

Corporate foresight: A structured literature review.

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## **Abstract**

This review follows a structured approach to the literature search and analysis to understand how scholars have defined corporate foresight, distinguished it from other related concepts within close fields of study, which theoretical perspective they have followed to break down the construct, and their views on initiating corporate foresight. The findings portray corporate foresight as a relatively new concept within the organisational and management literature. As a result, corporate foresight appears to still have definitional and conceptual tensions within the reviewed literature. Varied theoretical frameworks are also explored to understand this construct. The studies dealing with the implementation of corporate foresight have the highest level of consensus within the literature. Scholars also agree on the methodological tools and techniques used in corporate foresight. Similarly, the literature also converges on the outcomes and success factors of corporate foresight efforts.

The review concludes by exploring emergent themes and possible future research trajectories. Firstly, the unlearning concept from organisational learning theory provides an interesting perspective towards understanding corporate foresight. Future research could study corporate foresight as an unlearning practice. Secondly, social media platforms have grown significantly due to the rapid increase in technology and internet access. Future research can further establish social media analytics as a tool in corporate foresight. Lastly, corporate foresight in Small and Medium Enterprises and emerging markets is scarce. Future research should investigate this phenomenon within contexts other than those in developed Western contexts.

**Keywords:** Corporate foresight, organisational learning, dynamic capabilities, futures, foresight.

## Plagiarism declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy [Evidence Based Management] at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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# Chapter One: Introduction

## 1.1 Background

The concept of VUCA (Volatility, Uncertainty, Complexity, Ambiguity) has infamously been known and used to describe the business operating environment of the 21<sup>st</sup> century (Fergnani, 2022a; Meyer et al., 2022). Geopolitics, globalisation, hyper-competition, technological disruptions, and disruptive business models, among others, are the key sources of environmental uncertainty experienced in today's business contexts (Haarhaus & Liening, 2020). This prevailing environmental uncertainty that permeates industrial and global boundaries has strained the firms' strategic resources and decision-making processes. As a result, firms continuously search for ways to understand and respond appropriately to the drivers of change to achieve a competitive advantage (Haarhaus & Liening, 2020; Rohrbeck et al., 2015).

The environmental uncertainty has grown so acute that it rendered most of the traditional strategic management tools and methods insufficient to give firms the much-needed advantage over their rivals due to the constant and rapid changes in their operating environments (Fergnani, 2022a; Purwanto et al., 2023). While it was previously possible to base the business and strategic decisions on the extrapolation of historical data to attain a competitive advantage, such methods are now insufficient to build and sustain a competitive advantage (Fergnani, 2022a; Marinković et al., 2022). Even the concept of sustainable competitive advantage is questionable in the present era, with scholars like Wenzel (2022) suggesting that individuals and firms alike are operating in an age of temporary advantage where strategies of previous success may be future sources of inertia and lead to failure.

The primary aim of for-profit firms is to remain competitive and ahead of rivals and to achieve this, in an uncertain and complex environment, firms need to understand and interpret current environmental trends and cues to make sense of the future (Marinković et al., 2022). Despite the challenges posed by the extreme environmental factors of the 21<sup>st</sup> century, firms should still make decisions around competition, strategy, innovation, and marketing, *inter alia*, to influence their performance and competitiveness (Petrou et al., 2020). They are forced to continuously look for ways to understand and respond to the drivers of environmental change (Rohrbeck et al., 2015). Corporate foresight has emerged, and gained interest in scholarship and practice, as a future-oriented practice

to help firms make sense of their environment in the face of dynamism, complexity, and variability (Gordon et al., 2020; Rohrbeck et al., 2015).

Corporate foresight helps firms gather strategic intelligence through the analysis of their operating context to understand the future, thereby giving them an edge over rivals (Marinković et al., 2022; Ruff, 2015). This has ignited practitioners' interest in corporate foresight over time with scholars only starting to show interest recently (Marinković et al., 2022). It presents practitioners with the capability to address the complex and volatile operating environment. As a result, the corporate foresight field experienced significant growth as a practitioner-led field, outpacing scholarly interest and growth (Ruff, 2015). However, there is consensus from scholars on the recent interest in this phenomenon (Andresen et al., 2022; Li & Sullivan, 2022; Marinković et al., 2022; Rohrbeck et al., 2015). Thus, the concept is significant in practice and theory.

While practitioners see corporate foresight as a concept to help firms achieve competitive advantage through anticipation and adaptation (Hakmaoui et al., 2022), scholars see the concept of corporate foresight and the broad foresight literature as relevant to advancing knowledge around uncertainty. In the 2018 Editors' Comments edition of the *Academy of Management Journal*, Alvarez et al. (2018) reiterated the significance of bringing back the lost interest in uncertainty into management theories. By bringing corporate foresight into the scholarly discourse, a concept that addresses environmental uncertainty, the scholars are therefore responding to this call by the editors of the *Academy of Management Journal*. Environmental uncertainty is not a new phenomenon in management theories, it has been central to management research for decades (Milliken, 1987; Yestrepesky et al., 2023). Further, as a new phenomenon in strategy and management research, corporate foresight research brings new research avenues (Fergnani, 2022a). A structured literature review on corporate foresight is therefore warranted.

Although rooted in the futures and forecasting literature (Fergnani, 2022a; Gordon et al., 2020), corporate foresight literature has experienced a gradual development and integration into the management and strategy literature. The two reviews by Gordon et al. (2020) and Rohrbeck et al. (2015) provide an insightful timeline of this literature from the early 1950s to the present. The development shows that the field was dominated by futures scholars and was published mainly in futures journals. *Technological Forecasting and Social Change* journal, for instance, still dominates as an outlet with most articles even in this structured literature review. However, as a sign of integration into the

management and strategy field, several top management journals like the Academy of Management Perspectives are starting to participate. This recent move into the management field reinforces the management scholars' interest in corporate foresight.

## **1.2 Problem statement**

Corporate foresight is defined as an organisation's capability to discern the environment for trends and discontinuities, to design and evaluate the likely futures based on environmental changes, and to utilise these envisioned futures as a competitive advantage (Fergnani, 2022a). Similarly, Iden et al., (2017) define corporate foresight as a practice that enables firms to build a competitive advantage for the future through value creation. As a new concept in business and management literature, corporate foresight has been broadly defined and conceptualised (Iden et al., 2017; Marinković et al., 2022), but I have selected this definition to emphasise the review's focus on corporate foresight as it applies to firms in the context of business, management, and strategy literature.

The extant literature shows that the concept of corporate foresight dates as far back as the 1950s within the futures and forecasting literature (Gordon et al., 2020). However, the construct is relatively new in the organisational management and strategic management literature, which has made it prone to definitional and conceptualisation tensions within the field. Some scholars refer to the concept as strategic foresight, others as corporate foresight or organisational foresight, while others use the terms interchangeably. There is no agreed-on definition of the construct. On the one hand, there is a group of scholars that define corporate foresight as a firm capability to make sense of the environment in anticipation of the future (Fergnani, 2022a; Haarhaus & Liening, 2020; Marinković et al., 2022; Rohrbeck et al., 2015; Schwarz et al., 2020) and, on the other, those that define it as a practice that firms engage in to understand their operating environments for adaptation and anticipation of the future (Andresen et al., 2022; Hakmaoui et al., 2022; Wenzel, 2022).

Further, the underlying differences in the field are also reflected in how corporate foresight has been conceptualised. Fergnani (2022), and others that define it as a capability, are stronger proponents of a dynamic capabilities' conceptualisation. They define corporate foresight as a firm dynamic capability or a micro foundation of dynamic capabilities (Schwarz et al., 2020). These scholars use the dynamic capabilities theory to understand corporate foresight (the findings section shows all the articles within this group and the second group that uses different theoretical lenses to unpack corporate foresight). Wenzel (2022), and others that define it as a practice, argue for a different

conceptualisation pointing out that a dynamic capabilities conceptualisation downplays the significance of the construct. He posits that corporate foresight should be seen as a future-making practice that involves agents being actively involved in making the future, instead of a dynamic capability that only waits for the future to reconfigure resources appropriately (Wenzel, 2022).

The persisting tensions in the field form the basis of the current structured literature review. As a nascent concept within the strategic management literature, corporate foresight will benefit from multiple theoretical groundings (Ehls et al., 2022). Without strong theoretical development, corporate foresight will remain difficult for practitioners to implement and for scholars to advance the literature. The aim of this literature review is, therefore, to synthesise the extant literature on corporate foresight to address the highlighted debates and tensions. In addition, this review will also provide a conceptual framework to help with construct clarity, explore the theoretical grounding of this phenomenon, and the overall integration of the construct into the organisational and strategic management literature. Practitioners will benefit from the explanation of the components of corporate foresight and the outline of how it is initiated in practice.

### **1.3 Overview of past reviews**

Corporate foresight has recently gained significant interest from academia. Several literature review papers have been published to unpack this field of research. Iden et al. (2017) systematic literature review's focus was the identification of the emerging research areas that the prior literature on corporate foresight addresses, and the theoretical frameworks and models that have been used to study corporate foresight. Their review found that much like the rest of the research in strategy and management, corporate foresight lacks a coherent theoretical framework (Iden et al., 2017). While the review is extensive and proposes a critical success factor model for corporate foresight, it, however, does not provide a systematic guide on enacting corporate foresight. This void remains an area of future exploration.

In the 2015 Technological Forecasting and Social Change special issue on corporate foresight, Rohrbeck et al. (2015) aimed at sparking the scholarly interest in corporate foresight. They sought to provide clear definitions and demonstrate how corporate foresight can be theorised by cross-fertilising from other management and strategy research. They identified management cognition, forward-looking search, and prospective sense-making as potential starting points in developing theoretical

references for corporate foresight within general management research (Rohrbeck et al., 2015). This served to spark theoretical debates and interest within the corporate foresight literature.

Gordon et al. (2020) conducted a timeline review for corporate and organisation foresight literature published in *Technological Forecasting and Social Change Journal* over 50 years. Their review shows how the field has developed since 1969, how the *Technological Forecasting and Social Change* journal has contributed to its development, and the potential areas of future research (Gordon et al., 2020). Their timeline provides an insightful summary of the field's development over the years. They highlight the significant role that technology and artificial intelligence could play in corporate foresight.

The most recent systematic literature review by Marinković et al. (2022), perhaps influenced by Gordon et al. (2020), identifies technology as an important element of corporate foresight, and centres around the construct of technology and how it has been dealt with within the corporate foresight literature. The review proposes an integrative process framework that describes the motives to conduct corporate foresight, corporate foresight activities and tools, corporate foresight moderators, and outcomes, all undergirded by technology (Marinković et al., 2022). The main emphasis was to signify the importance of technology construct within the corporate foresight literature.

The prior reviews and other conceptual publications have emphasised the need to provide multiple theoretical frameworks to develop this field. This review responds to these calls, clarifies the corporate foresight construct, and aims to bring a different theoretical perspective to the field of corporate foresight. Further, from a practical point of view, this review aims at establishing a framework of enacting foresight based on the articles under review.

## **1.4 Review questions**

The following questions guide the direction of this structured literature review. They remain at the centre of the data analysis, theming, and coding processes.

### **Questions 1.**

How does the literature define corporate foresight? Scholars seem to use several terms interchangeably to refer to this construct. Strategic foresight, industrial foresight,

corporate foresight, and strategic forecast are used interchangeably to refer to the same phenomenon. Could these mean the same thing, or could they be just related concepts to corporate foresight? A significant element in achieving construct clarity and guiding theoretical development in literature is a clear definition and conceptualisation of the construct (Suddaby, 2010).

**Question 2.**

Which theoretical framework does the current literature use to study corporate foresight? To have a clear construct, Suddaby (2010) again warns about developing constructs that are too general in their application and scope. I, therefore, seek to unpack the theoretical grounding of corporate foresight to contribute to its theoretical development and contextual scoping.

**Question 3.**

How does the existing literature recommend the implementation of corporate foresight? The literature suggests several ways to initiate corporate foresight, however, it still lacks clear guidance on when a certain approach is suitable and when it is not. Corporate foresight can be implemented through a) establishing an in-house corporate foresight unit, b) incorporating it into an existing unit like a strategy and innovation unit, c) setting up an ad-hoc project to work on corporate foresight or d) outsourcing the task to consulting firms (Ruff, 2015). However, little is known about the suitability of each approach to individual firms and their idiosyncrasies.

**Question 4.**

What does the literature say about the impact of corporate foresight on firm performance? The majority of corporate foresight scholars concur that corporate foresight enhances a firm's competitive advantage (Fergnani, 2022a; Rohrbeck et al., 2015; Rohrbeck & Kum, 2018; Schwarz et al., 2020). Only a few scholars, like Daheim and Uerz, (2008) and Wenzel, (2022) question the positive relationship between improved firm performance and corporate foresight. Thus, the literature could still benefit from a detailed review of how corporate foresight enhances a firm's competitiveness.

The outline of the rest of the paper is as follows. The following chapter describes the review methodology, looking at search strategies, scope, inclusion and exclusion criteria, data extraction, and data analysis. This is followed by the findings and analysis and then the discussion section. I conclude by looking at the potential areas for future research.

# Chapter Two: Review methodology

## 2.1 Introduction

Literature review articles serve different and several objectives, among them, to identify previously neglected research areas, to challenge existing theories, to refine constructs and concepts, and to cross-theorise from other disciplines (Fan et al., 2022). Thus, the purpose of a literature review is to collect, analyse, and synthesise past research to achieve any of the above objectives (Snyder, 2019; Tranfield et al., 2003).

The first step for this structured literature review involved scanning the corporate foresight literature for existing recent literature reviews and the availability of literature to support the review and help formulate the review questions (Snyder, 2019). Secondly, the aim of conducting this structured literature review methodology was to ensure that bias is reduced, and replicability is improved (Fan et al., 2022). To achieve this aim, I developed a review protocol and did a pilot test on the first few articles to refine the protocol to ensure all articles meeting the inclusion criteria were included. This ensured a rigorous, replicable, and transparent literature review (Fan et al., 2022). Figure 1 below summarises the review methodology followed in this literature review.

## 2.2 Search strategies

The literature search was done in Web of Science and Scopus databases using the advanced literature search option which allows using different search terms strings made of combinations of search terms and Boolean operators. Further, the advanced search option within the databases allowed for applying some of the inclusion and exclusion criteria at the search stage. For instance, I could filter for peer-reviewed articles, publishing dates, fields of research, full-text articles, and language at the search stage. After scanning the prior reviews and the available literature, the search terms were refined to corporate and strategic foresight. As indicated below, the boolean operators were used to widen the search within the databases.

The search string used in the Web of Science database was TS= ("strategic foresight" OR "Strategic forecast" OR "corporate foresight" OR "corporate forecast") OR TI = ("strategic foresight" OR "strategic forecast" OR "corporate foresight" OR "corporate forecast") OR AK= ("strategic foresight" OR "strategic forecast" OR "corporate foresight" OR "corporate forecast"). This returned 186 hits.

The search string used in the Scopus database was TITLE ( "strategic foresight" OR "strategic forecast" OR "corporate foresight" OR "corporate forecast" ) OR TITLE-ABS-KEY ( "strategic foresight" OR "strategic forecast" OR "corporate foresight" OR "corporate forecast" ) AND PUBYEAR > 2018 AND PUBYEAR < 2025 AND PUBYEAR > 2018 AND PUBYEAR < 2025 AND ( LIMIT-TO ( SUBJAREA, "BUSI" ) ) AND ( LIMIT-TO ( DOCTYPE, "ar" ) ) AND ( LIMIT-TO ( LANGUAGE, "English" ) ) AND ( LIMIT-TO ( EXACTKEYWORD, "Strategic Foresight" ) OR LIMIT-TO ( EXACTKEYWORD, "Corporate Foresight" ) OR LIMIT-TO ( EXACTKEYWORD, "Foresight" ) OR LIMIT-TO ( EXACTKEYWORD, "Strategic Approach" ) OR LIMIT-TO ( EXACTKEYWORD, "Innovation" ) OR LIMIT-TO ( EXACTKEYWORD, "Strategy" ) ). This search returned 87 hits. The total hits returned from both Web of Science and Scopus were, in total, 273.

### **2.3 Scope**

The construct of corporate foresight has developed slowly in the management, business, and strategy fields. However, research in the same fields has grown rapidly in recent years in terms of published literature per year. To ensure that this review is based on up-to-date and recent publications, my literature search only covered six years, 2019-2024. The results were adequate to cover the breadth of the literature, however, past literature reviews on corporate foresight and any other articles considered foundational on the construct were included regardless of the recency period.

### **2.4 Inclusion and exclusion**

Structured literature reviews start with clearly defined inclusion and exclusion criteria because the intention is not to cover every piece of literature about the construct (Snyder, 2019). In the present case, I also did not aim for full coverage of literature on corporate foresight, therefore, I only included peer-reviewed articles, articles published between 2019 and 2024, full-text articles, articles written in the English language, and those with business, strategic, and management focus. Further, only articles available from the University of Pretoria's libraries were considered. Any relevant article not available from the university's libraries was excluded.

As a quality measure, I used the journal rankings by the Chartered Association of Business Schools' Academic Journal Guide (3 – 4\*) and Scimago (green colour code) if a publisher journal is not listed by the Chartered Association of Business Schools' Academic Journal Guide. I used Google Scholar for citation analysis on the articles. However, I noted that corporate foresight developed over the years within the futures

and forecasting literature (Hines, 2020). It was recently introduced to the management and strategic literature, and it is only starting to be published in highly ranked journals, which affects both the number of citations per article and the publisher journal ranking. This also explains why more than 50 percent of the articles are found in one journal: *Technological Forecasting and Social Change* (AJG 3).

I excluded articles written in other languages other than the English language. I also excluded book chapters, conference papers, website material, newspapers, and any other grey literature. Articles that studied foresight within other contexts, like agriculture, sustainability, and the environment, were also excluded. This criterion helped ensure that the review is focused on management, strategic, and business-focused studies.

Further, the articles were taken through a two-phase screening process. In the first phase, I glanced at the date, keywords, article title, and abstract to determine if an article was relevant to the study based on the set inclusion criteria. The second phase involved reading the entire article to ensure that all inclusion and exclusion criteria boxes were ticked satisfactorily. All the articles meeting the set criteria were then added to my structured literature review project on my laptop and the Mendeley referencing manager. I achieved a final sample of 40 articles after the search results had been assessed through the inclusion and exclusion criteria.

## **2.5 Data extraction**

To ensure a rigorous and bias-free review, it is recommended that literature reviews use data extraction forms to be part of the audit trail of decisions and analyses made during the review (Snyder, 2019; Tranfield et al., 2003). Data extraction form in an Excel format was used to capture descriptive data like authors' names, year of publication, article topic, methodology, theory used, construct definition, country of study, findings, limitations, and future research suggestions.

## **2.6 Data analysis**

The analysis followed a thematic analysis. Thematic analysis is an analysis method under the qualitative research approach which identifies, organises, analyses, and reports on the themes that are extracted from the data (Nowell et al., 2017). The thematic analysis was iterative, moving from data to codes and from codes to data (Vaismoradi et al., 2016). The process was guided by Grodal et al. (2021) and Nowell et al. (2017)

approach to developing themes: generating themes, refining themes, and analysis and theoretical integration.

## **2.7 Limitations**

Despite the efforts to achieve a highly rigorous, transparent, and replicable structured literature review, there are inherent limitations within the selected methodology for this review. First, the article sample was limited to peer-reviewed material, leaving out numerous data sources like conference papers, books, book chapters, and relevant website material for understanding corporate foresight. Second, for quality purposes, I restricted my articles' sample to those published in journals ranked three and higher by the Chartered Association of Business Schools' Academic Journal Guide. This reduced the pool of article sources. Third, the literature search was confined to GIBS libraries, and articles inaccessible via GIBS libraries were excluded. Fourth, my choice and use of the Boolean operators and choice of the search strings could have potentially left out other relevant articles. Other researchers could use different search term formations and synonyms and find different articles. Lastly, the review was restricted to the six-year timeline from 2019 to 2024 (October).

The review methodology is summarised in Figure 1 below.

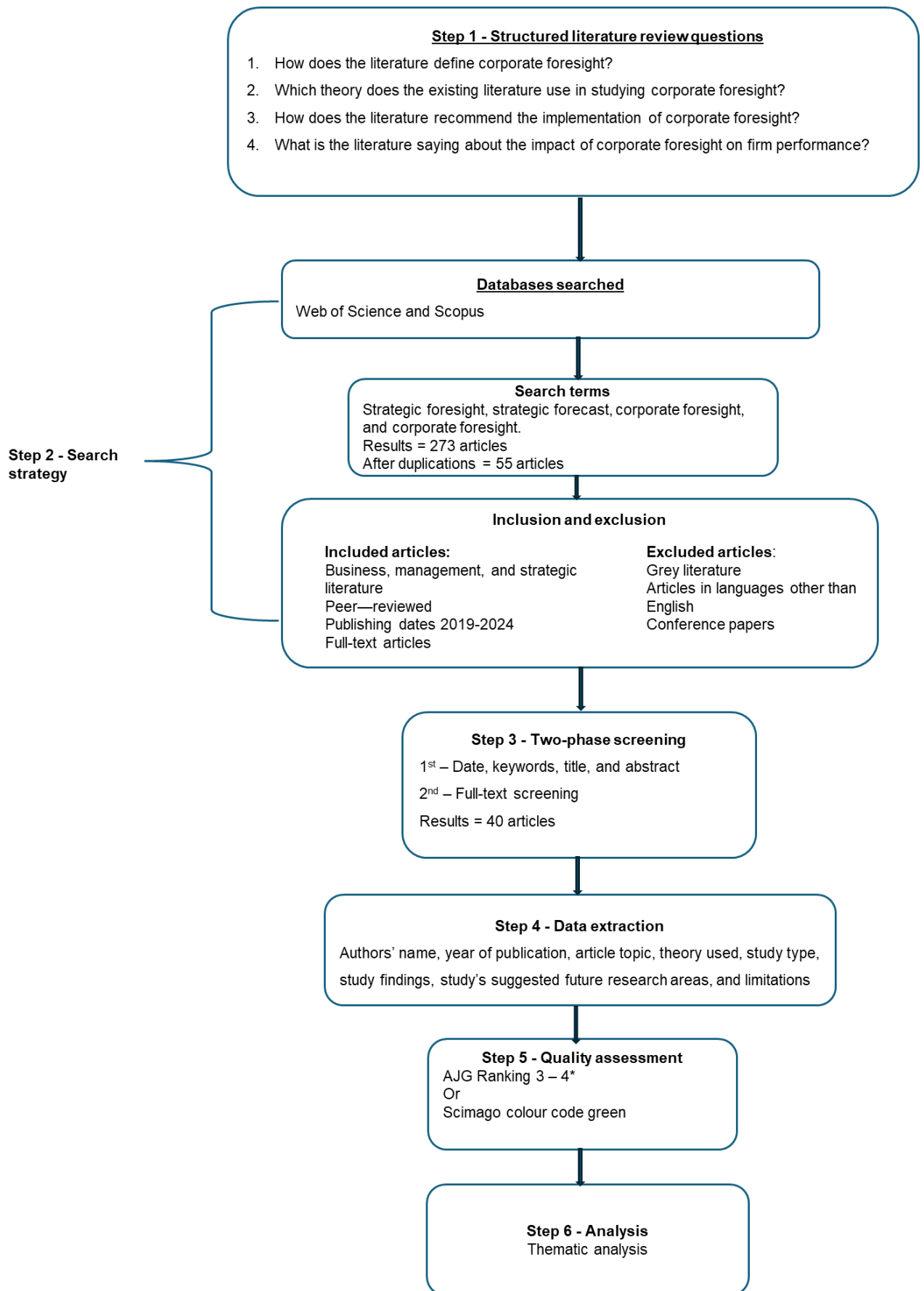


Figure 1 Summary of review methodology (author's work)

# Chapter Three: Findings and analysis

## 3.1 Introduction

The review methodology in the preceding chapter shows that, in total, I collected 40 peer-reviewed articles published within the timeframe of 6 years, from 2019 to 2024. The rest of the cited articles beyond this timeframe have been included for other reasons. Some are the most cited articles within my main sample of the review while others are written by the most cited authors like Rohrbeck et al. (2015) and Rohrbeck and Gemünden (2011). The statistical composition of the analysis reveals that of the total 40 articles, 39% are conceptual while 61% are empirical papers. The analysis further shows that publishing outlets are dominated by Technological Forecasting and Social Change with over 50% of the reviewed articles published by this journal followed by IEEE Transactions on Engineering Management which accounts for 22% of the articles.

This dominance by Technological Forecasting and Social Change reinforces the observation that corporate foresight has not fully been incorporated into the broader management and strategy literature, as evidenced by low publications in leading management journals like the Academy of Management Perspectives (two articles) and Strategic Management Journal (one article). The table below summarises the number of articles, within my sample, per publishing outlet. In the review period, 2022 dominates, with over 30% of articles published in that year alone. This could have been due to the COVID-19 crisis that had just ended, igniting academic interest in the field of corporate foresight and uncertainty. This is depicted in Figure 2 below.

Table 1 Journal articles and AJG ranking (author's works)

Publishing Journal	Number of articles	AJG Ranking
Technological Forecasting and Social Change	22	3
Technovation	1	3
Strategic Organisation	1	3
Strategic Management Journal	1	4*
Management Accounting Research	1	3
Journal of Open Innovation: Technology, Market, and Complexity	1	Scimago Green colour code
Journal of Business Research	2	3
Industrial Marketing Management	1	3
IEEE Transactions on Engineering Management	9	3
Academy of Management Perspectives	2	4*

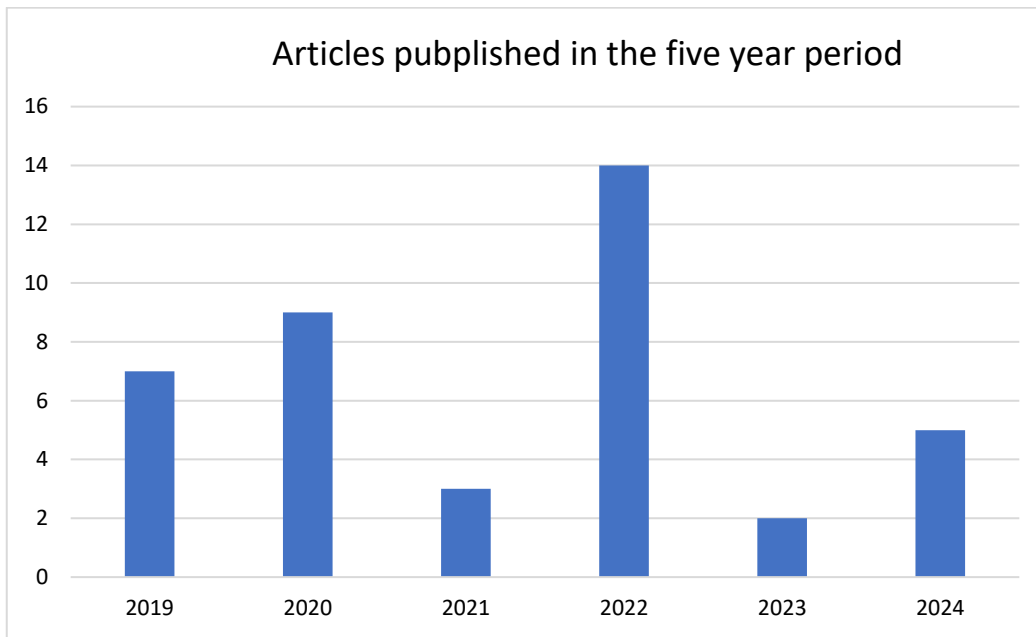


Figure 2 Annual publication of articles from 2019 to 2024 (October) (author's work)

In the sample of 40 articles, only 25% explicitly state the theory they followed in conducting their studies. This is not surprising as it confirms the highlighted theoretical incoherence and underdevelopment within the corporate foresight literature (Marinković et al., 2022). Dynamic capabilities theory dominates as the most followed theoretical framework with 40% of the papers exploring corporate foresight through this lens. Out of the 25 empirical research articles, nine studies were undertaken using the case study approach. This is also unsurprising given that corporate foresight is a new phenomenon starting to be explored within the context of firms. As also expected, most of the corporate foresight research was conducted in Western countries, predominantly European countries. 30% of the papers are from the European context. Only one study, (Hakmaoui et al., 2022), was conducted in Africa and another, (Li & Sullivan, 2022), in Asia. Further, only two articles provide and describe how they measured corporate foresight.

## 3.2 Findings

### 3.2.1 Defining corporate foresight

The review reveals that the construct of corporate foresight is broadly defined and conceptualised. Others conceptualise and define corporate foresight as a process or practice while others see it as a firm capability (Haarhaus & Liening, 2020). This conceptual and definitional tension accounts for the weak theoretical development of the

corporate foresight construct and the broader foresight literature because it has been shown that construct clarity is key to the advancement of literature (Suddaby, 2010). The table below captures some of the definitions to show the variations in how corporate foresight has been defined in the literature.

Table 2 Definitions of corporate foresight (author’s work)

<b>Definition</b>	<b>Author</b>
“...a systematic organization-level dynamic capability to interpret changes in the environment outline and evaluate possible futures based on these changes and use information from these futures for the organization’s competitive advantage.”	Fergnani (2022 p.822)
“Corporate foresight is identifying, observing, and interpreting factors that induce change, determining possible organization-specific implications, and triggering appropriate organizational responses.”	Gordon et al. (2020 p.2)
“...CF can be regarded as a firm’s capacity to interpret changes in the business environment, outline and evaluate plausible future based on these changes, and then utilize this information to build and sustain competitive advantages”	Marinković et al. (2022 p.290)
“Corporate Foresight is identifying, observing and interpreting factors that induce change, determining possible organization-specific implications, and triggering appropriate organizational responses”	Rohrbeck et al. (2015 p.2)
“...the <i>collective</i> ability of a firm’s managers to predict and assess unfolding events in their business environment in the context of firm innovation.”	Li and Sullivan (2022 p.566)
“...observing, perceiving, and capturing factors that is likely to induce future changes, and 2) dealing with these changes by deciding appropriate organizational responses, ...”	Iden et al. (2017 p.87)

Defining corporate foresight and conceptualising it within the dynamic capabilities literature dominates the studies. Its proponents, Fergnani, (2022a) (2022b), Haarhaus and Lienen (2020), and Schwarz et al. (2020), use the dynamic capabilities framework which aims at the renewal and reconfiguration of the firm’s resources to respond to environmental uncertainty (Ehls et al., 2022). Wenzel (2022) strongly opposes the

dynamic capabilities definition, arguing that, as a future-making practice that is made of performative activities, corporate foresight should rather be conceptualised and defined within the practice theory literature. In response to Wenzel's (2022) assertion, Fergnani, (2022b) suggests that there are several epistemological stances to clarifying the construct of corporate foresight other than confining it within either the dynamic capabilities framework or practice theory. He posits that practice theory and variance theory could still be used to understand and define corporate foresight (Fergnani, 2022b). As a new field in the organisation and management research, corporate foresight is still open to alternative definitional and conceptual perspectives, however, the scholarship needs to agree on a definition.

Adding to this discourse, Idoko and MacKay (2021) introduce performativity as another perspective to study and understand corporate foresight. Borrowed from the linguistics philosophy, the performativity lens posits that certain phenomena do not just explicate or describe the world instead they explain and enact the act simultaneously (Idoko & MacKay, 2021). In this sense, corporate foresight is understood as not just a practice of anticipating the future, but also participating in its creation. Thus, corporate foresight is a construct whose activities "...create part of the world that it purports to describe through the act of describing it" (Idoko & MacKay, 2021 p.3). This perspective aligns with the practice theory lens which emphasises the performativity nature of corporate foresight. Despite the differences in defining corporate foresight, the synthesis of the literature depicts some deep commonalities across all these conceptualisations and definitions.

There is consensus that corporate foresight aims to, firstly, understand the changes taking place in the present environment, secondly, to evaluate how such changes are likely to affect the firm, and thirdly, to trigger the appropriate responsive strategies. These three objectives of corporate foresight, as implied in the definitions, link strongly with the concept of environmental uncertainty. In her pioneering work on environmental uncertainty, Milliken (1987) suggests and defines three types of environmental uncertainty: state uncertainty as difficulty in comprehending the trends and changes in the environment, effect uncertainty as the inability to foresee the potential impact of such changes on the organisation, and response uncertainty as the difficulty in finding responsive strategies and their likely success or failure in managing uncertainty.

By linking corporate foresight and environmental uncertainty concepts, I find corporate foresight as a practice to address environmental uncertainty, and it could be defined through the three types of environmental uncertainty. Firstly, corporate foresight helps

firms reduce state uncertainty by detecting and evaluating environmental discontinuities (Rohrbeck et al., 2015). Secondly, corporate foresight reduces effect uncertainty by “...determining possible organization-specific implications...” (Gordon et al., 2020 p.2) caused by changes in the environment. Lastly, corporate foresight reduces response uncertainty because it fosters forward-looking, and cognition-stretching by forcing firms to identify responsive mechanisms and strategies to future environmental changes. This linkage builds and strengthens the assertion that environmental uncertainty is an antecedent of corporate foresight (Fergnani, 2022a).

Another interesting element that has been added to the definition of corporate foresight is the inclusion of possible outcomes of engaging in corporate foresight. Most notably, Marinković et al. (2022) in their recent literature review, included competitive advantage in their definition of the construct. Similarly, Rohrbeck and Kum (2018) define this construct by adding that spotting trends and changes using corporate foresight ahead of competition gives firms a competitive advantage. Li and Sullivan (2022) included the innovation outcome in defining corporate foresight. This pattern of constructing definitions further broadens the construct definition and keeps blurring the construct clarity because of the multiple outcomes that could be linked to corporate foresight, and thus, multiple definitions. The corporate foresight field will benefit significantly from a uniform definition of the construct.

### ***3.2.2 Related constructs.***

The corporate foresight field appears to be closely tied to organisational learning, information search, business ecosystems, and forward-looking fields. As a result, some concepts are closely defined and conceptualised with corporate foresight. First, sense-making, defined as a meaning-making process from interrogating past experiences (retrospective sense-making) and evaluating the future (prospective sense-making), is also used, similarly to corporate foresight, to understand the business operating environment (Sakellariou & Vecchiato, 2022). Secondly, the business ecosystems literature defines ecosystems as collective initiatives by multiple organisations with diverse industries and backgrounds to envision the future and co-enact it (Spaniol & Rowland, 2022). Thirdly, forward-looking is also closely defined and employs similar methodologies to explore plausible futures. To achieve construct clarity and enable theoretical development (Suddaby, 2010) underpinning a construct, it is salient that scholars divorce the construct of interest from other related and closely defined constructs and concepts.

There is consensus among scholars that foresight, and thus, corporate foresight, has its roots in the futures literature (Fergnani, 2022a; Ketonen-Oksi, 2022; Rohrbeck et al., 2015). Futures literature explains how firms detect, analyse, and interpret environmental changes to anticipate the future (Ketonen-Oksi, 2022). As shown in figure three below, the constructs within the futures research are closely related to foresight and its variations. Firstly, future preparedness refers to how firms are prepared to face the future and its consequences (Ketonen-Oksi, 2022). Secondly, futures fit explains how the firms' approaches and strategies are oriented towards social justice, economic inclusivity, and environmental sustainability (Ketonen-Oksi, 2022). And lastly, future proof describes how firms' approaches, products and services, and strategies will remain relevant and adapted to future environments (Ketonen-Oksi, 2022). Though historically situated in the futures literature, corporate foresight has recently been studied and theorised within organisational and management research as demonstrated by the studies.

Several constructs in the foresight literature also appear to be closely defined with corporate foresight leading to most studies using the terms interchangeably (Iden et al., 2017; Ketonen-Oksi, 2022). Collaborative open foresight is defined as an interorganisational corporate foresight (Li<sup>^</sup> et al., 2022; Wiener et al., 2020). This involves multiple firms taking part in a corporate foresight project jointly. Parties to the project could include, inter alia, customers, suppliers, and regulators. Also involving several parties, is networked foresight. Networked foresight refers to corporate foresight undertaken by the partners within a network organisation (Bootz et al., 2019; Gattringer & Wiener, 2020; Wiener et al., 2020). Wiener et al. (2020) also differentiate participatory foresight from the others as involving various stakeholders taking part in a corporate foresight project for a single firm. Research shows that these types of corporate foresight give firms access to unlimited skills, diverse mental models, and cognition, and also circumvent the structural and power dynamics of a firm often leading to ineffective corporate foresight exercise (Gattringer & Wiener, 2020; Li<sup>^</sup> et al., 2022; Wiener et al., 2020).

Additionally, Iden et al. (2017) distinguish industry foresight, strategic foresight, and managerial foresight from corporate foresight. First, they define industry foresight as involving the analysis of industry trends and changes to inform competitiveness (Iden et al., 2017). The scope within industry foresight is therefore reduced to just the industry within which the firm operates. Second, strategic foresight is defined as the fusion of futures techniques and methods with strategic tools to inform strategy development (Iden

et al., 2017). Similarly, strategic foresight scope is suggested to be limited to strategy development, unlike corporate foresight which can even extend beyond the normal strategic planning period (Calof et al., 2018). Lastly, managerial foresight concerns how future-oriented managers are, and if they can use that quality to build a competitive advantage (Iden et al., 2017). These constructs exist within the periphery of foresight literature, and they can be linked as shown in Figure 3 below.

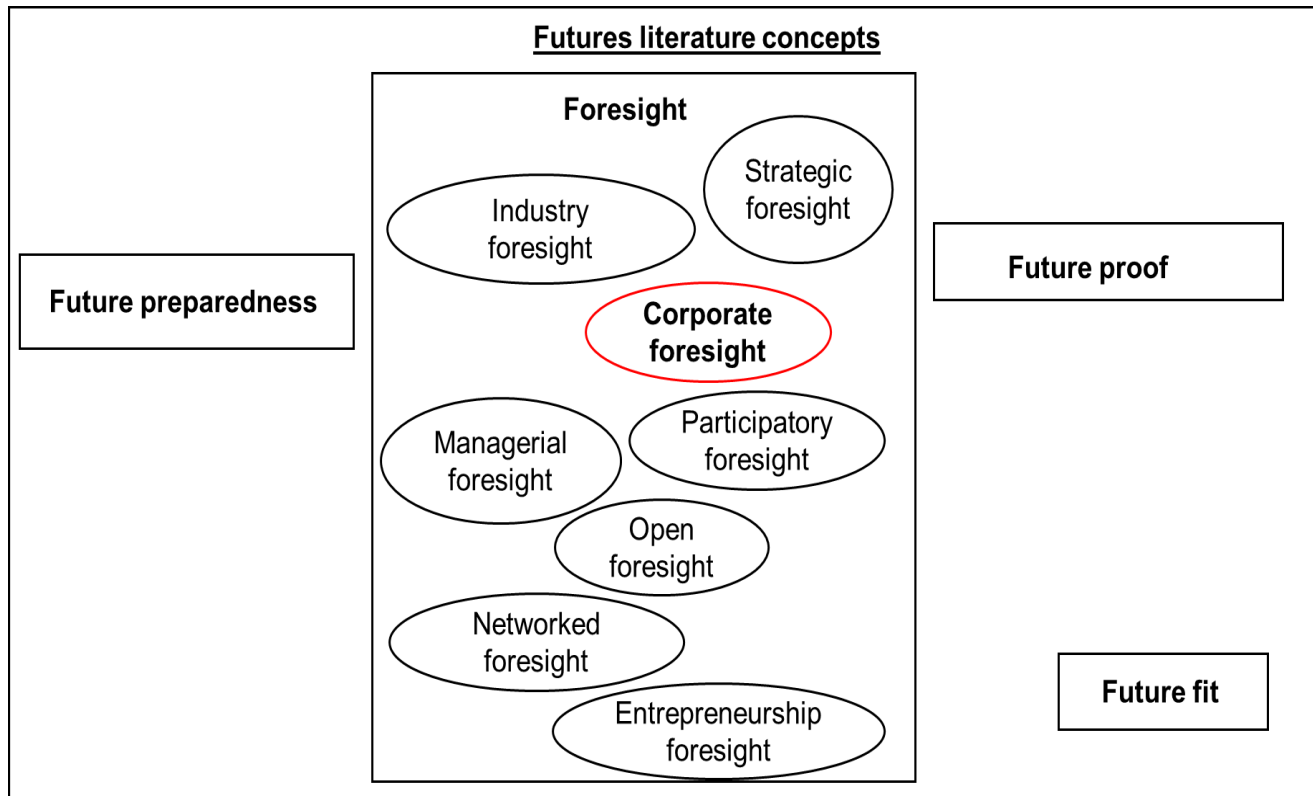


Figure 3 Futures literature constructs (author's work)

### 3.2.3 Theorizing corporate foresight

Since it gained academic interest, corporate foresight has been the subject of several theoretical frameworks and references, the most dominant being dynamic capabilities theory (Fergnani, 2022a; Iden et al., 2017; Marinković et al., 2022). Dynamic capabilities theory seeks to explain the success of firms that appropriately respond to environmental changes and the failures of those that do not anticipate and adapt to the environment (Schwarz et al., 2020). Dynamic capabilities theory is a refinement and an extension of the resource-based view theory, which suggests that firms must continuously re-configure their resources if they are to succeed and remain competitive in a fleeting environment (Ehls et al., 2022). The dynamic capabilities framework consists of three processes: sensing, which involves scanning the environment of trends and weak

signals, seizing, which involves taking the opportunities identified at the sensing stage, and transforming, which is changing the firm's practices to fit the new changes and environment because of sensing and seizing (Teece et al., 1997, 2016).

To understand this new concept within management and organisational research, scholars have considered cross-theorising from other management theories in the literature. Among others, network theory, which views the environment as a social system comprising the firm and other social actors with different relationships, has also been used to explore corporate foresight (Marinković et al., 2022). This view proposes that corporate foresight activities should be open to multiple actors, including those external to the firm (Marinković et al., 2022). The opening up of corporate foresight leads to open foresight as discussed in the preceding section.

Organisational learning theory is also prevalent across the articles. Burt and Nair (2020) explained organisational learning as the process through which firms learn and use that knowledge to improve and adapt to their environments. The process of learning consists of knowledge creation, knowledge transfer, and knowledge storage (Argote & Miron-Spektor, 2011). Thus, engaging in corporate foresight, therefore, involves knowledge and information acquisition about the environment, information interpretation, and transformation and exploitation to adjust to the environment (Peschl, 2023).

Another interesting theoretical angle explored in the literature on corporate foresight is the theory of forward-looking behaviour, which is used to explore anticipatory systems (Hakmaoui et al., 2022). Within this perspective, corporate foresight is seen as a system that firms use to anticipate future environmental changes and gain insights to build competitive advantage (Hakmaoui et al., 2022). Closely linked to this theoretical lens is the complexity theory. It observes the world as a non-linear, dynamic, uncertain, and complex system (Andresen et al., 2022). Similar to the theory of forward-looking behaviour, complexity theory states that firms can only anticipate the future because the world is unknowable and unpredictable. Corporate foresight through this lens, therefore, only helps firms anticipate the future because they have minimal control over their operating environment (Andresen et al., 2022).

In contrast to the anticipatory and complexity perspective above, Andresen et al. (2022), Idoko and MacKay (2021), and Wenzel (2022) suggest the performative perspective to our understanding of corporate foresight. They use practice theory, knowing-in-practice, to unpack the construct of corporate foresight. This perspective argues that corporate

foresight is a future-making and not a future-anticipating practice, made up of performative activities that enact the future (Wenzel, 2022). Through the use of practice-based methods and techniques, corporate foresight gives firms opportunities to take part and co-create their future rather than just wait in anticipation.

The behavioural theory of a firm and contingency theory are also explored in the extant literature to study corporate foresight. Behavioural theory of the firm lens indicates that firms do not always make rational decisions, decision-making agents are rationally bound, and they engage in satisficing behaviours (Ehls et al., 2022). Corporate foresight, within this theoretical perspective, is seen as a way to expand and stretch the cognitive bounds of decision-making agents to make better and innovative strategies (Ehls et al., 2022). Contingency theory posits that strategic decisions are dependent on firm-specific internal and external environmental factors (Fergnani, 2022a). This lens explains corporate foresight as an outside-in approach to strategy and decision-making. It also explains the antecedents of corporate foresight as detailed in the succeeding section.

Several theoretical perspectives have been explored to study corporate foresight. This was in response to Rohrbeck et al.'s (2015) plea to scholars to build the theoretical foundation for this construct to pave the way for its development, in practice and academia. Given that corporate foresight is a new phenomenon within the management, organisational, and strategy literature, it is not uncommon to find that multiple theoretical lenses have been developed, with some borrowed from other fields, to understand it further. As such, we should still expect more varied theoretical explorations of this construct as it continues gaining popularity within the management and strategy scholars' debates.

### ***3.2.4 Antecedents.***

There is a consensus in the literature regarding corporate foresight antecedents. Firms are driven by environmental shocks to engage in corporate foresight (Fergnani, 2022a; Haarhaus & Lienen, 2020; Meyer et al., 2022; Sakellariou & Vecchiato, 2022). Today's operating environment is characterised by unprecedented environmental uncertainty, complexity, and dynamism forcing firms to seek alternative coping mechanisms to survive and remain competitive (Wiener et al., 2020). As a result, corporate foresight has emerged as a future-oriented practice that can help firms address these environmental challenges of the 21<sup>st</sup> century (Andresen et al., 2022; Gordon et al., 2020; Haarhaus & Lienen, 2020; Purwanto et al., 2023; Wenzel, 2022).

Further, the need to innovate (Wiener et al., 2020), to adapt to the environment and to anticipate the future (Marinković et al., 2022), to remain alert to business opportunities and threats (Muhlroth & Grottke, 2022), to improve decision-making and firm performance (Spaniol & Rowland, 2022), to make long-term decisions under uncertainty (Hakmaoui et al., 2022; Iden et al., 2017), and the need to create value and sustainable competitive advantage (Purwanto et al., 2023) have all been cited as the reasons why firms engage in corporate foresight. Overall, firms appear to engage in corporate foresight because they seek superior positions and better returns within the competitive landscape.

### ***3.2.5 Initiating corporate foresight***

The research detailing how corporate foresight is initiated and integrated into the processes and activities of a firm is sparse and lacks coherence (Iden et al., 2017; Ruff, 2015). One perspective is that corporate foresight can be integrated into the organisation web establishing a corporate foresight department or unit with the sole mandate of carrying out corporate foresight activities and reporting directly to senior management (Hakmaoui et al., 2022; Ruff, 2015). Another perspective is to integrate a corporate foresight unit within an existing department like strategy and innovation, research and development department, or new product development department (Ruff, 2015). The last one suggests that corporate foresight can be carried out as an ad hoc project lead either by an internal team or outsourced to specialist consultants (Ruff, 2015). However, each approach has its advantages and disadvantages.

An in-house approach to corporate foresight might be exposed to the firm's cultural weaknesses, such as myopic management, lack of legitimisation, and skills limitations (Marinković et al., 2022). However, when the firm is culturally strong, has structures and policies that support corporate foresight, and the team has common mental models and attitudes toward corporate foresight, the results are likely to be good (Marinković et al., 2022; Ruff, 2015). While outsourcing the corporate foresight process is likely to bring diversity and expertise from people outside the theoretical boundaries of the organisation, it is, however, likely to be costly and be poorly implemented after project handover (Marinković et al., 2022). Incorporating corporate foresight into the firm's activities and processes, therefore, requires careful analysis and alignment with the firm objectives, resources, and context.

Hakmaoui et al. (2022) and Li<sup>^</sup> et al. (2022) agree on three steps of conducting corporate foresight: perceiving, prospecting, and probing. The perceiving stage involves the scanning of the environment to identify trends, existing and potential drivers of change, and any other discontinuities (Hakmaoui et al., 2022; Li<sup>^</sup> et al., 2022). Activities and tools at this stage include expert panel discussions, foresight workshops, and brain-storming sessions to identify the weak signals (Li<sup>^</sup> et al., 2022). The prospecting stage is the sense-making phase of the corporate foresight activity, it involves a synthesis of the insights gathered from the perceiving stage to make sense of the environment and the likely future (Hakmaoui et al., 2022; Li<sup>^</sup> et al., 2022). At this stage, the participants rely on the use of tools like value-chain analysis, case probabilities, and impact simulations (Li<sup>^</sup> et al., 2022). Lastly, they agree on probing which is the implementation phase of the process, and it involves experimenting and prototyping based on the first two stages (Hakmaoui et al., 2022; Li<sup>^</sup> et al., 2022). Figure 4 below provides a corporate foresight initiation framework supported by organisation learning theory.

In addition to the above, and in refining the process of conducting corporate foresight, Moqaddamerad and Ali (2024) further break down the process of initiating corporate foresight into six steps. First, they refer to framing as the setting of the targets and boundaries for corporate foresight engagement (Moqaddamerad & Ali, 2024). Given the insurmountable information that corporate foresight exposes the organisation to, it is critical to set clear targets and boundaries to avoid being lost in the information and analysis. Second, it is scanning which, similar to the perception above, involves the scanning of the environment for trends and changes and how they influence the future (Moqaddamerad & Ali, 2024).

Thirdly, based on the analysis of the environmental drivers of changes, the next step is forecasting. This is an evaluation and assessment of the plausible future scenarios as envisioned during the scanning phase (Moqaddamerad & Ali, 2024). Fourth, they refer to visioning as the selection of the preferred future scenario and the firm-wide facilitation of the necessary changes to achieve the desired future state. Fifth is the planning phase which builds on visioning and outlines the plans of action to be undertaken (Moqaddamerad & Ali, 2024). And lastly, is the acting step, which, like probing, is the implementation phase of corporate foresight (Moqaddamerad & Ali, 2024).

Extant research on initiating corporate foresight further shows that the different stages of corporate foresight involve different techniques, methods, and tools depending on each organisation's context. Ruff (2015) grouped these activities into two, those that

scan and detect environmental trends and changes (trend analysis, environmental scanning, and value chain analysis, for example), and those that help evaluate the plausible future states of the environment (horizon scanning, scenario analysis, and road mapping, for example). Other techniques include Delphi techniques, strategic road mapping, visioning, backcasting, and wildcasts (Lautenschlager & Tzempelikos, 2024; Vecchiato et al., 2023). Several of these methods and tools have been borrowed from the organisation and strategy research similar to how theoretical frameworks from other fields of research have been explored to understand corporate foresight. This shows that corporate foresight will slowly integrate into the general organisation and strategy research.

Social media analytics is the most interesting and unfamiliar approach used within corporate foresight. Social media analytics is an approach to external information search that involves the collection and analysis of user-generated insights from social media platforms to inform business decisions (Laurell & Sandstrom, 2022). Unlike the other methods mentioned above, social media analytics has not received much scholarly attention. This approach presents firms with the opportunity to scan and monitor environmental changes with minimal costs and effort (Laurell & Sandstrom, 2022). This method also transverses the cognitive shortcomings of the traditional methods which depend on internally sourced skills by opening the foresight activity to third parties, who are often consumers of the firm's product and service. Similarly to open and user-innovation, social media analytics can help firms anticipate and prepare for the future (Laurell & Sandstrom, 2022). Given the prevalence of social media platforms and the growing use of technology and the internet, social media analytics could significantly improve firms' scanning capabilities.

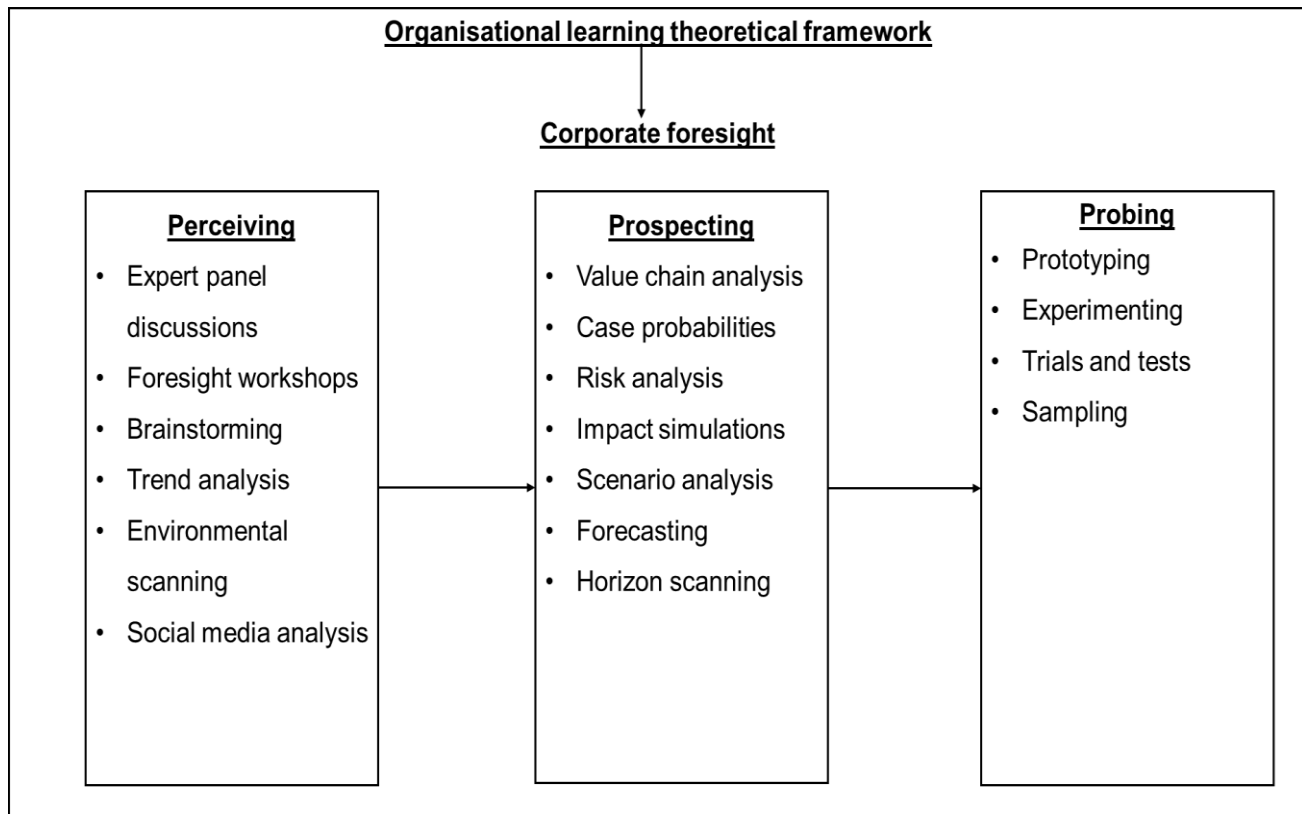


Figure 4 Corporate foresight initiation framework (author's work)

The success or failure of corporate foresight engagements can be explained by several factors. Firstly, firms have to accept that the environment is changing, and action has to be taken to remain competitive and survive, a concept that Fergnani, (2022a) names environmental incomprehension awareness. Such an awareness helps firms open up and become amenable to new information about the environment and the firm's shortcomings. Secondly, and from the organisational learning perspective, for firms to take in new information, they must have the absorptive capacity (Peschl, 2023). This refers to the firm's capacity to acquire, analyse, and utilise new outside information (Fergnani, 2022a). It has been reiterated that corporate foresight can lead to lots of information about the environment and lacking the capability to acquire and analyse such information would render the exercise unsuccessful, hence the need for absorptive capacity. Corporate foresight success factors area is another element within the field where the scholars seem to converge (Fergnani, 2022a; Marinković et al., 2022; Vecchiato et al., 2023).

In addition to environmental incomprehension awareness and the firm absorptive capacity, several idiosyncratic elements still contribute to the success of corporate foresight initiatives. A firm needs to have the necessary skills to engage in corporate

foresight, it must have a financial budget to support the initiative, and the organisational structure that allows corporate foresight insights to have an impact within the firm (Vecchiato et al., 2023). Using the information processing framework, Li and Sullivan (2022) also argue that the success and failure of corporate foresight initiatives depend on the managers' orientation towards the future and their ability to focus more on the present and the future, than the past. This position suggests that in organisations led by hubristic managers, corporate foresight has a higher chance of failure than in those that are led by non-hubristic managers (Li & Sullivan, 2022). This reaffirms the suggestion that corporate foresight is a social activity carried out by social actors, therefore, its success and failure are dependent on the social actors enacting it.

The chances of success or failure of corporate foresight could also be linked to its components. Fergnani (2022a) suggests six components make up corporate foresight: information collection, people and network, inclusion, methodological rigour, technical methods and integration, linking corporate foresight and strategy, foresight systems, and futures orientation (Fergnani, 2022a). How these components are carried out can have a serious impact on corporate foresight. If the firm does not engage in robust information collection and analysis or fails to match its foresight techniques and tools to its context, it could end up with a failed corporate foresight project. Another critical element is for corporate foresight to have linkages to corporate strategy and be hierarchically closer to decision-making (Marinković et al., 2022). To realise the purported benefits of corporate foresight, firms, therefore, need to be intentional in building robust and rigorous corporate foresight components in support of the corporate foresight project.

Lastly, to benefit from the initiation of corporate foresight and realise its positive outcomes, Pouru et al. (2019) discuss some of the inhibitors to its success. Firstly, firms should be willing to accept and utilise new information, and avoid confirmation bias (Pouru et al., 2019). This should involve utilising all the information and insights gained, instead of only accepting insights that align with pre-existing knowledge and beliefs. Secondly, firms should adequately analyse the resources, both financial and attention, needed to avoid starting the corporate foresight project and ending up not seeing it through due to costs or not implementing the necessary changes because of a lack of attention from those charged with decision-making (Pouru et al., 2019). And lastly, firms should have supportive structures in place to ensure that the corporate foresight unit has access to decision-makers who do not have negative and resistive attitudes towards change (Pouru et al., 2019).

### **3.2.7 Outcomes of CF**

It has been reiterated that corporate foresight helps organisation navigate the uncertainties of their operating context (Wenzel, 2022). Further, research shows that certain outcomes accrue to organisations as a result of corporate foresight. Meyer et al. (2022) posit that corporate foresight fosters explorative and exploitative strategies which lead to ambidextrous firms (Li<sup>^</sup> et al., 2022; Marinković et al., 2022; Moqaddamerad & Ali, 2024). This is echoed by Purwanto et al. (2023) who add that apart from fostering ambidexterity and agility, corporate foresight can create value and help build competitive advantage through innovation and improved organising within the firm. At the highest level, corporate foresight encourages the future-oriented and outside-in approach to strategy which keeps firms receptive and responsive to environmental change and can create a sustainable competitive advantage (Moqaddamerad & Ali, 2024).

Other outcomes of corporate foresight are that it supports strategic decision-making and strategic planning (Lautenschlager & Tzempelikos, 2024; Marinković et al., 2022), it leads to increased communication and alignment in the firm (Marinković et al., 2022), it can lead to improved innovation through business model innovation (Moqaddamerad & Ali, 2024), technological innovation, and new product development (Marinković et al., 2022; Sakellariou & Vecchiato, 2022), and it can lead to improved financial performance (Fergnani, 2022a; Marinković et al., 2022). Improved financial performance, however, remains elusive to empirically prove due to the long-term nature of corporate foresight and the many factors that contribute to a firm's financial performance (Iden et al., 2017; Marinković et al., 2022). Research on corporate foresight outcomes reveals, mostly, positive outcomes that can give firms the needed competitive advantage and agility in today's fleeting environment.

## **Chapter Four: Discussion and implications**

### **4.1 Theoretical implications**

Construct definitions are critical to the development of the construct and the field at large. Studies in this review demonstrate that there is still no agreed-on definition of corporate foresight. However, there is consensus in the underlying meanings and interpretations across the studies which provide common and interesting insights about the corporate foresight construct. All definitions point in the direction that corporate foresight helps

firms understand the environment and anticipate the future (Hakmaoui et al., 2022; Iden et al., 2017; Marinković et al., 2022; Rohrbeck et al., 2015). This link to the present environment, firms' strategic options to respond to environmental changes, and uncertainty about the future provided an opportunity for this review to define corporate foresight through the elements of environmental uncertainty. Thus, this review's contribution is the refinement of the corporate foresight definition through the elements of environmental uncertainty.

While scholars have some consensus in understanding corporate foresight, the area of contention appears to be how the construct is conceptualised. This probably has to do with the rather slow theoretical development of corporate foresight literature. The majority of the studies have placed corporate foresight within the framework of dynamic capabilities (Fergnani, 2022a; Marinković et al., 2022; Meyer et al., 2022; Rohrbeck et al., 2015) while others, notably Wenzel (2022), contest this conceptualisation arguing that the approach significantly downplays the construct and the phenomenon of uncertainty. As the field gets integrated further into general management research, areas of disputes like this are likely to reduce. This will be driven by the multiple theoretical lenses yet to be explored in unpacking corporate foresight.

In response to Rohrbeck et al.'s (2015) call for cross-theorisation of corporate foresight from other management theories, scholars have attempted, with a plethora of theoretical frameworks, to understand this phenomenon. The use of multiple theoretical underpinnings, especially in understanding nascent fields and constructs, is encouraged (Fergnani, 2022b) because it helps with both theoretical and practical developments. By exploring the several theories used to understand corporate foresight, this review finds organisational learning theory more relevant in explaining our understanding of corporate foresight. Studies that propose this perspective explain organisational learning as the process through which firms learn and use that knowledge to improve and adapt to their environments (Burt & Nair, 2020). Learning firms use the information to adapt to their environments. Similarly, corporate foresight concerns scanning the environment for new information about trends and changes, and firms analyse this information to anticipate the future.

Lastly, by exploring and defining concepts related to corporate foresight, I lay the ground for future research to investigate these constructs separately to avoid the current confusion where scholars use the terms interchangeably. Figure 3 above demonstrates how all the foresight types and their pre-fixes fit within the futures literature.

## **4.2 Practical implications**

Studies concentrating on how corporate foresight can be incorporated into the firms' practices and daily activities are limited. Further, most of the studies have undertaken corporate foresight research within the context of large and mature corporations (Ketonen-Oksi, 2022). As a result, the extant studies are biased toward firms that can afford any approach to corporate foresight: in-house corporate foresight units, or expert corporate foresight consultants. Studies demonstrate consensus regarding the activities involved in carrying out corporate foresight.

Corporate foresight starts first by scanning the environment through analysis of trends, relevant literature reviews, and experts' involvement in the phenomenon. Secondly, the scanning and information-gathering phase is followed by a detailed analysis and consideration of possible future scenarios. After exploring all possible futures, the implementation process starts by experimenting with new approaches, strategies, and products. All three main stages in the corporate foresight process fit neatly within the organisational learning framework elements which include knowledge creation, knowledge transfer, and knowledge storage (Argote & Miron-Spektor, 2011). This review further emphasises the significant role of organisational learning theory in guiding the initiation of corporate foresight. The suggested corporate foresight initiation framework above can guide firms that seek to implement it.

Studies demonstrate that corporate foresight can have a positive impact on firm performance (Fergnani, 2022a; Marinković et al., 2022). However, firm performance is broad, and it is influenced by many factors. Studies show that corporate foresight is positively related to firm innovation, supports strategic planning, and supports long-term decision-making. These corporate foresight outcomes can, therefore, influence firm performance positively. This review, therefore, suggests that firms that engage in corporate foresight will achieve these outcomes which in turn can lead to competitive advantage and improved firm performance.

## **Chapter Five: Conclusion and future research directions**

### **5.1 Theory-based future research**

From the theorising perspective, firstly, my suggestions for future research are based mainly on organisational learning theory. Burt and Nair (2020) introduced an interesting element to the organisational learning framework in describing corporate foresight. They suggested that organisational learning, as with any other framework, has its shortcomings like competence trap and hubris (Burt & Nair, 2020). To address this, they suggest unlearning, which refers to the withholding of prior knowledge to allow the processing of new information and knowledge (Burt & Nair, 2020). The unlearning process allows firms to see and acknowledge the need for new knowledge and the limitations of prior knowledge. Future studies should explore this theoretical angle further. They should empirically investigate the understanding of corporate foresight as an unlearning practice.

Secondly, future studies should further investigate social media analysis as a tool for corporate foresight. Only one study (Laurell & Sandstrom, 2022) in this review has explored the use of social media as an information-searching tool for foresight purposes. Given the rate of technological advances and internet access, social media use grows at an increasing rate, and it can easily be explored as a source of information to inform corporate foresight. Advancing this line of research will add to the list of methods and techniques for corporate foresight in this technologically savvy world.

Lastly, studies have predominantly presented corporate foresight in a positive light. Corporate foresight is associated with positive outcomes and no study appears to question the validity of this association. For instance, could the misinterpretation of environmental changes and trends lead to failure, could the practice of corporate foresight be the source of inertia even when change is inevitable, or could engagement in corporate foresight lead to hubristic managers? To bring balance to this field of research, future studies should explore the possible negative outcomes that can arise as a result of corporate foresight.

## **5.2 Practice-based future research**

From the practice perspective, future research should investigate corporate foresight in the Small and Medium Enterprises (SMEs) context. The extant research on corporate foresight has been biased, based only on large and pioneering corporations like Shell. The significant role SMEs play in the global economy is well-researched and understood.

SMEs make up 90% of the business globally and are responsible for over 50% of global employment (Ketonen-Oksi, 2022) yet corporate foresight, a seemingly important construct to firms' success and longevity, has not been satisfactorily studied within the context of SMEs (Pouru et al., 2019). This line of research will advance our understanding of the nuances around corporate foresight understanding and implementation in the often resource-constrained SMEs.

Secondly, this review demonstrated that only two studies (Hakmaoui et al., 2022; Li & Sullivan, 2022) were conducted in emerging markets. The management literature has long been criticized for being too Western: relying heavily on conceptualisation, theorising, and model development based on the Western context and Western values (Muzio, 2022). Barnard et al. (2017) added that African context research is not developing or adapting existing theories to suit the African context, rather Western theories are imposed on the African context. This review reveals that corporate foresight literature is no exception to this Western-biased literature development. Future research should, therefore, investigate corporate foresight in developing and emerging markets to understand the practical challenges thin such contexts.

## **5.2 Conclusion**

This article reviewed the literature on corporate foresight following a structured methodology to ensure a clear and replicable process. I demonstrated the current tensions and debates within the literature and highlighted areas of consensus progress within the field, such as corporate foresight antecedents and implementation techniques and steps. This review highlights the importance of corporate foresight through the lens of organisational learning theory which has grown relevant as we globally move into the knowledge economy (Pouru et al., 2019). Corporate foresight fosters a learning environment within firms which challenges the status quo and stretches firms' cognition. The last part considered future research trajectories from both the theoretical and practical perspectives.

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