies present an unclear picture of the relationship among communication, commitment, and consensus, which has been researched by a number of scholars (Alexander, 1985; Floyd & Wooldridge, 1997; Guth & Macmillan, 1986; Rapert, Velliquette & Garretson, 2002). Very few studies focus on the effect that the relationships among different strategy levels have inside a company, such as business and/or operational level on implementation. In addition, there seemed to be a trend in studies towards developing frameworks and model-based approaches to strategy implementation (Li et al., 2010).

Third, Alharthy et al. (2017) explored current research and a systematic search process was carried out ending with 47 papers related to the topic. As in both Li et al. and Nobles' research both conceptual and empirical papers were analysed. They found out that many organizations could not maintain competitive advantage despite having strong strategy in place. This was mostly due to lack of achievement at the strategy implementation stage as leaders and top management did not pay enough attention to the implementation. Many other factors were also neglected, and the paper specifically stated the necessity in future research to use empirical data from organizations where strategy has been implemented (Alharthy et al., 2017).

Forth, Tawse and Tabesh (2020) performed a review of the literature studying both conceptual and empirical papers focusing on organizational factors that impact strategy implementation effectiveness. The outcome of their work was an introductory framework which builds on the previous findings of Noble (1999a) identifying conditions of strategy implementation effectiveness. These conditions are the structural and interpersonal capabilities managers may employ to be able to select and carry out managerial actions that create the conditions for strategy implementation effectiveness (Tawse & Tabesh, 2020).

The purpose of this study is to identify obstacles and success factors evident from empirical studies affecting strategy implementation. To address the issue, this study provides an overview of major

empirical research on strategy implementation obstacles and success factors from 1980 until 2020. It identifies the major obstacles hindering strategy implementation as well as the key factors for successful implementation with a focus on identifying possible gaps in the literature. As the literature is fragmented and still in development, scholars have called for additional empirical studies to explain successful strategy

implementation in different types of organizations, industries, and businesses (Baumgartner, 2014; Klettner, Clarke & Boersma, 2014).

Empirical papers used in this literature review have been listed (See Table 1) and the empirical papers used in the four reviews done by, Noble (1999), Li et al. (2010), Alharthy et al. (2017) and Tawse and Tabesh (2020).

**Table 1** Empirical papers studied in four strategy implementation reviews

| Papers studied in this review |                                         | Papers studied | Papers studied   | Papers studied         | Papers studied        |
|-------------------------------|-----------------------------------------|----------------|------------------|------------------------|-----------------------|
| Year                          | Empirical research                      | Noble (1999)   | Li et al. (2010) | Alharthy et al. (2017) | Tawse & Tabesh (2020) |
| 1980                          | Waterman, Peters & Phillips             |                |                  |                        |                       |
| 1980                          | Bourgeois                               | x              |                  |                        |                       |
| 1984                          | Gupta & Govindarajan                    | x              | x                |                        |                       |
| 1985                          | Wernham                                 | x              | x                |                        |                       |
| 1985                          | Alexander                               |                | x                | x                      |                       |
| 1986                          | Nutt                                    | x              | x                |                        | x                     |
| 1986                          | Guth & MacMillan                        | x              | x                | x                      |                       |
| 1988                          | Govindarajan                            | x              | x                |                        | x                     |
| 1989                          | Hambrick & Cannella                     | x              |                  |                        | x                     |
| 1990                          | Wooldridge & Floyd                      |                | x                |                        | x                     |
| 1996                          | Walderseel & Sheather                   | x              |                  |                        |                       |
| 1998                          | Al - Ghamdi                             |                |                  | x                      |                       |
| 1999                          | Corboy & O'Corrbui                      |                |                  |                        |                       |
| 2000                          | Beer & Eisenstat                        |                | x                | x                      | x                     |
| 2001                          | Rapert et al.                           |                | x                |                        | x                     |
| 2001                          | Okumus                                  |                | x                |                        | x                     |
| 2002                          | Aaltonen & Ikavalko                     |                |                  | x                      |                       |
| 2002                          | Heide, Grønhaug & Johannessen           |                | x                |                        | x                     |
| 2005                          | Shah                                    |                |                  |                        |                       |
| 2006                          | Hrebiniak                               |                | x                | x                      | x                     |
| 2006                          | Schaap                                  |                | x                |                        | x                     |
| 2008                          | Crittenden & Crittenden                 |                |                  | x                      | x                     |
| 2008                          | Brenes, Mena & Molina                   |                | x                | x                      | x                     |
| 2010                          | Cater & Pucko                           |                |                  |                        |                       |
| 2010                          | Sorooshian, Norzima, Yusof & Rosnah     |                |                  |                        |                       |
| 2011                          | Alamsjah                                |                |                  |                        |                       |
| 2012                          | Håkonsson, Burton, Obel, & Lauridsen    |                |                  |                        |                       |
| 2012                          | Mollahoseini & Ahmadkhani               |                |                  |                        |                       |
| 2013                          | Al-Kandi, Asutay & Dixon                |                |                  | x                      |                       |
| 2013                          | Pella, Sumarwan, Daryanto & Kirbrandoko |                |                  |                        |                       |
| 2015                          | Sabourin                                |                |                  |                        |                       |

|      |                                |   |    |   |    |
|------|--------------------------------|---|----|---|----|
| 2016 | Gębczyńska                     |   |    |   |    |
| 2018 | Köseoglu, Yazici & Okumus      |   |    |   |    |
| 2019 | Tawse, Patrick & Vera          |   |    |   |    |
| 2020 | Köseoglu, Altin, Chan & Aldrag |   |    |   |    |
|      | Number of research             | 8 | 14 | 9 | 12 |

Source: The authors

The structure of this article is as follows: Section 2 describes the method and analysis employed for carrying out this literature review. The results are presented and discussed in Section 3. Section 4 covers the conclusion.

## 1. Research method

The purpose of this article is to review the literature on empirical studies on strategy implementation using existing research to create new knowledge, as proposed by Torraco (2016). The research follows the guidelines offered by Nakano and Muniz (2018) on how to write a literature review for empirical papers. To fulfill the objective of building a standalone review of the empirical literature and identifying knowledge gaps concerning strategy implementation in organizations, relevant studies have been reviewed and analyzed. All of the 35 research papers selected in this review use primary data gathered from the organizations studied.

### 1.1. General database search

The method employed was to collect and analyze empirical peer-reviewed scholarly articles in the field of business strategy implementation. For this purpose, a standardized and rigorous methodology, as suggested by Nakano and Muniz (2018), was applied. It includes a useful method to build a standalone systematic literature review (SLR). The literature databases used to access the peer-reviewed studies in this field were *Scopus*, *Web of Science*, and *ProQuest*. All searches were conducted in the search window of each database with the tools supplied and the content was displayed based on a number of criteria presented, in Table 2. The content was provided in order of relevance extracted from the titles, abstracts, and keywords of the articles.

**Table 2** Criteria for systematic literature review

| Factors     | Criteria for all searches                         |
|-------------|---------------------------------------------------|
| Publication | Peer-reviewed academic articles and book chapters |
| Sector      | Companies and organizations                       |

| Text             | Full text available online                                                         |
|------------------|------------------------------------------------------------------------------------|
| Content          | Strategy implementation obstacles/barriers/failures and levers/key success factors |
| Type of research | Both qualitative and quantitative studies                                          |
| Timeframe        | 1980–2020                                                                          |
| Language         | English                                                                            |

Source: Nakano &amp; Muniz, 2018

### 1.2. Focused searches

The initial search results shown in Table 3 are displayed for *Scopus*, *Web of Science*, and *ProQuest* databases. The numbers displayed in the Database column in Table 3 refer to the search string used for each database; the search strings are:

Search string 1; “Strategy implementation” AND “obstacle”

Search string 2; “Strategy implementation” AND “lever”

Search string 3; “Strategy implementation” AND “barrier”

Search string 4; “Strategy implementation” AND “key success factor”

Search string 5; “Strategy implementation” AND “failure”

**Table 3** Results from the searched databases

| Scopus   | Number of articles found | Number of articles relevant for this research |
|----------|--------------------------|-----------------------------------------------|
| 1        | 26                       | 5                                             |
| 2        | 35                       | 1                                             |
| 3        | 8                        | 2                                             |
| 4        | 10                       | 2                                             |
| 5        | 46                       | 1                                             |
| Total    | 125                      | 11                                            |
| ProQuest | Number of articles found | Number of articles relevant for this research |
| 1        | 25                       | 1                                             |
| 2        | 15                       | 1                                             |
| 3        | 115                      | 0                                             |
| 4        | 14                       | 1                                             |
| 5        | 8                        | 0                                             |
| Total    | 177                      | 3                                             |

| Web of Science | Number of articles found | Number of articles relevant for this research |
|----------------|--------------------------|-----------------------------------------------|
| 1              | 12                       | 4                                             |
| 2              | 37                       | 2                                             |
| 3              | 9                        | 0                                             |
| 4              | 7                        | 0                                             |
| 5              | 53                       | 0                                             |
| Total          | 118                      | 6                                             |

Source: The authors

During the second selection, the following criteria were used for inclusion of papers:

1. Empirical studies
2. Articles published in academic journals
3. Research methods described
4. Content focused on strategy implementation obstacles and/or success factors

At this stage, 20 papers were included. This means that paper not containing evidence of strategy implementation obstacles and/or key success factors were outside the scope of this article. In other cases, the papers were outside the scope of this review if the content was not in English, even though the titles and abstracts were, or if they provided only short overviews rather than research outcomes and/or had very limited or no discussion about research methods.

### 1.3. Additional searches through references

To ensure access to articles, both open source and non-open source, the Icelandic National Library database was used, but it provides access to articles through databases such as EBSCOhost, ProQuest, Scopus, and Web of Science. In the case where access was not granted via the national database, access to articles was bought through the University of Iceland or Reykjavík University. Backward and forward snowballing technique, using the reference list and citations, was applied to identify new papers as recommended by Wohlin (2012).

An additional search of the literature was carried out in accordance with a technique recommended by Webster and Watson (2002; i.e., identifying additional references from key articles). Some of the articles referenced research and articles outside of the search scope but focused on similar topics according to their title, authors, and journals in which they were published. Therefore, 35 articles were included in the final review: 20 based on a focused search and 15 from the additional search.

The search engine *Google Scholar* was used to find these 15 articles.

### 1.4. Analysis

In step one, the context of the articles was analyzed based on the information available in the articles themselves. In step two, the content of the selected articles was analyzed based on the guidelines on how to write a literature review for empirical papers (Nakano & Muniz, 2018). In step three, analytical tools were used. The analysis was conducted in three consecutive steps:

#### Step One: Research context

- Organizational type studied
- Strategic level
- Industry
- Countries
- Perspective

#### Step Two: Research objectives, findings, and methodology

- Author
- Objectives of the research
- Main findings
- Methodology

#### Step Three: Analysis of obstacles and success factors

- The 35 articles were categorized into two main groups: a) research focused on strategy implementation obstacles and b) research focused on strategy implementation success factors.
- The content of those research items was analysed in Excel and using the Mind Map software.

## 2. Results

As Table 4 reveals, the articles analyzed in step one deal with different contexts and external environments. The analysis was based on the type of organization studied, including private companies (Co), public organizations (PO), companies owned by either private and public owners, public/private/partnerships (PPP), and/or non-profit organizations (NPO). The studies have also been conducted on different levels within the organizations (i.e., corporate or business level or lower operational levels). Furthermore, different perspectives have been studied related to strategy implementation. Those taking part in strategy implementation can be senior and top managers, middle or lower managers, employees, or a mixture

of all positions. Top and senior managers can be presidents, owners, board members, and/or high-ranking executives, such as chief executive officers

(CEO), chief finance officers (CFO), and chief operating officers (COO).

**Table 4** Research context

| Author                         | Organization type | Strategic levels                           | Industries studied                                                                 | Countries studied | Perspective                             |
|--------------------------------|-------------------|--------------------------------------------|------------------------------------------------------------------------------------|-------------------|-----------------------------------------|
| Waterman (1980)                | Co                | Corporate/business unit                    | Mixed                                                                              | US                | Top management                          |
| Bourgeois (1980)               | PO                | Business level                             | Service, manufacturing, and high-tech                                              | US                | Top management                          |
| Gupta & Govindarajan (1984)    | Co                | Business level                             | Mixed                                                                              | US                | Top management                          |
| Wernham (1985)                 | PO                | Corporate level                            | Telecom                                                                            | UK                | Middle management                       |
| Alexander (1985)               | Co                | Business level                             | Mixed—72 firms on the Fortune 500 list—industrial, retail, utilities, and services | US                | Top management (CEOs)                   |
| Nutt (1986)                    | Co, PO, NPO       | Corporate and business level               | Services providers                                                                 | US & Canada       | Top management (CEOs, COOs, and CFOs)   |
| Guth & Macmillan (1986)        | Co                | Business level                             | Mixed                                                                              | US                | Middle management                       |
| Govindarajan (1988)            | Co                | Business level                             | Automotive, petroleum, food, chemical, aerospace, electronics retail, etc.         | US                | Middle management and top management    |
| Hambrick & Cannella (1989)     | Co                | Business level                             | Chemical                                                                           | US                | Top management                          |
| Wooldridge & Floyd (1990)      | Co                | Business level                             | Banks and manufacturers                                                            | US                | Middle management                       |
| Walderseel & Sheather (1996)   | NA                | NA                                         | Mixed services, software, insurance, etc.                                          | Australia         | Middle managers and senior management   |
| Al-Ghamdi (1998)               | NA                | NA                                         | NA                                                                                 | UK                | NA                                      |
| Corboy & O'Corrbui, (1999)     | Co                | NA                                         | NA                                                                                 | US                | Top management                          |
| Beer & Eisenstat (2000)        | Co                | Corporate and business level               | NA                                                                                 | NA                | Top and middle management               |
| Okumus (2001)                  | Co                | Corporate, business, and operational level | Hotel services                                                                     | NA                | Top and middle management and employees |
| Rapert et al. (2002)           | NA                | Functional level                           | Health care                                                                        | US                | Top and middle management               |
| Heide et al. (2002)            | Co                | Business and functional levels             | Ferry cruise                                                                       | Norway            | Top and middle management and employees |
| Aaltonen & Ikävalko (2002)     | Co, PO            | NA                                         | Service industry                                                                   | NA                | Top, middle, and operational management |
| Shah (2005)                    | NA                | NA                                         | Mixed                                                                              | India             | Middle- and lower-level managers        |
| Schaap (2006)                  | NA                | NA                                         | Gaming industry                                                                    | US                | Senior-level managers                   |
| Hrebiniak (2006)               | NA                | Corporate & business level                 | Mixed                                                                              | US                | Top and middle managers                 |
| Crittenden & Crittenden (2008) | NA                | NA                                         | Service, B2B, nonprofit and consumer industries                                    | US                | NA                                      |

|                                  |             |                                 |                                                             |                 |                                                                       |
|----------------------------------|-------------|---------------------------------|-------------------------------------------------------------|-----------------|-----------------------------------------------------------------------|
| Brenes et al. (2008)             | Co, PO      | Business level                  | Mixed                                                       | Latin America   | Top management                                                        |
| Cater & Pucko (2010)             | Co, PO, PPP | Business level                  | Mixed. Manufacturing, services, trading, etc.               | Slovenia        | Top management                                                        |
| Sorooshian et al. (2010)         | NA          | NA                              | Manufacturing in agriculture                                | Iran            | Top management                                                        |
| Alamsjah (2011)                  | Co          | NA                              | Mixed. Finance, manufacturing, plantation, and mining.      | Indonesia       | Middle management                                                     |
| Håkansson et al. (2012)          | NA          | NA                              | Manufacturing                                               | Danish SMEs     | Top management                                                        |
| Mollahoseini & Ahmadkhani (2012) | Co          | NA                              | Food                                                        | Iran            | Executives, middle management, operational managers, and experts etc. |
| Al-Kandi et al. (2013)           | Co          | NA                              | Banking                                                     | Saudi Arabia    | Middle management                                                     |
| Pella et al. (2013)              | NA          | Business level                  | Mixed                                                       | Indonesia       | Top and middle management                                             |
| Sabourin (2015)                  | NA          | NA                              | Mixed                                                       | Canada          | Top management                                                        |
| Cebczynska (2016)                | Co, PO, PPP | Business and operational levels | Mixed. Transport, finance, mining, industrial process, etc. | Poland          | Top-, middle-, and lower-level managers                               |
| Köseoglu et.al (2018)            | NA          | NA                              | Hotel business                                              | Turkey          | Senior and human resource management                                  |
| Tawse et al. (2019)              | NA          | NA                              | NA                                                          | NA              | Top management                                                        |
| Köseoglu et.al (2020)            | Co          | Business level                  | Hotel business                                              | China/Hong Kong | Top management                                                        |

Source: The authors

## 2.1. Objectives of empirical studies, findings and methodology

In accordance with the guidelines proposed by Nakano et al. (2018), the structure of Tables 5 - 8 is based on when the relevant articles were published, author(s), research objective(s), findings, and methodology. The review included articles published between 1980 and 2020; each of the four tables covers 10 years.

In the early work of various scholars (see Table 5) related to strategy implementation, the focus was on understanding and explaining the concept of strategy in organizations in terms of how it enhances competitive advantage and improves a company's performance (Bourgeois, 1980;

Hrebiniak & Snow, 1982; Nutt, 1983; Waterman et al., 1980; Wooldridge & Floyd, 1990). In the 1980s, research also focused on obstacles to strategy. Two of these early studies identified a list of obstacles that must be addressed in the formulation process, as a poor strategy formulation approach can lead to strategy obstacles later in the process (Hambrick & Canella, 1989), whereas others need to be addressed in the implementation stage (Alexander, 1985; Wernham, 1985). As can be seen in Table 5, studies of middle management emerged concerning how implementation factors influence middle management (Wernham, 1985) and how middle management can influence implementation (Guth & Macmillan, 1986).

**Table 5** Empirical strategy implementation literature (1980–1989)

|   | Authors                | Objective                                                     | Findings                                                                                                                          | Methodology                                              |
|---|------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 1 | Waterman et al. (1980) | To build a model that can facilitate strategy implementation. | It is not adequate to look just at strategy or structure. Complex variables, like goals, management styles, and skills, come into | Case study. Interviews with executives from 7 companies. |

|   |                             |                                                                                                   |                                                                                                                                                                                                        |                                                                                           |
|---|-----------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
|   |                             |                                                                                                   | play.                                                                                                                                                                                                  |                                                                                           |
| 2 | Bourgeois (1980)            | To identify the importance of consensus, goals and means.                                         | Strategy makers should concentrate on reaching consensus rather than focusing on goals when formulating a strategy.                                                                                    | Questionnaires sent to top management in 12 public corporations.                          |
| 3 | Gupta & Govindarajan (1984) | To study managerial characteristics affecting strategy implementation.                            | Unit would benefit for having managers with marketing and sales experience that are willing to take risks and have greater tolerance to ambiguity.                                                     | Mailed survey within 58 strategic business units (SBU) within eight Fortune 500 firms.    |
| 4 | Wernham (1985)              | To study how factors influence the implementation of strategy among senior and middle management. | Factors included were the availability of resources, top management support, history of past implementation, and size of implementation unit.                                                          | Case study in one public company (British Telecom). Semi-structured interviews conducted. |
| 5 | Alexander (1985)            | To identify strategy implementation obstacles faced by top management.                            | Major strategy obstacles were, lack of time allocated, unexpected problems, lack of coordination, and activities were not effective.                                                                   | A questionnaire was distributed to 93 top executives. Follow-up interviews with 21.       |
| 6 | Nutt (1986)                 | To determine if different tactics affect implementation.                                          | Four types of implementation tactics were used in 93% of cases (intervention, persuasion, participation, and edict).                                                                                   | Self-report study of 90 middle managers. Written real-life cases.                         |
| 7 | Guth & Macmillan (1986)     | To examine the scope and effects of strategy intervention.                                        | Middle managers who believe their self-interest is compromised can redirect strategy, delay, and sabotage or reduce quality of implementation.                                                         | Multi-case study with 91 case studies. Data collection based on in-depth interviews.      |
| 8 | Govindarajan (1988)         | To study budget evaluative style and competitive strategy.                                        | Organization structure, control systems, managers' characteristics, and firm focus are effective in achieving strategy implementation.                                                                 | Questionnaire used for data collection from 24 firms on the Fortune 500 list.             |
| 9 | Hambrick & Cannella (1989)  | To study how to convert a new strategy into competitive success.                                  | Keys to implementation are, broad participation at the formulation stage, carefully assessing obstacles, making early use of levers, selling strategy to stakeholders, and responding as events arise. | A case study of one company. Interviews with top management.                              |

Source: The authors

From 1990 to 1999, as can be seen in Table 6, empirical research continued to centre on identifying key success factors for strategy implementation as well as strategy obstacles and pitfalls (Al-Ghamdi, 1998; Corboy & O'Corrbui,

1999). Middle-management studies continued; one study conducted by Wooldridge and Floyd (1990) examined middle and senior managements' perception of their contributions and their strategic involvement.

Table 6 Empirical strategy implementation literature (1990–1999)

|    | Authors                      | Objective                                                                           | Findings                                                                                                                                                                  | Methodology                                                                                                               |
|----|------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 10 | Wooldridge & Floyd (1990)    | To study the strategic involvement of middle managers.                              | CEOs believe that middle managers make a meaningful contribution. Middle managers expect and desire strategic direction. Involvement by itself does not cause commitment. | Interviews and questionnaires were used to collect data from 157 respondents in 20 organizations.                         |
| 11 | Walderseel & Sheather (1996) | To study if and how the type of strategy implemented influences the implementation. | Effects of strategy on leaders' behavior and choices of implementation actions. Results show that strategic context influences managers' implementation intentions.       | Data were collected through surveys and assignments. A simulation was used to test managers. Case analysis was also used. |
| 12 | Al-Ghamdi (1998)             | To replicate Alexander's (1985) study of strategy implementation.                   | Six major strategy implementation obstacles were identified. Communication, management support, and effective information systems                                         | Surveys used to collect data from 24 companies.                                                                           |

|    |                           |                                                          |                                                                                                                                                                  |                                                   |
|----|---------------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
|    |                           |                                                          | were key to successful implementation.                                                                                                                           |                                                   |
| 13 | Corboy & O'Corrbui (1999) | To identify and study strategy implementation obstacles. | Individual responsibilities for implementing change are not clear, senior managers withdraw when implementation begins. Lack of understanding of implementation. | Role-play simulation by CEOs and senior managers. |

Source: The authors

Between 2000 and 2009 (see Table 7), several authors presented models and frameworks based on the empirical data collected. For instance, Okumus (2001) integrated 10 key variables into a conceptual framework of implementation that was later developed into an implementation model of strategic content, context, process, and outcome (Okumus, 2003). In their conceptual framework of key dimensions of strategy implementation, Brenes et al. (2008) developed a framework based on data

collected in 81 organizations in Latin America. Hrebiniak (2006) studied obstacles and how to overcome them, offering a conceptual framework on key decisions and how to translate strategy into short-term metrics and to implement it in the organizational context. Scholars continued to collect empirical data on strategy implementation obstacles and success factors throughout the decade.

**Table 7** Empirical strategy implementation literature (2000–2009)

|    | Authors                    | Objective                                                                                                                     | Findings                                                                                                                                                                                                                                                                                                                  | Methodology                                                                                                                                                                                      |
|----|----------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14 | Beer & Eisenstat (2000)    | To identify strategy implementation obstacles and how to overcome them.                                                       | Top-down laissez-faire senior management style, unclear strategy, and conflicting priorities could hinder successful strategy implementation. Ineffective senior management team, poor vertical communication, coordination across functions, lack of leadership skills, business, and borders can affect implementation. | A qualitative study, in total 100 interviews. Meetings with top managers and middle managers. A total of 150 units inside 12 companies were studied with an in-depth examination of 4 companies. |
| 15 | Okumus (2001)              | To study the implementation process of strategic decisions.                                                                   | Variables identified through literature review play important roles in designing and implementing strategies. Three new variables identified: multiple project implementation, organizational learning and working with external companies.                                                                               | A study using interviews, observations, and document analysis. Case study of two hotel groups.                                                                                                   |
| 16 | Rapert et al. (2002)       | To study if the frequency of communication between marketing and top management has a positive effect on strategic consensus. | Identified six strategy implementation obstacles: poor vertical communication and coordination across functions, top-down laissez-faire senior management style, unclear strategy, and conflicting priorities.                                                                                                            | Qualitative and quantitative research. A survey was mailed to 1,000 CEOs and marketing executives with 322 responses. Followed by 30 in-depth interviews.                                        |
| 17 | Heide et al. (2002)        | To identify barriers to successful strategy implementation.                                                                   | Different kinds of communication problems were key barriers to strategy implementation.                                                                                                                                                                                                                                   | Case study. Data were collected from business unit staff members through 42 structured interviews.                                                                                               |
| 18 | Aaltonen & Ikävalko (2002) | To identify strategy implementation obstacles in service organizations.                                                       | Important to align systems and structure with strategy. Frequent vertical communication and strategic consensus can improve organizational performance.                                                                                                                                                                   | Qualitative research. A case study of 12 service organizations with 298 interviews.                                                                                                              |
| 19 | Shah (2005)                | To identify strategy implementation obstacles helping organizations to implement strategy more successfully.                  | Companies most frequently experienced 11 obstacles during strategy implementation.                                                                                                                                                                                                                                        | Data collected with a questionnaire from 145 managers in 35 industries.                                                                                                                          |
| 20 | Schaap (2006)              | To study the relationship between leadership behavior and successful strategy implementation.                                 | Frequent communication up and down organization structure enhances consensus and fosters shared values. Plans must be developed and tasks, timeframes, and responsibility must be specified.                                                                                                                              | Close-ended questionnaire was used and mailed to the participants and 120 responded.                                                                                                             |

|    |                                |                                                                                           |                                                                                                                                                                                        |                                                                                                         |
|----|--------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 21 | Hrebiniak (2006)               | To identify and evaluate factors that play a significant role in strategy implementation. | A strategy implementation framework that consists of internal and external contexts, and processes and outcomes proposed.                                                              | Survey of fixed and open-ended questions. Panel discussion used. Data were collected from 433 managers. |
| 22 | Crittenden & Crittenden (2008) | To determine why strategic planning efforts and implementation fail.                      | Successful implementation is based on various strategic elements, such as supportive policies and systems. Most systematic strategy implementation needs more integrative methodology. | A mixture of primary and secondary data were collected from 29 organizations.                           |
| 23 | Brenes et al. (2008)           | To measure the effect of key variables on successful implementation.                      | Five key success factors were identified for implementing a business strategy successfully.                                                                                            | Survey questionnaire were mailed and 81 companies responded.                                            |

Source: The authors

In Table 8, strategy implementation and how it affects a company's performance can be seen as the main focus of studies between 2010 and 2020. For instance, Sorooshian et al. (2010) examined the relationship between strategy implementation and the performance of small- and medium-sized manufacturing companies and found that leadership style, structure, and resources supporting implementation affect financial organizational performance. Another study found that inadequate leadership and employees' reluctance to share their knowledge have a negative effect on organizational performance (Cater &

Pucko, 2010). Furthermore, other issues affecting the organizations' performance indicators concerning implementation include not carrying out comprehensive analysis and planning and a lack of training in combination with low levels of employee motivation (Köseoglu et al., 2018). Authors continued to bridge the knowledge gap by studying factors affecting poor implementation (Mollahoseini & Ahmadkhani, 2012; Pella et al., 2013), success factors, and the importance of organizational culture and how it can contribute to successful strategy implementation (Alamsjah, 2011; Al-Kandi et al., 2013).

**Table 8** Empirical strategy implementation literature (2010–2020)

|    | Authors                          | Objective                                                                                  | Findings                                                                                                                                                    | Methodology                                                                            |
|----|----------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 24 | Cater & Pucko (2010)             | To identify obstacles of strategy implementation and how they affect performance.          | The biggest obstacles having negative effect on performance are inadequate leadership and employees' reluctance to share their knowledge.                   | Questionnaires sent to managers and board members in 172 companies.                    |
| 25 | Sorooshian et al. (2010)         | To study the relationship between strategy implementation and performance.                 | Strategy implementation drivers, such as leadership, structure, and human resource management, contribute to a company's performance.                       | Questionnaires sent to managers; 163 answered the survey.                              |
| 26 | Alamsjah (2011)                  | To study interrelated key success factors for strategy implementation by middle managers.  | Five interrelated factors contribute to successful implementation, including clarity of strategy, corporate culture and effective management communication. | Survey of fixed questions and open-ended questions aimed at 158 middle-level managers. |
| 27 | Håkonsson et al. (2012)          | To study how and if an executive style determines strategy implementation and performance. | The failure to align SME executive style and strategy leads to performance loss. Alignment is key when it comes to driving change and innovation.           | Data gathered from 241 companies on strategy and 303 companies on executive style.     |
| 28 | Mollahoseini & Ahmadkhani (2012) | To identify strategy obstacles.                                                            | Number of obstacles such as organizational, planning, managerial, staff, and environmental obstacles identified.                                            | Study using interviews, focus groups, and questionnaire, with 205 respondents.         |
| 29 | Al-Kandi et al. (2013)           | To identify what determines successful strategy implementation.                            | Identification of process and personnel, project, religion, and organizational factors.                                                                     | Study using questionnaire with a sample of 120.                                        |

|    |                        |                                                                                                      |                                                                                                                                                      |                                                                                |
|----|------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 30 | Pella et al. (2013)    | To study if and how strategy implementation problems affect strategy implementation.                 | Seven major obstacles identified. Included, corporate scorecard, information technology, performance appraisal, management and financial support.    | A survey was conducted in 60 Indonesian companies, and gathered 194 responses. |
| 31 | Sabourin (2015)        | To understand the underlying drivers of performance in strategy execution.                           | Four drivers identified, rules, emotions, initiatives, immediate action, and integrity.                                                              | Study using survey questionnaire to 484 managers and 180 responded.            |
| 32 | Cebczynska (2016)      | To verify to what extent corporate strategy is reflected in lower managerial levels.                 | Strategy implementation is most lacking on an operational level and lack of training of employees affects their awareness of the corporate strategy. | Research conducted in 30 Polish enterprises by questionnaire.                  |
| 33 | Köseoglu et al. (2018) | To examine potential barriers to the implementation of strategic decisions.                          | Identified 41 barriers to implementation and at least 20 of them had influence on performance and operation.                                         | Research conducted in Turkish hotels by questionnaire with 118 responses.      |
| 34 | Tawse et al. (2019)    | To study top managers' struggle with the transition between strategy formulation and implementation. | Top managers tend to focus on strategy formulation and planning but fail to embrace the problem solving and complexity of implementation.            | Research based on interviews with CEOs.                                        |
| 35 | Köseoglu et al. (2020) | To study how managers perceive strategic management process.                                         | Managers in this study agree that communication and people management are the key success factors in strategy implementation.                        | Study using interviews with 21 managers.                                       |

Source: The authors

Table 9 summarizes the research methods employed for all articles reviewed. The majority of studies gathered data using questionnaires, 12 studies used interviews, and 4 studies employed mixed methods of both interviews and questionnaires. Other studies employed focus groups (Mollahoseini & Ahmadkhani, 2012), simulations (Walderseel & Sheather, 1996), role play (Corboy & O'Corrbui, 1999), observations (Okumus, 2001), panel discussions (Hrebiniak, 2006), and self-reporting real-life cases (Nutt, 1986). Some of the studies used one or more researched methods. In some cases the limitation of the research was not outlined in the reviewed articles. Nevertheless, identified limitations were related to the data collection methods, which in many cases were based on a single method, revealing a lack of triangulation (Cater & Pucko, 2010; Govindarajan, 1988; Heide et al., 2002; Walderseel & Sheather, 1996). Validity and generalization of some of the studies are limited based on the small sample used (Heide et al., 2002; Schaap, 2006). Some of the studies use self-reported data collection methods, which can be biased based on perspective (Cater & Pucko, 2010; Håkansson et al., 2012).

Table 9 Summary of research methods

| Research methods              | Number |
|-------------------------------|--------|
| Questionnaires                | 22     |
| Interviews                    | 13     |
| Interviews & questionnaires   | 4      |
| Case studies                  | 4      |
| Multi-case study              | 1      |
| Focus groups                  | 1      |
| Simulations                   | 1      |
| Role play                     | 1      |
| Observations                  | 1      |
| Panel discussion              | 1      |
| Self-reported real-life cases | 1      |

Source: The authors

## 2.2. Analysis of obstacles and success factors

Step three, as described in Section 2.4, focuses on the analysis of the content of the papers. First, Table 10 shows the 16 obstacles and the 18 success factors identified in the 35 articles and demonstrates the range of factors identified from the literature sources. The factors have been grouped based on the 5Ps model introduced by Pryor et al. (2007) into purpose, principles, process, people, and performance. Second, Table 10 illustrates a pattern that emerged when comparing the content of all the obstacles and the

success factors: Many of the obstacles and the success factors identified can simultaneously be viewed as obstacles hindering implementation and factors necessary for successful implementation.

Based on this analysis related factors affecting strategy implementation are paired (see the grey area and the arrow in Table 10) and the articles that reference each factor are reported in parentheses.

**Table 10** Related obstacles and success factors influencing strategy implementation, grouped according to the 5Ps Model Pryor et al. (2007). (Article numbers in Table 5 – 8 are given in parentheses)

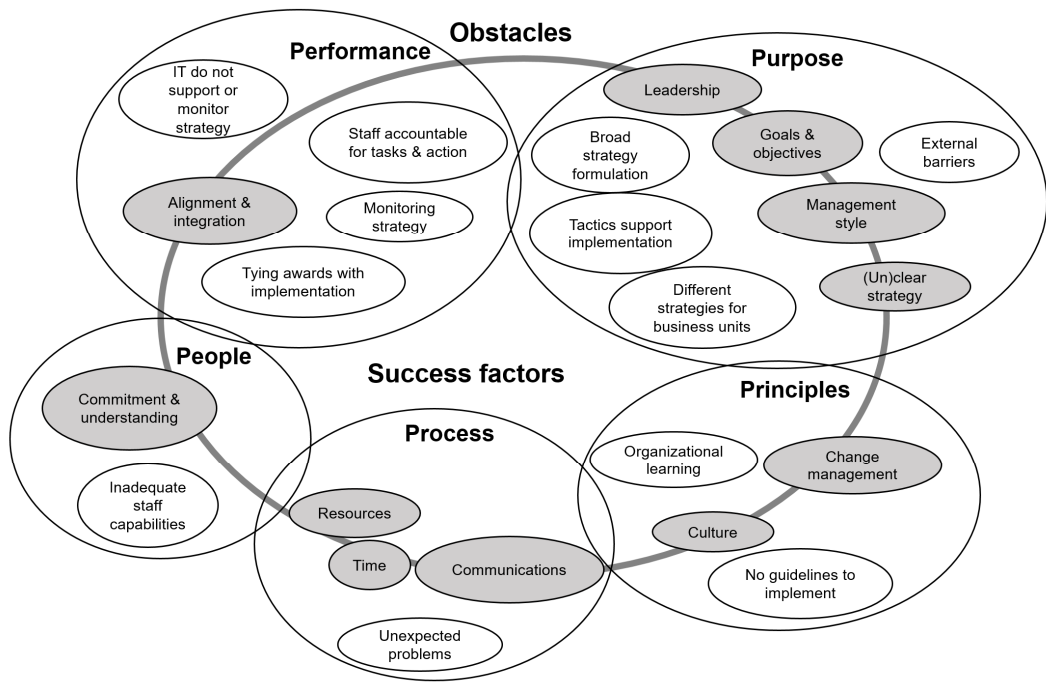
| Obstacles                                               |       | Success factors                                         |
|---------------------------------------------------------|-------|---------------------------------------------------------|
| <b>Purpose</b>                                          |       |                                                         |
| Inadequate leadership (5,14,19, 21,24)                  | <---> | Leadership styles and motivation (11,22,23,25,27,29)    |
| Goals and tasks not defined (5,12,13,19,21,28,30)       | <---> | Goals and objectives linked to strategy (1,18,31,34)    |
| Management style and lack of support (4,7,13,14,24,28)  | <---> | Management style and support effects implementation (3) |
| Unclear strategy (14,21,24,33)                          | <---> | Well-defined strategy (2,6,35)                          |
| External barriers (5,17,28)                             |       | Tactics support implementation (6)                      |
|                                                         |       | Broad strategy formulation (9)                          |
|                                                         |       | Different strategies for business units (8)             |
| <b>Principles</b>                                       |       |                                                         |
| Inadequate change management (4,21,24,33)               | <---> | Change management lead by executives (23,25,29)         |
| Cultural problems (17,21,24,28)                         | <---> | Shaping corporate culture (22)                          |
| No guidelines to implement (21,32)                      |       | Organizational learning (15,22)                         |
| <b>Process</b>                                          |       |                                                         |
| Poor communication (14,17,24)                           | <---> | Frequent communication (16,18,20,22,26,29,35)           |
| Lack of time (4, 5, 12)                                 | <---> | Timeframes and priorities set (18,20,29,34,35)          |
| Lack of resources (17,24)                               | <---> | Existing resources (22,25,35)                           |
| Unexpected problems (5,12,33)                           |       |                                                         |
| <b>People</b>                                           |       |                                                         |
| Limited commitment and understanding (13,19,28)         | <---> | Shared understanding (2,9,10,16,18,20,31,35)            |
| Inadequate staff capabilities (5,14,17,19,24,32)        |       |                                                         |
| <b>Performance</b>                                      |       |                                                         |
| Limited alignment and coordination (5,12,14)            | <---> | Alignment and integration (1,15,18,22,27,31)            |
| IT do not support or monitor strategy (4,5,12,19,24,33) |       | Monitoring strategy (22,35)                             |
|                                                         |       | Staff accountable for task and action (20,23,26,31)     |
|                                                         |       | Tying awards with implementation (18,20,22)             |

Source: The authors

Figure 3 shows the obstacles and the success factors affecting strategy implementation grouped graphically based on the five elements of purpose, principles, process, people, and performance from the 5Ps model (Pryor et al., 2007). These five elements in Figure 3 are displayed in one circle each. Inside each circle both success factors and obstacles are displayed in smaller ovals. The grey

ovals in Figure 3 connect identified obstacles within each element and the success factors which can simultaneously be viewed as obstacles hindering implementation and factors necessary for successful implementation. These factors are all demonstrated in grey and are called dualistic factors hereafter. Outside the grey ovals are obstacles in each element and inside are the success

factors in each element, all demonstrated in white.



**Figure 3** Strategy implementation obstacles and success factors

Source: The authors

The following discussion centres on the dualistic factors identified in Table 10 presented in Figure 3. The first of the dualistic factors in the purpose element is leadership, which focuses on leadership support, motivation, and style influencing implementation. Shah (2005) underlined that commitment and support refers to involvement and overall responsibility of top management, which should be accountable for the implementation process. This responsibility, according to Shah, cannot lie anywhere else in the organization, as top managers are accountable for the performance of an organization as a whole. The second dualistic factor brings forth the importance of defining objectives, setting goals, and linking them to the business strategy and the competitive environment as vital aspects related to implementation (Beer & Eisenstat, 2000). Setting key performance indicators is not only inadequate in many organizations but is also seen as challenging, and this is even harder to accomplish at lower levels in organizations (Aaltonen & Ikävalko, 2002). The lack of indicators, objectives and goal setting can, therefore, hinder implementation. Employees often do not have a

road map for implementation, as there are no clear key indicators for the performance of each person or position (Pella et al., 2013). The third dualistic factor is management style, which has been identified in a number of studies. Wernham emphasized that top management support was important for successful implementation and is one of the rare points on which most experts can agree (1985). Beer and Eisenstat (2000) indicated that frequent absence of senior management during strategic decision-making would affect the implementation. Some studies have also shown that senior management tends to withdraw when implementation begins and their lack of support can consequently affect the implementation (Corboy & O'Corrbui, 1999). The fourth dualistic factor highlights the importance of having a clear strategy for successful implementation. A number of researchers have come to this conclusion (Alamsjah, 2011; Beer & Eisenstat, 2000; Cater & Pucko, 2010; Köseoglu et al., 2018). Hrebiniak (2006) stressed that poor or vague strategy limits the implementation effort and therefore is a major obstacle as good execution cannot overcome various shortcomings of a bad strategy or poor

implementation efforts.

There are two dualistic factors in the principle element, change management and culture. Change management was identified by Hrebiniak (2006) and he determined that the inability to manage change and the importance of reducing resistance to change was the topmost challenge and obstacle for managers. Cater and Pucko (2010) found that managers lack capabilities to implement change management in Slovenian companies, which supports Hrebiniak's conclusion. Crittenden and Crittenden (2008) found that company internal culture plays a vital role as a driving force in successful implementation. They also found that different cultures between silos can have a negative influence on implementation (Crittenden & Crittenden, 2008). The importance of culture has been identified as a major obstacle or success factor by a number of authors (Brenes, 2008; Heide, 2002; Köseoglu et al., 2018; Sorooshian et al., 2010).

The first dualistic factor in the process element is communications, which highlights the importance of frequent and clear communication and the issues which can arise with a lack of communication. Alamsjah (2011) found that it is not enough just to have a clear strategy it needs to be communicated through the organization and be translated into execution plans. Rapert et al. (2002) highlighted that vertical communication and shared understanding play a key role in the process. Similar findings are discussed by Schaap (2006) on the importance of communications to help employees understand the strategy being implemented. The second dualistic factor in the process element is time and importance of timeframes being set. A number of studies have shown the importance of realistic timeframes, as strategy implementation takes more time than commonly allocated (Al-Ghamdi, 1988; Alexander, 1985). Al-Kandi et al. (2013) indicated that, if timeframes were set, they had to be followed up with detailed planning and implementation must be put ahead of other managerial commitments. The resource factor is the third factor in the process element. Crittenden and Crittenden (2008) found it was not only important for companies to have access to resources but also to decide when and where to allocate them, whether it is money, people, time, or capabilities.

The only factor in the people element emphasizes that commitment and shared understanding of the strategy influences successful

implementation (Rapert et al., 2002), but so does the importance of building up consensus in the implementation process to foster shared attitudes and values (Schaap, 2006).

Last, performance element has one dualistic factor, which is alignment and coordination which has been identified by a number of scholars. Strategy alignment is the important process of linking the organization's structure and resources with its strategy and external business environment (Aaltonen & Ikävalko, 2002; Al-Ghamdi, 1998; Beer & Eisenstat, 2000; Håkonsson et al., 2012; Okumus, 2001).

## Conclusion

Research on strategy implementation is still in its early days, with a limited number of empirical studies completed. Most of the effort has historically been focused on strategy formulation and process and less on strategy implementation, let alone studies grounded in empirical data.

The findings suggest and synthesize that empirical research has so far identified 16 obstacles that can hinder strategy implementation and 18 key success factors that can facilitate implementation. This study also draws the attention to, and highlights, factors that are dualistic, meaning that they contain both elements of obstacles and key success factors. The dualistic factors, or elements, should therefore be considered in the strategy implementation process.

The theoretical implication of the study is that it provides an overview of major empirical research concerning strategy implementation obstacles and success factors conducted from 1980 until 2020. Older studies providing the review of the literature reach back to 2010. Furthermore, previous literature reviews combine a mixture of conceptual and empirical research, as presented in Table 1, and have left out number of empirical papers that are included in this particular review. Therefore, this systematic review offers a more holistic overview of implementation obstacles, success factors, and dualistic factors, than previous studies.

The paper also enriches the practical knowledge on implementation obstacles, success factors, and dualistic factors which are of relevance for those implementing strategies, such as managers and other implementers. Another benefit offered to practitioners is how these factors are categorized based on the five critical elements presented in the 5Ps model including the concepts of strategy implementation, namely: purpose, principles,

processes, people, and performance.

Ample room exists for further study on strategy implementation obstacles and understanding how to overcome them, a problem that seems to occur repeatedly in the strategic process. Studies that combine the identification of obstacles and uncover workable solutions are lacking. Additionally, a substantial lack of studies exists on employee influence on strategy implementation, both positive and negative aspects, which may be crucial to gain a better understanding of why and how so many strategy implementation projects fail, or succeed in some cases. Strategy implementation literature could benefit from a greater number of studies employing observation, focus groups, and panel discussions, which could add value and new perspectives to the understanding of the topic in question. The differences among industries, countries, or cultures regarding implementation have not yet been explored at any depth.

One of the limitations to this study is that selection bias of authors and subjectivity may have influenced the exclusion of articles but several techniques were used to mitigate this risk. This review relies on databases that support keyword search, where search strings must be identifiable. This approach used could overlook important literature and restrict accessibility of sources. Furthermore, this review article focuses solely on full-text articles published in English and last, a small number of articles analysed limits the generalizability of the findings. **SM**

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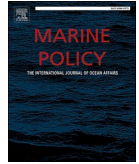
## **Article 2**

### **Strategy implementation obstacles: Iceland fishery CEO perspectives**

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# Strategy implementation obstacles: Iceland fishery CEO perspectives

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## ABSTRACT

Empirical research on strategy implementation obstacles affecting specific industries is limited. Few studies have been conducted worldwide and none in Iceland, although Iceland is one of the world's leaders in fisheries, ranked 19th as a major marine capture producing country. Consequently, the aim of this research is to identify critical internal and external strategic obstacles faced by Icelandic fishery companies and to capture the perspective of CEOs in the fisheries industry. The generic attributes of these companies, as expressed by the CEOs, are compared with analogous studies. This empirical study consists of in-depth interviews with the CEOs of the largest fisheries' companies in Iceland. This study identifies two internal strategy implementation obstacles not identified in earlier studies: language barriers and a multicultural workforce. It also recognizes external obstacles not found in prior research, such as lack of governmental vision for the industry, hostile regulatory bodies and persistent changes to industry regulations, high political uncertainty, time-consuming lobbying and, often, unsympathetic political and media discussion. The study has theoretical implications for academia, impacting strategy implementation in the Icelandic fishing industry and elsewhere. These findings can help policymakers and CEOs understand and minimize the influence of strategy implementation obstacles. It can serve as a reference point to create and plan more holistic policies supporting CEOs and policymakers in the fisheries to develop more efficient and profitable strategies. Furthermore, these findings can help policymakers to build consensus on fisheries management, benefitting the fishing industry and society.

## 1. Introduction

Effective strategy implementation is vital for any business or organization. According to Hrebiniak [1], it is key to success in business. It is not an overstatement to suggest that if strategy is never implemented, then organizational resources are wasted. This is underlined in an article by Olson et al. [2], where authors posit that doing and executing strategy is hard work. Consequently, managers are still facing remarkably similar problems to those reported decades ago. Earlier work on the notion of strategy implementation focused on explaining the concept of strategy in organizations, its role and how it can add to competitive advantage and increase value to an organization's performance [3–5]. More recent research on strategy implementation obstacles has been carried out by several scholars [6–8]. For example, Köseoglu et al. identified several obstacles to implementation in the hotel business, and 20 of them had an influence on operation and performance. The five significant obstacles identified were frequent operational interventions by hotel owners, implementers did not consider all stakeholders in the

process, strategic planning and motivation from employees was lacking, and training of implementer insufficient [8].

Several researchers have tried to define the concept of strategy implementation but do not fully agree on a definition; few definitions can be found in the literature based on different approaches [9–11]. In a literature review on the eclectic roots of strategy implementation, Noble [10] set out to discover the nature of strategy implementation. Noble explored the diversity of different perspectives taken by various scholars in defining the concept and developed three views explaining the most common conceptualization of strategy implementation. The first and most common approach is the structural view, which is twofold. It is seen as an approach that focuses on organizational structure and sees implementation as the straightforward operation of a clear plan. This view is expressed in the research of Gupta [12], which focuses on how to assess performance during and after its implementation by setting up a control system. The second view established by Noble [10] was the interpersonal process view, which focuses on the importance of reaching consensus on strategy and its implementation [4,13] and on leadership

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and implementation style as studied by [14] and Nutt [15,16], among others. The third view identified by Noble [10] was the communication and iteration processes. Here, scholars focus on interaction and communication between managers both vertically and horizontally [17] and defensive routes inside organizations that hinder learning and growth [18].

Only a few studies have been carried out on top management influence on implementation, e.g., Beer and Eisenstadt [6], which found leadership skills and poor management and communication to be the main obstacles to effective strategy implementation. Studies on the role, effects and perception of top management on strategy implementation are still in their infancy [19,20]. Furthermore, strategic management research has already established that industry structure and architecture are critical for both strategy formulation and implementation [21]. A recent study of the hotel industry [22] underlines that each industry's characteristics must be considered during strategy implementation.

This study focuses on strategy implementation obstacles experienced by chief executive officers (CEOs) in the fisheries industry in Iceland. This is significant as the Icelandic national economy has historically been driven by fisheries, which has fluctuated from 5 % of GDP to over 13 % over the last 30 years [23]. Iceland ranks 19th as a major marine capture producing country, with 1 % of global production [24], and has been seen as a laboratory for fisheries and the individual transferable quota system (ITQ) [25,26]. Therefore, it acts as an important measure on the effectiveness of governmental marine policy and fisheries industry management in general.

Iceland began managing its fisheries using a system of total allowable catch (TAC) following a collapse in herring stock due to overfishing in 1968 [27]. The overfishing crisis in the cod fisheries emerged in the early eighties when too many fishing vessels were operating. The ITQ system was introduced in 1984 [28] to limit the allowable catch in cod, and other important demersal species. The fisheries' management system has undergone various changes since then. A uniform ITQ system was implemented in 1990, which included nearly all of Iceland's fisheries [29]. The uniform ITQ system is based on individual transferable quotas, and all fisheries are subject to vessels' catch quotas and represent shares in the TAC. The quotas are permanent and transferable [30]. There are three main types of fishing vessels operating in Icelandic waters. Stern trawlers, which are usually over 40 m long, coastal fleet vessels, which consist of smaller vessels under 15 m and 60–80 m pelagic vessels up to 3000 metric tons. The majority of the demersal catch in Iceland is landed by stern trawlers, either fresh or frozen, and the vast majority of the pelagic catch is landed by the 60–80 m pelagic vessels [31]. The number of coastal vessels under 15 m in 1997 was 1134 but decreased to 841 vessels in 2017. The number of stern trawlers in 1984 was 106 but it decreased to 45 vessels in 2017. There were 52 pelagic vessels in 1981 but decreased to 26 vessels in 2017 [31].

In 2004 a special uniform fishing fee was introduced replacing various fees levied on quota holders harvesting the fishing stocks. The fee is levied on landed catch each year and is higher on the most valuable species. Initially, the fishing fee was 1.5 % of the catch value. After nearly two decades of decline in fish catches (1990–2008), a higher rent was introduced, and catches began to increase in 2009 with increased rent. Icelandic fisheries have historically been shaped by severe currency fluctuations affecting the industry [25]. Changes in the exchange rate and the weakening of the Icelandic krona after the financial crisis were also major contributors to the increase in rent after 2008. In 2009, the fee was raised and exceeded 6 % of the catch value in 2012. The fee was lowered in 2013–2.1 % of the catch value in 2015. The fee was again increased in 2016–6.2 % of the catch value [26]. A recent study on resource rent and distribution in Icelandic fisheries studying the period from 1997 to 2017 showed the rent division between the public and previous and current quota owners. Almost 20 % of the rent went to the public (due to the fishing fee and corporate taxes), 40 % went to those who originally acquired the fishing rights but then sold their businesses (trading their quotas), and 40 % went to companies still working in the

fishing industry [37].

The largest fishing company in the fishing year 1990/1991 held 4.3 % of the total allocated quota. Fifteen years later, this had risen to 10.7 %. In a 24-year period, the share of the five largest companies had risen from 14 % to 31.5 %, and the ten largest had risen from 21.9 % to 50.5 % [32]. More precisely, fifty of the largest fishery companies in Iceland hold 90.6 % of the total fishing quota allocated by the government for 2020–21; the remaining holders are small operators [33]. In 1984, the share of the ten largest companies in demersal fisheries was 21 %, in 1996 it was 31 % and in 2020 it was 52 %. Based on the ITQ system, a rise of vertically integrated companies have emerged where companies covering the whole value chain from fishing, processing, marketing and selling their products currently hold the majority of the Icelandic fishing rights [34,35]. The reason for this vertical integration has not been studied but could be attributed to the profitability of this type of operation as the companies have control of the entire value chain [35]. There have been indications that weaker companies have suffered due to stronger companies buying them out, leading to consolidation [35]. Younger generations also seem less interested in fisheries and running the family-owned company and are, therefore, more likely to sell the company [35].

The fisheries industry has also bought shares in the Icelandic mainstream media, which makes the issue more controversial [36]. The general public is negative toward the system, and polls show that a high percentage of Icelanders oppose the system [35]. A survey conducted in 2022 showed that 61 % of Icelanders opposed the system [37]. The three most important issues, which have led to fierce public debate, are the decline in population and employment in coastal towns around Iceland [38], wealth creation and wealth transfer and inequality that the ITQ system leads to and the high cost for newcomers entering the industry [35]. This development was considered negative by many Icelandic politicians, and a law was subsequently passed in 1998 introducing a quota ceiling. The maximum permanent quota share that individual companies may own is 12 % in cod-equivalent tonnes [39]. The quota ceiling has slowed consolidation in the industry during the last 20 years [35].

The Icelandic ITQ system has had severe policy implications and consequences. New companies have emerged, the number of people working in the fishing industry has decreased, and fishing vessels have been scrapped [40]. In 1991 there were 14,200 employed in Icelandic fishing and fish processing. By 2008, the number had decreased to 7300 but increased again in 2013 when 8200 were employed by the industry [40]. Some coastal fishing communities have lost up to half of their population since the early 1990s [41]. The demographic has also changed dramatically with the influx of a migrant workforce that works in the processing sites in the coastal communities [42].

The ITQ system and consolidation of fishing rights in Iceland have been heavily disputed and criticized [26]. After a decade of experience in the ITQ system, researchers concluded that there was no consensus on the consolidation of fishing rights among stakeholders in the industry [26]. A recent study shows how stakeholder power in Icelandic fisheries' policymaking developed before and after 1990, based on eight stakeholder groups in fisheries. Before the quota system was introduced, fisheries industry policy-making was characterized by consensus, which has dwindled since 1990 [25]. The power of local communities, scientists, fish workers, crew members, and enforcement agencies has decreased since 1990, and the power of quota holders and fish processors has increased, with bureaucrats the only group holding its power unchanged [25].

Many Icelandic politicians have criticized the consolidation of fishing rights and see it as a negative development for the industry [35]. Many coastal communities have experienced demographic and socio-economic challenges in a fisheries management system, which is supposed to be sustainable [38]. Intensive political debate has taken place on various forms of fisheries management and was even brought to court and the UN Human Rights Committee [43]. The Icelandic

Fisheries' Management Act has been amended a few times to meet negative regional and local changes by introducing community quotas and a coastal fisheries scheme [44]. A number of ad hoc committees have been established since the beginning of the ITQ system by different governments to review the legislative fisheries' management and, most recently, by the Minister of Fisheries in 2022 [45]. But at the same time, the Icelandic ITQ system has led to more sustainable fisheries in Icelandic waters and has also led to the improved economic performance of fishing and processing in the industry. Iceland's fisheries are now profitable and the industry is paying significant rent taxes [39,46]. This has also led to the closure of fish processing factories, the scrapping of fishing vessels, and redundancy; the number of jobs from 1989 to 2016 decreased by nearly half [46]. In addition, improved technology in the industry has led to more automation resulting in fewer employees and an increased need for an educated workforce [34].

The novelty of this study rests upon interview data collected from the CEOs of the largest fisheries quota holders in Iceland and their perception of internal and external strategy implementation obstacles. In this research, the focus will be on 9 of the largest companies/quota holders, which hold 44,70 % of the total quota allocated for 2020–21 [33] two of the companies are listed on Nasdaq Iceland, and the other seven are family owned.

The main aim of this study is to identify obstacles that the CEOs in selected Icelandic fisheries companies face when implementing their corporate strategy. To do so, this research intends to answer the following questions:

1. What are the internal and external strategy implementation obstacles from the perspective of CEOs in Icelandic fisheries companies?
2. How do the findings reflect on the literature of strategy implementation obstacles?

The paper adopts the following structure: the introduction (Section 1) is followed by Section 2 which provides the theoretical background and context of the study. Section 3 presents the research methods, including the selection criteria and the analysis carried out. Results are presented in Section 4, discussion in Section 5, and conclusions in Section 6.

## 2. Background literature

This article is based on strategy implementation literature, research and studies on internal and external obstacles influencing strategy implementation in companies and various industries.

### 2.1. Strategy implementation obstacles

Strategy implementation literature has focused on internal obstacles, or as defined by Cândido and Santos, organizational obstacles which fall under management control [47]. A few studies have singled out external obstacles affecting strategy implementation [22,48,49]. Cândido and Santos found 65 obstacles and categorized each obstacle based on its origin and nature into 14 themes. Of these 14 themes of obstacles, 13 were defined as internal and one as external. Internal obstacles included leadership skills, communication problems, management skills, change management, cultural aspects, a lack of resources, structure, and coordination. External obstacles were unanticipated external events, competition-related, technological environment, macro, political and social factors [47].

The research by Alexander [50] on implementation obstacles faced by managers is compelling in the sense that implementation can be time-consuming and that lack of coordination is a frequent problem, including issues such as insufficient employee capabilities and training and a lack of leadership. The capabilities of employees involved are often not sufficient, training of staff is lacking, as well as a lack of leadership. Key tasks are poorly defined, and uncontrollable external

factors often influence strategy implementation [50]. These factors, among others, have been confirmed in later research as some of the main contributors influencing strategy implementation [51]. The two key lessons to be drawn from Alexander's research are that strategy implementation obstacles occur regularly during implementation and that managers see the lack of clear communication as an obstacle on several levels. The study identifies 11 internal implementation obstacles, which fall under management control and one external implementation obstacle, all influencing implementation [50].

Beer and Eisenstat identified poor coordination across functions in an organization [6]. They, like Alexander, also discovered that a lack of leadership affects implementation, as well as poor communication from top management to front-line staff. Their findings also showed that unclear strategy and ineffective senior management teams could be obstacles to successful implementation. They draw a key lesson that these six obstacles are interlinked in most organizations and that managers avoid confronting them [6]. In a similar study, Shah [52] singled out several major implementation obstacles. Shah claimed that by removing these obstacles, it would be possible to implement strategic goals more successfully.

Alexander is one of the few researchers who has identified external factors as strategy implementation obstacles. His research revealed how uncontrollable environmental factors like natural disasters, strikes, and a surprising turn in industry sales could have an adverse impact on implementation [50]. Al-Ghamdi came to the same conclusion in his replication of Alexander's research [51]. Hrebiniak also states in his study [48] that uncontrollable events like interest rates or competition behaviour increases the difficulty of strategy implementation. A few other studies have found that competition and the market environment can affect successful strategy implementation [22,53]. Ali and Hadi [54] came to a similar conclusion that environmental impediments in the competitive market require proper attention in strategy implementation. Furthermore, they identified political, regulatory, social, and cultural obstacles, which had a limited impact on strategy implementation in their study. Heide et al. [55] named political barriers as a type of obstacle managers experience during implementation, although the nature or the comprehensiveness of the barrier was not explained, and the barrier did not have much effect on the implementation in the study. Hambrick and Cannella [17] found that external stakeholders like the media can be used to facilitate implementation. Heracleous and Werres found in their research that the unforgiving external environment and unanticipated external events can hinder strategy alignment and lead to corporate failure [56].

Given that the literature on strategy implementation is fragmented and still in development, scholars have called for additional empirical studies to explain strategy implementation in different types of industries, organizations and businesses [49,57]. Very few studies have been carried out on the industry level, even though strategic management research has established that industry structure which refers to specific industry features, can govern the intensity and rivalry of competition and the ability to capture value [21]. According to the same study, industry structure can affect factors and strategies in an industry, for example, making choices on how to manage the value chain and, therefore, the vertical integration and disintegration of the industry. Those characteristics are critical for both strategy formulation and implementation [21].

### 2.2. Strategy implementation in various industries

Most of the empirical studies on strategy implementation are single case studies [55,58] or studies focused on mixed industries [7,59–61]. In a single industry study on hotel services carried out by Okumus [62], a strategy implementation framework which includes a number of basic key concepts was developed. It includes the internal and external context, strategic content, as well as the process and output [62]. Other single industry studies carried out in the hotel industry [8,22] recognize

special factors which drive strategic implementation. These include planning and strategic decisions, organization structure and leadership, implementation process, lack of coordination and communication, resistance to strategic decisions, motivation, and employee career planning expectations [8]. The more recent study of the hotel industry [22] underlined that each industry's characteristics must be considered during strategy implementation and in the implementation phase, internal considerations such as employee involvement and strategic consensus are extremely important [22].

In the case of the food industry, the strategy implementation obstacles in companies of Fars Province in Iran recognized a lack of consensus regarding strategy planning, organizational obstacles, managerial and staff obstacles, along with external obstacles like inflation, competition, and market changes in the competitive environment influenced successful implementation. [54]. A study in the health care industry in Turkey identified the five most important barriers influencing strategy implementation as being low employee motivation, too much focus on financial performance, lack of consensus among decision-makers, lack of strategic analysis and coherence between the organization's overall goals and operational decisions [63].

At least two recent marine policy studies have been conducted on marine governance and barriers influencing integrated marine management [64] and on the fishing industry's perception of drivers and barriers to blue growth investment and policy implications in Iceland and Norway [65]. The study on integrated marine management identifies fragmented unsustainable marine policy and encourages a more holistic and integrated marine governance and management approach. Institutional barriers that hinder integrated marine management are identified, such as policy layering, institutional drift and resistance of powerful actors in the industry [64]. The study on barriers and drivers to blue growth investment was categorized into regulatory, resource, market, and social factors. A number of blue growth barriers were identified, such as uncertainty about regulatory systems due to political involvement and negative public debate about fisheries management [65]. These studies shed light on numerous failures in marine policy and fisheries management environment.

### 2.3. Theoretical framework

Building on a framework from authors' earlier research [61] will be

employed as a comparative framework with the obstacles CEOs in fisheries companies are experiencing. The framework can be seen in Fig. 1, which shows the internal strategy implementation obstacles which fall under management control and external obstacles, which are unanticipated external events, competition-related, technological environment, macro, political and social factors [47]. These strategy implementation obstacles are identified in 34 empirical studies conducted from 1980 to 2020. As can be seen in Fig. 1, internal strategy implementation obstacles outnumber the external obstacles identified.

### 3. Research method

A single case study is appropriate when studying a single industry, as it explores real-life cases through collected data and that it reports case themes [66]. This type of analysis has been used in other strategy implementation studies, i.e., [16,62,67]. Similar studies have gathered qualitative data, carrying out research on how to implement strategies successfully [68] and Okumus's study on strategy implementation framework [62]. As Lee and Ling state, qualitative approaches like interviews are appropriate for interpretive approaches [69].

A semi-structured interview framework was developed and used as the basis for collecting data. Semi-structured interviews deliver systematic data and allow the researcher to delve deeper into the subject [71]. A defined interview structure was used to ensure that all interviewees were asked the same questions. To provide consistency, the same person carried out all the interviews. Follow-up interviews were conducted to gather further information or explanations as needed or when the same themes were repeatedly brought up by interviewees and saturation was reached. Saturation became quite evident after interview six in the process, at that point already finalized in interviewing the largest companies. Interviews were analysed by descriptive and open coding methods, which are used to help answer the research questions [69]. Three interviews were carried out face to face at the CEOs' workplace. Five interviews were conducted via TEAMS software due to the COVID-19 situation, and one interview was conducted by telephone. Interviews took from 40 min up to three hours. All the CEOs asked to remain anonymous.

See the proposed structure for data collection and analysis in Fig. 2.

Secondary data from the companies were used for triangulation, including website material, annual reports, strategy, and policy material

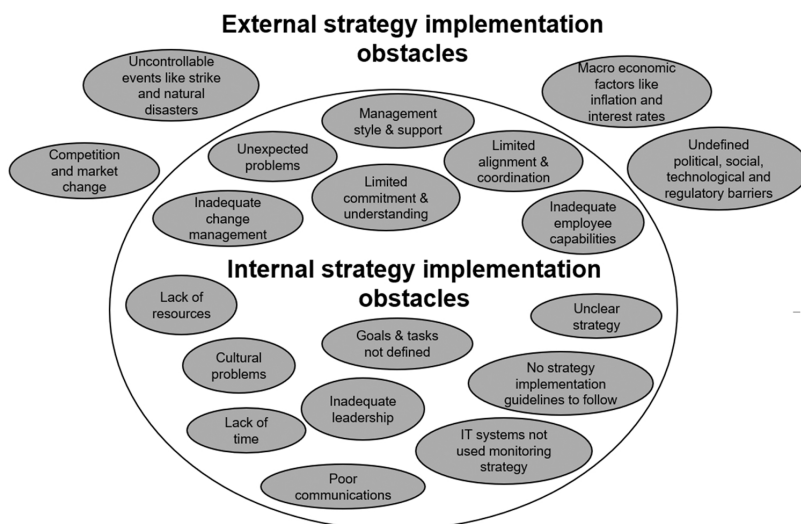


Fig. 1. Strategy implementation obstacles identified based on 34 empirical studies (derived and reversed) [61].

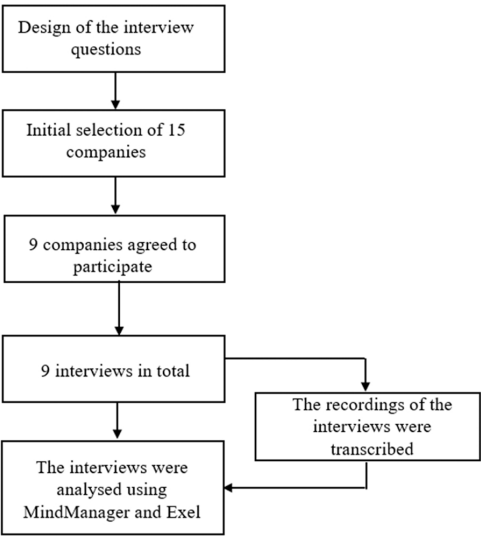


Fig. 2. Design of an interview framework.

collected from employees’ staff members, as well as observations during visits to the companies.

3.1. Case selection

In this research, purposive sampling was used [69]. Representative organizations were selected based on accessibility, employee size, revenue, type of operation, layers of management and reasonable profit and which have gone through the strategy implementation process were selected. The purposive sampling method used in this research is based on given criteria, which can be seen in Table 1.

Nine out of the fifteen largest companies in the Icelandic fishing industry agreed to participate in the research. These nine companies hold 44.70 % of the fishing quota allocated in Iceland in 2020–2021. By focusing on the size of the companies in the industry and the number of employees, it was more likely that strategy implementation had taken place. All the companies are in the business of fishing, processing and marketing and selling their products on the global market. The interview framework only allowed CEOs to take part in the research, which resulted in CEOs from nine companies participating, see Table 2. All CEOs were offered an assistant during the interview and two of the CEOs had their Human Resource (HR) Managers with them during the interview, see Table 2.

3.2. Data analysis

In this case, thematic analysis was carried out as in a number of strategic management studies [70,71] and marine policy studies [72]. According to Riger and Sigurvinsdóttir, thematic analysis is used to

Table 1  
Selection criteria.

| Issue                            | Criteria                                                                                |
|----------------------------------|-----------------------------------------------------------------------------------------|
| Size of the company in fisheries | Must be one of the 15 largest fishing quota holders in Iceland                          |
| Size of the company in revenue   | Are listed as one of the 120 biggest companies in Iceland 2020                          |
| Number of employees              | Have more than 200 employees                                                            |
| Company operation                | Fishing, processing, marketing, and selling fish and fish products on the global market |

Table 2  
Interview profile.

| Characteristics           | Total                 | Comments                                    |
|---------------------------|-----------------------|---------------------------------------------|
| Total interviews          | 9                     |                                             |
| Total companies           | 9                     |                                             |
| Total participants        | 11                    | Companies 3 and 6 had two participants each |
| Gender                    | 9 males and 2 females |                                             |
| Max duration              | 02.45.00              |                                             |
| Min duration              | 00.39.57              |                                             |
| TEAMS meetings            | 5                     |                                             |
| Telephone                 | 1                     |                                             |
| Face to face              | 3                     |                                             |
| Asked to remain anonymous | 9                     |                                             |
| Position in the company   | 9 CEOs, 2 HR managers |                                             |

search for themes and enables the researcher to identify common themes in multiple interviews [73]. The six stages of the method are the following [74]:

1. Immersing oneself in the data by reading and transcribing the interviews
2. Once familiar with the data, a researcher can generate initial codes
3. Once data has been coded researcher can start searching for themes
4. Themes need to be reviewed and refined
5. Defining and naming themes based on thematic maps of the data
6. When themes are identified, a research report is written

3.3. Producing the report

Following the six-step process from [74] helped identify the strategy implementation process, obstacles and key success factors relevant to this study. In transcribing the interviews, the lead author immersed himself deeper in the data, particularly to identify commonalities and differences between interviews. Data were coded using Mindmanager software [75]. As the data became well known, notes were taken, generating codes and quotes from the interviews. During the next stage, codes were merged into broader themes based on commonalities. After reviewing themes based on the coding substance, they were clarified, defined, and named. Themes were analyzed in Word and Excel [76].

4. Results

This section focuses on the identification of the strategy obstacles mentioned by the CEOs. They are categorized as either internal or external obstacles.

4.1. Internal strategy obstacles

Internal obstacles identified in the interview data were subdivided into inadequate leadership skills, inadequate management and expert skills, a lack of resources, poor communication, and a multicultural workforce and language barriers, all of which are discussed in the following subsections.

4.1.1. Inadequate leadership skills

Each of the companies’ strategy implementation is executed by a small top management team of three to seven people, and the strategy is in all cases top down, both in the case of the formulation and the implementation. The training of managers and staff to formulate and implement the strategy was in most cases, insufficient, which resulted in limited strategic goals being created and measured. The people on the middle management layer, furthermore, have a limited role in the strategy implementation process. Follow-up on strategy implementation

is lacking in most companies. Interviewees stated that implementation is handled through informal processes:

- ... always the follow up ... the traditional follow up which I'm not good at (interviewee 1).
- I have often claimed that the cheapest strategy in the industry is just to follow what one of the biggest companies in the industry is doing. That is a good benchmark. We are relatively small compared to the biggest company in the industry (interviewee 5).
- I suppose my skills and capabilities to coordinate and align are my weaknesses. I'm not the most organized person (interviewee 1).

#### 4.1.2. Inadequate management and expert skills

Interviewees underlined the need for and importance of being able to attract well-educated people with the right skills and knowledge to improve the management of the companies, including strategy implementation, measuring and evaluation of the strategic process. Inadequate management skills were seen as a major obstacle in the implementation process. However, this obstacle could be overcome by hiring employees with specific degrees and/or expert knowledge. A lack of educated experts in operations, marketing, finance and management is seen as one of the most difficult obstacles when implementing the strategy:

- The company has ... totally been built up in that way that employees have worked themselves up to top level management positions without formal education which is good up to a certain point, but it is important for a company like ours to recruit well-educated employees (interviewee 3).
- This company has been built up by employees without higher education until two years ago. Not a single employee had a university degree until two years ago (interviewee 9).

Interviewees were, in general, pleased with their current management teams, but there was a clear demand for a larger workforce and an increased range of trained staff with an appropriate university education in operations, that is, human resources with the skillset to assist with strategy formulation and implementation. The need for better-prepared management team members is seen by the interviewees as the next crucial step in the development of these companies.

#### 4.1.3. Lack of resources

Most of the interviewees stated that a lack of resources like a technological workforce and strategy experience were restraining factors when implementing strategy. Technical changes have rapidly transformed the fishing industry over the past five years, with increased automation on fishing boats and in the processing and packaging of the products. However, interviewees stated that problems arose when implementing the new knowledge-intensive technology as part of their overall strategy because most of the workforce has historically been unskilled, with limited capabilities to meet these new challenges. According to the interviewees, there is a clear demand for a larger workforce and an increased range of trained staff with the appropriate technology-based university education. As most of the companies are in small coastal towns, which have limited infrastructure, they are less attractive to potential employees, thus merging as an additional obstacle:

- We are trying to make all jobs easier, robotizing jobs and implementing new technologies, [meaning] we need better-educated staff (Interviewee 2).
- ... what we need to do is hire marketing people and applied food scientists if we are going to move forward (interviewee 1).

Interviewees stated that the lack of resources, i.e., time, expertise, and effective information systems hindered strategy implementation.

Inadequate time was spent on strategy implementation, which took longer than expected in most cases; time pressure resulted in strategy not being implemented in other cases. The small top implementation management teams were simultaneously managing and running the companies and had limited time for actual implementation, often because of their day-to-day operations:

- We spend too little time on implementation, ... we did this on an annual basis the first years and then we started to do this differently and more informally... (interviewee 1).
- People are not always negative towards this, but sometimes that is the case. People are just occupied. We need to give ourselves time to carry this out and we always underestimate the time necessary... (interviewee 6).

#### 4.1.4. Poor communication

Most interviewees mentioned problems with communication. They agreed that communication "down the line" was imperfect and did not always function properly. Communicating well and pushing implementation from the top down to middle management and front-line staff were generally perceived as major strategy implementation obstacles:

- One thing which is difficult, is to reach everyone, especially foreign employees on our fishing vessels. (interviewee 6).
- We need stronger human resource management... I have never drawn up an organizational chart, and I have asked people, and everybody seems to know how things work [without an organizational chart]. But I can admit we can do better, and it is a big challenge (interviewee 5).

Employee communication was seen as one of the most difficult tasks by most of the interviewees. Human resource management and policy were limited and, in general, not linked formally with strategic objectives in any of the companies. Some of the companies did not have organizational charts, and others stated that all communication, when it comes to strategy and strategy implementation, is informal.

#### 4.1.5. Multicultural workforce and language barriers

Some of the interviewees noted that a multicultural workforce is problematic when implementing strategy:

- We have a workplace where we have many nationalities and there are huge cultural differences between those groups, resulting in all kinds of problems (Interviewee 8).
- I can confirm and admit that we could do much better and there are huge challenges with implementation. We have a multicultural workforce and if I hold staff meetings, I must have many meetings, in factories, on the fishing vessels... (interviewee 5).

Language barriers were also a problem hindering implementation:

- We have three working languages and all employee meetings and material, which all employees must understand are in Icelandic, Polish and English.... Employees do not read these things though we do have an employee-handbook (interviewee 6).
- People in general don't know about the strategy. It becomes more difficult when you have a more multicultural workforce (interviewee 1).

#### 4.2. External strategy obstacles

External strategy obstacles identified in the interview data were subdivided into high political uncertainty, a lack of long-term governmental vision; fisheries' rules and regulations; negative discussion about the industry; time-consuming lobbying, and external economic obstacles, all of which are discussed in the following subsections.

#### 4.2.1. High political uncertainty

All the interviewees claimed that the fisheries industry is working in an environment of high political uncertainty, and this lack of consensus makes strategy formulation difficult and strategic decisions and implementation risky. Furthermore, they pointed out that constant political uncertainty about the fisheries' management system, such as in relation to short political cycles particularly when approaching elections, affects their business strategies and decision-making:

- Politics, sometimes this has been very hard and often we have been on the brink of quitting or selling (interviewee 9).
- Politics and the negative discussion about the companies and the political ideas suggested have hindered us and are costly (interviewee 5).

The political uncertainty about fisheries management and the quota system and the discussion affects the companies, and the uncertainty grows when it comes closer to parliamentary elections:

- Now it's coming close to elections, and I cannot do this anymore. I have had enough. Often those are individuals that operate a boat and have some tons of quota and they just say; this is too much pressure (interviewee 8).
- Many owners have sold their operation in an election year. That's very bad (interviewee 9).

#### 4.2.2. Lack of long-term governmental vision and fisheries' policy rules and regulations

Most of the interviewees experienced an urgent need for clear governmental vision for the industry, as a lack of long-term governmental vision affects the industry's ability to develop and create and increase the value of the industry:

- Uncertainty about the fisheries management system ... we need to ensure it's a system built for the long term (Interviewee 3).
- Then we have the constant uncertainty around the fisheries' management, which has affected this industry and has pushed for more consolidation I think... it's bad if this development is driven by fear but not industry efficiency (Interviewee 8).

Frequent changes to Icelandic fisheries' policy rules and regulations affecting the management and operation of the companies are seen as a major obstacle and add to political uncertainty. Among the issues mentioned by the interviewees are the individual transferable quota system (ITQ), community quotas and coastal fisheries, rules on fishing fees, and the cost of conducting research and monitoring institutions. In addition, the CEOs interviewed argue that regulatory bodies are hostile towards the industry; rules and regulations are too often not in line with industry needs and are being implemented without enough consultation with industry or experts in the relevant field:

- Regulatory environment is hostile to the industry (Interviewee 2).
- The political environment is constantly changing and does affect us. Fees and charges are increased, and rules are changed (interviewee 4).
- Our obstacles are also related to governmental changes of rules in the middle of a season (interviewee 7)

#### 4.2.3. Negative industry discussion and time-consuming lobbyism

Most of the interviewees believed that the media and political discussion about the industry and individual companies are increasingly hostile, with mostly negative news about the industry and even false news being published:

- Media moguls get away with misleading media discussion about their companies, which they are not willing to rectify (interviewee 1).
- ...then you have the politicians in the media every day saying: "we are going to call in the quota from those criminals" (interviewee 9).
- Maybe it is a mistake to have the company registered in Iceland. The industry will not be developed according to its potential because of this political discussion (interviewee 2).
- I'm in the executive council of the [Confederation of Icelandic Fisheries Companies], you start to live with all the nonsense in the discussion. It is this general discussion about the industry, but that is something that my energy goes more and more into (Interviewee 6).

These factors affect the industry and influence the public negatively. Simultaneously, much time and energy are spent, especially through the *Confederation of Icelandic Fisheries' Companies (SFS)*, to influence the discussion, correct reports and lobby for the industry:

- Our lobbying is time-consuming, and we channel it through our confederation (SFS) as they have more time and resources to work on it (Interviewee 6).
- Lobbyism, SFS is doing it and the owners somewhat also. I use every opportunity that comes along to keep our interests in the discussion (interviewee 5).
- Probably what I have spent most of my time working on is lobbying (interviewee 5).

#### 4.2.4. External economic obstacles

Some of the interviewees highlighted the international competition and market change from foreign fisheries, like Norway and Russia, as a restraining factor when it comes to strategy implementation. Others identify the Icelandic currency (ISK) as a specific problem affecting strategy implementation because of the risk of such an unstable currency. The lack of stability of the currency affected operational costs, revenue forecasts, investment and finance. Most of the interviewees emphasized high corporate taxes and high fishing fees that the industry was paying, affecting investment and the competitive advantage of the companies:

- We are in tough competition in all our markets (interviewee 7)
- External obstacles which cause much uncertainty are currency fluctuations and taxes (Interviewee 4)

Fig. 3 synthesizes the internal and external obstacles CEOs face when implementing strategy. The obstacles highlighted in light grey colour is identified in the primary data.

## 5. Discussion

In this study, multiple strategy implementation obstacles in the fisheries industry were identified and categorized into internal and external obstacles. The findings shown in Fig. 2 highlight that CEOs in fishery companies face similar internal obstacles identified in earlier studies when implementing strategy [6,8,50]. Most interviewees claimed a lack of resources, i.e., time, expertise, and unskilled/untrained employees, hindered implementation. These are obstacles which have been documented in other research [19,54,55,65]. The small top implementation management teams were at the same time managing and running the companies in their day-to-day operations and had limited time for actual implementation. Strategy implementation that took more time than anticipated was also a common obstacle resulting in strategy not being fully implemented or not implemented at all, thus supporting the findings of Alexander [50] and Al-Ghamdi [51].

Most of the interviewees noted problems with vertical communication, meaning that communication "down the line" was inadequate, which supports the findings of Beer and Eisentat and Hrebiniak [6,48].

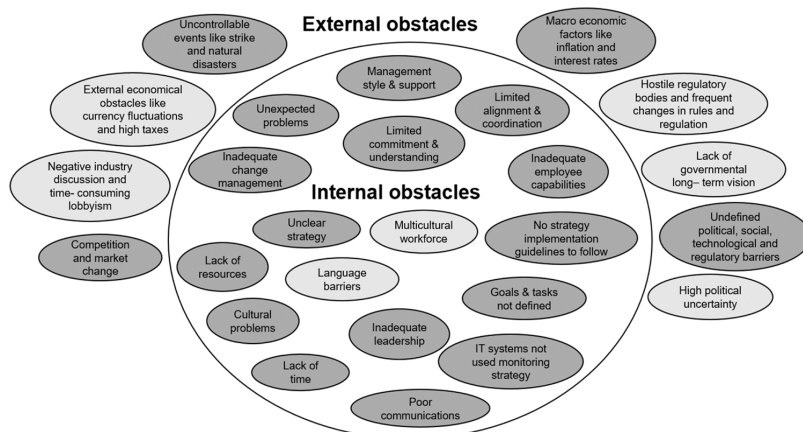


Fig. 3. Internal and external strategy implementation obstacles identified in the primary data are highlighted in light grey.

Communicating and top-down implementation from the company leaders to front-line employees was perceived as a strategy implementation obstacle. Some CEOs communicated strategic decisions down the line if they believed it was important. All except two of the companies are family-run, thus most often with a very informal structure and communication channels. This sometimes-dysfunctional structure affects vertical communication, in line with academic findings [55].

Interviewees were generally pleased with their current managers, but there was a clear demand for an increased number of qualified employees in operations, which can assist with strategy implementation. The need for a better-prepared management team is seen by the interviewees as the next crucial step in developing these companies as a consequence of improved technology [40]. These findings are in accordance with earlier research that suggests one of the main obstacles in strategy implementation is the need for talented and trained employees, such as employees with university degrees who possess the skillsets needed for the successful implementation of strategies [6,52,65]. In each of the companies included in the study, strategy implementation is executed by a small top management team of three to seven people and, in some cases, with limited leadership and management skills; in addition, implementation is handled through informal processes. The people on the middle management level have a minimal role in the implementation process, and yet interviewees believe that middle managers are important and make a meaningful contribution to strategy implementation and want strategic direction from their superiors [77]. The training of managers and staff to formulate and implement was, in most cases insufficient, which resulted in limited strategic objectives being formulated [48].

The findings on internal obstacles differ from the literature in two instances. Firstly, the data indicates that having a multicultural workforce in the fisheries industry affects implementation. Secondly, the interviewees also highlighted that language barriers were perceived limiting employee participation in implementation. Interviewees agreed that the industry had transformed in structure, size and culture over the past decades. For example, Icelanders often only seek the highest-paid jobs on fishing boats or in management positions. Management is more complicated than in the past, given the rising numbers of operational languages and multicultural staff. In addition, technological changes with automation have transformed the industry and increased the need for an educated workforce [34]. Interviewees claimed that too often, they take it for granted that employees know what to do or “*in what direction to row*” based on experience, although that is not always the case. These findings are in line with the demographic and socio-economic changes that the Icelandic fishing communities have

gone through; fisheries-related jobs have lost their attractiveness for young adolescents and the strong influx of the migrant workforce working on the processing sites [38]. These findings also relate to implementation obstacles identified by Argyris on defensive routes that hinder learning and growth in organizations [18].

As can be seen in Fig. 2, 5 external obstacles in total surfaced from the fisheries industry data, which indicates that CEOs of fisheries companies should give external obstacles real attention. These external obstacles involve high political uncertainty, lack of long-term governmental vision and frequent changes in rules and regulations, negative industry discussion and time-consuming lobbyism and external economic barriers, like currency fluctuations and high taxes. Four of these, except for the external economic barriers, have not been identified, to our knowledge, as strategy implementation obstacles in earlier studies [8,22,54,55,62,78]. The findings that are industry specific, based on interviewees' perceptions, include the high political uncertainty and the lack of long-term vision by politicians. There is a common perception among the interviewees that political uncertainty, and the lack of long-term vision by politicians, significantly affect strategy implementation. This political uncertainty and lack of vision are perceived as both investment and operational risk by the interviewees. Investment is seen as particularly risky due to political uncertainty and the lack of consensus on the future of the fisheries management. There is a call from the interviewees to the government for increased political stability and a long-term vision for fisheries management, a more integrated and holistic approach to strengthening marine policy could be the solution in line with transformative marine governance suggested by Kelly et al. [64].

This lack of consensus on the future of the fisheries management has been identified in earlier research [25,26]. Interviewees underlined that these factors had affected the industry, and they have pushed for more consolidation, which is driven by fear but not always industry efficiency. This could partly explain the speed of consolidation and why some of the companies have been sold. Similar research has conveyed that political obstacles can influence strategy implementation, although the political obstacles were not described in any detail in the study [55]. The reason for the high political uncertainty and lack of vision for the industry can be linked with the intensive political debate in the Icelandic parliament on different forms of fisheries management systems, where the ITQ system has been criticized regularly for three decades. Matters of Icelandic fisheries management have even been brought to Icelandic courts and before the UN Human Rights' Committee. Committees have been established by the Ministry of Fisheries to identify disagreements among stakeholders and to set forward proposals for a future vision of fisheries

management, the last one in 2022, without any policy review being passed by the Icelandic parliament [43,45]. There is limited consensus on how to manage fisheries in the political arena and among the general public in Iceland, and the ITQ system and consolidation of fishing rights have always been controversial, and it still is, according to polls [35,37]. These factors, consequently, affect the industry's ability to formulate a deliberate long-term strategy and ability to implement it. This uncertainty also affects their long-term vision for their companies, e.g., when it comes to making investment decisions. These developments have profound policy implications impacting the competitiveness of the Icelandic fishing industry and might be relevant in other countries as well.

Most interviewees perceived that constant changes to rules and regulations in the fisheries industry were not in line with industry needs and hindered strategy implementation. These findings are in line with the study of barriers to blue growth investment in Iceland where uncertainty about the regulatory system due to political involvement was perceived as an investment barrier [65]. Possible reasons for frequent changes in industry rules are that the Icelandic fishing industry is regulated with complex laws and regulations. Government allocates quotas annually, making decisions on how much to catch by species, they enforce complicated fishing fee rules and monitor fishing vessels among other tasks [44,79]. Issues mentioned by the interviewees are the ITQ system, community quotas, coastal fisheries and regulations on fishing fees. These issues mentioned are among the most debated, criticized and controversial parts of fisheries management in Iceland since it was established [43], which could explain the frequent changes perceived by the interviewees. Community quotas can be allocated to communities based on downturns in fisheries and to communities that have experienced a severe impact on their employment situation due to cutbacks in catch landing [44]. Coastal fisheries have been subject to change since they were established, initially regulated by size and later by restrictions (days at sea) and in 2009 by the TAC system (in four sea areas) [31]. The quota allocated to communities and coastal fisheries lower the TAC in the ITQ system and the fishing quota allocated, and could therefore be seen by the interviewees in this study not to be in line with their needs. These constant changes made by the government in the fisheries' management system are affecting the industry, as well as the stability of the fishing communities [25,38].

The interviewees argue that regulatory bodies are hostile toward the industry. Hambrick and Cannella [17] recognized that external bodies could have a positive influence on strategy implementation, for instance, the media. Most interviewees underlined that the media and public discussion about the industry and individual companies have been hostile over the years, even though the fisheries industry has been investing and buying shares in the Icelandic mainstream media [36]. One of the main barriers to blue growth investment in Iceland was negative public debate about the ITQ system [65]. They also stated that they spent too much time and energy lobbying for the industry towards various stakeholders; this effort would be better spent on strategy and running their companies.

Specific external economic obstacles have been identified in earlier studies, like inflation [54] and interest rates [48], but not specifically currency fluctuations or taxes. The majority of the interviewees mentioned high taxes paid in the form of corporate tax and the fishing fee. Since the establishment of the ITQ system, the resource rent grew significantly after 2008, and it is likely that the rent increased because landings of cod started to increase as well as with better utilization of input factors like labour and capital [39]. The increase in the resource rent is reflected in higher corporate tax payments of the fisheries industry after 2010 [39]. This increase in taxes and rent for the fisheries' resources is perceived by the interviewees as being too high for the industry, hindering strategic development of this capital-intensive industry. This perception of high corporate taxes and a high fishing fee is in contradiction with public opinion, where polls have shown up to 80 % of Icelanders are opposed to the ITQ system based on wealth creation, wealth transfer and the inequality it leads to [35]. Interviewees

emphasized frequent currency fluctuations, which negatively influence the industry creating uncertainty and unpredictability. Currency fluctuations have shaped and affected this important export industry for decades, according to other studies [25,46]. Interviewees highlighted market competition with other international companies, similar external obstacles have been found in other studies, and they have been categorized as macro factors and/or uncontrollable external factors [47,50,51].

This research had the aim of answering two questions: 1) What are the internal and external strategy implementation obstacles from the perspective of CEOs in Icelandic fisheries companies? 2) How do the findings reflect on the literature on strategy implementation obstacles? The analysis indicates that Icelandic fisheries companies face similar internal strategy implementation issues identified in other research but with two exceptions: the multicultural workforce in the fisheries industry affects implementation, and language barriers were perceived to limit employee participation. The research identifies external economic factors identified in earlier strategy implementation studies like high taxes and inflation but also four external obstacles not identified in earlier strategy implementation studies. These external obstacles are high political uncertainty, lack of long-term governmental vision and frequent changes in rules and regulations, as well as negative industry discussions and time-consuming lobbyism.

## 6. Conclusion

This empirical study, which identified strategy implementation obstacles in nine companies in the Icelandic fisheries industry, contributes to the literature on strategy implementation research by providing a new conceptualization of internal and external obstacles by categorizing them as specific to the industry. The external strategy implementation obstacles recognized in this study, such as high political uncertainty, lack of governmental vision and frequent changes in the industry rules and negative industry discussion, have not been found in prior research. The findings of the research highlight that CEOs in fisheries companies face similar internal obstacles to their peers in other industries and/or companies when implementing strategy. The findings on internal obstacles differ, however, in two instances from the literature, namely that a multicultural workforce can play a role in implementation and language barriers are common in the industry hindering communication and strategy implementation.

These findings can help policymakers and CEOs understand, and minimize the influence of strategy implementation obstacles. It can serve as a reference point to create and plan more holistic policies supporting CEOs and policymakers in the fisheries to develop more efficient and profitable strategies. Furthermore, these findings can help policymakers to build consensus on fisheries management, benefitting the fishing industry and society.

The main limitation of this research is that a limited number of interviews were carried out, although the biggest companies with close to half of the fishing quota in the industry were included. Furthermore, access to CEOs is often a major barrier in research. Therefore, gaining access to the CEOs interviewed in the study, even though not great in number, provides data that may not necessarily be easy to collect. As such, the results are relevant both for academia and practitioners alike. Additional quantitative data collection and middle management perspective might have added value to this research, but these were outside the scope of the study.

There is a need for more research in various industries and comparative studies between industries. The study also reveals that there is room for future research on strategy implementation obstacles, particularly research grounded in empirical data, as it may overcome these obstacles and help strengthen marine-related policy making.

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## Authors contribution

All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by Kristján Reykjalín Vigfússon. The first draft of the manuscript was written by Kristján Vigfússon and all authors commented on earlier versions of the manuscript. All authors read and approved the final version.

## Declaration of interest

None.

## Data Availability

The data that has been used is confidential.

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## **Article 3**

### **Key Success Factors for implementing strategy in the Icelandic Fisheries Industry**

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# Key success factors for implementing strategy in the Icelandic fisheries industry

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## Abstract

**Purpose** – This study focuses on the key success factors (KSFs) for strategy implementation in the fisheries industry in Iceland identified by chief executive officers within the industry. The purpose is to provide a comprehensive categorization of KSFs that influence how strategy is mobilized. The secondary aim is to uncover the level of priority that companies place on the dimensions of the United Nations (UN) Sustainable Development Goals (SDGs).

**Design/methodology/approach** – The methodology involves qualitative case studies based on in-depth elite interviews with nine chief executive officers of Icelandic fishing companies.

**Findings** – The research indicates strategy implementation can be improved in four main areas. First, by engaging and involving all employees in the implementation process. Second, by enhancing bottom-up innovation and communication. Third, through alignment of the corporate strategy and the UN SDGs, and fourth, by following rigorous action plans with clear, measurable and prioritized objectives and timeframes for the managers to follow. These improvements have both theoretical and practical implications for the fishing industry. Consequently, a conceptual framework for integrated strategy implementation in the fisheries industry is proposed.

**Research limitations/implications** – A limited number of in-depth elite interviews were conducted since access to the chief executive officers of the country's largest fishing companies proved challenging. However, the nine companies collectively hold nearly 50% of the country's total quota, thereby proving a deep

*Authors' contributions:* All authors contributed to the study's conception and design. Kristján Reykjalín Vigfússon performed material preparation, data collection, analysis and wrote the first draft of the manuscript. The remaining authors commented on versions, read and approved the final manuscript.

*Declaration of interest:* The Science Ethics Committee of Icelandic universities neither prohibits nor authorizes research, but its role is to provide teachers, students, experts and other employees of Reykjavik University and other universities in Iceland, guidance on how to conduct research in an ethical manner, <https://english.hi.is/node/50019>. Ethical guidelines and codes include introducing the study to participants, obtaining informed consent from participants and use of a semi-structured interview framework, therefore conducting the research with integrity, including reliability, honesty, respect and accountability, see Code of Research Ethics for Public Higher Education Institutions, [https://english.hi.is/sites/default/files/bryndjo/pdf/code\\_of\\_research\\_ethics\\_for\\_public\\_higher\\_education\\_institutions.pdf](https://english.hi.is/sites/default/files/bryndjo/pdf/code_of_research_ethics_for_public_higher_education_institutions.pdf). This study has been conducted according to these guidelines and codes and according to the rules of practice of Reykjavik University.

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understanding of the topic relevant to the industry. The research uncovered a substantial cross-section of viewpoints, and as such, the results are relevant for both academia and practitioners alike.

**Originality/value** – This study contributes to the debate on KSFs relevant to strategy implementation within a specific industry but also aligns with the UN SDGs by proposing a dedicated framework for implementing strategies in the fisheries industry. Overall, this study can help managers achieve strategy implementation.

**Keywords** Strategy, Implementation, Key success factors, Fisheries industry, CEO, SDGs

**Paper type** Research paper

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## 1. Introduction

Successful strategy implementation is key to strategic success in business, although most managers know more about strategy formulation than strategy implementation. Consequently, managers are more comfortable with “planning” than “doing,” which causes problems in making the strategy work and steering change management (Hrebiniak, 2006). Historically, research has shown high failure rates of strategy implementation, ranging between 50 and 90% (Kaplan and Norton, 2001). A recent study suggested that some evidence supporting these percentages needs to be updated, as they are fragmented or require more scientific rigor. Numbers should therefore be taken with caution, and the estimated range of failure is between 30 and 70% (Cândido and Santos, 2015). Consequently, several researchers have studied strategy implementation obstacles (Alexander, 1985; Hrebiniak, 2006; Köseoglu *et al.*, 2018; Vigfusson *et al.*, 2023). However, fewer studies have identified key success factors (KSFs) influencing strategy implementation (Aaltonen and Ikävalko, 2002; Brenes *et al.*, 2008; Köseoglu *et al.*, 2020).

As the literature is fragmented and still in development, researchers have called for additional empirical studies to explain how strategy implementation can be carried out successfully in different organizations, industries and businesses (Baumgartner, 2014). Adner has established that industry characteristics, structure and architecture are critical for strategy formulation and implementation (2017). Across all industries, organizations need help in implementing strategy (Hrebiniak, 2013). In the past decade, a few studies have emerged studying strategy implementation KSFs in specific industries, including the pharmaceutical industry in the Middle East (Obeidat *et al.*, 2017) and the hotel industry in Hong Kong (Köseoglu *et al.*, 2020). Most strategy implementation studies have centered on the role of middle management in strategy implementation (Ahearne *et al.*, 2014). Studies on senior management's role, effect and perception of strategy implementation are still in their infancy (Tawse *et al.*, 2019), and few studies focused on external factors affecting strategy implementations have been conducted (Vigfusson *et al.*, 2023).

Miller was one of the first researchers to define the concept of KSFs while implementing strategic decisions (1997), and these factors are still critical for successful strategy implementation. Some researchers have used the KSFs concept in their studies (Brenes *et al.*, 2008; Köseoglu *et al.*, 2020). At least two studies have been conducted on KSFs for implementing sustainability strategies by companies (Günther, 2016; Johannsdottir and McInerney, 2018). According to Clarke and Garside (1997), KSFs can be considered tasks or attributes that should receive priority attention because they help organizations meet goals and objectives, powerfully drive performance, and are key to implementation success.

Strategy implementation is a critical phase in the strategic management process that involves putting a chosen strategic plan into action. The strategic process can be described in three main phases: formulation, strategy implementation and evaluation (David and David, 2013). The strategic process bridges strategy formulation and implementation, for the purpose of achieving organizational goals (Hrebiniak, 2006). Furthermore, implementation can be critical in creating a competitive advantage, which is the core aim of any strategy formulation and implementation (Giles, 1991). Strategy formulation has been well studied

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(Mintzberg and Lampel, 1999; Noble, 1999; Pettigrew, 1992), and the third phase, strategy evaluation, as well (Kaplan and Norton, 2004, 2008; Rumelt, 1979; Srivastava and Sushil, 2013). The implementation phase is still understudied in the literature (Aaltonen and Ikävalko, 2002; Hrebiniak, 2013; Köseoglu *et al.*, 2020).

Strategy implementation comes with numerous challenges. In strategic management, transparent, effective and frequent communication is important in ensuring the implementation of strategic objectives and lay out roles and responsibilities among all stakeholders involved (Aaltonen and Ikävalko, 2002; Alamsjah, 2011). In a concerted aim to maintain a robust informational flow, regular communication and feedback mechanisms are essential pillars, informing and engaging stakeholders throughout the implementation process (Schaap, 2006). The purpose and guidance of leaders has been studied and plays an important role in strategic planning. The assignment of well-defined roles and responsibilities (Brenes *et al.*, 2008), coupled with capable leadership, constitutes a component essential to motivate and guide individuals and teams toward realizing strategic objectives (Crittenden and Crittenden, 2008; Sorooshian *et al.*, 2010). Moreover, establishing specific, measurable, time-bound goals serves as a framework for systematic monitoring (Aaltonen and Ikävalko, 2002; Sabourin, 2015) and continuous monitoring and feedback are requisite for tracking progress, discerning issues and facilitating the adjustments (Allio, 2005; Okumus, 2001). The allocation of resources, like financial assets, human capital and technological infrastructure, is crucial as it underpins the implementation of the strategic blueprint (Gębczyńska, 2016; Köseoglu *et al.*, 2020). Further synergy is achieved by the alignment of the organizational culture (Crittenden and Crittenden, 2008) and values with the strategic blueprint, as contended by Srivastava and Sushil (2017). Such alignment not only drives the implementation process but also employee engagement and commitment (Köseoglu *et al.*, 2020; Sabourin, 2015) and suggest that employees support to strategy implementation is more likely if companies have higher values or agenda than just monetary, e.g. with focus on sustainability (Johannsdottir *et al.*, 2015). Acknowledging and proactively managing the changes that often accompany strategy implementation is essential for ensuring a coherent transition (Cater and Pucko, 2010).

Hrebiniak (2006) stressed that strategy implementation consist not only of internal context but also external context. The United Nations (UN) Sustainable Development Goals (SDGs) are part of organizations external context and are essential in guiding policy and strategy implementation (UN, 2016). The UN's 17 SDGs are focused on three interconnected dimensions, social, economic and ecological (The SDGs wedding cake, 2016) contributing to better lives for all. However, Berrone *et al.* found out that most organizations face challenges in implementing SDGs into their overall strategy (2023).

The research method employed in this study utilizes a qualitative case study approach, focusing on the KSFs related to strategy implementation within Icelandic fisheries. The primary data collection method involved conducting in-depth interviews with chief executive officers (CEOs) from Iceland's largest fishing companies that collectively hold 44.7% of the 2020/21 quota (Fiskistofa, n.d.). It is critical to underscore the role that fisheries operating in oceans, seas and coastal areas play in supporting local residents. As a mean of livelihood, fishing has the potential to combat poverty and hunger while still being sustainable (UN, 2016; FAO, 2020). Within this context, an empirical study provides a relevant insight into what KSFs drive strategy implementation in Icelandic fisheries companies and in what way they KSFs differ from those found in the literature. Furthermore, an empirical study encompassing these factors fills a gap in the existing literature, which concentrates on the KSFs for implementing strategies in fisheries and diverse industries.

Traditional strategy implementation framework or concepts have to often focused on one or few components of strategy implementation, thus missing the holistic integrative approach needed to deploy and align strategy throughout the organization (Atkinson, 2006).

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The 5Ps model which focuses on purpose, principles, processes, people and performance has been considered a valuable tool for implementing strategy. In addition to the five main ideas, the model covers specific activities and functions like structure, system, leadership behavior, human resource policies, culture, values and management. Ensuring the alignment of these elements can result in effective strategy implementation (Pryor *et al.*, 2007). In this study, the 5Ps model is used as a framework to help identify KSFs that facilitate strategy implementation. The selection of the 5Ps model is justified by its conceptual nature and integration of theories and experience for diverse business disciplines like fisheries.

This study focuses on the KSFs for strategy implementation in the fisheries industry in Iceland identified by CEOs within the industry. The purpose is to provide a comprehensive categorization of KSFs that influence how strategy is mobilized. The secondary aim is to uncover the level of priority that companies place on the dimensions of the UN's SDGs.

This research intends to answer the following questions:

- (1) What KSFs do Icelandic fishery chief executive officers use when implementing strategy?
- (2) Which of the UN SDGs are important for strategy implementation in fisheries companies?
- (3) If and how can the identified KSFs be integrated into a conceptual framework for strategy implementation?

This article introduces novelty by offering empirical evidence of the KSFs driving strategy implementation in the fisheries industry. It analyzes these factors through a framework, a perspective that has yet to receive significant attention in the literature. Additionally, the research contributes novelty by uncovering direct first-hand insights from fisheries leaders and utilizing this knowledge to construct a theoretical and practical framework for strategy implementation.

The structure of this article is as follows: [Section 2](#) provides the theoretical background, literature and the context of the study. [Section 3](#) describes the research method, research context, selection criteria for companies and interviewees and the analysis employed for this study. The findings are presented in [Section 4](#) with a thorough discussion in [Section 5](#). Finally, the conclusion and limitations of this research are discussed in [Section 6](#) including possible suggestions for future research.

## 2. Strategy implementation

Strategy implementation is seen as a critical field having a crucial influence on organizations and their performance (Hrebiniak, 2006). In a literature review on strategy implementation, Li *et al.* (2010) found that no universally accepted definition of strategy implementation exists and categorized varying definitions into three main perspectives. First - the *process* perspective - considers strategy implementation as a process of carefully planned steps and is similar to the structural view discussed by Noble (1999). Second, the *behavior* perspective maintains that strategy implementation consists of a series of more or less concerted and parallel actions to be examined from a *behavior* perspective. Third, the *hybrid* perspective combines elements of both process and behavior perspectives (Li *et al.*, 2010). These three main categories attempt to incorporate previous definitions to create a comprehensive working characterization that encompasses the most important factors researched. The strategy implementation process can be seen as dynamic and complex that demands decisions and actions to be taken by the people working in the organization. Decisions and actions are affected by both internal and external factors with the core aim of breathing life into strategic plans in search of competitive advantage.

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### 2.1 Key success factors of strategy implementation

Waterman *et al.* (1980) put forward a framework for implementing strategy building upon earlier research focused on the importance of identifying steps in an effective strategic process. The research uncovered that company structure, management style, staff organization, skill development and strategic planning processes affect the ability of the organization to change. One of their main findings is that all of the elements needed for successful implementation are interlinked. Mintzberg and Waters further argued that different strategies should be implemented in different circumstances and situations (1985).

Several other researchers have identified KSFs influencing strategy implementation (Aaltonen and Ikävalko, 2002; Shah, 2005; Tawse *et al.*, 2019). Zagotta and Robinson (2002) developed several keys and guidelines for CEOs to successfully implement strategy including an open approach to everyone in the organization through repeated communication messages, business commitment measures, planning, reporting on strategy measures and evaluating execution regularly. Other researchers observed specific key factors in strategy implementation such as consensus (Bourgeois, 1980; Schaap, 2006), frequent communication (Alamsjah, 2011), clear and transparent communication (Aaltonen and Ikävalko, 2002) and building trust and commitment in management teams and the strategic process (Lampaki and Papadakis, 2018; Malkamäki *et al.*, 2021).

In researching 12 service organizations, Aaltonen and Ikävalko (2002) highlighted the importance of aligning systems and structure with strategy. To implement strategies successfully, they underscored that top-down strategy implementation is hard enough as an approach, and as such, two-way communication is preferred. Goals and objectives must be set for different levels in the organization and linked to daily activities. If strategy emerges over time in the organization, middle managers play a vital role in strategic communication to the broader staff and the middle managers need skills and motivation to succeed (Aaltonen and Ikävalko, 2002).

In another study involving 104 managers implementing strategy, Shah (2005) recommended organizations should focus on forming a sound strategy, allocate sufficient resources and ensure strong management commitment and leadership. Equally important, is safeguarding employee understanding, gaining employee commitment and connecting financial rewards with performance. Others have studied leadership and leadership styles affecting strategy implementation. For instance, a study carried out in 407 Danish small and middle-sized companies suggested that aligning executive style with company strategy is critical for successful implementation (Håkonsson *et al.*, 2012). Still, other research has shown that a particular type of chief executive officer (CEO) leadership style can increase engagement in strategy implementation (Barrick *et al.*, 2015).

Crittenden and Crittenden (2008) researched 29 organizations – both local and international – to reveal that successful implementation was largely based on a mixture of various strategic elements such as supportive policies and systems assisting the implementation. They also generated a list of critical levers for successful implementation, called the “eight levers of strategy implementation”. Alamsjah (2011) researched strategy implementation KSFs in various industries and underlined five connected and interlinked factors: uncertainty in the local environment, clear strategy, organization structure, company culture and CEO involvement. His findings suggest the importance of company culture in contributing to successful strategy implementation.

Two studies conducted specifically on KSFs for implementing sustainability strategies by companies will be emphasized (Günther, 2016; Johannsdottir and McNerney, 2018). Günther's research targeted companies across various regions including: Europe, North and Latin America, Asia-Pacific, Africa and the Middle East. The majority of the respondents held prominent managerial positions or were involved in sustainability-related roles. The results of the study show that corporate sustainability is perceived as important in almost every

**Table 1.**  
Key success factors  
influencing strategy  
implementation,  
grouped according to  
the 5Ps (Pryor *et al.*,  
2007), derived and  
diversified (Vigfússon  
*et al.*, 2021)

company independent of industry or region. Most companies aspire to achieve long-term profitability while adhering to ethical standards. However, a considerable portion of the respondents believe that their organizations fail adequately to integrate sustainable initiatives into their business strategies (Günther, 2016). In terms of the KSFs for implementing a sustainable strategy, the respondents in the study stated several crucial aspects. First, clear directive and mandates from management were deemed essential. Second, alignment with the company’s broader business strategy and financial goals with regular performance reviews were critical factors. Third, management should establish clear objectives and communicate relevant information to involve employees in preparing and planning implementation. Fourth, the study emphasized the significance of management consensus and strong leadership abilities in successful implementation (Günther, 2016). The findings pertaining to KSFs in Günther’s study align with the factors identified (see Table 1).

A qualitative study on Nordic insurance companies implementing environmental sustainability into their corporate sustainability practices (Johannsdottir and McInerney, 2018) developed a framework to facilitate positive changes and provide guidance to companies with limited resources to implement sustainable practices into daily business operations. The findings of the research are structured into five critical success factors, referred as the “Five Cs,” which are (1) commitment, (2) configuration, (3) core business, (4) communication and (5) continuous improvements. The Five Cs framework is consistent with an earlier study looking at the integration of corporate sustainability into strategic management (Engert *et al.*, 2016). The Five Cs framework is unique as it focuses on the relationship between environmental sustainability and an insurance company’s core business including products, underwriting, risk management, loss prevention and claims and investment, but the framework also recognizes that are both internal and external

Key success factors

*Purposes*

- Leadership styles and motivation (6)
- Goals and objectives linked to strategy (4)
- Well-defined strategy (2)
- Management style affects implementation (1)
- Tactics support implementation (1)
- Broad strategy formulation (1)
- Different strategies for business units (1)

*Principles*

- Change management led by executives (3)
- Organizational learning (2)
- Shaping corporate culture (1)

*Process*

- Frequent communication (6)
- Timeframes and priorities set (4)
- Having resources (2)

*People*

- Shared understanding (7)

*Performance*

- Alignment and integration (6)
- Staff accountable for task and action (4)
- Tying awards with implementation (3)
- Monitoring strategy (1)

**Source(s):** Vigfússon *et al.* (2021, p. 24)

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driving forces at play that will pressure companies to act on sustainability matters (Johannsdottir and McInerney, 2018).

New and emerging research is increasingly focusing on the actual practice of strategy implementation. This involves getting closer to the core of “doing” – Who does what and what influence do the front-line employees have on implementation (Cadwallader *et al.*, 2010; Hendry *et al.*, 2010). In a recent review study summarizing strategy implementation literature over the past 40 years, researchers identified the focus of strategy implementation has moved from the pioneering structural view defined by Noble to more of an adaptive conceptualization of strategy implementation, shedding light on how organizations make sense of and enact strategies in practice (Weiser *et al.*, 2020). In this same study, authors put forward an integrative view aiming to combine the strengths of the two defined complementary theories to contribute to successful strategy implementation (Weiser *et al.*, 2020).

In a review of the empirical strategy implementation literature during 1980–2020, researchers identified 18 KSFs to facilitate implementation. Similar to past research, the authors stressed that leadership style and effective change management led by executives can have a positive influence on execution and employee participation. A well-defined and aligned strategy followed with priorities, goals and objectives with timeframes is an integral part of successful implementation. Furthermore, a shared understanding of strategy and frequent communication with employees are paramount to successful strategy implementation (Vigfússon *et al.*, 2021). KSFs identified in 34 empirical articles from 1980 until 2020 (see Table 1) and the range of factors identified from the literature sources (Vigfússon *et al.*, 2021). The factors have been grouped based on the 5Ps model introduced by Pryor *et al.* (2007).

The number of empirical articles in Table 1 are documented in parentheses.

## 2.2 Strategy implementation in various industries

A few studies have been carried out in specific industries to uncover strategy implementation obstacles (Köseoglu *et al.*, 2018; Mollahoseini and Ahmadkhani, 2012; Ocak *et al.*, 2021; Okumus, 2001; Vigfusson *et al.*, 2023). In a single industry study on hotel services, Okumus (2001) developed a strategy implementation framework that consists of the company’s internal and external context, strategic content, process and output (Okumus, 2001). Okumus’ research attempts to provide organizations with a holistic and practical approach when analyzing and evaluating the complex problem of implementation. Another hotel industry study, recognized special barriers hindering implementation, which included frequent interventions by owners to hotel operations, no or limited comprehensive strategic analysis done before decision-making, lack of comprehensive strategic planning and lack of training for implementers (Köseoglu *et al.*, 2018). The study findings are in line with previous studies stipulating the importance of strategic consensus (Aaltonen and Ikävalko, 2002), communication (Alexander, 1985), shared values (Schaap, 2006) and commitment (Brenes *et al.*, 2008) but do not support earlier findings on time constraints and lack of resources when implementing strategy (Alexander, 1985).

A food industry study from the Fars Province in Iran detailed 45 individual obstacles to successful strategy implementation grouped across main five dimensions: individual/employee, planning, organizational, environmental and management (Mollahoseini and Ahmadkhani, 2012). The research findings suggest that individual/employee obstacles influence and hinder strategy implementation more than the other four dimensions. Specifically, the individual/employee category includes the following obstacles: low capability of staff, lack of team spirit among employees, employee resistance to change and inadequate understanding of the strategy being implemented.

In a healthcare industry study from Turkey involving 39 hospitals, [Ocak et al. \(2021\)](#) concluded the most important barriers influencing and hindering strategy implementation are: low employee motivation, which supports the findings of [\(Mollahoseini and Ahmadkhani, 2012\)](#); lack of consensus among decision-makers, identified in earlier studies [\(Aaltonen and Ikävalko, 2002\)](#); lack of comprehensive strategic analysis before implementation; lack of fit between the organization's overall goals; and, operational decisions based on financial performance [\(Ocak et al., 2021\)](#). An earlier study on the healthcare industry deliberated if a balanced scorecard management tool [\(Kaplan and Norton, 1996\)](#) could help organizations implement strategy effectively. The study results showed that a balanced scorecard could indeed contribute to implementing strategy effectively as long as the measurement system is adapted to the realities of healthcare organizations [\(Bisbe and Barrubés, 2012\)](#).

A more recent study in the fisheries industry in Iceland [\(Vigfusson et al., 2023\)](#) identifies two internal strategy implementation obstacles not identified in earlier studies: language barriers given different nationalities of employees and country culture differences due to a multicultural workforce. It also recognized external obstacles not found in prior research, including the lack of governmental vision for the industry, hostile regulatory bodies, persistent changes to industry regulations, high political uncertainty, time-consuming lobbying and, often, unsympathetic political and media attention.

When digging further into the research on strategy implementation and KSFs within specific industries, a study of the pharmaceutical sector in the Middle East revealed that operational factors significantly affect the success of strategies in the industry [\(Obeidat et al., 2017\)](#). Resource availability as well as when and where to allocate resources scored highest in the pharmaceutical study, which is in line with earlier findings [\(Crittenden and Crittenden, 2008\)](#). Communication, operational planning, control and feedback also scored high in the study. Further results showed that if these factors had a high score, strategy implementation was more successful in the companies [\(Obeidat et al., 2017\)](#).

The previously mentioned hotel industry study [\(Köseoglu et al., 2020\)](#) suggested that people-related factors like communication and willingness to change are KSFs in implementing strategy. Furthermore, several managers in the study underlined that allocation of resources, action plans, training and a clear strategy are KSFs in the implementation process, along with the reaction of competitors all affect successful implementation [\(Köseoglu et al., 2020\)](#).

Based on these studies from the different industries, clear and frequent communication is one of the most critical KSFs in implementing strategy. Consensus, shared values, commitment and a clear strategy are also identified as KSFs, as in a number of other mixed-industry research [\(Aaltonen and Ikävalko, 2002; Bourgeois, 1980; Nutt, 1986; Sabourin, 2015; Schaap, 2006\)](#).

### 3. Research method

#### 3.1 Research context

Fisheries have historically driven the Icelandic economy, the industry's output fluctuating has represented between 5 and 13% of gross domestic product (GDP) over the last 30 years [\(Statistics Iceland, 2021\)](#). From the standpoint of export value, fisheries have exceeded one-third of all exports for several years, such as in 2007, when the export value reached 34.3% of total exports [\(Statistics Iceland, 2021\)](#). On a global scale, Iceland is listed as a significant marine capture-producing country by the Food and Agriculture Organization of the UN [\(FAO, 2020\)](#). Iceland ranks 19th and accounts for 1% of the world's total fishing production [\(FAO, 2020\)](#). In short, fisheries are often cited as the country's single most crucial industry [\(Sigfusson et al., 2013\)](#). Fifty of the largest fishing companies in Iceland hold 90.6% of the total

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2020/21 individual transferable quota (ITQ) and the remaining quota is held by a number of smaller operators (Fiskistofa, n.d.). The growth strategy in the industry has partly been driven by mergers and acquisitions in an effort to reach scale and compete globally. Additionally, players have pursued vertical integration in order to control all aspects of the value chain from extracting fish to marketing their own brands and meet the demand of fish and fish products and partly by gaining control of the vertical value chain from fishing to marketing and selling their own brands (Vigfusson *et al.*, 2023).

At the same time, the Icelandic ITQ system has led to environmental stewardship in Icelandic waters (Gunnlaugsson and Valtýsson, 2022) while improving economic performance of fishing and processing in the industry. As the industry has become more profitable, its contribution to society in the form of taxes has risen (Gunnlaugsson *et al.*, 2020). For instance, potential synergies have been established between several of the SDGs, namely SDG 1 (No Poverty), SDG 2 (Zero Hunger) and SDG 14 (Life Below Water), but trade-offs between the SDGs have also been recognized (Cook *et al.*, 2019). The integrated implementation of these SDGs has demonstrated the effect of improving livelihoods (Diz *et al.*, 2019). It is therefore of importance to understand how fisheries are able to successfully implement strategies, as the industry can continue to advance the interconnected SDGs by decreasing poverty (SDG 1), eradicating hunger (SDG 2) and caring for aqualife (SDG 14). Sustainable fisheries are very much relevant for the SDGs, synergies between them and how the three pillars of sustainable development are achieved, such as in the case of “poverty reduction, food security, nutrition, well-being and traditional livelihoods”, but also issues such as “anthropogenic pressures such as overfishing, habitat destruction, pollution, climate change and ocean acidification” (Diz *et al.*, 2019, page. 1). This is therefore of relevance for the fishing industry and successful strategy implementation taking these issues into account.

This research is based on in-depth elite interview approach (Berry, 2002; Goldstein, 2002) with CEOs from fisheries in Iceland. It is essential to point out that this paper is a part of a larger body of comprehensive research on Icelandic fishing companies, which has so far resulted in two academic articles based on the same data-collection process. The first article, “Strategy Implementation Obstacles: Iceland Fishery CEO Perspective,” was published in Marine Policy in January 2023 (Vigfusson *et al.*, 2023) and aimed to identify critical internal and external obstacles faced by CEOs of Icelandic fishery companies while implementing strategy. Original empirical evidence is presented in both articles based on different focuses and approaches.

A case study is appropriate in this research as it explores real-life cases through collected data involving multiple sources of information and encapsulates case themes and descriptions (Cresswell *et al.*, 2013). Case analysis has been used in other strategy implementation studies (Okumus, 2001). As Lee and Lings state, qualitative approaches like interviews are, from a natural standpoint, appropriate for the interpretive process (2008).

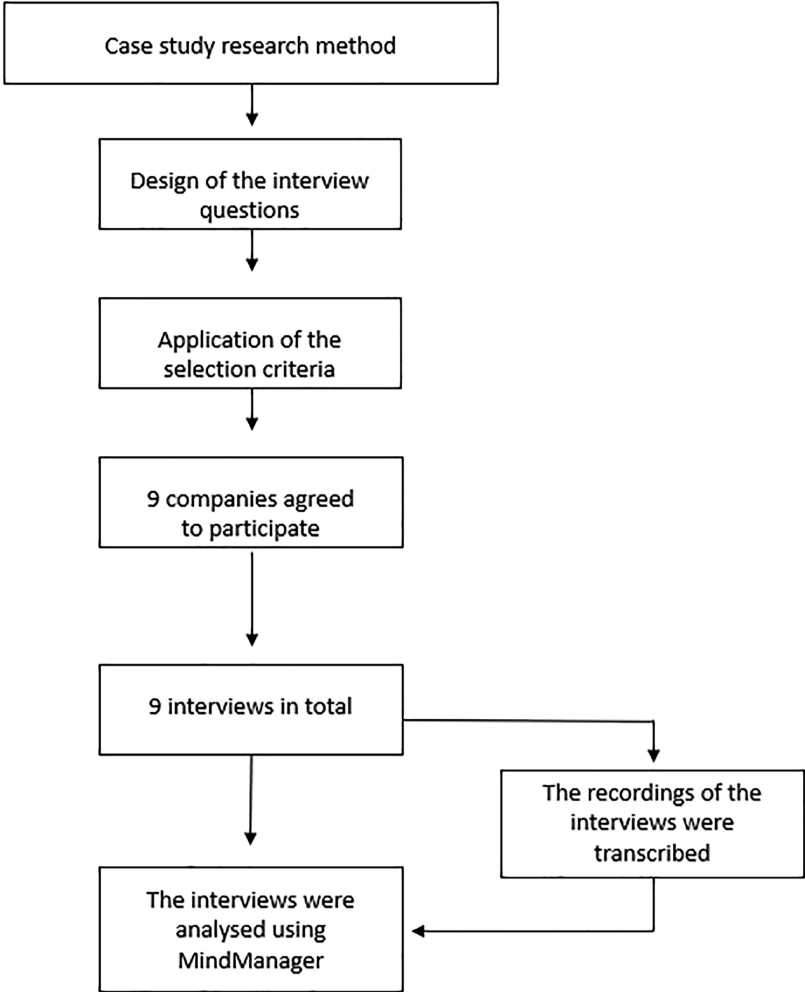
### 3.2 Interview framework

The interview framework followed a semi-structured design to collect data from the organizations while allowing the researcher to uncover new themes which at the outset, are not obvious based on employees’ personal experiences (Burgess, 1982). The interviewees were identified beforehand, and all interviewees were asked the same questions; about general strategy knowledge, strategy formulation, strategy implementation, strategy evaluation and strategic tools, to make the interviews comparable and structured. Using semi-structured interviews also allowed the researcher to delve deep into specific topics. To provide reliability, the same interviewer conducted all the interviews.

Three interviews were carried out face-to-face at the CEO’s workplace. Five interviews were conducted via Microsoft Teams video conference software due to the COVID-19

pandemic and one was conducted by telephone. The interviews ranged from 40 min to three hours and were all recorded based on approval. All the CEOs asked to remain anonymous. Saturation became quite evident after interview six; however, all the interviews had been scheduled at this stage, and the remaining interviews allowed further verification of the central ideas. Recordings were transcribed and the results were analyzed using MindManager software to visualize mindmaps and identify key overarching themes. [Figure 1](#) shows the design of the interview framework.

Secondary data from the companies have been used for triangulation, including materials from websites, annual reports, documents collected from middle managers and observations while visiting the companies. The elite interview framework only allowed the CEOs of the organizations to participate in the research. In total, nine CEOs from nine distinct companies were interviewed.



**Figure. 1.**  
Design of interview  
framework

**Source(s):** Authors own creation

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### 3.3 Selection criteria and sampling

In this research, purposeful sampling is used. Purposeful sampling is a method used in qualitative research to identify and select information-rich cases or people to answer research questions (Lee and Lings, 2008). Organizations were chosen based on factors such as revenues, number of employees, type of operation and layers of management. Specifically, companies needed to have the following criteria in order to be selected: (1) one of the 15 largest fishing quota holders in Iceland; (2) one of the 120 biggest companies in Iceland 2020; (3) more than 200 employees; and (4) involved in fishing, processing, marketing, selling fish and fish products on the global market.

In total, nine out of the fifteen largest companies in the fishing industry agreed to participate in the research. These nine companies held 44.7% of the fishing quota in Iceland in 2020/2021 (Fiskistofa, n.d.). By focusing on the size of the companies in the industry and a minimum of over 200 employees, it was more realistic that strategy implementation had taken place.

### 3.4 Extraction of information and data analysis

Qualitative techniques often play a key role in analyzing the output from semi-structured interviews; in this case, a thematic analysis is used to analyze the interview data (Riger and Sigurvinsdottir, 2016). Thematic analysis has been used in a number of strategic management studies (Höglund *et al.*, 2019). According to Riger and Sigurvinsdottir (2016), thematic analysis searches for themes in a given data set and enables the researcher to identify common ideas across interviews (2016). The six stages of the method based on (Braun and Clarke, 2006, p. 87) are used:

- (1) Familiarizing yourself with your data
- (2) Generating initial codes
- (3) Searching for themes
- (4) Reviewing themes
- (5) Defining and naming themes
- (6) Producing the report

By conducting the interviews, authors were able to familiarize themselves with the data and probe deeper through follow-up questions. In transcribing the interviews, the lead author immersed himself in the data, particularly to identify commonalities and differences between interviews. Data was coded using the Mindmap software (MindManager, 2021). As the data became well known, notes were taken, generating codes and quotes from the interviews. During the next stage, codes merged into broader themes based on commonalities. After reviewing themes based on the coding substance, the themes were clarified, defined and analyzed in Word and Excel (Microsoft, 2021).

## 4. Key success factors implementing strategy in the fishing industry

The main aim of this study is to identify KSFs relevant to strategy implementation in the fisheries industry. First, the companies are put into context by describing their profile and challenges. Second, the importance of SDGs for companies' policies is explored. Third, the KSFs implementing strategy in the companies are identified. Finally, an implementation framework for integrated strategy is presented. The framework and categorization of KSFs is based on approach used in a study by Manninen and Huiskonen on factors influencing

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integrated implementation of corporate and sustainability strategy (2022) and a study by Tawse and Tabesh on strategy implementation process and effectiveness (2021).

#### *4.1 Companies profiles and challenges*

All but one of the companies studied are family-owned companies. Across all the companies, strategy implementation is executed by a small top management team of three to seven people. The CEOs are all males with 11–37 years of management experience in the industry. Strategy formulation and implementation are both carried out in a top-down manner in all cases. All the interviewees stated strategy formulation and implementation were essential tasks. In general, the CEOs were pleased with their management team. However, there was an apparent demand for trained staff with operations and human resource management education to assist with strategy implementation. In some cases, especially regarding smaller companies, training managers to implement strategy was lacking, resulting in limited strategic goals being created and measured. Most interviewees complained about needing help to attract well-educated people with the right skills and knowledge to improve strategy formulation and implementation. Most interviewees underlined the lack of resources – namely a workforce with strategy experience – were restraining factors in implementing strategy. Analysis of the data revealed that fishery CEOs perceive strategy implementation as a complex and integrated part of managing their companies. Around half of companies had implemented strategy, but others struggled due to a lack of resources like time, knowledge and educated workforce (Vigfusson *et al.*, 2023). All companies participating in the study had the strategic objective to harness the industry value chain, pursue more vertical integration and strengthen the building of their brand.

#### *4.2 Integration of SDGs into company policies*

The interviews revealed a prevalent focus on sustainability. Most of the interviewees mentioned the difficult task of simultaneously dealing with the demanding task of continuously delivering wild fish products to customers while managing sustainability initiatives. Furthermore, drawing from the interview data, triangulating, with information sourced from company websites many of the fishing companies included in the study have demonstrated their commitment to social responsibility by endorsing the responsibility policy under the umbrella of Fisheries Iceland (SFS). This policy aligns with the principles outlined by the SDGs (SFS, 2023). The overarching objectives established by SFS include the mitigation of greenhouse gas emissions originating from the industry, fostering greater transparency concerning non-financial information through issuing of sustainability reports, prioritizing the well-being and safety of employees operating within the industry and promoting the recycling of fishing gear (SFS, 2023). It is noteworthy that many of the participating companies have independently formulated corporate social responsibility (CSR) policies that stands apart from the SFS initiative. These autonomous policies incorporate, in some cases the SDGs as demonstrated in Table 2. This Table presents a breakdown of the specific SDGs to which participating companies have pledged their commitment based on their CSR policies.

Five out of nine companies have independently formulated CSR policies which incorporate some of the 17 SDGs. Five of the companies have included SDG 14 for the conservation and sustainable use of oceans, seas and marine resources for sustainable development and SDG 9 for building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation. Two out of five companies have incorporated SDGs which relates to the well-being of society such as SDG 3 for good health and well-being, SDG 5 for gender quality and SDG 7 for affordable and clean energy.

|                                         |                           | Icelandic<br>fisheries<br>industry                           |
|-----------------------------------------|---------------------------|--------------------------------------------------------------|
| Company                                 | SDGs                      |                                                              |
| Company 1                               | None                      |                                                              |
| Company 2                               | None                      |                                                              |
| Company 3                               | 9, 14                     |                                                              |
| Company 4                               | 5, 9, 12, 14              |                                                              |
| Company 5                               | 9, 14                     |                                                              |
| Company 6                               | None                      |                                                              |
| Company 7                               | None                      |                                                              |
| Company 8                               | 9, 12, 14                 |                                                              |
| Company 9                               | 3, 5, 7, 8, 9, 12, 13, 14 |                                                              |
| <b>Source(s):</b> Authors' own creation |                           | <b>Table 2.</b><br>Fisheries companies<br>commitment to SDGs |

#### 4.3 Identifying and categorizing key success factors

The data became well known throughout the six stages of thematic analysis (Braun and Clarke, 2006). Generating codes and quotes from the interviews were categorized into first-order factors. During the next stage, codes merged into broader themes based on commonalities into appropriate categories. Categories were then grouped together into aggregate dimensions. In the data analysis, three types of information were developed: the organization-related KSFs, employee-related KSFs and other internal activities advancing implementation. The organizational-related KSFs are factors, like company structure, how activities are organized, company processes, culture and communication. These factors have been developed by management with limited interaction between managers and employees. The employee-related KSFs are factors, like motivation, knowledge sharing and employee daily tasks. These are developed by management but are dependent on employees behavior. The internal factors advancing implementation are factors that CEOs perceived part of integrated implementation but could not be categorized into either employee-related KSFs or organization-related KSFs. The internal factors advancing implementation was either partly or fully missing in all of the companies although the CEOs perceived them as important. The CEOs had more substantial impact and control over the organizational-related KSFs and the employee-related KSFs and could therefore push strategy implementation forward. The data-analysis structure is shown in Figure 2.

#### 4.4 Framework for strategy implementation in the fisheries industry

The strategy implementation framework for the fisheries industry was formulated from the data results are shown in Figure 3. The aim is to understand the integrated strategy implementation from the CEOs perspective. The framework captures strategy implementation experience and perception of the CEOs in a logical structure where the internal activities advancing implementation affect both the organizational-related KSFs and the employee-related KSFs in the framework. Internal activities, at the center of the framework, maintain essential factors shaping internal company conditions. These factors encompass specific tangible measures, clear objectives with defined timeframes and an integrated approach to strategy implementation. Sustainable emphasis emerges in the framework on both organizational- and employee-related levels engaging and involving all employees in the implementation process based on sustainable motivation and through alignment of the corporate strategy and the SDGs. By leveraging these factors, companies can create a favorable environment to drive performance forward. The framework is a useful tool for the industry and can be applied in other industries. The findings are in line with earlier research and help build on the shortage of research on strategy implementation in the fisheries industry.

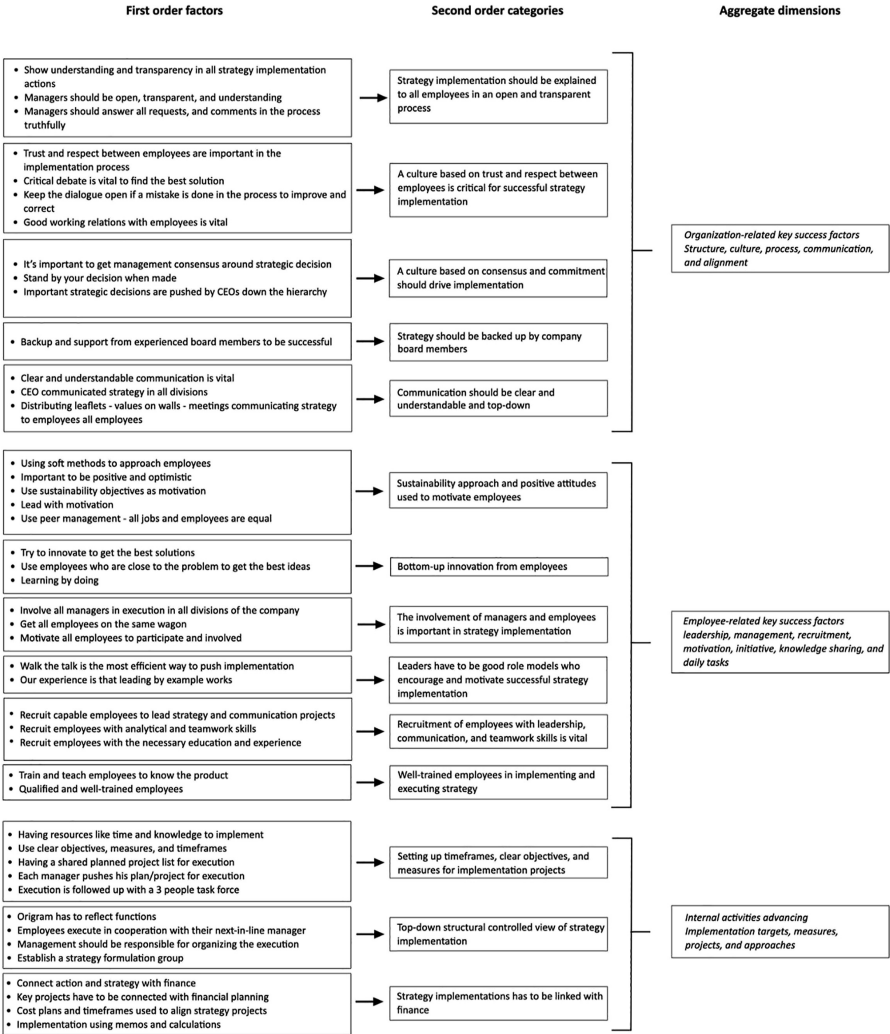
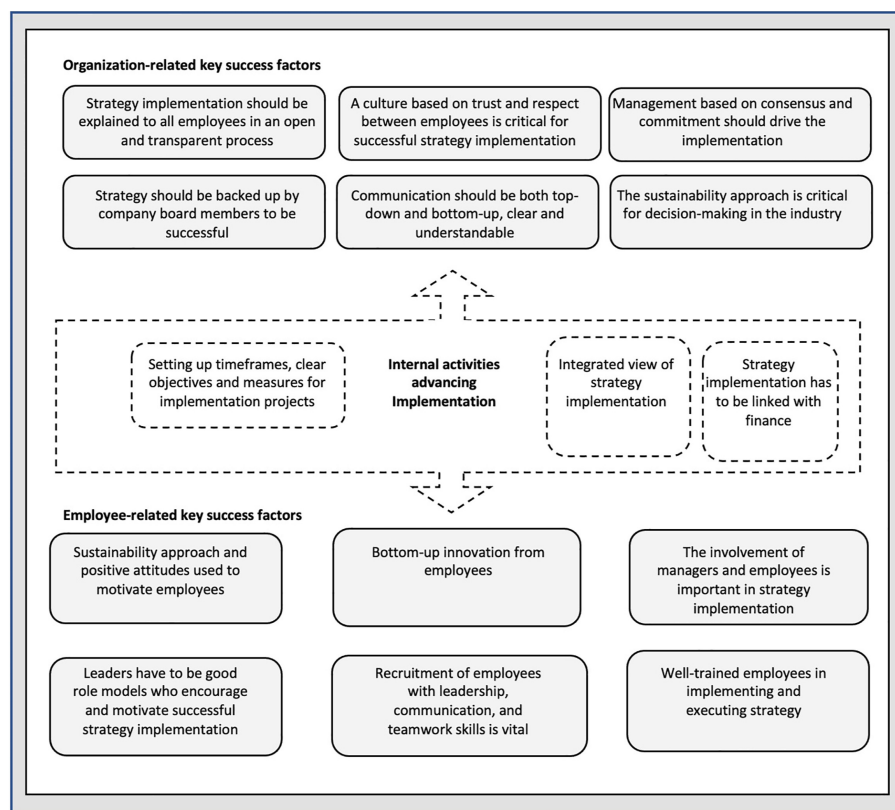


Figure 2.  
Data-analysis  
structure

Source(s): Data-analysis structure adapted by the author (Manninen and Huiskonen, 2022, p. 4)

5. Discussion

Implementing strategy should focus on more than just the implications of one component while ignoring other KSFs during implementation, necessitating a comprehensive and integrated perspective (Atkinson, 2006). The 5Ps model (Pryor *et al.*, 2007) emerges as a comprehensive framework, offering a holistic lens focusing on organization’s purpose, processes, principles, people and performance. The findings underline that identified KSFs should be considered in advance and during strategy implementation. As shown in Figure 3, internal activities maintain essential factors shaping internal company conditions and an integrated approach to strategy implementation. These factors encompass specific, tangible performance metrics (Brenes *et al.*, 2008; Sabourin, 2015) characterized by well-defined



**Figure. 3.**  
Framework for  
integrated strategy  
implementation in the  
fisheries industry

**Source(s):** Framework for integrated strategy implementation in the fisheries industry adapted by the author (Manninen and Huiskonen, 2022, p. 5)

timeframes and precise objectives (Aaltonen and Ikävalko, 2002) aligned with the organization's overarching purpose.

Moreover, the framework underscores a purpose-driven and sustainable emphasis at organizational and employee levels and involves actively engaging all employees in the implementation process through sustainable motivation (Johannsdottir *et al.*, 2015) and aligning corporate strategy with the SDGs (Johannsdottir and McInerney, 2018). On the organizational level, processes focus on fostering clear and transparent communication (Köseoglu *et al.*, 2020) throughout the organization's hierarchical structure (Schaap, 2006). Simultaneously, on the employee-related level, there is an emphasis on encouraging bottom-up innovation as a fundamental competency (Weiser *et al.*, 2020). Principles on the organizational-related level are based on support from board members (Brenes *et al.*, 2008), seeking consensus and commitment while implementing strategy (Günther, 2016; Köseoglu *et al.*, 2020) and enhancement of culture based on respect and trust (Malkamäki *et al.*, 2021). On the employee-related level, the principle of involving managers and employees emerges as vital in ensuring the success of strategy implementation (Cadwallader *et al.*, 2010; Hambrick and Cannella, 1989; Köseoglu *et al.*, 2020). The people-centric focus, especially on the employee-related level, revolves around having motivational leaders as role models capable

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of driving successful implementation. Additionally, recruiting well-trained employees with adept leadership, communication and teamwork skills, possessing the necessary knowledge and skills for effective strategy implementation, becomes a cornerstone (Brenes *et al.*, 2008; Crittenden and Crittenden, 2008; Sorooshian *et al.*, 2010).

While tailored for the fisheries industry, this framework transcends its specificity and could be applicable across industries. Its holistic approach encapsulates the intricate interplay of purpose, processes, principles, people and performance, making it a valuable guide for strategic implementation in varied organizational contexts.

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### *5.1 Organization-related key success factors*

Most interviewees underscored the importance of explaining the strategy process to all employees, which are consistent with previous research findings (Köseoglu *et al.*, 2020) and the study of Günther on KSFs in implementing sustainability strategies (2016). All comments and requests from employees should be answered and by doing so, the overall understanding of the need for strategic change grows. Interviewees mentioned the company culture as an important success factor, as culture based on respect and trust facilitates implementation through critical debate, strong working relations and innovation. Earlier studies have shown that for successful strategy implementation, organizational culture must align with business strategy (Brenes *et al.*, 2008) and flexible cultures are more positively associated with strategy implementation than market or hierarchy cultures (Ahmadi *et al.*, 2012). A recent case study of a Finnish grocery retail company concluded that employee trust could improve engagement in strategy implementation (Malkamäki *et al.*, 2021).

Interviewees perceived the need of management consensus and commitment as a drive for successful implementation. Still, these findings align with the results of Köseoglu *et al.* that strategic consensus is vital in the implementation process (2020). Consensus among managers is perceived as necessary in communicating strategic decisions down the hierarchy, which is in line with (Günther, 2016) and earlier findings (Aaltonen and Ikävalko, 2002; Alamsjah, 2011). Although the CEOs perceived consensus as vital in formulating and implementing strategy, the interviewees believed it only applied to top management and not general employees.

All interviewees agreed communication is vital in implementing strategy and must be clear and understandable for employees, which interlinks with content being explained in an open and transparent process. In all cases, the communication in the companies was top-down. These findings contrast with Schaap, who found that frequent communication in both directions can enhance consensus through shared attitudes and values (2006). Schapp's findings align with Köseoglu *et al.* (2020), Obeidat *et al.* (2017) and Günther (2016), where communication was an important KSF for implementing strategy in the hotel and food industries respectively. More bottom-up communication could therefore benefit fisheries companies in implementing their strategy.

A few interviewees highlighted the importance of board members supporting strategy implementation, which aligns with the findings of Brenes *et al.* (2008), where board member support scored as the highest success factor.

### *5.2 Employee-related key success factors*

Interviewers perceived the involvement of managers and general employees in executing strategy as essential in implementing process improvements and strategic decisions; this opinion is supported by Günther's notion of involving employees in preparing and planning implementation (2016). In practice, involvement of managers took place in the companies, but few of the general employees were directly involved. Hambrick and Cannella found that broad employee participation stimulates strategy formulation and improves the quality of strategy implementation choices (1989). In their study of the hotel business in Hong Kong,

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Köseoglu and his colleagues uncovered that managers perceived employee involvement as one of the most important success factors implementing strategy (Köseoglu *et al.*, 2020).

Research on roles and consequences in strategic implementation has been conducted (Hendry *et al.*, 2010). For example, front-line employee involvement in service innovation has been studied, and the findings suggest that employee participation is critical for successful implementation (Cadwallader *et al.*, 2010). Brenes *et al.* found out that 98% of the most successful companies in Latin America implementing strategy considered the active involvement of a significant number of top-level staff to be imperative for successful implementation (2008). Additionally, the study of the hotel industry by Köseoglu *et al.* (2020) showed that factors like employees' willingness to change could influence strategy implementation; namely, the higher the willingness, the more successful the implementation.

The Icelandic fishing industry has developed towards increased environmental stewardship in fishing and processing and has succeeded in cooperation with the government to build sustainable fishing stocks and increase the utilization of the products (Gunnlaugsson *et al.*, 2020; Gunnlaugsson and Valtýsson, 2022). Most of the interviewees referred to sustainability in catching, harnessing and producing products in their marketing and sales strategy. However, this focus was predominantly limited to the economic dimensions of SDGs, particularly SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry Innovation and Infrastructure) and SDG 12 (Responsible Consumption and Production). Similarly, the ecological dimension represented by SDG 14 (Life Below Water) and SDG 13 (Climate Action) has received some attention, as these goals are fundamental to thriving marine ecosystems and therefore the future of the fishing industry. Conversely, there has been less emphasis on the societal dimensions of SDGs, with only SDG 5 (Gender Equality) and SDG 7 (Affordable and Clean Energy) being addressed by the companies included in the study, where two companies highlighted SDG 5 and one company focused on SDG 7. The context of SDG 1 (No Poverty) and SDG 2 (Zero Hunger) were neither brought up by the interviewees, nor on the companies' website or the website of the Federation of Icelandic Fishing Industry (SFS). These findings are in line with the findings of other researchers who found out that most organization faced challenges in implementing SDGs into their overall strategy (Berrone *et al.*, 2023) and should focus on their core business when implementing sustainability into their corporate strategy (Johannsdottir and McInerney, 2018).

Nevertheless, the Icelandic fishing industry has exhibited superior performance compared to fishing industries in neighboring countries in recent years (Knútsson *et al.*, 2016) resulting in robust industry financial health (Gunnlaugsson and Saevaldsson, 2016). Furthermore, the industry has generated sizeable resource rent, averaging around US\$380m per year since 2008, which accounts for approximately 17% of the fishing industry's export value (Gunnlaugsson *et al.*, 2020). Although there has been progress in terms of sustainability of the fishing stocks, the societal aspects of the SDGs have received insufficient attention, with no direct link established to issues of hunger and poverty. Consequently, there is an opportunity for Icelandic fisheries companies to further integrate the societal dimension of SDGs policies into their corporate strategies and core businesses (Johannsdottir and McInerney, 2018), in light of the industry's financial strength and efforts to continually align with broader sustainability goals.

Most of the interviewees stated that leading by example is a critical factor and believed leading with a peer management approach, positive attitude and meaningful sustainable mission may motivate managers and employees in implementing strategy (Johannsdottir *et al.*, 2015). Barrick *et al.* (2015) showed a particular type of CEO leadership style can increase engagement in strategy implementation based on psychological meaningfulness, safety and availability.

Moreover, the majority of the companies have demonstrated their commitment to CSR by endorsing the SFS social responsibility policy for the Icelandic fishing industry. Although

this policy adheres to the principle set forth by the SDGs, it lacks guidelines regarding the implementation of specific SDGs it addresses. Additionally, the majority of the companies have independently developed CSR policies aimed to integrate certain SDGs. As displayed in [Table 2](#) the companies are focused on specific SDGs like SDG 14 (Life Below Water) in their policies but are missing out on potential synergies, or trade-offs ([Cook et al., 2019](#)), which have been established by ([Diz et al., 2019](#)) particularly social aspects such as those addressed in SDG 1 (No Poverty) and SDG 2 (Zero Hunger) as fisheries contribute to global food security, nutrition and healthy diet as implementation of these SDGs would contribute to improved livelihoods ([Smallhorn-West et al., 2022](#)). In addition, the companies could improve their CSR policies by establishing clear and specific objectives and measures while concurrently aligning and integrating the SDGs into their corporate frameworks and policies ([Johannsdottir and McInerney, 2018](#); [Manninen and Huiskonen, 2022](#)).

Interviewees maintained that an effective way to innovate and unlock the best solutions is to engage general employees in the implementation process. General employees are usually closest to the problems and are often willing to innovate to improve operations. As mentioned previously, [Weiser et al. \(2020\)](#) documented how strategy implementation research has moved from the pioneering structural controlled view to a more adaptive view which sees strategies emerging bottom-up through the proactive involvement of all employees. In this study of fisheries, we predominantly observed the first top-down controlled view, although it was perceived as important by the CEOs to engage general employees in the process.

The interviewees recognized specific skills and appropriate employee training as vital in the implementation process. Successful implementation requires employees that are good at teamwork and leading projects, with good communication skills and the ability to analyze data. Training on the ground had to have taken place before employees were sent out to execute. The interviewees stated that, at the same time, it was challenging to attract well-educated people to work in the companies. A lack of resources, including time, skills and training, has been identified in earlier research ([Alamsjah, 2011](#); [Alexander, 1985](#)) in addition to language and communication problems, with a multicultural workforce, lack of expert skills and education in the fishing industry ([Vigfusson et al., 2023](#)). The study of [Köseoglu et al. \(2020\)](#) identified that an appropriate level of training and teamwork skills are needed in the hotel industry. Resource availability was one of the highest success factors affecting implementing strategy in pharmaceutical companies ([Obeidat et al., 2017](#)).

### *5.3 Internal-related key success factors*

Most interviewees were familiar with the concept of the balanced scorecard ([Kaplan and Norton, 1996](#)). They agreed that an integral part of any successful implementation was to have an action plan with clear, measurable and prioritized objectives with specific timeframes for management to gauge progress, maintain control and regularly follow-up. However, most companies studied had yet to have such action plans. In a study carried out in 300 companies in Latin America, the most successful companies emphasized that periodic control by top management and a systematic strategy were among the five most important components in implementing strategy ([Brenes et al., 2008](#)). These findings are in line with results in the hotel and pharmaceutical industries, where clear action plans and regular control were seen to be a critical part of successful implementation ([Köseoglu et al., 2020](#); [Obeidat et al., 2017](#)).

During the few decades, the top-down structural approach has been used as the primary approach to implementing strategy through formal structures, plans, incentives and controls ([Weiser et al., 2020](#)). All of the interviewed fishery CEOs used a top-down structural approach both when formulating and implementing strategy. Research has shown that top-down culture can be an opposing force to successful strategy implementation ([Crittenden and Crittenden, 2008](#)).

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One KSF for implementing strategy is linking strategy and strategic projects with finance (Brenes *et al.*, 2008). Research has shown that a lack of financial support can undermine the strategy (Pella *et al.*, 2013). Some interviewees said it was important to link strategy with finance, although half of the fisheries were unable to link financial measures with specific strategic projects or strategy implementation.

#### 5.4 Summary of discussion

This empirical study had the aim of synthesizing identified KSFs into a conceptual framework for strategy implementation and answering three questions:

- Q1. What KSFs do Icelandic fishery chief executive officers use when implementing strategy?
- Q2. Which of the UN SDGs are important for strategy implementation in fisheries companies?
- Q3. If and how can identified KSFs be integrated into a conceptual framework for strategy implementation?

The findings are consistent with the KSFs identified in earlier research. First, by engaging and involving all employees in taking part in the implementation process. Second, by enhancing bottom-up innovation and communication. Third, through alignment of the corporate strategy and the SDGs and fourth by following rigorous action plans with clear, measurable and prioritized objectives and timeframes for the managers to oversee.

The findings on industry-specific factors are in line with comparable research conducted in the pharmaceutical sector and the hotel industry (Köseoglu *et al.*, 2020; Obeidat *et al.*, 2017). Still, they differ in two respects. First, CEOs' motivation and leadership were perceived as more important when implementing strategy by companies within the fishing industry. Second, external competition was not perceived to influence implementation in the industry. The findings suggest the fisheries industry could improve strategy implementation by first enhancing organizational-related factors like communicating strategy and strategic issues up and down the hierarchy, building up culture with open channels for participation and activating its board members in strategy implementation. Second, the companies could utilize employee-related factors further, involving all employees in the strategy implementation process by encouraging bottom-up innovation. Third, by moving from the top-down structural approach implementing strategy and adopting a more integrative approach using all of its human resources, the companies may be better positioned to gain increased competitive advantage. Fourth, enhancement to the CSR policy of the companies can be achieved through the incorporation and further alignment of the SDGs goals, specifically SDG 1 of No Poverty and SDG 2 of Zero Hunger along with SDG 14 of Life Below Water. Moreover, closer integration of these goals with the companies' CSR policies can be accomplished by establishing clear objectives and measures. As such, fishery companies can make a concerted effort to decrease poverty and hunger on a global scale. The findings are in line with earlier research and help build on the shortage of research on strategy implementation in the fisheries industry. By leveraging these factors, fishery companies can create a favorable environment to drive performance forward.

## 6. Conclusions

Research on KSFs in implementing strategy has been limited. Based on empirical findings, research on industry-specific factors influencing strategy implementation is even more

limited. This empirical study identifies KSFs when implementing strategy in the fisheries industry as perceived by Icelandic fisheries CEOs and contributes to current debates on KSFs implementing strategy in various industries.

The main contribution of this article is uncovering fishery industry-specific KSFs and presenting a framework for integrated strategy implementation. The research findings indicate that CEOs can improve strategy implementation in their companies by: involving all employees in the strategy implementation process; enhancing bottom-up innovation and communication; using rigorous action plans with clear, measurable and prioritized objectives; and determining specific timeframes for management oversight. Furthermore, companies can improve their strategy implementation by incorporation and aligning the social-related SDGs with their core business and CSR policy. Clear objectives and measures are essential for achieving these CSR goals, thereby making a meaningful impact in reducing poverty and hunger on a global scale.

This can have practical implications for fisheries. There is a need for more studies on KSFs implementing strategy in various industries and comparative studies between industries, particularly studies grounded in empirical data. Further research can help managers overcome failures and understand what's needed for successful and sustainable strategy implementation.

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## **Article 4**

### **Integrating resource-based and market-based views in the Icelandic fisheries Industry – CEO perspectives**

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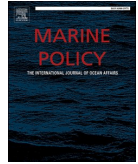
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# Integrating resource-based and market-based views in the fisheries industry – CEO perspectives

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## ABSTRACT

Icelandic fisheries have been driven by access to natural resources, focused on fishing, processing, and selling products to wholesalers. The purpose of this study is to identify competitive advantage in the industry and find out how it is evolving within the perspective of resource-based view (RBV) and market-based view (MBV). In addition, this study is aimed at providing empirical evidence that can improve the understanding of competitive advantage in RBV and MBV perspectives in academic research. This study involves qualitative case studies based on in-depth elite interviews with chief executive officers (CEOs) of Icelandic fishing companies holding around 50% of the allowable national fishing quota. The findings suggest a transition from an RBV to an MBV to strengthen the competitive advantage of the industry. Key findings stress the significance of growth strategy, enhancing integration, value chain control, and brand development within the MBV perspective. Furthermore, the identified competitive advantage integrates strengths from the RBV with a market perspective for the fisheries industry. By considering these research views jointly, the understanding of companies' strategic behaviors and outcomes in a specific industry is expanded. This study offers, in addition, actionable insights and recommendation for top management and stakeholders in the Icelandic fishing industry, highlighting a shift from RBV to MBV strategies and underscoring the importance of internal resource integration for sustaining competitiveness. Moreover, the study proposes a model showing the prospective competitive advantage of the industry. Additionally, it contributes to the ongoing discussion on competitive advantage and provides valuable industry-specific insights. Limitation of this study is that it may not fully represent the entire fishing industry in Iceland and relies exclusively on the perspectives of CEOs.

## 1. Introduction

A central theme and purpose of strategic management is the continuous attempt to explain why some companies outperform others [1]. The concept of performance, however, turned out to be too ambiguous both in conceptual and empirical terms and was consequently replaced by some scholars by the concept of competitive advantage [2,3], studied by various scholars [4–7]. Competitive advantage can materialize in different forms like economies of scale [8], which allows companies to enjoy lower costs than competitors, economies of scope [9] with product line breadth supply [10], or vertical integration of the value chain [11]. Other competitive advantages are rooted in unique business models [12], internal processes [13], or other

types of core competencies [14]. There are two most dominant perspectives defining competitive advantage, the structural perspective based on the industrial organization (IO) view from Bain [15] later by Porter's theory on how competitive forces shape strategy in industries [1,6] and later earmarked as the market-based view (MBV), and the resource-based view (RBV) researched by [16,17] which developed as a complement to the MBV [18].

Fisheries and aquaculture are important global industries producing a record 214 million tons of food in 2020, with an estimated 58,5 million people employed and around 600 million livelihoods dependent at least partly on the industry [19]. Fisheries contribute to nutritional needs, improve food security, decrease poverty, offering important livelihoods to families [20]. The amount of fish and ocean products destined for

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human consumption was 9.9 kg per capita in the 1960s, increased to 20.2 kg per capita in 2020, with the forecast of 21.4 kg per capita for 2030. The growth of the industry comes mainly from aquaculture creating about half of the total industry revenue in 2020 [19].

Despite the increase in consumption of fish and ocean products, resource availability continues to decline due to over-exploitation of fish resources but in 2020 around 35 percent of the global fishery stocks were biologically unsustainable [19]. In this context, it is worth mentioning the United Nations Sustainable Development Goals (SDGs), founded in 2015, which underline the huge challenges of ending poverty, improving food and nutrition security, and protecting natural resources, biodiversity, and ecosystems [21]. An important part of reaching UN SDGs aims is reflected in SDG 14 Life Below Water which aims to conserve and sustainable use of the ocean, seas, and marine resources [21], thus of relevance for the fishing industry and issues relevant to its operation. These include increased ocean acidification impacting species, like oysters, corals, some fish species, and seaweed [22]. Ocean pollution and waste released to air and land by human activity is, furthermore, the largest cause of disease on a global scale, responsible for nine million premature deaths every year [23]. In addition, fisheries [24] and marine transportation still uses mostly fossil fuels [25].

Ensuring the long-term sustainability of fishing stocks holds paramount significance for the fisheries industry. Individual Transferable Quota systems (ITQ) have been used to implement and regulate catch levels and oversee demersal fisheries [26–28]. As posited by Chu [29], the primary objective behind adopting these systems is the promotion of sustainable fishing practices and restore the fish stocks. These concerted efforts have yielded positive outcomes, particularly within the context of Icelandic demersal fishing stocks, which have exhibited growth trends since 2000 [30]. Furthermore, a study conducted by Vigfusson et al. shows a shift toward an increased emphasis on sustainability as a pivotal determinant of success in the industry [31]. Part of the sustainability development and future empathizes is the recent innovation transformation in the industry revolves around generating added value by utilizing fewer fish resources more fully, at the same time fostering the development of sustainable global fisheries [32,33].

Iceland is positioned at the 19th rank globally, contributing to approximately 1 % of the total global fishing production output, in the broader context of a worldwide maritime capture-producing country, but Iceland is listed and recognized as a notably influential nation, as reported by the United Nations Food and Agriculture Organization [34]. Iceland established two fundamental systems managing fisheries and stock resources in the last century. The first was a total allowable catch (TAC) system in 1968 following a collapse in herring stock due to overfishing [35]. The second, the ITQ system was set up in 1984 to limit the allowable catch in cod and other critical demersal species. It was implemented in 1984 after a cod fisheries' overfishing crisis [26]. According to Gunnlaugsson and Agnarsson [36], implementing a management system within fisheries characterized by overfishing and overcapitalization should lead to efficiency gains over time. Furthermore, the same study underlines that introducing the ITQ has led to higher revenue and profits in the fisheries industry, lower costs, smaller fleets with fewer and bigger vessels, and more sustainable fishing stocks [36]. Other studies have indicated that the ITQ system has adverse effects on smaller fisheries and their associated communities [37]. Small-scale fisheries perceive ITQs as prioritizing economic efficiency and capital accumulation over the preservation of fish stocks, which adversely affects their operations. Additionally, non-ITQ fisheries do not present realistic opportunities for upward mobility for newcomers. This dissatisfaction stems from their lack of power in the decision-making process. Consequently, small-scale fisheries advocate for a governance system where authority is devolved to regional control [38]. In addition, the rigidity of the ITQ system can hinder regulatory authorities from achieving ecosystem-based fisheries management (EBFM) goals, such as preserving bycatch species [39] which can be essential for aligning

fisheries with sustainability objectives [40].

This case study is based on primary data collected through elite interviews [41] with CEOs from Iceland largest fishing companies that collectively hold 49.9 % of the 2023/24 allocated quota [42], and secondary data from relevant literature, governmental reports, surveys, websites, and media. It is part of a larger body of comprehensive research on Icelandic fishing companies in which original evidence is presented based on different focuses and approaches. This study holds paramount importance as it delves into the important factors that underpin competitive advantage within the Icelandic fisheries industry, as perceived by chief executive officers (CEOs). The purpose is to identify competitive advantage in the industry and find out how it is evolving from the RBV and MBV perspectives.

To fulfill the aim, the study intends to answer the following questions:

1. How is competitive advantage in the Icelandic fishing industry evolving?
2. How can empirical evidence improve the understanding of competitive advantage from the RBV and MBV perspectives in academic research?

The structure of the article is as follows: Section 2 provides theoretical background and the literature context. Section 3 explains the background of Icelandic fisheries and the study context. Section 4 describes the research method, selection criteria for companies and interviewees, and the data analysis process. Results are presented in Section 5 and the discussion in Section 6. Finally, the conclusion and limitations of this research are discussed in Section 7, including suggestions for future research.

## 2. Theoretical background

Competitive advantage is a key concept and a central theme in strategic management [43]. What factors affect and give rise to competitive advantage and sustain it has been discussed and debated, and various scholars have set forward different definitions of competitive advantage [44]. Rumelt [45], for instance, stated that the central theme that emerged is value creation, however, there is no agreement on how the value is distributed to the parties involved, whom and when. The RBV has been dominant and one of the most successful theoretical perspectives in the field of strategic management together with the five-forces model used as theoretical perspectives in MBV [46]. The RBV is mostly referred to in the literature as a specific theory [2] but some scholars refer to it as a framework as it provides a structural approach for analyzing Companies resources and capabilities [47] and as a perspective that emphasizes the importance of internal resources in achieving competitive advantage [48] and last as a model and then referring to Barney VRIO model [49]. The MBV is most often referred to by scholars as a perspective as it offers a viewpoint or lens of understanding and achieving competitive advantage [12] but also as a model or framework referring to the Five Forces Model of Porter [50]. This article will utilize the abbreviations RBV and MBV, with the term "perspective" applied in alignment. The term "perspective" is specifically chosen due to its common usage in scholarly discussions of RBV and MBV for analyzing and understanding the achievement of competitive advantage.

Research indicates that internal and external factors are important for competitive advantage [12,51–53]. There has been an active debate among scholars about how much internal resources [54] versus external factors [6,55] matter regarding competitive advantage. It has been stated that the RBV disregards the nature of the market and other external factors and focuses only on internal factors [18]. The traditional assumptions of fixed company resources in MBV and fixed consumer demands and valuations in RBV are now considered outdated [56]. Maier and Remus found out that external and internal factors should not

be separated, meaning that a fit or balance should consequently be found [57]. Although these fundamental perspectives differ in approach, both offer complementary viewpoints for developing strategic theory and contribute to the literature on competitive advantage [58,59].

Attempts have been made by Srivastava et al. [53] and Steininger et al. [12] to bridge associations between the RBV and the MBV and advance further integration of these perspectives and Chen et al. compared and contrast external strategic behavior of a company and the RBV and found out that some joint elements of these perspectives are interlinked [60]. Srivastava et al. identified links between RBV and marketing factors creating and maintaining customer value and developed a conceptual framework facilitating possible further integration of RBV and marketing [53]. Steininger et al. used content analysis to study different business models from the RBV and MBV perspectives. Concepts like value configuration, core competency, and partner network demonstrated strong or very strong connections to RBV. In contrast, target customer, revenue model, value proposition, distribution channels, relationships, and cost structure are strongly or moderately connected to MBV. These findings support a business model that integrates both RBV and MBV perspectives by linking these concepts [12] supporting the findings of Hedman and Kalling [61].

### 2.1. Resource-Based View

RBV is rooted in the early research of Chandler [62] and Ansoff [63], which categorized company's internal resources into physical, monetary, and human. Later, researchers included more detailed descriptions of organizational resources like skills, knowledge, and technical know-how [64]. The RBV developed, and researchers provided a specific perspective on competitive advantage. The basic idea of RBV is that the company's unique, inimitable, and immobile resources are the source of competitive advantage [65,66]. One of the main criticisms of RBV is that it has had difficulties in defining the concept of resources [56,67]. Consequently, number of marketing scholars have not adopted RBV [53].

Grant [68] introduced his version of RBV, which he called capability-based view (CBV), arguing that capabilities are the source of competitive advantage as capabilities are the power or ability to use resources. A new model was developed based on four conditions that must underlie companies competitive advantage in a specific industry, these are superior resources, ex-post limits to competition, imperfect resource mobility, and ex-ante limits to competition [44]. Since then, other offspring of RBV have developed, like the natural-resource-based view (NRBV) which states that management theory has excluded the constraints imposed by natural environment on companies and their competitive advantage and capabilities [69] the theory proposes interconnected strategies of pollution prevention, product stewardship [70, 71] and increased sustainable development [72] in line with UN SDGs [21]. The knowledge-based view [73] suggests that knowledge is the most important and valuable resource in creating competitive advantage. Varadarajan emphasized that customer information-based resources can lead to competitive advantage and labeled it as, a market resources-based view of strategy [74] adding further to the building of RBV. The RBV has been criticized for having a static perspective [75] and viable as a scientific theory [18] although recent RBV research has been focused on how companies reorganize their resources after a business is affected by shock like a steep industry decline [76].

The RBV has been critical towards external analysis applied by the MBV which assumes that companies within an industry are identical and have all strategically relevant resources they control and pursue, and therefore, will heterogeneity developed by new entrant be short-lived as the resources to implement strategies are highly mobile [16]. They advocate for the RBV, which places the company at the center of strategy-making as empirical evidence, such as Makhija (2003) indicates that a company's resources are crucial in determining its value in volatile market conditions.

Barney's perspective [16,65] focuses on the uniqueness of a company's resources as a source of competitive advantage. He suggests that if a company possesses internal resources and capabilities that are valuable, rare, inimitable and exploited by the organization (VIRO Model see Fig. 1), it can achieve sustained competitive advantage [16]. The value element in Barney's model (1991) assesses whether a particular resource or capability adds value to the company's products or services. A resource or capability must enable the company to exploit opportunities or mitigate threats to be valuable. Rarity examines how rare or unique the resource or capability is within the industry or market. Resources that are common or readily obtainable by competitors are less likely to provide a sustained competitive advantage. Imitability assesses how difficult it is for competitors to replicate or imitate the resource or capability. Resources that are difficult to replicate provide a more durable competitive advantage. Finally, the organization (or company as used in this article) needs to be effectively organized and able to leverage the resource or capability to its advantage. Even if a resource is valuable, rare, and difficult to imitate, the company must have the organizational structure and processes to exploit it [16]. In other words, a company gains a competitive advantage when its actions in an industry or a market create economic value that goes beyond normal expectations due to the unique resources it employs [77].

### 2.2. Market-Based View

Competitive strategy involves establishing and defending a strategic position in the marketplace and though the competitive strategy is viewed as the positioning of the company in the marketplace it is often known as the market positioning view or the market-based view (MBV) [59]. The MBV considers external factors as the primary drivers for company performance [3]. Accordingly, proponents of this view argue that a company positioning itself correctly in the market will gain a competitive advantage [6,15]. MBV posits that industry-specific factors and external market conditions are the primary determinants of a company's performance. According to this perspective, competitive advantage is derived from market conditions, the foundation of a company's value. Consequently, formulating an effective corporate strategy necessitates thoroughly understanding and integrating these external factors. [1,78]. The strategic position of a company in the market is a unique set of activities that are different from its rivals and the strategy employed is viewed in context to the industry in which the company operates in [1,79]. Most MBV activities can be sources of competitive advantage, like general market orientation [80], industry trends [81], brand recognition [82] products [83] and services differentiation [84].

Competitive advantage is a key determinant of superior performance [6,85], but a company can outperform its competitors contingent upon its capacity to establish and propose distinct propositions in the market space, supposing that the company can offer something different that it can preserve and sustain. In that case, it creates greater value at a lower cost or a comparable value to the customer, achieving both objectives. Increased profitability will follow, and delivering greater value allows the company to charge higher unit prices, leading to efficiency and lower average unit costs. Competitive advantage grows from the value it can create for its customers that exceeds its cost. Porter treats competitive advantage as an outcome of positioning and should be pursued as an end in itself [1].

The MBV strategy must be seen in the context of the industry. Concerning that approach, Porter introduced his Five Forces model of external environment assessment [6], see Fig. 2. The model assesses rivalry from existing competitors, the threat of new entrants, supplier bargaining power, buyer bargaining power, and threats of substitutes. The model considers the impact of competitors on a company's pricing strategy. A higher number of competitors reduces a company's bargaining power. When there are many competitors, suppliers, and buyers tend to seek better deals from competing companies that offer more favorable terms or lower prices. The company's influence is contingent

| Is a resource or capability ... |       |                    |                            |                                 |                      |
|---------------------------------|-------|--------------------|----------------------------|---------------------------------|----------------------|
| Valuable?                       | Rare? | Costly to imitate? | Exploited by organisation? | Competitive implications        | Economic performance |
| No                              | –     | –                  | No<br>↕<br>Yes             | Competitive disadvantage        | Below normal         |
| Yes                             | No    | –                  |                            | Competitive parity              | Normal               |
| Yes                             | Yes   | No                 |                            | Temporary competitive advantage | Above normal         |
| Yes                             | Yes   | Yes                | Yes                        | Sustained competitive advantage | Above normal         |

Fig. 1. VRIO Model.  
Source: Barney, 2002, p. 173.



Fig. 2. The Five Competitive Forces That Shape Strategy.  
Source: Porter, 2008, p. 27.

upon the threat posed by new market entrants. When the time and financial resources necessary for new competitors to enter and effectively compete in the market are minimal, the established company position becomes more vulnerable [6].

Within the Five Forces model, supplier power, buyer (customer) power, and threat of substitutes are vital [6]. Supplier power depends on factors such as the number of essential input providers, the uniqueness of these inputs, and the costs associated with switching to an alternative supplier, customer power in lowering prices is known as their bargaining power. A smaller, more influential customer base gives customers greater leverage to negotiate lower prices and better terms. Conversely, a company serving a diverse clientele with many smaller, independent customers can more effectively maintain higher prices, improving overall profitability. Substitutes, alternative goods, or services that can replace a company's offerings pose a potential threat. Companies offering unique products or services without close equivalents enjoy a stronger position, allowing them to increase prices and negotiate favorable terms. Conversely, when substitutes are readily available, customers can opt for alternatives, potentially weakening a company's bargaining power [6].

Critics of the MBV argue that focusing solely on market positioning is insufficient and that the company's internal resources should not be treated as a "black box" [77]. On the other hand, the MBV argues that the success of a company is not determined by its internal characteristics, but depends on the environment it operates in and the industry structure and the opportunities for a sustained competitive advantage lie within the industry structure and the value chain management [85]. Very few

researchers have made attempts to develop the Five forces model of Porter [86] although number of them have criticized the model for being frozen in time and missing out on changes in the competitive environment and is mostly useful for textbooks but less for real-life cases [87] and bigger companies [88]. Critics have also described the model as just providing a snapshot of industry competitive forces at a particular point and do not easily account for dynamic changes in industries over time, such as the threat of digitalization, exposure of globalization and innovation changes and suggested that these additional forces should be added to the Five Forces model [87] and for difficulty in operationalization [89].

2.3. Industry studies

A few studies have been conducted in specific industries using RBV and MBV as theoretical perspectives for assessing competitive advantage [72,90–93]. In a study of the source of competitive advantage in family business companies, multiple interviews with family owners and managers suggested that intangible and other unique resources contribute to competitive advantage. These include resources like strategic focus, customer orientation, relationships, and operational efficiency [92]. In the case of startup companies study findings suggest that the importance of time-based competition has to be recognized and that the resource management process is important as it embodies learning and resourcefulness supporting competitive advantages [93]. Peter, Siller, and Matzler found out that in their study of alpine tourist destinations in Italy, the MBV management perspective requires larger financial resources to create an effective brand image than the RBV perspective. In the same study authenticity as a resource in the RBV management perspective led to more sustainable strategies and was better suited to nice market products [90]. Khanra et al. found out in their research applying the RBV on sustainability aspects that green innovation could become a valuable company resource and competitive advantage as well as contribute to sustainable development and the SDGs [72]. Other studies have been conducted on specific resources like customer information [74] and at least one attempt has been made to compare RBV and MBV by explaining changes in the privatization of state-owned enterprises in the Czech Republic. The study revealed that RBV variables explained better company performance than MBV variables in a changing environment [50].

Most studies on competitive advantage in fisheries have focused on the Norwegian and Icelandic fisheries. Bertheussen [94] studied sustained competitive advantage of the Norwegian pelagic harvesting and processing industry concerning industry-specific institutional frameworks. The study revealed that harvesters achieved close to twice the return on assets than the processors based on a sector-specific institutional framework. Moreover, the fish input cost in form of quota is free for the harvesting industry. In another study comparing the performance of mackerel exports from Norway and Iceland to international markets, the results showed that Norway achieved higher export prices consistently over time due to the biological conditions of the fish product when

caught [95]. Nilssen [96] studied competitive advantage in the fish processing industry with high-quality fresh fish in Norway, and found out that some companies outperformed their competitors based on choosing a large proportion of fresh fish cached by hook gear fishing gear. Bertheussen also studied institutional and financial entry barriers in fishery and concluded that legal and financial barriers for new entrants in Norwegian fisheries exit [97] and the origin of the resource rent in the industry is created by fishery management institutions and the harvesting rules if companies get free or cheap access to the fish resources [98] and on how value creation in Norwegian fisheries is dependent on the natural resource owner and the fisheries management system [99]. Quartey addressed the knowledge-based view of sustainable competitive advantage from a fishing industry perspective in Australia. The findings suggest the strategic, organizational, and commercial influence of knowledge on establishing competitive advantage and argue that knowledge can be the most important source of sustainable competitive advantage for the industry [91].

The Icelandic ITQ system has been studied by some scholars and from different perspectives connected to the notion of competitive advantage, like its effectiveness and performance [100,101], wealth creation in the industry [30,102], concentration and consolidation of quota across species [103], profitability, and resource rent [36,104], financial performance [105], value chain analysis [106,107] and sustainability opportunities in Icelandic fisheries [108]. In addition, several market-based management instruments have been applied to analyze objectives to improve fisheries management, like economic, biological, social regional, and political [109] and how to protect marine ecosystem services in wild-caught fisheries [110]. Table 1 below summarises studies on specific industries using RBV and or MBV as theoretical perspectives.

3. Icelandic fisheries

The Icelandic fisheries' management system has undergone various changes since the uniform ITQ system was implemented in 1990, which included nearly all of Iceland's fisheries [100]. The uniform ITQ system is based on individual transferable quotas, and all fisheries are subject to vessels' catch quotas. The quotas represent shares in the TAC and are transferable [101]. The introduction of transferable quotas has transformed Icelandic fisheries, allowed quota holders to buy and sell fishing quotas in the fisheries management system and strengthened the user rights in fisheries [111,112]. However, the most debated outcome is the consolidation of fishing rights, which have been heavily disputed and criticized after more than three decades of experience within the ITQ system. The largest fishing company in the fishing year 1990/1991 held 4.3 % of the total allocated quota, but the number had risen to 10.2 % in 2023. The share of the five largest companies of the total allocated quota rose from 14 % in 1992, to 31.5 % in 2016 and 33 % in 2023, respectively [42]. More precisely, fifty of the largest fishery companies in Iceland hold 91.3 % of the total fishing quota allocated by the government in 2022–23, while the remaining holders are small operators [42].

The Icelandic ITQ system has had significant implications and consequences leading to the closure of fish processing factories, the scrapping of fishing vessels, while the number of jobs from 1989 to 2016 decreased by nearly half [36]. In addition, improved technology in the industry has resulted in more automation, leading to a reduction in number of fishing and processing personnel, while the need for specialized employees has grown [106,113]. Consequently, coastal fishing communities have lost up to half of their population since the early 1990s [114]. This evolution within the Icelandic fisheries was met with disapproval by several politicians, and legislative action was taken in 1998 when so-called quota ceiling was introduced. Under this legal provision, individual companies were subjected to a maximum allowable ownership threshold set at 12 % of the total quota share, expressed in cod-equivalent tons [104]. Most of the fish caught by the companies is sold to wholesalers or retailers, meaning that general brand recognition

Table 1  
Industry studies focused on RBV and MBV as a source of competitive advantage.

| Study                                  | Industry                             | RBV - a source of Competitive advantage                                                                                                                                    | MBV – a source of Competitive advantage                                                                                        |
|----------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Tokarczyk et al. [92]                  | Family Business                      |                                                                                                                                                                            | Strategic orientation and avoiding commodity focus<br>Customer driven culture<br>Vertical and or horizontal integration        |
| Zahra [93]                             | Startup companies                    | Structure is flexible and communication informal<br>Time-based competition affects access to resource<br>The resource management process embodies learning and supports CA |                                                                                                                                |
| Peter et al. [90]                      | Alpine tourism in Italy              | RBV is best related to niche market products<br>RBV leads to sustainable strategies<br>Green innovation as a resource advantage                                            | MBV requires larger financial resources to create brand image than RBV                                                         |
| Khanra et al. [72]<br>Varadarajan [74] | Mixed industries<br>Conceptual study |                                                                                                                                                                            | Customer information as a resource advantage                                                                                   |
| Makhija [50]                           |                                      | RBV resources explain better value creation in periods of privatization than MBV variables                                                                                 |                                                                                                                                |
| Bertheussen [94]                       | Fisheries                            | Harvesters (quota owners) have close to twice the return on investment than processors (without quota) and protection from new entrants and low-cost fish input            |                                                                                                                                |
| Bertheussen et al. [95]                | Fisheries                            |                                                                                                                                                                            | Norwegian exporters of mackerel achieved higher export prices than Icelandic exporters because of biological conditions (time) |
| Nilssen et al. [96]                    | Fisheries                            |                                                                                                                                                                            | Fresh fish caught and sold with hooking gear outperformed competitors                                                          |
| Bertheussen et al. [97]                | Fisheries                            | Legal and financial barriers exist in Norwegian fisheries protecting incumbents                                                                                            |                                                                                                                                |
| Bertheussen [99]                       | Fisheries                            | Resource rent is created and based on fishery management institutions and harvesting rules if access is free                                                               |                                                                                                                                |
| Bertheussen et al. [99]                | Fisheries                            | Value creation in Norwegian fisheries is dependent on natural resources and fisheries management                                                                           |                                                                                                                                |

(continued on next page)

Table 1 (continued)

| Study                            | Industry  | RBV - a source of Competitive advantage                                                                                                                                                                                                          | MBV – a source of Competitive advantage                                                                 |
|----------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Quarrey [91]                     | Fisheries | Strategic, organizational, and commercial influence of knowledge is a source of competitive advantage                                                                                                                                            |                                                                                                         |
| Arnason [102]                    | Fisheries | Experience of ITQs in Iceland strongly suggests substantial economic benefits                                                                                                                                                                    |                                                                                                         |
| Gunnlaugsson & Valtýsson [30]    | Fisheries | The economic performance of fisheries in Iceland has improved and the value of fishing rights is making it difficult for new entrants to enter the industry                                                                                      |                                                                                                         |
| Gunnlaugsson & Agnarsson [36]    | Fisheries | companies are increasingly vertically integrated<br>Resources rent as capture of fishing fee emerged after 2008 in Iceland and has been fluctuating from 13 % to 29 % of the total rent until 2016                                               |                                                                                                         |
| Gunnlaugsson & Saevaldsson [105] | Fisheries | The financial health of the Icelandic fisheries is sound and has improved since 2008 mostly because of the ITQ management system                                                                                                                 |                                                                                                         |
| Knutsson et al. [106]            | Fisheries | The Icelandic fishing industry has outperformed fishing industries in neighboring countries. Long-run profitability is based on regulatory changes; abolition of export barriers, introduction of ITQ system, and establishment of fish auctions |                                                                                                         |
| Kristofersson et al. [107]       | Fisheries | The Icelandic ITQ management system has increased efficiency and profit in the industry                                                                                                                                                          | Icelandic fisheries are more market-driven than Norwegian fisheries which are mostly driven by catching |
| Byrne et al. [108]               | Fisheries | Consolidation in the Icelandic fishing industry is highest in the pelagic sector and lowest in fishing of cod and haddock                                                                                                                        |                                                                                                         |

is limited. For example, a substantial majority, encompassing approximately 98–99 % of the total yield, is destined for international markets. The exported cod is subsequently distributed to foreign fish markets, which may undergo further processing overseas or be allocated to wholesalers for subsequent distribution [115]. In contrast, marginal proportion of the cod catch, the most valuable species, is directed toward the consumption of Icelandic residents and tourists within various hospitality establishments, including hotels, restaurants, canteens, and private households [115].

The growth strategy in the industry has partly been driven by

horizontal mergers and acquisitions in the industry itself to reach economies of scale [103]. According to Gunnlaugsson and Valtýsson [30] there have been indications that weaker companies with small proportions of quota have suffered due to more substantial quota holding companies buying them out, resulting in consolidation of the industry. Younger generations also seem less interested in fisheries and running the family-owned company and are, therefore, more likely to sell the company [30]. Under the ITQ system, there has been a notable increase in the prevalence of vertically integrated companies in Iceland's fishing industry. The companies now dominate the Icelandic fishing rights and engage in all aspects of the value chain, encompassing fishing, processing, marketing, and product sales [30,106]. The stimuli for such vertical integration lie in the strategic objective to oversee all parts of the value chain, ranging from fish extraction to marketing, thus meeting the demand for fish and related products. This strategy involves securing control over the entire vertical value chain, from fishing operations to marketing and sales [113]. Despite the prevalence of this integration, the brand recognition for these companies remains relatively low, as a significant portion of the caught fish is being directed toward wholesalers or retailers [115].

At least three studies have analysed the value chains of Icelandic fisheries. Knútsson et al. [116] focused on the structural changes in Icelandic fisheries from 1990 to 2012, Kristófersson et al. [107] focused on whether and how the ITQ system affected the Icelandic fisheries value chain and Björvinsson et al. [117] compared and determined whether the competing whitefish industries in Iceland and Norway employ distinct marketing and harvesting strategies. Knútsson and his colleagues found out that the structure of harvesting, production, and processing in the export and marketing of Icelandic fish products has been product-driven with three major marketing sales organizations (MSO) in strategic position until 1997 as controller of the value chain. A change occurred after 1997 when the larger companies took more responsibility for the marketing activities which moved the power structure from the MSO to the producers and the producers' strategy became more marketing-focused. Kristófersson and his colleagues found out that Icelandic fisheries have been able to increase their effectiveness and earnings based on the ITQ system along with the government abolishing export barriers and establishing fish markets in Iceland [118]. Despite the prevalence of this integration, the brand recognition for these companies remains relatively low, as a significant portion of the caught fish is directed toward wholesalers or retailers rather than individual consumers [115].

Subsidies in global fisheries significantly influence industry dynamics, often resulting in both economic and environmental repercussions, such as overfishing and unfair competition [119]. The World Trade Organization (WTO) has been negotiating new disciplines for fisheries subsidies, culminating in an agreement in 2022 [120]. While global agreements aimed at reducing harmful subsidies in fisheries can enhance effective fisheries management, they also pose challenges [119]. Notably, Iceland ranks among the lowest in the Organisation for Economic Co-operation and Development (OECD) regarding fisheries support and subsidies [121].

Since 2010 some of the largest companies and quota holders have emerged or gone through acquisitions [122] and some of these companies have been listed on the Icelandic Stock Exchange, preparation plans for new listings of fisheries companies are discussed frequently [123]. In addition to consolidation of fishing rights and mergers and acquisitions in the industry, the most significant fisheries companies have established or invested in the aquaculture operations in Iceland. Although the Icelandic ITQ system is controversial, it has contributed to fostering greater environmental sustainability within Icelandic waters while also enhancing the economic viability of the fishing and processing sectors. As a result, Iceland fisheries have been financially profitable since 2008 and the industry is generating substantial revenue through resource rent which is distributed between the government in fishing fees and taxes, profit to current quota holders and those who

originally acquired the fishing rights but have cashed in their winfall gains and traded their quotas [36,104]. Simultaneously, the Icelandic ITQ system has promoted environmental stewardship in Icelandic waters [30].

#### 4. Research Method

A case study is appropriate for this research, as it facilitates the examination of real-life case by gathering data from various sources and providing a comprehensive portrayal of case-specific themes and details [124]. A case study approach has been applied in previous studies related to strategy implementation [125,126]. In alignment with the perspective articulated by Lee and Lings [127], qualitative methods such as interviews are well-suited for the interpretive aspects of this research, but the study employs an in-depth elite interview method, as advocated by Berry [128] and Goldstein [41], to investigate how competitive advantage in the Icelandic fisheries industry is evolving based on chief executive officers (CEOs) perspectives. In this study its appropriate to build on the concept of “strategic groups” defined by Porter as a group of companies in the same industry executing same or very similar strategies [129].

##### 4.1. Case selection and sampling

Purposeful sampling is a method used in qualitative research to identify and select information-rich case(s) or people to help provide answers to the research questions proposed [127]. The case is the Icelandic fishing industry, and companies were chosen based on factors such as revenues, number of employees, type of operation, and layers of management. Specifically, companies needed to have the following criteria to be selected: (1) one of the 15 largest fishing quota holders in Iceland; (2) one of the 120 biggest companies in Iceland 2020; (3) more than 200 employees; and (4) involved in fishing, processing, marketing, selling fish and fish products on the global market.

Ultimately, nine out of the fifteen largest companies within the Icelandic fishing industry consented to participate in the research. Notably, these nine companies collectively held a substantial 49.9 % share of the fishing quota in Iceland during the 2023/2024 period [42]. The rationale behind focusing on companies of this magnitude, coupled with the minimum employee threshold of over 200, was to ensure a more realistic likelihood of substantial strategy formulation and implementation had taken place within the selected companies.

##### 4.2. Semi-structured interview framework

A semi-structured interview framework was designed to facilitate interview data collection. This approach provided the researchers with a valuable opportunity to uncover emerging themes aligning with the recommendations put forth by Burgess [130]. The selection of interviewees (hereafter CEOs) was predetermined, and a uniform set of questions about competitiveness, strategy formulation, strategy implementation, strategy evaluation, competitive advantage, and strategic tools used was posed to all CEOs. To ensure comparability and procedural rigor and structure in the interviews and to enhance the same interviewer conducted all the interviews, thereby minimizing variations in interview administration [131]. Semi-structured interviews also conferred the advantage of enabling the researcher to delve deeply into specific subjects of interest [132].

In total, nine CEOs representing nine companies were interviewed. The interview duration ranged from 40 minutes to three hours, and each session was recorded with CEOs explicit consent. Among the elite interviews conducted [41], three occurred face-to-face at the CEO's workplace, while five were facilitated using Microsoft Teams video conferencing software for CEOs convenience. Additionally, one interview was conducted via telephone to accommodate logistical considerations. Notably, all CEOs interviewed were assured of anonymity, a

measure taken to safeguard the principles of confidentiality and ethical standards throughout the research process [133]. However, it is essential to highlight that all scheduled interviews were diligently conducted as planned to gain and retain trust of respondents to collect high quality data from respondents who have limited time [134]. Subsequent interviews, although conducted after data saturation was reached, proved invaluable by offering corroborative insights into the central concepts under examination [127]. Secondary data from the companies was used for triangulation. These secondary data sources included website content, annual reports, strategic and policy documents sourced from employees and staff members, observations made during on-site visits to the companies, and information derived from media sources.

##### 4.3. Data analysis

Thematic analysis has been carried out in several strategic management studies [132,135]. Thematic analysis, as outlined by Riger and Sigurvinsdóttir, was used to search for themes and enabled the researcher to identify common themes in multiple interviews [136]. This analysis method consists of six stages ([137] p 87): familiarizing oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Following the six-step process helped identify the competitive advantage of the industry. Subsequently, the recorded interview sessions were transcribed, and the resultant data were subjected to analysis using MindManager software. This analytical approach enabled the construction of visual mind maps and the identification of themes within the dataset. During the transcription of the interview data, the focus was on discerning commonalities and discrepancies between interviews. As the data became well known, notes were taken, and codes and quotes were generated. During the subsequent stage, codes were merged into broader themes based on commonalities. After reviewing themes based on the coding substance, they were clarified, defined, and named. Themes were analysed in Word and Excel.

#### 5. Results

This section presents the empirical findings of the study and the secondary data used for triangulation. Fig. 3 presents codes, and initial and final themes from the interviews. Section 5.1. is focused on the current competitive advantage in the industry perceived by the CEOs, Section 5.2 on the brand building, Section 5.3 on the value chain marketing focus, Section 5.4 on the sustainable emphasis, Section 5.5 on increased innovation, and Section 5.6 on growth strategy.

##### 5.1. Competitive advantage in the Icelandic fishing industry

The findings suggest that knowledge and management experience in the industry have been built up over time. CEOs have extensive experience in the industry, ranging from 20 to 36 years, but on average they have 28 years of working experience as CEOs. The top management teams in each company are small, including three to seven people, mostly males, and strategy is developed and executed top-down in all cases. Further similarities between the companies can be found in the management structure as all except three of the companies are family-run and owned, thus most often with a very informal structure and communication channels.

None of the CEOs saw local competition in the Icelandic fishing industry as a particular threat but most of the CEOs mentioned the global competition is increasingly fierce and the Icelandic companies need to grow revenue and increase consumer brand recognition to be able to compete on the global market. Most of the CEOs said that majority of the fishing products are exported to the global market and sold directly to wholesalers and intermediaries:

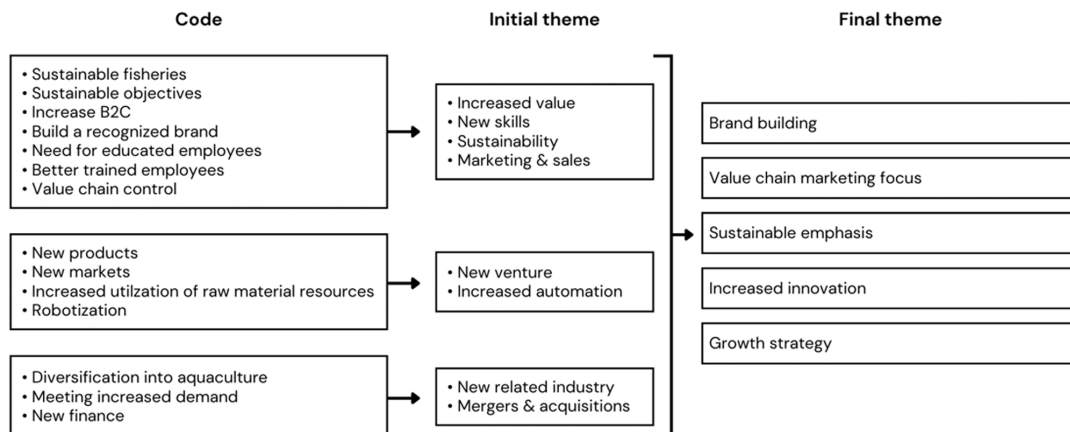


Fig. 3. Codes and themes from interviews.

- Our sales and marketing are in development, still our primary focus is primarily on catching and processing and selling our products to wholesalers (CEO 4).
- Our aim to reduce the involvement of intermediaries has yielded less success than anticipated, with our ability to sell products directly to end consumers hindered, primarily resulting in distribution through intermediaries and wholesalers (CEO 8).

CEOs also stated that the fishing industry is marked by considerable capital requirements and inherent volatility, necessitating a forward-looking and strategic approach. Effective management in this sector demands substantial financial investments and the ability to anticipate and adapt to future market fluctuations. This foresight is crucial in their CEOs minds for maintaining financial stability and ensuring long-term success in an industry where investment intensity and economic unpredictability are defining characteristics:

- Industry necessitates substantial investments, meaning that its leaders possess a foresighted perspective toward the future to effectively strategize for investments and ensure financial stability (CEO 7).
- The fishing industry is a fluctuating industry and extremely investment intensive (CEO 8).

The current characteristics of the competitive advantage in the industry are mostly based on internal resources like the ITQ fisheries management system, access to sustainable fishing stocks, decades of local knowledge and management experience in the industry, and high technological standards partly based on local innovation:

- Our competitive advantage is access to natural resources (CEO 1).
- Part of our competitive advantage is knowledge and flexibility in processing fish and fish products (CEO 6).

## 5.2. Brand building

Most of the CEOs discussed the importance of either establishing their own brands or further developing the brands, thus bringing the companies to the consumer markets with their products. Currently, few of the companies engage in direct business-to-consumer sales and such occurrences remain a notable deviation from the norm, as a very small portion of the fish export is sold directly to consumers. Most of the companies sell and market their products in cooperation with other Icelandic fisheries companies or under brands owned by other sales and marketing companies:

- Our objective is to establish and consolidate our proprietary brand over a decade, thereby achieving the capacity to market all our products under a unified brand identity. However, it is notable that part of our products are marketed under Chinese and Japanese brands rather than our own (CEO 1).
- In collaboration with other Icelandic companies, the corporation maintains ownership of proprietary brands. Additionally, a segment of our fish products is retailed directly to end consumers. Our company must possess the capability to narrate the comprehensive journey of our products, spanning from catching to consumption (CEO 4).

## 5.3. Value chain marketing focus

There are several factors driving integration mentioned by the CEOs. Cost reduction is a crucial incentive related to transactions between different components of the value chain. Also, companies choose integration to gain control over elements within the value chain ensuring access to vital raw materials as well as aiming to go deeper into specific elements of the value chain like marketing, sales, and branding. Furthermore, the CEOs said that integration can offer benefits like improved economies of scale and possibilities to cut out intermediates and middlemen:

- The prevailing mode of distribution entails sales through intermediaries. However, a strategic imperative exists to penetrate further into the value chain. This endeavor seeks to establish a closer relationship with the market and the end consumer, facilitating a more comprehensive consumer need (CEO 9).
- Our policy is to strengthen the value chain and have more control, better delivery, and decrease the number of intermediaries we work with (CEO 4).

The CEOs stated that there was an apparent demand for more qualified and educated employees in downstream activities, including marketing, branding, innovation, and strategy. The CEOs see the need for a better-prepared management team as the next crucial step in developing these companies to be more competitive in the global markets and being able to go downstream into individual segments of the value chain:

- Experienced and educated personnel within the domains of marketing, sales, and branding is imperative for our organizational objectives (CEO 8).

#### 5.4. Sustainability emphasis

The CEOs interviewed stressed the importance of environmental sustainability and underlined that access to sustainable wild fishing stocks is important to deliver quality products. According to the CEOs, safeguarding the long-term ecological sustainability of fish stocks is the most critical task for the fisheries industry:

- *One of our main values is responsibility which refers to a sustainable approach to ocean and sea life and utilization of raw materials, in coherence with the aim of a sustainable planet, people, and profit (CEO 3).*
- *We do measure CO<sub>2</sub> emissions for our ships and plants and have measurements in place to decrease our emissions (CEO 1).*

Most CEOs implied their responsibility to their community, emphasizing the significance of fish and fish product utilization, sustainability policy and measures, and their aim to increase the value of products. However, despite their efforts, noticeable financial benefits have yet to materialize. The aim is to increase the utilization of raw materials and develop and use innovative solutions and products. Over the past few years, the focus has been on increasing the value of products through investments in marketing initiatives:

- *We hold a responsibility to our community, emphasizing the significance of fish and fish product utilization. With our sustainability policy and measures, we aim to increase the value of our products. However, despite our efforts, noticeable financial benefits have yet to materialize (CEO 3).*
- *We aim to increase the utilization of raw materials and develop and use innovative solutions and products. Over the past few years, our focus has been on increasing the value of our products through investments in marketing initiatives (CEO 8).*

#### 5.5. Increased innovation

During the interviews, the CEOs discussed innovation within the fisheries industry. Specifically, the activities and advancements undertaken by the fisheries sector over the preceding decade, focused on fostering innovation to enhance seafood value through innovation and collaboration. The primary objective of this strategic initiative was to nurture innovative practices within both the fisheries industry and related industries. According to the CEOs, the drive for innovation demonstrated noteworthy outcomes, manifesting in increased competitive advantage, financial gains, and strengthening of the Icelandic fisheries in general. The CEOs see innovation as one of the keystones of the future competitive edge of the industry.

- *We collaborate with innovative companies, some of which we own, to develop fishing gear and products. Our strength lies in the comprehensive range of fishing equipment we develop on board our vessels and upon successful testing, we market these products to the industry (CEO 2).*
- *We are committed to investing in innovative technological solutions and products developed in collaboration with pioneering companies (CEO 8)*

The CEOs stated that many innovative companies the industry had invested in had grown fast and are supporting industries in developing new equipment, data, technology, and packaging solutions for fishing, processing, and transport. Most of the CEOs mentioned the shift in recent decades in innovation and technological advancement that has transpired in the fishing industry. This shift is seen as a competitive advantage in global competition in the industry.

#### 5.6. Growth strategy

The CEOs emphasized that companies must pursue expansion as a strategic necessity to remain competitive globally. This expansion is

critical for enhancing market power, securing strategic positions in new markets, and diversifying their product portfolios. By doing so the companies can better strengthen their competitive standing against international rivals:

- *To expand, we must look beyond our current borders, as we've reached the upper limit of the 12 % quota ceiling (CEO 7).*
- *To compete effectively in retail and consumer markets, we require more market power (CEO 8).*

For various reasons, it is challenging to meet demand and control the supply of fish and fish products according to the CEOs. Weather, fishing fleet, technology, and quota allocation can play a significant role. For these reasons, most CEOs mention the need to better control the value chain, especially the supply side, and to adjust the supply and demand. Consequently, the industry has to participate and invest in aquaculture:

- *Our growth strategy does not lie in cod because of limited quota. Hence, we cannot allocate further investment in that direction. Instead, our focus needs to shift towards investing in aquaculture (CEO 2).*

The CEOs highlight that companies must secure enhanced and more resilient financial backing to pursue expansion and capitalize on growth prospects. The industry's capital-intensive nature necessitates additional funding to maintain current operations and fuel strategic investments and expansion initiatives. Therefore, access to robust financial resources becomes a critical enabler of growth, positioning the company to seize new opportunities and sustain their competitive advantage in a demanding industry:

- *To achieve growth, we require enhanced and more robust financial resources (CEO 9).*
- *The industry demands significant financial resources, and to expand and invest, we require additional funding (CEO 8).*

## 6. Discussion

The main objective of this research was to investigate how competitive advantages in the Icelandic fishing industry are evolving as perceived by industry CEOs. Further aim was to find out if empirical evidence would improve our understanding of competitive advantage in Market-Based and Resource-Based View perspectives in academic research.

### 6.1. How is the competitive advantage in the Icelandic fisheries evolving

The competitive advantages in the Icelandic fishing industry are evolving because of access to homogenous and comparable resources that underpin the competitive advantage of the companies, like access to fishing stocks [99], and because of the financial value of the quota based on the ITQ system itself which can be a financial barrier to new entrants entering fisheries [30,94], and extensive management experience [91]. Icelandic fishing companies have historically been driven by access to natural resources like the fish stocks that are either used for raw product production or the production of food products that are mostly sold to wholesalers and or intermediaries [115]. This is in line with other research that the characteristic of the competitive advantage has been focused on production [116]. Another valuable resource companies have access to based on their prior catching experience [16] is the ITQ system, in the form of quotas that are allocated to the companies annually based on regulations and Icelandic law [42]. This has resulted in strengthening the economies of scale [8] within operations and has nurtured the potential for economies of scope [9] across the sector, particularly along the value chain [115]. There has also been a shift evident in less need for manual workforce reducing labor costs [106]. The ITQ system has also incentivized quality standards across various

dimensions of the industry, spanning fishing practices, processing techniques, broader production processes, and the preservation of fishing stocks [107]. Moreover, there has been a significant and rapid decrease in the number of fishing vessels accompanied by a simultaneous increase in the size and capacity of individual vessels and fishing equipment which has improved [36]. The findings underline that existing competitive advantage is partly rooted in the ITQ system [102, 105–107] which is used to manage the natural resources the fisheries companies have access to and are in line with other studies explaining how industry-specific institutional frameworks can gain and create competitive advantage [94,99].

According to the CEOs, value chain integration has developed under the ITQ system with increased market driven emphasis [3]. Other studies show how ITQ system encouraged such development with increased efficiency and better results and the fact that the companies themselves have taken on more sales functions [106,107]. Under the ITQ system, there has also been an increase in number of vertically integrated companies [138] as stated by the CEOs. These companies now dominate the Icelandic fishing rights, engaging in most aspects of the value chain, encompassing fishing, processing, marketing, and product sales [30,106]. However, this development is still very limited [115]. These findings indicate that there is a continuous development in the industry to take control of the sales and marketing part of the value chain [1] although it is first and foremost selling products in bulk to intermediaries and wholesalers.

Several industry-specific factors influence the opinion of the CEOs from an obstacle point of view as they prevent further economies of scale in international competition and uncertainty about fisheries management. For instance, the quota ceiling (12 %) imposes significant limitations on the fisheries companies, inhibiting their capacity to implement MBV strategy. This regulatory cap on quota ownership potentially constrains the companies' market power and ability to negotiate advantageous pricing structures [27]. As a result, the quota ceiling restricts larger entities from consolidating resources that could facilitate broader market engagement and operational efficiencies [28]. The CEOs, furthermore, claim that a fragmented distribution of quotas among numerous stakeholders contributes to operational inefficiencies. Additionally, CEOs indicate that companies may hesitate to allocate resources toward new technologies aligned with MBV strategies due to uncertainties regarding long-term quota access, which affects their ability to optimize operations or invest in high-value products [27]. Consequently, strategic planning is challenging for these firms [113]. Collectively, these factors, i.e. quota ceiling, distribution of quotas, and duration of quota control, significantly hinder large fisheries companies' capacity to effectively adopt an MBV strategy, ultimately impacting their competitiveness and sustainability within the industry. Smaller-scale fisheries may lack the extensive resources and infrastructure that larger companies possess [38] and limited access to capital [37]. Consequently, smaller fisheries might face difficulties in accessing international markets and establishing strong brand identities compared to larger companies thus making it challenging to implement MBV strategies effectively. In addition, studies have shown that smaller local fisheries are selling their quota or merging with larger local companies [139].

CEOs claimed that significant value accrues to established brands within the consumer market. However, at the same time, they stated that establishing a new brand is resource-intensive substantial financial costs which may push the companies to seek new finance. According to the CEOs, this process is complex, cumbersome, time-consuming, and finance intensive which is in line with a study of tourist destinations in Italy, which stated that the MBV perspective requires larger financial resources to create an effective brand image than the RBV perspective [90]. The need for educated workforce [113] and knowledge [73] is also a barrier entering the consumer market instead of selling the products to a few established wholesalers. Most CEOs saw this as a long-term goal for the companies, while others were already acting in this direction.

These findings indicate the industry's interest in moving its strategic approach closer to the MBV by gaining a competitive advantage by positioning the company and its products on the market and utilizing brand recognition as a competitive advantage [1]. This development is in line with study by Agnarsson et al. [140], which states that Icelandic fishing companies have been seeking to become more vertically integrated, but at present, only a handful of companies participate in direct-to-consumer sales, with a very small portion of fish exports being sold directly to consumers. Moreover, brand recognition is low, and Iceland's fishing industry does not enjoy substantial recognition as a consumer-facing brand, although the industry's brand identity may possess some recognition among wholesalers and distributors [140].

Though the emphasis has first and foremost been on preserving the fishing stocks the CEOs stated their commitment to a sustainable approach to ocean and sea life and further utilization of raw material [70]. They also stated their expectations to build further up their companies brands with increased emphasis on the concept and history of sustainable products coming from sustainable stocks and clean sea which is in line with the study of Peters et al. which found that authenticity was important as a resource which led to more sustainable strategies [90]. Most companies in the study have established Corporate Social Responsibility (CSR) policies and are working toward achieving specific UN SDGs [31]. This is in accordance with a study conducted by Gunnlaugsson and Valtýsson which concluded there is evidence of environmental stewardship among current fishing rights holders in Iceland and they have shown a willingness to support reductions in the TAC for vital species, underscoring their commitment to responsible resource management [30]. The fisheries management system has resulted in innovation by encouraging the maximization of utilization and quality seafood as stated by the CEOs which is in line with the study which found that green innovation could be a source of competitive advantage [72]. By-products previously considered to be of little value or even worthless have, with the concerted efforts of the scientific community, entrepreneurs, fishing companies, and authorities, become very valuable products, even unique in their class. This is in line with a study by Sigfússon [33] which states that the Icelandic fishing industry has galvanized innovation and entrepreneurship in the global seafood sector. This emphasis on achieving the best possible use of resources has according to Agnarsson et al. called for new solutions and approaches that have attracted companies and experts from different sectors [115].

Developing comprehensive policy frameworks that extend beyond ITQs is essential for integrating sustainability-emphasis within the fishery sector. Such policies may include incentives for sustainable fishing practices, penalties for non-compliance, and support for research into sustainable methods [34]. These incentives can create a more favorable market environment for sustainably sourced seafood, enhancing competitiveness in the marketplace [34]. The ITQ is designed to enhance economic efficiency, ensure sustainability and manage fishing quotas effectively [27]. However, integrating broader management strategies like EBFM can significantly align fisheries with sustainability objectives. EBFM emphasizes the importance of ecological interactions between marine ecosystems which can be incorporated into frameworks to bolster competitive advantages through sustainable practices [40]. A study by Emery et al. examined the implementation of ITQs to manage the ecological impacts of fishing in line with EBFM objectives. The study found that while catch management through ITQs can be effective, it may also undermine regulatory authority, potentially leading to significant negative consequences for ecosystem management goals [39]. Effective sustainability practices necessitate the active participation of diverse stakeholders, including local communities, fishers, and scientists. By implementing regulatory frameworks and initiatives, the government can engage stakeholders to enhance the legitimacy and effectiveness of sustainability initiatives. This approach aligns with the NRBV [70,141] by leveraging local knowledge and social capital as valuable resources that contribute to competitive advantage [69].

Most CEOs emphasized their objective to expand further, outlining a growth strategy encompassing heightened consumer market penetration [80], asset acquisition to strengthen the value chain [129] and brand enhancement [82]. Additionally, they highlighted the necessity for increased financial resources to bolster their brands and invest in consumer markets for fish and fish products. These emerging companies are all aiming for economies of scale in global competition, further improving their product range and meeting the demand for fish and fish products. Further growth is limited by the ITQ system as the largest companies are already at or close to the 12 % quota ceiling unless the law is changed. CEOs believe there is a need for further mergers and have been advocates for a 15 % quota ceiling for fisheries companies registered on the Icelandic Stock Exchange [142]. These findings align with other research claiming that the quota ceiling has held back mergers in the industry [30]. As stated by Agnarsson et al. [140], not one of Iceland's fishing companies ranks among the world's thirty largest. To illustrate, the combined revenue of Iceland's two largest quota holders falls below that of the thirteenth-ranked company globally. In addition to the consolidation of fishing rights and mergers and acquisitions in the industry, the largest fisheries companies have been investing in aquaculture operations in Iceland to be able to meet the demand for fresh and or frozen fish products. Still, Norwegian companies own most Icelandic salmon farming companies, they are financially strong and have the means to invest in the development of Icelandic salmon farming [115].

## 6.2. How can empirical evidence improve the understanding of competitive advantage from the RBV and MBV perspectives in academic research

Further aim of this study was to find out if empirical evidence from the fisheries industry would improve our understanding of competitive advantage in RBV and MBV perspectives. The study identifies how competitive advantage evolves by examining the transition from a resource-based strategy, focused primarily on natural resources, to a market-based strategy emphasizing growth, integration, value chain control, consumer marketing and brand development. These findings are in line with earlier findings linking marketing based assets and capabilities with RBV resources and understanding its attributes [53]. The integration of strengths from both RBV and MBV demonstrates how combining internal resources with market orientation can enhance competitiveness and underline that internal and external resources should not be separated [57]. This dual analysis provides deeper insights into companies' strategic behaviors and outcomes and proposes a model of prospective competitive advantage, adding valuable, industry-specific insights. The findings suggest a transition from an RBV to an MBV to strengthen the competitive advantage in the industry. These changes, however, are gradually changing due to obstacles manifested including a lack of expertise and experience necessary to navigate the consumer market, insufficient investment within the market, and restricted growth possibilities inside the ITQ fisheries management system. Findings also suggest that competitive advantage can be based on RBV and MBV and can evolve and develop over time.

Fig. 4 illustrates the integration of RBV and MBV perspectives to enhance competitive advantage in the Icelandic fisheries industry. It shows how internal resources, such as innovation, management experience, knowledge, and access to natural resources, form the foundation for a transition into an MBV growth strategy, leading to sustainable branding, increased product innovation, and value chain control with an emphasis on increased consumer marketing and further brand building. The central arrow indicates the transition process, emphasizing how combining RBV strengths with MBV strategies fosters an overall competitive advantage for the industry based on growth strategy.

The figure illustrates how fisheries' prospective competitive advantage integrates both internal resource-based strengths and market-based opportunities, which highlights the dynamic interplay between the two perspectives.

## 7. Conclusion

This study contributes to the current literature by using empirical data to explore the evolution between two perspectives in a specific industry, namely the Resource-Based View (RBV) and the Market-Based View (MBV). Examining competitive advantage from both RBV and MBV the dual perspective contributes to the existing literature by integrating two dominant frameworks in strategic management, offering theoretical and practical insights specific to the industry. Using qualitative case studies based on in-depth interviews with CEOs holding significant quotas in the Icelandic fishing industry strengthens the empirical contribution. This elite interview method ensures a rich data set and provides insights directly from industry leaders, thereby adding substantial value to the findings.

Key findings suggest transitioning from an RBV to an MBV to strengthen competitive advantage in the fisheries industry. The identified competitive advantage integrates strengths from the RBV with increased MBV emphasis for the fisheries industry. Findings also indicate that the Icelandic fishing industry is currently at a critical juncture, strengthening its competitive advantage proactively and moving from an emphasis on RBV to increased MBV although this evolution is still slow. The foundation for new growth includes a commitment to the current focus in the industry and the continual customization of solutions and services to meet the needs of wholesalers and intermediaries. The new approach aims to position the companies for the future by cultivating a more sustainable competitive advantage. The growth initiative in the industry involves expanding into new products and markets. Furthermore, key findings stress the significance of growth, enhancing integration, value chain control, and brand development within the MBV perspective. By considering these research views jointly, the understanding of companies strategic behaviors and outcomes in a specific industry is expanded.

One of the core contributions of this paper is the development of a model that integrates the RBV and the MBV perspectives, offering a nuanced understanding of how internal resources and external market conditions jointly shape competitive advantage in a specialized industry. Additionally, it contributes to academic discourse by providing

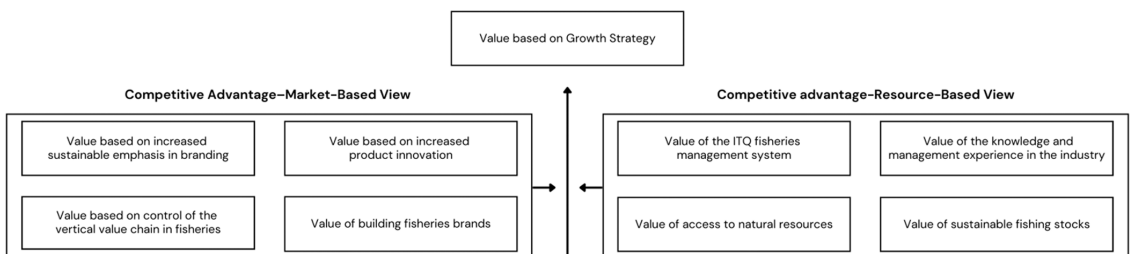


Fig. 4. Integrating Resource-Based and Market-Based Strategies in the Icelandic Fisheries Industry.

empirical evidence specific to Icelandic fisheries and proposing a model for prospective competitive advantage. The findings reveal that competitive advantage in this industry is increasingly derived from a synergy between internal resource strengths and market strategies. This integrated approach enhances the understanding of strategic behavior and outcomes, offering actionable insights for top management and stakeholders. These changes, however, are gradually changing due to obstacles manifested including a lack of expertise and experience necessary to navigate the consumer market, insufficient investment within the market, and restricted growth possibilities inside the ITQ fisheries management system.

This article's practical contribution lies in providing actionable insights for top management and other stakeholders in the Icelandic fishing industry. Findings suggest that integrating internal resources, such as regulatory frameworks and management knowledge, is crucial for sustaining competitiveness. Additionally, efforts to enhance integration, control over the value chain, and brand development are identified as critical for strengthening competitive advantage within the MBV perspective. This research illuminates a path for shaping the industry's prospective future by identifying and integrating competitive advantages inherent to the fisheries sector. Additionally, it contributes to the ongoing conversation on competitive advantage, particularly within this specific industry context. By offering an understanding of competitive advantage dynamics, it provides valuable industry-specific insights and identifies potential challenges.

However, it is essential to note that this study may not fully represent the entire Icelandic fishing industry, as it exclusively reflects the perspectives of CEOs. Despite this, the research offers valuable insights and recommendations, highlighting a pivotal transition in strategic focus that can inform future studies and strategic decision-making in similar contexts. Future research could compare the findings and competitive advantage identified in the Icelandic fishing industry with those of other countries or industries. This study's insights could be used by comparing competitive advantage in Iceland's fishing industry with other contexts, incorporating diverse stakeholder perspectives, and examining the influence of external factors. Overall, further research, like longitudinal studies tracking competitive advantage trends and strategies to overcome obstacles identified, would enhance our understanding of competitive advantage dynamics in the fishing industry. Furthermore, future research could investigate the competitive advantage of fisheries in regions with varying regulatory systems. Such studies would aid in generalizing the proposed model beyond the context of Iceland. From an academic perspective, conducting more in-depth research on the further development of the MBV as a comprehensive theory for competitive analysis would be valuable.

## Authors contribution

NN1, NN2, NN3, and NN4 contributed to the study's conception and design. NN1 performed material preparation, data collection, and analysis and wrote the first draft of the manuscript. NN2 and NN3 provided supervision. NN2, NN3, and NN4 commented on the versions read and approved the final manuscript.

## Declaration of Competing Interest

The Science Ethics Committee of Icelandic universities neither prohibits nor authorizes research. However, its role is to provide teachers, students, experts, and other employees of Reykjavik University and other universities in Iceland guidance on how to conduct research in an ethical manner, <https://english.hi.is/node/50019>. Ethical guidelines and codes include introducing the study to participants, obtaining informed consent from participants, and using a semi-structured interview framework, therefore conducting the research with integrity, including reliability, honesty, respect, and accountability, see Code of Research Ethics for Public Higher Education Institutions, <https://english>

[.hi.is/sites/default/files/bryndjo/pdf/code\\_of\\_research\\_ethics\\_for\\_public\\_higher\\_education\\_institutions.pdf](https://hi.is/sites/default/files/bryndjo/pdf/code_of_research_ethics_for_public_higher_education_institutions.pdf). This study has been conducted according to these guidelines and codes and according to the rules of practice of Reykjavik University.

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## Author statement

I hereby declare that the paper submitted is original, has not been previously published, and is not currently under consideration for publication elsewhere.

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## CRediT authorship contribution statement

**Lára Jóhannsdóttir:** Writing – review & editing, Supervision, Conceptualization. **Kristján Vigfússon:** Writing – review & editing, Writing – original draft, Resources, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Mehmet Köseoglu:** Writing – review & editing. **Snjólfur Ólafsson:** Supervision.

## Data Availability

The data that has been used is confidential.

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