

**“Unlocking Organizational Potential: Harnessing AI literacy for Dynamic Capabilities through sensing, seizing and reconfiguring initiatives in IT firms”.**

Shah Alam Malik

Master's Thesis

Business Technologies

2023



## Abstract

<b>Author</b> Shah Alam Malik
<b>Degree</b> Master of Business Administration
<b>Thesis Title</b> Unlocking Organizational Potential: Harnessing AI literacy for Dynamic Capabilities through sensing, seizing and reconfiguring initiatives in IT firms.
<b>Number of pages and appendices</b> 71 + 4
<p>The purpose of the research is to examine and understand how developing artificial intelligence (AI) literacy across an organization can enhance its Dynamic Capabilities (DC). DC refer to the ability to continuously sense external opportunities and threats, mobilize internal resources to seize openings, and reconfigure strategies and assets accordingly to maintain competitiveness. The research argues that purposefully cultivating workforce skills, knowledge, and competencies related to AI technologies and applications fundamentally strengthens these organizational sensing, seizing, and transforming abilities.</p> <p>The key objective of the research is to explore the current distribution and maturity of AI literacy across companies, analyze its impact on shaping sensing, seizing, and reconfiguring capabilities, evaluate effectiveness of various AI literacy adoption initiatives, and identify factors that mediate the relationship between AI literacy and DC.</p> <p>The qualitative research strategy involved semi-structured interviews with 5 IT professionals and leaders from organizations at various AI adoption stages. The interviews were conducted in October-November 2023. The focus was on understanding their strategies and experiences in building AI literacy to enhance DC. The theoretical framework draws from DC theory and the resource-based view of strategic management, emphasizing the role of valuable, rare, and inimitable resources like AI literacy in strengthening organizational competitiveness when effectively deployed.</p> <p>The result shows that organizations with high AI literacy display increased dynamism, agility, and innovation in tracking AI advancements and integrating AI into processes. Proactive training, digital platforms, internal networks, and tech partnerships spread AI literacy. Leadership commitment and adaptability influence how AI literacy enhances innovation. The research highlights how purposeful AI literacy development boosts DC for continuous competition, offering insights into strategic AI assimilation for unlocking organizational potential in the digital era.</p>
<b>Keywords</b> AI Literacy, Dynamic Capability, Organization Potential, Sensing, Seizing, Reconfiguring

# Contents

1	Introduction .....	1
1.1	Background.....	1
1.2	Research problem.....	2
1.3	Research questions and objectives .....	3
1.4	Significance of the research .....	5
1.5	Scope and limitations .....	5
1.6	Organization of the research .....	6
2	Theoretical framework.....	9
2.1	AI literacy .....	9
2.1.1	Definition and components of AI literacy .....	9
2.1.2	Role of AI literacy in organizations .....	10
2.2	Resource-Based View (RBV) .....	12
2.3	Organizational Potential .....	13
2.3.1	Innovation potential.....	13
2.3.2	Adaptability potential.....	15
2.3.3	Learning potential .....	16
2.3.4	Strategic potential .....	17
2.3.5	Collaborative potential .....	18
2.4	Dynamic Capability.....	19
2.4.1	Conceptual framework of Dynamic Capabilities .....	20
2.4.2	Relationship between DC and Organizational Potential .....	23
2.5	Embracing theoretical plurality, empirical insights, and future opportunities .....	25
2.5.1	Integrating RBV and DC.....	25
2.5.2	Empirical affirmation of theories:.....	25
2.5.3	Expansion opportunities:.....	27
2.6	Gaps in existing literature .....	27
3	Research methodology.....	30
3.1	Research design .....	31
3.2	Data collection and procedure .....	32
3.3	Data analysis.....	33
3.4	Research validity and reliability .....	34
3.5	Ethical considerations .....	36
4	Findings and analysis.....	37
4.1	Analysis of AI literacy levels in organizations.....	37

4.2	Impact of AI literacy on Dynamic Capabilities .....	39
4.3	Initiatives for sensing, seizing and reconfiguring AI and their effectiveness .....	41
4.4	Mediating and moderating factors in the relationship between AI literacy, DC & OP.....	47
5	Discussion .....	52
5.1	Synthesis of findings .....	52
5.1.1	Current distribution of AI literacy .....	52
5.1.2	Impact of AI on Dynamic Capabilities.....	53
5.1.3	Effectiveness of adoption initiatives employed by organisations.....	54
5.1.4	Key opportunities and recommendations .....	55
5.2	Validating the research questions.....	56
5.3	Theoretical implications.....	62
5.3.1	Sensing capabilities .....	62
5.3.2	Seizing capabilities .....	62
5.3.3	Reconfiguring capabilities .....	63
5.4	Limitations and future research directions .....	64
6	Conclusion .....	66
	References .....	68
	Appendix 1.....	72
	Appendix 2.....	73
	Appendix 3.....	74
	Appendix 4.....	75

## **1 Introduction**

The rapid developments of AI technologies have transformed business operations and presented multiple avenues through which organizations can boost performance, innovate, and stay competitive. On the other hand, even though there is significant value for every organization to leverage the power of AI, many firms struggle with implementing it successfully. Organizations face one big challenge that is low AI literacy in their bodies. AI literacy denotes what individuals must know, be able to do, or understand for successfully leveraging AI-based tools. This includes technical AI elements as well as an understanding of the implications, boundaries, and ethical perspectives of the system.

This part stresses how inadequate AI literacy delays organizations from exploiting the full transformatory capabilities for AI. It hinders integration of AI into organization's existing process as well as informed decision-making concerning AI implementation. Lack of AI literacy within organizations remain an obstacle in realizing the power of AI potential on all fronts.

The introduction, therefore, establishes the foundation upon which subsequent sections in research can be based as it defines the research problem within its context. It raises an alarm on the importance of addressing the issue of AI literacy in organizations. The introduction serves as a platform for probing into the linkage between organizational capacity and literacy on artificial intelligence, and why there is need to do research in that respect.

The introduction not only introduces the general importance of AI literacy and its effects in organizations but also acts as a lead into the exact research problem this paper aims at addressing. The next part of this research will look deeper into this research problem to alert the reader on the knowledge gaps and the research necessities.

### **1.1 Background**

Background section goes further to investigate how AI technology evolved and contributed to development within organizations. It demonstrates how AI can revolutionize procedures, improve customer relations, and facilitate decision-making. AI has disrupted industries by taking away the tedious chores, doing massive processing, and generating smart intelligence to power businesses.

Nevertheless, successful AI implementation and use go beyond having state-of-the-art tools and systems. Employees should also have some basic understanding of AI and its application in organizations. The term ai literacy entails having necessary knowledge, skills, and abilities to

comprehend, interact with, and productively apply AI technologies. However, understanding AI goes beyond having technical skills and includes cognitive and behavioural ability in comprehending AI concepts, analysis of AI results and decision-making in relation to AI incorporation.

This section highlights the importance of developing AI literacy as a crucial element for any organization to fully explore the potential of AI. Organizations without sufficient AI literacy could fail to incorporate AI technologies in their process, utilize AI outputs to inform the decisions, and comprehend the implication of AI. The inability to be AI-literate holds back organizational change and restricts the advantages of AI systems.

The background section focuses on providing the basis of understanding the research problem and its importance in relation to AI literacy. It lays groundwork for the chapters of the thesis, which will address the linkages between AI literacy, Dynamic capabilitiesC (DC), Organizational performance, and innovations. The background part also accentuates the wider importance of this study, as it points out how increasing AI literacy contributes to an organization's success and competency in the age of AI revolution.

The background section provides an all-inclusive overview of how AI technologies evolved and impacted enterprises emphasizing the central importance of having AI literacy to get the real utility out of AI. The introduction presents the background information of the research subject and the frameworks later chapters, helping the reader to understand the importance of the research and the objectives of the investigation.

## **1.2 Research problem**

This study aims to investigate the nexus between Artificial Intelligence (AI) literacy and Dynamic Capabilities (DC) within organizational contexts. The central research problem revolves around the hypothesis that the key catalyst for unlocking organizational potential and fostering DC lies in AI literacy. While it is posited that AI technologies have transformative capacities capable of revolutionizing organizational operations, the successful implementation and application of these technologies necessitate a profound understanding of AI fundamentals, the ability to decipher AI outcomes, and the execution of well-guided actions.

The research problem further seeks to gain clarity by scrutinizing the interconnection between AI literacy and Dynamic Capabilities. Dynamic capabilities, acknowledged as pivotal for organizational adaptation to a changing environment and the seizing of opportunities, underscore the essential role

of AI literacy in facilitating these aspects. The intention is to bridge this gap by examining how AI literacy empowers a firm to integrate, develop, and rearrange resources and competencies.

This research endeavors to elucidate the mechanisms that link AI literacy and DC by focusing on the proposed hypothesis. It strives to identify both individual and organizational attributes influencing AI literacy within organizations, concurrently exploring the relationship between AI literacy and organizational performance outcomes such as innovation and agility. The scrutiny of these relationships aim to provide crucial insights into how AI literacy shapes an organization's capabilities.

In summary, the research problem section establishes the foundation for the thesis by presenting a hypothesis that identifies a gap in knowledge and outlines specific research questions. It underscores the significance of investigating the relationship between AI literacy and DC, emphasizing practical implications for organizations aspiring to harness the potential of AI.

### **1.3 Research questions and objectives**

The research questions and objectives section play a crucial role in guiding the research by providing a clear direction for the investigation. The research objectives section outlines the specific goals that the research aims to achieve. These objectives provide a clear focus and direction for the re-search, guiding the research process and informing the analysis and findings.

#### *Research objectives*

The research aims to comprehensively explore the complicated relationship between AI literacy and DC within organizations. To achieve this, a thorough review of existing literature will be conducted to gain insights into the theoretical foundations and conceptual frameworks that underpin the interplay between AI literacy and the development of DC.

In parallel, the research seeks to delve into the factors that influence the development of AI literacy, both at the individual and organizational levels. This will involve an extensive literature review to identify key determinants, barriers, and facilitators impacting the proficiency in AI technologies among employees and within organizational structures. Subsequently interviews will be employed to gather data, and the findings will be analyzed to offer insights into the factors that contribute to the varying levels of AI literacy.

Another focal point of the research involves investigating the tangible impact of AI literacy on critical organizational outcomes, namely performance, innovation, and agility. This will entail a thorough literature review to establish the theoretical underpinnings connecting AI literacy to these outcomes. Empirical studies, surveys, or case analyses will be designed and executed to assess the actual impact of AI literacy on organizational metrics. The collected data will be meticulously interpreted to draw meaningful conclusions about how variations in AI literacy influence organizational aspects.

Lastly, the research aims to explore and recommend strategies and interventions that can effectively enhance AI literacy and foster DC within organizations. This will involve an in-depth review of existing literature to identify best practices and success stories from companies that have successfully implemented interventions to improve AI literacy and DC. The research will culminate in the development of practical recommendations and guidelines for organizations, offering insights on strategies to enhance AI literacy and navigate challenges associated with integrating AI technologies into their operations. Overall, these research endeavors aim to provide valuable insights and actionable recommendations for organizations seeking to optimize their utilization of AI technologies for improved organizational performance, innovation, and agility.

### *Research questions*

In principle, the research objective outlined above will be distilled into four focal questions that will be systematically addressed throughout the course of the research.

- 1) What is the relationship between AI literacy and DC?
- 2) What factors influence the development of AI literacy at individual and organizational levels?
- 3) How does AI literacy impact organizational performance, innovation, and agility?
- 4) What strategies and interventions can enhance AI literacy and foster DC?

Overall, the research questions section provides a clear roadmap for the research, outlining the specific inquiries that will be explored. By addressing these research questions, the research aims to contribute to the existing body of knowledge by providing insights into the relationship between AI literacy and DC, identifying factors influencing AI literacy, exploring its effects on organizational out-comes, and proposing strategies for fostering AI literacy and DC within organizations.

#### **1.4 Significance of the research**

The research section stresses the importance and implications of the research done for the thesis. It emphasizes the importance of the outcomes for organizations looking to leverage AI capabilities as well as change agents.

This research focus to find what are the ways that AI literacy can help unlock organizational potential which will contribute to the advancement of the underlying mechanisms and processes in this endeavour. The research seeks to determine the relationship of AI literacy and DC in enhancing organizational performance, increasing innovation, and providing a sustainable competitive advantage. Such results may give useful information to companies that wish to address AI-related business challenges within a short period.

Additionally, the research should be helpful in providing real world suggestions for organizations how to turn AI into competence and a source of competitive advantage. The outlined points can assist managers in establishing strategies for addressing low levels of AI literacy among employees and creating an AI ready culture.

In this respect, the importance of this research reaches individuals who are engaged in driving organizational transformation. With time, AI will continue to determine employment practices. Therefore, people who have acquired knowledge and skills about AI's concepts will have better chances of leading their organizations to success. Such findings can be used to establish the competencies and know-how needed by personnel to thrive within the AI arena, as well as make sound judgments that contribute to business transformation.

Overall, the significance of the research lies in its potential to contribute to the understanding of the relationship between AI literacy and organizational potential. The research findings and recommendations have practical implications for organizations and individuals, enabling them to harness the power of AI and unlock their full potential in the rapidly evolving digital era.

#### **1.5 Scope and limitations**

The scope and limitations section clearly delineates the boundaries of the research and acknowledges the study's limitations. AI literacy is viewed as a pivotal component of enabling the unlocking of organizational potential in the study. The research recognizes that other variables affect organizational performance and capabilities but narrows down to AI literacy to appreciate how it relates to dynamic abilities.

To make the results more broadly applicable, the research will be undertaken in different organizations representing different branches. The objective of this approach is to incorporate varied AI literacy views and the effect on organizational results. This research will comprise multiple organizations spread across different sectors to make the lessons learned apply to various organizational settings.

Nevertheless, these shortcomings should be acknowledged. The research, however, had one major constraint that is the use of self-reported data during the qualitative phase, this implies to biases and inaccuracies may arise in self-report measures, as perceptions, interpretations, and conceptions about AI literacy, DC, and organizational performance may differ among respondents. These limitations should be minimized by designing appropriate instruments and thoroughly analyzing the data using scientific methods.

The other limitation is that the findings may not be generalized. Although this research hopes to include various organizations, the results generated may not be applicable to all organizational settings. Every organization operates in its specific circumstances of industry, dimensions, culture, and resources, which can affect the relationship between AI literacy, DC, and organizational outcomes. Interpretations should be drawn from within the context of the organizations studied, and the applicability of conclusions in other contexts should be done cautiously.

An additional difficulty lies in the fact that both AI and organizational dynamics are dynamic phenomena, and it is not possible to acquire a full comprehension of these spectacles. AI is a quickly changing field that gives birth to ever new types of technologies, algorithms, and applications. There are numerous internal and external factors that have a bearing on how organizational dynamics change with time. Although this research considers the state of knowledge at present, it might not include all the future developments and organizational changes that will be experienced in the future.

Nonetheless, this research will still have some implications for the linkage between AI literacy and organizational capability. This implies that although it may contribute to further knowledge about AI literacy, in recognizing the range and limits of the project, it must be transparent and should call for careful interpretation of the findings.

## **1.6 Organization of the research**

The first chapter opens with an introduction that establishes the framework for this research. It covers the background of the research, the problems and questions related to the research, the objectives,

and the scope. The methodical start of these studies appears in Chapter 2, under the topic of the Literature review section. Figure 1 shows the research flow diagram in a methodical manner. First, the concept of organizational potential and its affecting elements are outlined in the literature review.

More will be learned about how AI literacy aids businesses in realizing the full potential of artificial intelligence. The multifaceted concept of AI, which encompasses various dimensions and implications for organizations, will be examined.

DC is influenced by the level of environmental change Dynamic Capabilities is influenced by the level of environmental change (Teece D. J., 2007). DC form the crux of strategic management, and this research chapter imparts practical significance to businesses by underscoring the vital traits of sensing, seizing, and reconfiguring. It serves as a strategic roadmap, revealing the necessities for companies to express these DC for enduring suc-cess in the ever-evolving business landscape.

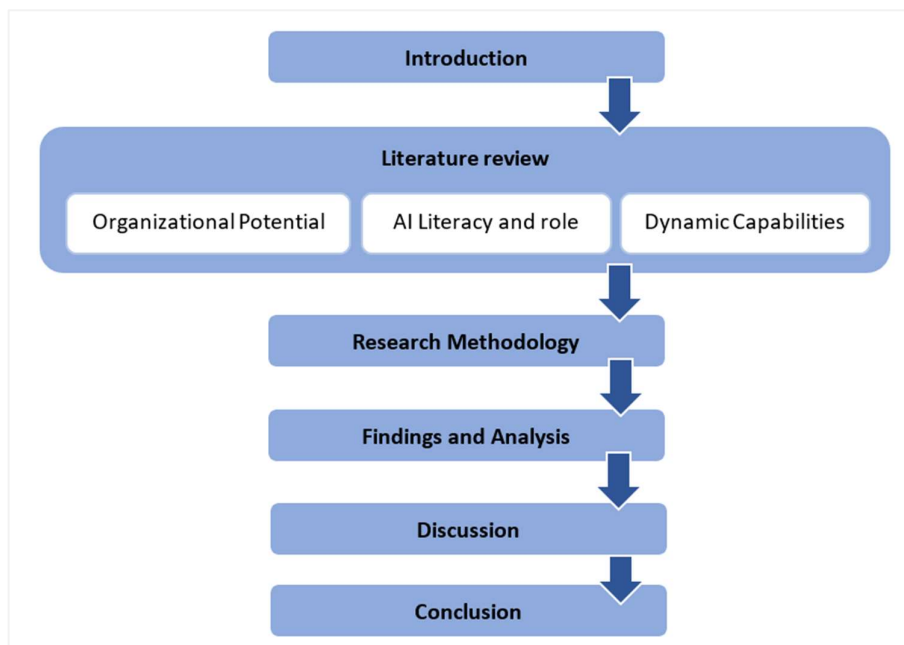


Figure 1: Research flow diagram of the thesis

Chapter 3 focuses on research design and research methodology to find the answers to the re-search questions. Firstly, the section describes the concepts of qualitative and quantitative data and then, it emphasizes how the data was generated to obtain the results.

The next chapter, i.e., chapter 4, will be analyzing the results that are generated by the interview and the data collected in it. The sections are distributed and explained thoroughly as per the research questions and related observations.

Moving forward into Chapter 5, the focus will be on the discussion portion. In this area, emphasis will be placed on moving beyond synthesis and carefully attempting to connect all the discoveries to-gether to provide a logical understanding. The consequences of the research will also be under the spotlight, including what it means overall and how it affects other areas of business. At the same time, the limits that come with the methodology will be acknowledged, ensuring an open and truthful portrayal. A roadmap for the future will be laid out in Chapter 5.

Finally, Chapter 6 will conclude the research by summarizing the findings, discussing the limitations, and suggesting opportunities for future research.

## 2 Theoretical framework

Within this chapter, the foundational theories that constitute the central focus of this research will be delved into. Each theory will be systematically studied, with its individual components and principles thoroughly examined. As the exploration proceeds, connections between these theories will be sought to be established beyond isolated examinations. Furthermore, the pursuit of deeper empirical insights and the identification of potential opportunities will be integral to the analytical approach. This multifaceted exploration is aimed at not only understanding the theoretical frameworks but also at contextualizing them within the broader empirical landscape, fostering a comprehensive understanding of their relevance and potential applications.

### 2.1 AI literacy

#### 2.1.1 Definition and components of AI literacy

AI is pervading our everyday life. With the growth of AI sophistication and complexity, everybody ought to possess an understanding of this literacy, which comprises comprehending, appraising, and using different AI systems critically for their benefit. AI literacy can be described as a multitude of factors through which people remain knowledgeable about the capacity, limits, and societal effects involved in AI.

*Fundamental Concepts:* For a person to gain an understanding of AI literacy base, one should understand the underlying ideas on which artificial intelligence is based. This will entail an appreciation on why AI is good for business as well as knowing about the various models of AI systems (Goodfellow, 2016). Some of these notions are machine learning, neural networks, computer vision, natural language processing, robotics, and narrow AI versus artificial general intelligence (AGI) (Kurzweil, 2005). They provide conceptual knowledge that gives meaning to AI technologies and enable people to make wise choices.

*Algorithms and Techniques:* Technically algorithms and techniques serve as the foundational pillars that enable the existence of AI systems. Regarding AI literacy, individuals proficient in AI should possess the capability to comprehend essential algorithms, including but not limited to regression, clustering, and decision trees (Alpaydin, 2020). These algorithms provide some understanding into how AI systems process and analyze data to detect patterns or come up with some predictions. People should also know major AI approaches such as supervised, unsupervised, and reinforcement learning.

*Data and Analytics:* AI runs on data as gas. For individuals to analyze AI appropriately, they must understand the significance of information to build, train, and enhance the performance of algorithms (Domingos, 2015). Data collection approaches, quality and cleaning, feature construction, overfitting, underfitting, and the best techniques for the preparation of bias-free datasets are also regarded as some of the key elements. Good data literacy is a prerequisite for assessing the validity and fairness or not of artificial intelligence.

*Critical Thinking and Problem-Solving:* To sharpen the required critical thinking about real world AI as well as the relevant issues related to ethics and data, one must be able to solve problems concerning the concepts and techniques of AI. This entails studying AI case studies, thinking of hypothetical events, and developing the ability to assess the costs, benefits, and risks of AI in different fields. (Stone, 2016). Critical thinking sharpens helps one to evaluate AI systems for the right use. In summary, building a solid base in these areas of fundamental competencies equips individuals with comprehensive proficiency in AI awareness.

Embracing continuous learning ensures that people with AI literacy stay ahead of AI innovation. Thus, they can develop novel technologies, procedures, and techniques to provide intelligent solutions for challenging problems. Additionally, constant learning helps people to change in line with the developing artificial intelligence environment to ensure that they possess fresh knowledge and abilities in an emerging domain.

### **2.1.2 Role of AI literacy in organizations**

Artificial intelligence is one of new emerging technologies which are currently revolutionizing industrial operations, and the way organizations operate. Where there is acceptance of AI in business, it's crucial for organizations to offer AI literacy training to their workers. Today, literacy is mentioned by people, referring to the knowledge necessary for understanding, interacting with, and effectively working with various AI applications.

The comprehensive article "Artificial intelligence for the real world" by Davenport talks about AI literacy and why it is important for a change towards digital transformation. In this respect, we consider in more details why AI literacy is important for organizations to be able to harness AI, while also considering other relevant references. The term "AI literacy" is multidimensional and implies great organizational significance. Therefore, a more comprehensive understanding can be gained by delving deeper into all of them.

*Improved Decision-Making:* The implications of AI in organizational decision-making processes are very significant. Such analytics and predictive models powered by AI can offer great insights and help in making decisions based on data. However, if the key decision-makers lack AI literacy, they may have difficulty interpreting the findings from AI systems. The underlying algorithms, biases, and uncertainties in AI models help organizations to make sound decisions, formulate good approaches, and eliminate possible risks and biases. Using artificial intelligence literacy, an organization can improve its ability to make decisions that are more accurate, timely and knowledgeable (Chen, Wen, & Huang, 2020).

*Collaboration and Integration:* AI is not confined to the purview of data scientists or IT. This has a tremendous implication for diverse organizational functions such as marketing, finance, human resource, and customer service. AI literate people from disparate functional areas can exchange ideas regarding AI concepts and practical application of various technology tools. Through this collaboration, AI is well integrated into business processes thereby improving efficiency and performance. Through encouraging AI literacy throughout the company, companies can maximize the effect of AI in all functions to achieve collective success (Allam, Raafat, & Alhadreti, 2019).

*Driving Digital Transformation:* There is no doubt that nowadays AI literacy is playing a very vital role in driving organizational digital transformation. Development of organization's staff towards artificial intelligence will allow the company open innovation areas, save resources, and ensure development in an era when the technology is changing faster than ever before (Davenport, 2018).

*Enhancing Innovation and Problem-Solving:* High AI literacy helps to stimulate innovative culture among employees and enables them to find nonstandard solutions for their problems. The AI literate employees having good knowledge about of AI concepts and algorithms, can be able to identify opportunities that can best suit AI technology in enhancing their efforts. Automation of routine processes, big data analysis, and the ability to derive actionable intelligence that could fuel innovation (Davenport, 2018).

*Ethical and Responsible AI Use:* AI literacy includes an understanding of the ethical implications surrounding AI technologies. Employees with AI literacy possess the knowledge to identify potential biases, privacy concerns, and ethical dilemmas associated with AI applications. (Jobin, Ienca, & Vayena, 2019; Jobin, Ienca, & Vayena, The global landscape of AI ethics guidelines, 2019) argue that promoting ethical AI use is essential for building trust with stakeholders and avoiding potential reputational risks.

*Promoting Continuous Learning:* Therefore, AI literacy is not static but a lifelong learning. Organizations need to invest in continuous training of their employees to facilitate AI literacy since AI is continuously evolving fast. Therefore, organizations need access to AI education programs, workshops as well as other resources for them to educate their employees on the recent AI trends

and developments.

## 2.2 Resource-Based View (RBV)

The basic of RBV was originated in 1959 by Penrose, which suggests that the organization's controlled, organized, and used resources are more important than the industry structure. The RBV or Resource Based View of strategy which emphasizes on a firm's internal resources and competencies as sources of competitive advantage and superior, sustainable performance in external markets is a strategic management framework. Unlike traditional industrial organisation economics, it moves the analysis from the exogenous environment towards endogenous firm characteristics. The core principle of RBV states that different resources will not have equal contribution to providing sustainable comparative advantage (Barney, 1991).

About the RBV, one key point is the VRIO framework that provides guidelines regarding these qualities or characteristics in a resource meant for long-term leadership and/or sustained competitive advantage (refer figure 2). The term, VRIO stands for Valuable, Rare, Inimitable, and Organizational Culture:

Is a resource . . .					
Valuable?	Rare?	Difficult to Imitate?	Supported by Organization?	Competitive Implications	Performance
No	---	---		Competitive Disadvantage	Below Normal
Yes	No	---		Competitive Parity	Normal
Yes	Yes	No		Temporary Competitive Advantage	Above Normal
Yes	Yes	Yes		Sustained Competitive Advantage	Above Normal

Figure 2 : VRIO frameworks (Patrick & Barney, 1998)

*Valuable Resources:* The term 'valuable resources' refers to physical, human, and organizational assets controlled by organizations. The set them apart from the rest of the competitors in the market through the development and execution of strategies using such resources.

*Human Capital:* As such, one of the valuable resources is human capital which can be explained as knowledge, skills and abilities that are contained within the firm's staff. This implies AI literacy which can also be considered as strategic knowledge-based resource for AI.

*Intellectual capital:* Intellectual capital is a more encompassing term that embodies other knowledge-based resources in the organization. In the given outline, it refers to AI literacy as one of the components of Intellectual capital.

*Organizational culture:* The sharing of knowledge and its uses is also shaped by organizational culture. It has something to do with the efficient use of AI literacy.

AI literacy forms a major component of intellectual capital and human capital in the RBV perspective. Thus, creating AI literacy among the labour force means creating a strategic organizational resource of high value that is rare and hard to imitate by competitors.

## **2.3 Organizational Potential**

Through a comprehensive review of literature, it is evident that organizational potential is a composite of various dimensions. These include innovation potential, adaptability potential, learning potential, strategic potential, and collaborative potential. Each dimension contributes to fortifying the organizational structure, fostering DC, and enabling sustained growth and adaptability. This nuanced understanding provides strategic insights for organizations aiming to optimize their latent capacities effectively.

Therefore, it may be argued that, for continuous prosperity, an understanding of its potential to inform on the necessary strategic choices must be possessed by any organization, ensuring that relevance is maintained, and optimal output is achieved.

### **2.3.1 Innovation potential**

In general, the type of an organization's potential to come up with innovative products such as new concepts that can be turned into items like products, services and business processes for value addition, and growth is referred to as innovation potential (Damanpour, 2012). These cover encouraging an innovative environment through engaging in the risk-taking and leveraging organizational resources for product development and selling.

*Creativity and idea generation:* Creativity needs to be motivated for innovation possibilities. Employees need motivation to use their imaginations, challenge the status quo in the industry and suggest innovative strategies. This can also be realized by organizing brainstorming sessions, idea competitions and cross functional collaborations. The organizations foster the development of valuable and fresh ideas through nurturing a creative environment (Amabile, 1998).

*Resource allocation and risk:* Innovation entails channelling the resources such as funds, workers and duration needed. It entails building project teams for innovation, setting up innovation kitties, creating infrastructure, and offering space for experimentation and piloting. However, through strategic resource allocation, risks taking, and an appropriate system which allows for innovation (Chesbrough H. a., 2006)

*Collaboration and knowledge sharing:* Innovation is usually common when partners learn from each other through sharing knowledge, insights, skills, and ideas. This explains why organizations with high Innovation Potential promote collaboration, tear down silos, and support cross-functional and interdisciplinary teams. Enabling different points of view, collaborations and sharing of skills within an organization may contribute towards more innovate results. (Bessant & Tidd, 2013).

*Implementation and commercialization:* The meaning of innovation potential overflows idea generation and includes capability of implementing as well as commercing innovative solutions. Translating ideas into valuable products, services, and processes which satisfy customer needs while contributing to increase in profits. Organizations need focus on implementation and commercialization to convert the ideas into successful innovations. (Bessant & Tidd, 2013).

*Organizational agility:* A company's capacity to respond rapidly is linked to its innovation capability and the extent of change in the markets and emerging chances. Agile organizations are quick reacting, easy manoeuvrable, and capable of transforming strategies and resources to take up the opportunities for innovations. Organizations need to be agile to enhance their innovation potential and take advantage of the dynamic markets (Tushman, 2008).

This includes considering these things as well as utilizing ideas from the literature referenced above so that organizations find appropriate ways of improving their Innovation Potential. It can help in creating a culture of creativity, allocation of resources to support innovations, promoting collaboration and sharing of knowledge, concentrating on implementation effectiveness, and fostering organizational agility (refer Figure 3 for a view of different potentials of an organization).

### 2.3.2 Adaptability potential

Adaptability potential is the capability of an organization to aptly respond, adjust, and survive when facing changes in its internal and external environments. The organizational change refers to the ability of a business to predict, sense, and understand changes, and to respond in a timely manner by appropriately modifying the strategies, structures, processes, and competences (Dess, 2019). Organizations use adaptability potential to respond flexibly to unpredictable situations, exploit newly available openings, and prevent emerging dangers. To further elaborate:

*Sensing and anticipating changes:* Such organizations are very adaptable in the sense that they can sense and predict environmental changes. They are aware of what is happening in their environment and search for early signs of changes that may alter their current situation or create new ones. Organizations that develop strong sensing capabilities can have proactive decisions, and quickly change their strategies (Teece D. J., 1997).

*Flexibility and agility:* Organizations must have flexible structures, processes, and operations to qualify as adaptability potential in their pursuit of Adaptability Potential. Flexible structures foster timely decision-making, delegated decision authority and efficient team and department coordination. Flexibility and agility in organizations is key to developing a strategy that is flexible enough to adapt operations, products and services to dynamic customer needs and changing markets (Eisenhardt K. M., 2000).

*Learning and innovation:* High Adaptability Potential means much learning and innovation in organizations. This fosters an environment for experimentation and taking risks. It includes encouraging knowledge dissemination, enhancing interdepartmental liaisons, and offering tools and encouragement to staff to acquire new competencies and inventions. Developing the attitude of being an inquisitive learner and encouraging an innovative environment. New information will enable organization's view things differently, accept change and adapt readily to changing environment (Easterby-Smith, 1999).

*Change management capabilities:* Developing robust change management capacities. essential for enhancing Adaptability Potential. Effective change management involves this is what structured processes, clear communication strategies, as well as stakeholder engagement initiatives. Through effective management of change, organizations ensure a smooth transition, reduce disturbances, and enhance employee involvement in addition to commitment (Kotter, 1996).

These dimensions of adaptability potential facilitate organizational agility and readiness in coping with unforeseeable conditions, timely reaction to changes and sustained prosperity in rapidly changing and competitive markets.



Figure 3: Organizational Potential and its factors

### 2.3.3 Learning potential

Integrated within this concept is an organization's capability to access, assimilate, and apply newfound knowledge and skills for the enhancement of its performance, adaptation to evolving circumstances, and stimulation of creativity. This encompasses the organization's ability to foster a culture of performance management, establish an environment conducive to lifelong learning, encourage knowledge pooling, and nurture an adventurous and inquisitive attitude. To gain a deeper understanding of Learning potential, exploration into the following key aspects is warranted:

*Learning culture:* An organization with a learning culture is one whose identity allows for learning in a systematic fashion. It entails building psychological safety, fostering open interactions, and cultivating a learning culture with an inclusive approach to group development. The organizations with a high learning culture develop the employees' spirit of seeking for knowledge, imparting ideas, and constant honing of expertise and abilities.

*Individual and collective learning:* Individual learning as well as collective learning is known as learning potential. A specific type is known as learning, which involves the improvement of the abilities of individuals and facilitates the process of acquiring new knowledge, skills, and competence through formal and informal educational methods. On the other hand, collective learning highlights a combined understanding of knowledge amongst teams, departments, and the whole enterprise. It encompasses instituting structures that foster collaborative learning like communities of practice, joint undertakings, and lessons-learned session (Argote & Miron-Spektor, 2011). (Edmondson, 2018).

*Knowledge management:* Maximizing learning potential depends on effective knowledge management practices. Knowledge management is a process of creating, storing, and distributing knowledge in an organization. It is comprising of sharing platforms for knowledge, lessons learned database, mentoring programs, and documentation of best practices (Alavi & Leidner, 2001). Proper knowledge management in organizations help them avoid duplication, exploit expertise, and enable continuous learning and betterment.

*Learning processes and methods:* Diverse learning processes and methods boost learning potential. This entails having provision for different learning chances like formal training programs, on-job learning, job rotation and coaching (Bates, 2015). There is several learning methods that organizations can use, including e-learning, simulations, gamification, and peer learning, which cater for different learning preferences as well as boost engagement and knowledge retention. If this is so, then organizations should investigate these factors to foster a high learning potential that allows them to be dynamic, creative, and grow in the competitive market of the day.

#### **2.3.4 Strategic potential**

It implies that a firm should be able to exploit its existing resources, capabilities, and strategic advantages while developing new ones to implement sustainable growth strategy. The ability of the enterprise's management to spot a profitable niche or take advantage of favourable conditions, the dynamics of the market it operates in, the company's flexibility regarding external impacts, and the appropriateness the internal factors relative to the company's strategy. To understand strategic potential in-depth, it is important to consider several concepts and frameworks:

*Strategy:* Strategic management in the context of business and management, Michael E. Porter's perspective has significant influence on organizations that endeavour to be distinctive amidst competition. According to Porter, it is crucial for one to create and maintain a distinct and sustainable competitive advantage by developing a unique value proposition that supports organizational objectives (Porter M. , *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, 2011). These observations focus on the details about competitiveness in industries and advise business to take careful decisions about industry positioning, product differentiations and costs. This line of strategic thinking takes into consideration not only the short-term tactics but also long-term strategies for success in volatile business environments.

*Competitive advantage:* Competitive advantage, a cornerstone concept in strategic management, is the ability of a firm to outperform its rivals by creating superior value or operating more efficiently. Michael E. Porter's influential work continues to shape our understanding of competitive advantage

in the contemporary business landscape (Porter M. , *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, 2011). In his book "*Competitive Advantage: Creating and Sustaining Superior Performance*," published in 2011, Porter delves into the sources of competitive advantage, emphasizing the significance of differentiation and cost leadership. He contends that firms can achieve a sustainable competitive advantage by either offering unique products or services that command a premium price or by becoming the low-cost producer in the industry.

### **2.3.5 Collaborative potential**

Ability of an organization in working in partnership with the internal and external partners, sharing its resources as well using their collective skills. This refers to the ability to build cooperative relations that promote sharing of both knowledge and work efforts and to coordinate efforts of people, teams, and organizations. To gain a more detailed understanding of Collaborative Potential, the following key aspects can be explored.

*Collaboration:* Working together to reach common goals, sharing resources, and taking advantage of varying views, with the aim to gain benefits. It may come in different forms like partnerships, alliances, networks, or cross functional teams. There are several papers on inter-organizational relationships and strategic alliances that focused a lot on collaboration. (Huxham, 2005) (Gulati, 1998).

*Trust and relationship building:* Collaboration involves trust as a key element. The practice of building trust between people and organizations enhances transparency, leads to free interaction, dissemination of information, and encourages cooperation. It is important to build and sustain trusting relationships to work together successfully (Lewicki, 1998)

*Collaborative culture:* Collaborative culture comprises of norms, values and processes within a firm which foster cooperation. The idea includes creating an environment where people work together, freely communicate, and are awarded for collaborating. Some research is available in the literature on organizational behaviour and organizational culture regarding how important it is for companies to foster collaborative cultures (Denison, 1990) (O'Reilly, 1996)

*Collaborative platforms and technologies:* Thanks to technological development companies can use different collaborative platforms and tools for communication, knowledge sharing and coordinating. They allow for collaborative work, remote access and information sharing all of which improve Collaborative Potential (Malhotra, 2007)

By considering these aspects, organizations can enhance their Collaborative Potential and reap the benefits of effective collaboration, such as increased innovation, improved problem-solving, and enhanced agility.

## 2.4 Dynamic Capability

Dynamic capability (DC) implies that a business can consciously formulate, enlarge, and modify the endowments. (Helfat, Finkelstein, Mitchell, & Peteraf, 2007) (Zahra, 2006). The latter entails asset management which comprises the tougher facet being the intangibles (Teece D. J., 2007). Nevertheless, constructing DC depends on inner procedures and efforts, which should be sustained by the externally made efforts. These capabilities represent the culmination where sustainable value is generated, as it becomes challenging for competitors to replicate them at the final stage of value creation.

DC stand at the top of the hierarchy among the organizational capabilities as firm resources and capabilities (Wang, 2007). Wang and Ahmed have a three-tier hierarchy: zero-order resources, first order capabilities, second order core capabilities, and third order dynamic capabilities. All capabilities are not DC because they should also be valuable and difficult to imitate by competitors (Helfat, Finkelstein, Mitchell, & Peteraf, 2007). Resource-based renewal lies with the higher order capabilities, and these capacities are known as meta-capabilities (Ambrosini & Bowman, 2009)

Unlike firm performance, DC refer to the deliberate reconfiguration of resources (Helfat, Finkelstein, Mitchell, & Peteraf, 2007). Change processes, inventing and reinventing the business architecture, asset selection, and asset orchestration are their primary concentrations (Helfat, Finkelstein, Mitchell, & Peteraf, 2007). This is what firms do by constantly renewing and adding value in the resource base, to adapt to ever-changing environments.

Six distinct roles that DC play to help firms remain competitive in constantly changing environments (Helfat, Finkelstein, Mitchell, & Peteraf, 2007) (Zahra, 2006). These include renewal of resources and capabilities, recombination, redeployment, replication, retrenching, and retiring of resources and capabilities.

- *Refreshing or renewing of resources* by a firm entail revitalizing these previously possessed resources. This helps to keep the resources relevant and capable of dealing with new challenges and opportunities. Renewing resources allows firms to keep competitive advantage and adapt with changing business environment.

- *Recombination* is the way in which distinct resources and competencies are combined to create new value propositions. Firms can use their existing resources to launch new products, services, or business models. This enables firms to diversify into new market areas or develop distinctive products in existing markets.

- *Redeployment* entails shuffling of resources and capabilities in various areas within the organization or across different business units. Through efficient resource redistribution, firms can make the available resources serve them better. It allows companies to react to changing demands of the market and take fresh chances.

- *Replication* is about reproducing effective resources or capabilities in other circumstances and geographic areas. This advantage can be gained through the utilization of the strengths available within the firms in transferring them onto new areas. It helps to capture an expanded market or go back to a known market.

- *Retrenchment* entails trimming which may involve cutting down the workforce and selective scaling back the resources and capabilities. Sometimes, firms might have to withdraw or reduce their presence in some markets. The process of retrenchment enables companies to invest in core areas of competence while shedding off unproductive non-strategic units.

- *Retirement* of resources and capabilities is phasing out or discontinuing resources that are redundant or useless. With this function, companies create space for new investments to align their resources with corporate strategy.

DC application depends on the degree of environment change (Teece D. J., 2007). They are particularly suitable for the fast-changing environment, although they are applicable for medium to high velocity markets and various intensities of change. DC are effective as they respond to different types and scales of internal and external changes. DC are key for building and maintaining a competitive advantage regardless of market conditions.

#### **2.4.1 Conceptual framework of Dynamic Capabilities**

Organizations apply DC as a lens that enables them to comprehend how to change, create, and relocate their organization's assets under changing circumstances. The framework described by Teece, Pisano, and Shuen was first proposed in 1997. Since then, this framework has been enhanced by many other researchers in the context of strategic management. At its core, the conceptual framework of DC revolves around three interrelated processes: sensing, seizing, and

reconfiguring. This process builds upon each other allowing organizations to successfully operate within complicated and uncertain environment settings (Teece D. J., 2007).

- *The sensing process* is the first component of the framework, involving the organization's ability to identify and interpret signals from both its internal and external environment. Through perceiving and comprehending these indicators, organizations should be able to identify possible business prospects or dilemmas necessitating strategic actions. It should involve scanning the competitive environment, following industry trends, and determining what customers expect and prefer. Sensing should be made effective so as enable organizations get a glimpse of the dynamic changes and potential changes taking place in (Teece D. J., 1997) (Eisenhardt & Martin, 2000).

- *The seizing process* deals with the capability of an organization to marshal its resources and competency to seize those opportunities. Involves rapid decision making, resources allocation and utilizing existing capabilities to take advantages of the emerging situations. Seizing opportunities can be by making strategic investments, strategic alliances, acquisition, and internal reconfiguration. Organizations can capitalize on opportunities and hence be ahead of competition and add value in turbulent market environments (Teece D. J., 1997) (Eisenhardt & Martin, 2000)

- *The reconfiguring process* is third element in the proposed framework relates specifically to the organization's capacity for reconfiguration, involving the dynamism with which it can realign its resources and capabilities based on prevailing situations. It entails realignment of resources, creation of new capabilities, and adjusting the current ones in accordance with the emerging market conditions and corporate goals. Through continuous reconfiguration, organizations ensure that their inner frameworks of systems, process, and structure match changing environment (Teece D. J., 1997) (Helfat & Peteraf , 2009)

The business models based on the perspective of the dynamic capabilities' framework refers to idea that should be distinguished from the dynamic capabilities, the strategy, as well as the investment decisions. Although business models are sometimes defined within a context of strategy they should be viewed as distinct activities (Chesbrough & Rosenbloom, 2002).

Strategic analysis thus involves choosing the desired market segments as well as the most viable business model. This may even involve discarding the old models in favour of the new to ensure competitiveness through unique capability which serves as the foundation for firm-specific competitiveness and business model. Sometimes, new general-purpose technologies may create opportunities for radically different business models, requiring subsequent adjustments in the corporate strategy. (Ricart & Casadesus-Masanell , 2011) .

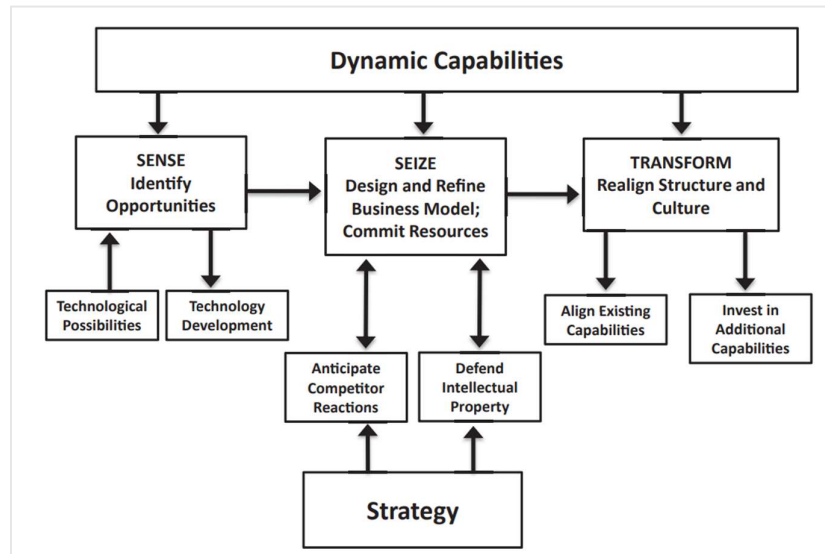


Figure 4: Schema of Dynamic capabilities, business model and strategy (Teece D. , 2010)

A simplified version of the framework, omitting feedback channels such as that between organization design and dynamic capabilities, is shown in Figure 4 (Teece D. , 2010) DC and strategy combine to create and refine a defensible business model, which guides organizational transformation. Ideally, this leads to a level of profits adequate to allow the enterprise to sustain and enhance its capabilities and resources (Ricart & Casadesus-Masanell , 2011)

A business model shapes strategy since it constrains some actions and facilitates others. By determining costs and profitability, a business model impacts the very feasibility of a strategy. In the event of a conflict between strategy and the business model, it falls to top management to determine which of the two should change (Teece D. , 2010)

Dynamic capabilities and strategy combine to create and refine a defensible business model, which guides organizational transformation. Ideally, this leads to a level of profits adequate to allow the enterprise to sustain and enhance its capabilities and resources (Teece D. , 2010)(Ricart & Casadesus-Masanell , 2011)

The DC framework also recognizes the crucial role of knowledge and learning in the adaptation process. Organizations must develop a learning orientation, foster knowledge creation and dissemination, and facilitate organizational learning at both individual and collective levels. This enables the organization to accumulate new knowledge, build absorptive capacity, and facilitate the transfer of knowledge across various parts of the organization (Zollo & Winter, 2002) (Helfat & Peteraf, 2003).

Moreover, the framework acknowledges the influence of strategic factors such as leadership, organizational culture, and strategic alignment. Effective leadership is essential in driving the development and deployment of dynamic capabilities, while organizational culture shapes the mindset, values, and behaviors regarding adaptation and innovation. Strategic alignment ensures that DC are aligned with the organization's overall strategic direction, enabling focused and coordinated efforts (Teece D. J., 1997).

#### **2.4.2 Relationship between DC and Organizational Potential**

The present day's dynamic organizations are faced with a challenge of adapting to changes that take place in the industry even as they seek to be competitive players within the industry. Organizations to plot through these 'landscapes' must devise and utilize their Dynamic Capabilities. By dynamically changing the organizations' resources and competencies in order to be capable of reacting quickly to these external changes organizations obtain the so-called dynamic capabilities.

Through this, companies become more efficient thus improving their organizational strength (ability to achieve enduring competitive edge and sustained prosperity). It is my intention with this paper to explore the linkage between DC and the organizational potential and how DC promote organizational growth, innovation, creativity, and adroitness (Teece, Pisano, & Shuen, 1997).

- *Linking DC and Organizational Potential:* DC open and organization's capacity to persistently change and innovate amidst dynamic business environments. DC comprise of such processes, resources, and capabilities which enable the organizations to recognize an opportunity, grab it efficiently, and refit the firm's resources to maintain competitiveness. Organizational potential can be developed through DC which enable an organization to anticipate, exploit and cope with changes (Teece, Pisano, & Shuen, 1997).

- *Enhancing adaptability:* The adaptive capacity is one component that constitutes the organizational potential. The DC allow an organization to be flexible by sensing environmental change, exploiting opportunity, and realigning its resources and core competences. Organizations should be able to sense effectively to know changes in tastes of customers by identifying some emerging trends. The seizing processes of any organization help them utilize these openings; at the same time, they get ready themselves by reconfiguring the processes for future changes in the surrounding environment of any concern. Adaptive organizations are quick and flexible to respond to changing market conditions thereby increasing chance of prosperity (Eisenhardt & Martin, 2000).

- *Fostering innovation*: Innovation and market differentiation are another important part of organizational potential. Innovation is fostered through DC that facilitate the creation of knowledge, its acquisition, and further combining such knowledge. Dynamic capabilities increase organizational ability to discover technology, innovation, market requirements and offerings. Internal knowledge becomes renewed, while external resources of information, for example, are incorporated in dynamic capabilities, thus enabling firms to innovate, change, modify, and adapt to changing environments through renewal of knowledge accumulation and reformation processes. The capability dimension refers to the ability of the entity to innovate, which translates into the prospective capacity for leading the market, growth, and sustainability (Teece D. J., 1997).

- *Supporting resource utilization and reconfiguration*: Organizational potential involves effective utilization of resources and later redeployment. Dynamic capability enables organizations to exploit their organizational resources. Through the sensing process organization can feel any resources gaps, mismatches that might be present, and any untapped opportunities. To accumulate competencies and create resource availability, organizations grab processes such as investment, amalgamation or even purchasing of enterprises. To do so, organizations redeploy their resources toward creation of fresh assets and adjustment of the old ones to fit with strategic goals under changing market conditions through restructuring. To maximize returns, efficiency in operations and maintain competitiveness, organizations must optimize their resources (Teece D. J., 1997).

- *Building resilience*: Organizational resilience which is one the critical element of organizational capability becomes even more important for organizations facing unforeseen disruptions and challenges. Organizational resilience is supported by DC through creating new sensing mechanisms that help in responding to threats, identifying, and neutralizing risks, as well as bouncing back from interruptions. Organizations continuously create new capabilities to sense about possible threats, expose vulnerable areas, and make reactive strategies. Seizure and reconfiguration allow the organization to be flexible enough to overcome disruptions in quick time. DC enable organizations to foster resilience and keep their latent potential. (Teece, Pisano, & Shuen, 1997) (Helfat & Peteraf, 2009).

- *Enabling continuous learning*: The concept of organizational potential is an important factor in learning or developing new capabilities. DC are essential for organizations to create a thirst for knowledge; hence, they accumulate knowledge, acquire new skills, and adjust to changes dynamically. Knowledge creation and sharing dynamics contribute to organization's learning and transfer of knowledge which are the dynamic capabilities. DC give a stronger basis to organizations that enable them recognize and realize learning opportunities and consequently enhance the

possibilities of innovations, growth, and competitiveness (Zollo & Winter, 2002); (Helfat & Peteraf, 2003).

## **2.5 Embracing theoretical plurality, empirical insights, and future opportunities**

This chapter puts forth an integrative framework interconnecting resource-based and DC perspectives to examine organizational AI literacy. As illustrated, AI literacy constitutes valuable human and intellectual capital as well as an enabler of sensing, seizing, and reconfiguring processes. This synthesis establishes AI literacy as a strategic knowledge stock that enhances reactive decision-making capacities. The framework offers empirical confirmation and expansion opportunities (refer figure 5). In unifying diverse views, it reveals AI literacy's indispensable multifaceted role in developing sustainable AI capabilities.

### **2.5.1 Integrating RBV and DC**

The arrows connecting the RBV and DC layers symbolize the integration of these two perspectives. The interconnection highlights the idea that AI literacy is not merely a static resource but also an enabler for dynamic capabilities. Enhanced AI literacy within an organization can lead to improved abilities in sensing AI-related opportunities, seizing them effectively, and reconfiguring the organization's strategies and resources in response to AI-related changes.

This integration underscores that AI literacy is not an isolated concept but is deeply interwoven with the organization's broader resource base and dynamic capabilities. As a knowledge-based resource, AI literacy contributes to an organization's ability to sense, seize, and reconfigure effectively in the dynamic AI landscape.

### **2.5.2 Empirical affirmation of theories:**

The section below the central concept offers empirical support for the RBV and DC theories:

- *Investing in AI literacy*: The research findings affirm that organizations that strategically invest in building AI literacy within their workforce demonstrate superior abilities in sensing AI-related opportunities, seizing them effectively, and reconfiguring their strategies and resources as needed. This alignment with DC theory reinforces the notion that AI literacy contributes to organizational adaptability.

- *Broader AI literacy and agile pursuit of AI adoption:* The research demonstrates that organizations with a broader AI literacy across their workforce tend to pursue AI adoption and integration more agilely. This finding reinforces the idea that knowledge resources, such as AI literacy, enable dynamic adaptation.

- *Holistic approach to capability building:* The findings highlight the value of taking a holistic approach to capability building, including training, tools, and complementary factors. This approach acknowledges the multi-faceted nature of resource orchestration and dynamic capabilities.

- *Leadership support and experimentation culture:* The empirical evidence underscores the significance of leadership support and an experimentation culture in shaping the impact of AI literacy on organizational adaptiveness. This observation is consistent with DC theory, which acknowledges that DC manifest within specific organizational contexts.

The empirical affirmation section demonstrates that the theories align with real-world organizational practices and experiences. It illustrates how organizations that strategically invest in AI literacy are better equipped to sense AI-related opportunities, seize them, and adapt to changes in the AI landscape.

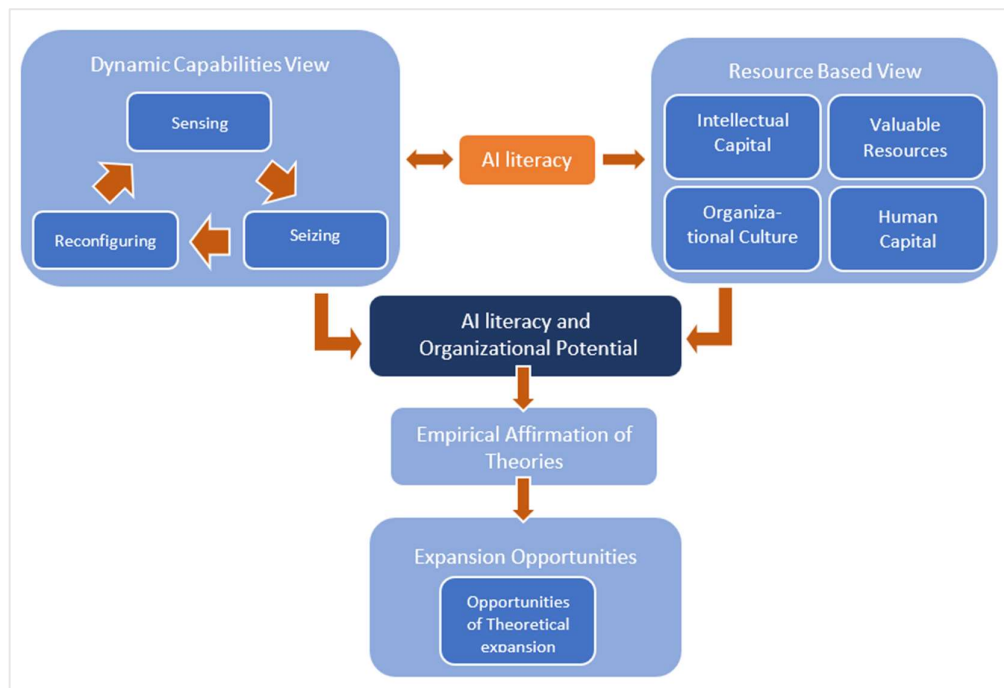


Figure 5: Theoretical framework

### 2.5.3 Expansion opportunities:

The expansion opportunities section beneath the empirical affirmation section highlights areas for further research and theoretical development:

- *Different adoption approaches*: Variations in the effectiveness of different AI adoption approaches suggest the need to explore configurations of initiatives that optimize dynamic capability building. This research can enhance our understanding of how organizations can best develop their AI capabilities.

- *Technical and ethical perspectives*: Contrasts between technical and ethical perspectives suggest the potential for new theoretical frameworks that address the need to foster holistic AI literacy while balancing potentially competing domains. Research in this area can shed light on how organizations can navigate the technical and ethical dimensions of AI.

- *Change management challenges*: The challenges associated with change management in the context of AI suggest an opportunity to develop AI-specific organizational adaptation theories. These theories would consider the unique challenges and dynamics involved in AI-related changes, distinct from conventional change management approaches.

- *Quantitative analysis*: Quantitatively tracking the progression of AI literacy and capability gains over time can provide insights into development journeys and inflection points. This data-driven approach can offer a more precise understanding of how AI literacy and DC evolve within organizations.

This theoretical framework provides a detailed and interconnected perspective on the relationships between AI literacy, workforce capabilities, continuous adaptation, and competitive advantage. It emphasizes the symbiotic relationship between the RBV and DC perspectives and offers directions for further research and theoretical refinement, all grounded in real-world empirical evidence.

## 2.6 Gaps in existing literature

Although the importance of AI literacy and DC in releasing organizational potentials have been realized in the current literature, there are certain gaps need exploring. The purpose of this section is to pinpoint and outline these discrepancies indicating the prospects of further work in this area. With this, scholars and practioners will have a better view of how AI literacy affects organizations' DC, how organizations leverage on AI for their own good and the reasons behind this development.

- *Limited focus on AI literacy*: Although AI literacy has been admitted in existing studies, its constituents and means of developing them in an organizational space are insufficiently comprehensible. In turn, AI literacy refers to a set of skills, such as familiarity with AI algorithms and instruments, ethical implications associated with AI systems, critical reasoning capacity to assess AI alternatives, and collaboration proficiency with AI apparatuses.

- *Lack of longitudinal studies*: Although it is useful, cross-sectional studies show the relationships between AI literacy, dynamic capability, and organizational potential just for one moment. Dynamic nature of these constructs is in need for longitudinal studies that follow them through time. Longitudinal research will help to reveal how the development of the ability to work with artificial intelligence affects dynamics capabilities accumulation, as well as research the potential influence on an organization's performance during the period after the training.

- *Contextual factors*: Research should be conducted on how the contextual factors impact the AI literacy-dynamic capabilities-organizational potential relationship. Every organization is situated in a different environment whereby an industry has associated specific dynamics, competitors, regulatory settings as well as cultures. The nature of these factors is such that they can influence the efficiency of any program related to artificial intelligence literacy and, subsequently, DC and organization's capacity.

- *Mediating and moderating mechanisms*: The literature recognizes the linkage between AI literacy, dynamic capabilities, and organizational capability but does not specify on what basis this association exists. The mediating mechanisms are the procedures in which AI Literacy promotes generation of knowledge, learning routine and knowledge combination.

- *Practical implications*: The literature on AI literacy and DC has many theoretical aspects but few tangibles that can be applied in organizations. In the future, research should endeavor to work out ways through which firms should formulate guidelines to enable them build literacy in AI, enhance dynamism, and eventually exploit everything available to them. This may include crafting of good governance frameworks on implementation of AI literacy interventions, preparing roadmaps for organizational change, as well as outlining key success enablers for integrating AI into established procedures and systems.

- *Measurement and assessment*: Robust measurement tools are crucial for accurately assessing AI literacy, dynamic capabilities, and organizational potential. However, existing measures in this field may vary in terms of their validity, reliability, and appropriateness for different organizational contexts. Future research should focus on developing and validating comprehensive measurement

instruments that capture the multidimensional nature of AI literacy, dynamic capabilities, and organizational potential.

By addressing these gaps in the existing literature, future research can provide valuable insights and practical guidance for organizations seeking to unlock their organizational potential through AI literacy and dynamic capabilities. Exploring these areas in greater detail will contribute to a more robust theoretical foundation, inform evidence-based strategies, and facilitate the successful adoption and integration of AI within organizations.

### 3 Research methodology

“The function of a research design is to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible”. (De Vaus, 2001). The empirical part of this research aims to “Unlocking Organizational Potential: Harnessing AI Literacy for Dynamic Capabilities through Sensing, Seizing and Reconfiguring Initiatives in IT firms”. The pyramid in figure 6 shows the process of the research and how it is planned to be accomplished.

Since the case is all about DC and AI literacy, it was apparent to go through the literature about the type of work the case company is performing. The literature review was deeply studied along with the Organization Potential associated with the dynamic capabilities.

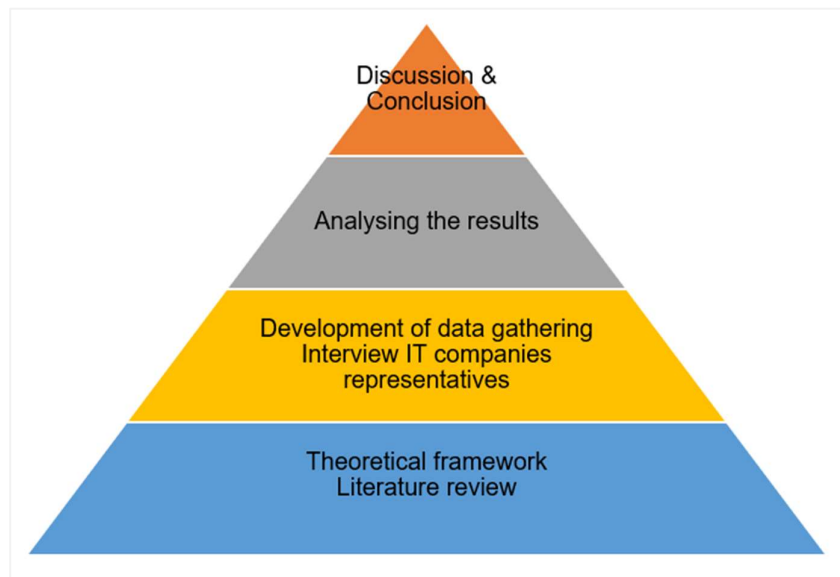


Figure 6: Research Process

To leverage AI literacy within IT firms in Finland and comprehensively grasp their dynamic capabilities, it is imperative to delve into the foundational concepts of dynamic capability. This involves a nuanced understanding of sensing, seizing, and reconfiguring aspects within the organizational framework. Concurrently, an exploration of organizational potential is crucial for gaining insights into various dimensions where the organization demonstrates potency.

In elucidating the intricate interplay between AI literacy and dynamic capability, it is paramount to investigate the role of AI literacy within IT companies and identify potential constraints. This analysis forms the crux of Chapter 2, providing an in-depth examination of how AI literacy functions as a catalyst for DC within the context of Finnish IT firms. By scrutinizing the organizational landscape,

the aim is to uncover the pivotal role of AI literacy, its impact, and the hurdles that may impede its seamless integration and application in fostering dynamic capabilities.

The subsequent phase involves the formulation of questionnaires and interviews designed for representatives of IT firms in Finland. These questionnaires are structured as open-ended, facilitating discussions tailored to the diverse nature of work and strategies employed by various organizations. The details of this approach are extensively covered in the upcoming section.

Moving forward, the following step in the progression is the analysis of the data extracted from interviews, with corresponding results succinctly discussed in Chapter 4.

Chapter 5 is designated for discussion, focusing on synthesizing the findings and deriving answers to the research questions articulated in Chapter 1. This section will also explore the theoretical and practical implications of the research, emphasizing its contributions to the field.

Chapter 6, the concluding chapter, functions as a concise summary where the key findings of the research on AI literacy and DC in Finnish IT firms are encapsulated. The relevance of these findings in shaping future market dynamics is highlighted, with both practical and theoretical implications for the industry emphasized. This chapter serves as a culmination, offering insights into how the research contributes to the existing knowledge base and influences strategic decision-making within IT firms, potentially reshaping the broader market landscape.

### **3.1 Research design**

The research strategy used in this research is qualitative research which followed important tactic to gather related information. The approach of the qualitative method is to emphasize on the viewpoint and experience of an representatives of the company who have the involvement in making decision of company's strategy. The objective is not to philosophize, but to comprehend and construe the senses and meanings that cause daily engagements. (De Vaus, 2001)

Qualitative research design has fundamental benefits that are relevant to a thesis on intricate matters. This is an appropriate methodology that is relevant to studies with high depth and contextual meaning like thesis research. Qualitative studies give insights on how people feel, see, and experience their environments. Qualitative designs are flexible, and they allow the researcher to explore unforeseen themes or change strategies in a changing environment. Regarding to this research, (Morse, Barrett, Mayan, & Olson, 2002), call for reflexivity of qualitative researchers by acknowledging their viewpoints and potential bias. In fact, an introspective element is particularly

relevant for a thesis that largely depends on the position of the researcher and her/his objectivity.

In addition to this, qualitative research design enables investigation of difficult themes with varied strategies which include interviewing, focus groups and fieldwork respectively. According to Maxwell (Maxwell, 2013), qualitative research is iterative in kind and allows researchers to narrow the scope of questions asked as new patterns emerge to achieve thoroughness in addressing the problem under investigation.

On the contrary, in quantitative research method questions are straight, measurable, and very easy at answering and frequently comprise axioms, for example: how many? What amount? To what degree? What share? Etc. Conclusions derived from quantitative research reveals actions and trends.

However, the quantitative method is not viable to apply in this research as it focusses on the how the company is competent in AI and leveraging to its Dynamic capability. Survey data can lead to a false information as it will come from individuals. The qualitative will directly focus on some key personnel who really have the futuristic approach of company's strategy.

Nevertheless, it is imperative to mark that they do not explain why individuals think, feel, or behave in such ways. It means quantitative research emphasizes on data sets or research collections, not on the motive behind detected activities. To mitigate the information gaps, qualitative studies are useful, for example, interviews, or open-ended survey question, etc.

This research employs a qualitative approach using semi-structured interviews to explore how organizations are cultivating AI literacy to enhance dynamic capabilities. Five interviews were conducted with senior IT professionals and managers at various companies to gain insights into their strategies and experiences with AI implementation. The goal was to understand how AI literacy is being developed within organizations and how it may contribute to sensing, seizing, and transforming market opportunities.

### **3.2 Data collection and procedure**

Data was collected through recorded online video interviews approximately 40–60 minutes in length. A consistent interview protocol was followed for each discussion, beginning with an introduction of the research aims and overview of key concepts. Participants were asked for consent to record the interviews for later transcription and analysis.

Interviews began with general background questions about the participant's role and organization. More specific questions were then posed about how their company cultivates AI literacy, including through training, partnerships, hiring strategies, and governance policies. Participants were asked for examples of how enhanced AI literacy has impacted sensing market shifts, seizing opportunities, and transforming business processes and offerings. Strategic priorities for AI investment and future plans were also discussed.

In total, five interviews were conducted with senior managers and IT leaders across a range of industry sectors, including IT consulting, telecommunications, cybersecurity, and engineering services. The companies represented were either actively using AI in products/services or strategizing how to build AI capabilities and literacy for future competitiveness. Interviews yielded approximately 5 hours of audio data that was manually transcribed for analysis.

### **3.3 Data analysis**

Transcribed interview data was analyzed using thematic analysis, a qualitative technique that identifies patterns and themes within textual data. Analysis followed established procedures for inductive thematic analysis outlined by (Braun & Clarke, 2006). The process involves six phases:

- *Familiarization with the data*: The researcher delved into the data by thoroughly reviewing transcripts and repeatedly listening to interview recordings. Preliminary thoughts and impressions were meticulously documented.
- *Generating initial codes*: Transcripts were systematically coded by labelling relevant features across the entire dataset. Coding was performed manually by highlighting and tagging repeating ideas, concepts, and examples.
- *Searching for themes*: Codes were analyzed and organized into overarching themes that described patterns across the data. Themes represent major concepts that are connected to the research questions.
- *Reviewing themes*: Potential themes undergo several levels of refining. Extracts of coded data are reviewed to ensure they form a coherent pattern. Themes are checked against each other and back to the original dataset.
- *Defining and naming themes*: Clear definitions and names are developed for each theme, summarizing the essence of each one.

- *Writing up* - Final analysis and themes are structured into a narrative that answers the research questions. Extracts from the interviews are used to demonstrate the prevalence of each theme.

Through this process, several major themes emerged from the data related to AI literacy and DC:

- Internal development programs for AI skills training
- External partnerships with vendors to provide AI products/services.
- Governance policies and oversight for responsible AI use
- Cultivating specialist roles focused on AI adoption.
- Using AI to enhance data-driven decision making.
- Automating business processes with AI to reduce costs.
- Developing AI solutions tailored to customer needs.
- Focus on incremental improvements rather than transformative change.

These themes highlight how the organizations are taking a strategic approach to building up AI literacy, positioning themselves to sense and seize emerging opportunities. However, radical transformation of business models and offerings is not yet widely evident.

### **3.4 Research validity and reliability**

The research design and process incorporated various measures to enhance the validity and reliability of the findings.

#### **Specific considerations that contribute to research validity include:**

- *Selection of knowledgeable participants*: Participants were selected based on their ability to provide knowledgeable and nuanced perspectives within their organizations, enhancing the validity of the findings.
- *Utilization of a consistent semi-structured interview protocol*: The use of a consistent interview protocol across all discussions ensures a systematic approach, contributing to the reliability and, subsequently, the validity of the study.

- *Thematic analysis procedures*: The data analysis procedures, specifically the use of thematic analysis, emphasize a systematic and methodical approach, reinforcing the reliability of the findings and, by extension, their validity.

- *Prevalence of themes across multiple interviews and companies*: Themes were required to be prevalent across multiple interviews and companies, ensuring they represent overarching patterns rather than characteristics of single cases. This contributes to the validity of the findings.

- *Inclusion of descriptive extracts in reporting*: The inclusion of rich, descriptive extracts from the interview data in reporting allows readers to evaluate themes and interpretations, enhancing transparency and, consequently, research validity.

**Elements that specifically contribute to research reliability include:**

- *Utilization of a consistent semi-structured interview protocol*: The consistent use of a semi-structured interview protocol ensures uniformity in data collection, contributing to the reliability of the study.

- *Recording and professional transcription of interviews*: The recording and professional transcription of interviews ensure accuracy in the representation of responses, bolstering the reliability of the data.

- *Thematic analysis procedures*: The methodical approach in data analysis, moving from initial open coding to theme definition and refinement, emphasizes a consistent and reliable analytical process.

It's worth noting that certain elements, such as acknowledging limitations, contribute to both validity and reliability by enhancing the overall rigor of the study.

Through careful research design, data collection and analysis procedures, the aim was to conduct rigorous qualitative research that makes a meaningful contribution on how AI literacy enables dynamic capabilities. Multiple strategies were employed to strengthen validity and reliability within the bounds of qualitative inquiry.

### 3.5 Ethical considerations

Several important ethical considerations were addressed in this research:

- Participants received full information about the nature and purpose of the study.
- Participation was entirely voluntary. Individuals were not pressured or coerced to take part. They could withdraw from the research at any time.
- Confidentiality was maintained by anonymizing names and organizations in interview transcripts and reporting of findings. No identifying details were included.
- Recordings, transcripts, and notes were securely stored with access limited to the researcher to prevent data leaks. Materials will be destroyed after research completion.
- Honesty and transparency were upheld throughout the research process. Interviews involved open-ended inquiry rather than manipulation or leading questions. Data analysis and reporting of findings represent responses accurately.
- Objectivity was maintained by avoiding researcher bias. Thematic analysis was data-driven, preventing preconceived perspectives from influencing results. Conclusions are based on actual evidence.
- Potential risks to participants were minimized. Questions focused on organizational practices rather than sensitive details. No apparent psychological, economic, or professional harms resulted.
- The research aims, methodology and outcomes were deemed valuable for generating new insights on important business strategy issues related to AI literacy and dynamic capabilities.

Adhering closely to these ethical principles ensured the research design and execution met high standards for integrity and responsibility. Protecting human subjects through informed consent, privacy and honest representation was a top priority throughout the study.

## 4 Findings and analysis

In this section, the results of our research are delved into and closely examined. Here, what was discovered is broken down, and the data collected is analyzed. By exploring this information, the aim is to draw meaningful insights and gain a better understanding of the research topic. Let's shed light on the key discoveries that emerged from the research, providing a clear analysis of their significance.

### 4.1 Analysis of AI literacy levels in organizations

The interviews provided insights into the varying levels of AI literacy across the organizations, based on their efforts to develop skills and knowledge related to artificial intelligence technologies and applications.

The representative from company from Company A indicated that their organization had been actively cultivating AI literacy for over 5 years, well before the recent surge in generative AI tools like ChatGPT. They had taken a proactive perspective by establishing partnerships with AI leaders, building internal training programs, and developing dedicated expertise in AI. Particularly, Company A had instituted an AI policy to govern the ethical use of AI across the organization even before the technology went mainstream. This demonstrates a relatively advanced level of literacy that enabled the company to sense the promise of AI prior to the hype.

In contrast, the interviewee from Company B runs a cybersecurity startup that relies heavily on AI techniques but has a smaller scale as a new firm. This representative from company noted that all their contracted developers have a good understanding of how integral AI is to their platform, since staying current on AI innovations is crucial in the security space. Company B maintains AI literacy by having the developers stay updated through newsletters, videos, and workshops that cover the latest advancements relevant to enhancing their product. However, their literacy is focused specifically on applied AI rather than broader organizational comprehension.

The respondent from Company C, a large IT services firm, emphasized extensive partnerships with leading AI organizations like Microsoft, Google, and AWS. These partnerships provide avenues for Company C's employees to receive training on state-of-the-art AI developments through courses and certifications. However, they do not yet formally measure or track AI literacy levels across the enterprise. The learning is targeted at customer-facing teams who can apply AI tools in client engagements. Thus, pockets of deeper literacy likely exist in certain business units. Table 1 shows the summarised explanation AI Literacy Assessment Across Organizations.

Table 1: AI literacy assessment across organizations

Company	AI literacy level	Training programs	Key takeaways
<b>A</b>	Basic and some advanced AI	Partnerships for employee training	Leveraging AI for operational efficiency and exploring advanced AI
<b>B</b>	Ingrained in product and strategy	AI newsletters, workshops, idea sharing	Continuous learning to stay updated on relevant AI innovations
<b>C</b>	Had AI policy before recent boom	Traditional and digital networks	Learns from partners and customers to build AI capabilities
<b>D</b>	Basic AI for productivity	Partners for training and use case development	Exploring advanced AI like generative AI for new offerings
<b>E</b>	Automation and AI models in use	Certifications, partnerships	Investing in employee skills and developing AI use cases

The interviewee from Company D works in the IT governance function of a global IT services company. This representative from company discussed how their organization rapidly decided to deploy GPT-3 capabilities before fully understanding the risks and challenges. This move to "deploy first, learn later" indicates both an appetite to experiment with AI and a push to gain hands-on literacy. However, the respondent also noted that overall, they view AI as incrementally improving services rather dramatically transforming operations. This perspective may stem from the governance function's close oversight of fundamental IT systems, which change slowly.

Lastly, Company E represents a traditional IT managed services provider focused primarily on cost savings and efficiency gains. Their approach has centered AI use cases on automating tasks and activities to reduce reliance on human effort. They track the number of employees certified in skills like machine learning to quantify AI literacy. But there are no formal maturity models yet that evaluate the sophistication of AI understanding across the organization. The priority is gaining sufficient literacy to identify and pursue automation opportunities.

The analysis indicates a range of AI literacy across the organizations stemming from their strategic approaches, core business models, size, maturity, and other factors. Companies on the leading edge have invested early in developing widespread AI skills and expertise, while others have narrower capabilities more tightly linked to projects or platforms. This suggests AI literacy requires ongoing nurturing and broad integration to dynamically adapt as the technology evolves.

## **4.2 Impact of AI literacy on Dynamic Capabilities**

Dynamic capabilities consist of the capacity to sense opportunities or threats, seize those openings through new products/services and business models, and reconfigure assets and processes accordingly. The interviews provided insight into how greater AI literacy reinforces and amplifies organizations' DC in several ways.

The proactive efforts by Company A to cultivate AI literacy years before the current AI boom enhanced its sensing capabilities to spot the coming shifts in the technology landscape and understand AI's potential applications. This knowledge also prepared it to seize opportunities to deploy AI in customer engagements and create new service offerings augmented by AI capabilities. The combination of sensing and seizing opportunities was possible due to its strong literacy foundation.

For startup Company B operating in the AI-dependent cybersecurity space, its continually growing AI literacy fuels DC in different ways. Staying updated on the newest AI innovations and research directions allows them to sense additions they could make to their cybersecurity platform. Their biweekly internal workshops to discuss promising AI developments helps rapidly seize opportunities to build new features based on the sensing insights.

Company C leverages its workforce's AI skills to deliver enhanced services and solutions infused with AI components tailored to customer needs. This exemplifies seizing opportunities in the market opened by the capabilities AI literacy provides. Clients are demanding AI-powered offerings, so the firm's literacy base allows it to dynamically act on these needs even as AI technology evolves.

The example Company D provided about swiftly deploying GPT-3 capabilities before thoroughly assessing risks illustrates the seizing aspect of dynamic capabilities. Their push to jump into AI experiments also highlight a reconfiguring mindset less shackled to previous linear processes. However, the incremental view of AI's benefits may limit their application of DC despite literacy gains.

Lastly, Company E's priority use of AI for task automation demonstrates seizing opportunities immediately available thanks to AI literacy. The technology allows them to reconfigure their service delivery model to reduce labour costs and gain efficiencies. These examples depict literacy powering sensing, seizing, and reconfiguring opportunities - the core components underlying dynamic capabilities.

In summary, the analysis indicates that as organizations build AI literacy it directly supports DC that drive strategic moves and value creation. Even nascent literacy opens options to sense impending shifts and act ahead of competitors. Deepening literacy expands potential to continuously seize prospects and reconfigure business activities through AI in keeping with market dynamics.

The table 2. examines the different programs, strategies, and mechanisms utilized by the companies to drive AI assimilation, along with an assessment of how successful they have been. It shows the value of centralized coordination in converting AI literacy into impact and highlights common pitfalls around sustaining momentum.

Table 2: AI adoption approaches and effectiveness

<b>Company</b>	<b>Initiative</b>	<b>Effectiveness</b>	<b>Explanation</b>
<b>A</b>	Partnerships with tech companies like Microsoft, AWS, etc. to stay updated on AI developments and train employees	Seems effective for sensing industry shifts and training employees on latest AI skills.	Helps organization sense industry changes through partners and seize opportunities by training employees on new skills. Partners provide access to latest AI developments.
<b>B</b>	Subscription to AI newsletters and publications to stay abreast of new developments	Moderately effective for sensing	Provides high-level awareness but may lack depth. Relies on employees proactively reading.
<b>C</b>	Developed AI policy and principles proactively before recent AI boom.	Highly effective for preparing organization and building trust	Allowed organization to move quickly and responsibly. Built trust with customers.

<b>D</b>	Idea workshops every 2 weeks for employees to share AI insights	Moderately effective for sensing	Provides way to gather employee insights but effectiveness depends on participation.
<b>E</b>	Measuring employee AI certifications from partners like Google, Microsoft.	Somewhat effective for assessing skills.	Measures formal credentials but may miss practical skills.

The details and frameworks provided in these tables help synthesize key findings from the interviews, identifying patterns and distinctions across the organizations that contribute insights into AI literacy and adoption effectiveness. Additional tables could also be constructed around culture, leadership, and other factors.

### 4.3 Initiatives for sensing, seizing and reconfiguring AI and their effectiveness

In this section, an effort will be made to investigate useful steps taken to comprehend, adjust, and maximize the application of AI. Here, an evaluation is conducted on how well these initiatives have worked to improve the organization's AI interactions. The purpose of this part is to present a clear analysis of the initiatives taken to identify possibilities connected to artificial intelligence, strategically take advantage of them, and adjust organizational procedures as necessary. Table 3 shows a summarized explanation for the Sensing, Seizing, and Reconfiguring Initiatives of IT companies that were interviewed.

#### Sensing Initiatives

*Company A:* The representative from company from Company A indicated that they keep themselves updated on latest AI trends and technologies through partnerships with companies like Microsoft, Google, AWS etc. They also partner with market research firms like Gartner to stay abreast of latest developments and trends in the AI industry. The company has dedicated marketing, research, pre-sales and learning teams that continuously track the AI landscape, emerging

technologies, customer needs and demands. These insights are then shared across the organization to build relevant skills and solutions.

The company leverages a mix of top-down strategic planning and bottom-up idea generation from employees to sense AI opportunities. Ideathons are conducted every 6 months to collect innovative ideas from employees. AI sensing is localized based on geography to cater to specific regional market needs. For example, the Nordics team focuses on sensing needs in the Nordics market.

*Company B:* The representative from company from Company B indicated that they subscribe to AI related newsletters and online publications to stay updated on latest happenings in AI. They maintain a backlog of new AI capabilities and features based on learnings, which helps assess applicability to their products. The company culture facilitates continuous learning of new innovations relevant to their cybersecurity product suite. Senior team members are tasked with scanning for any new AI methods that can be incorporated into their offerings. They also keep track of how competitors are leveraging AI in their products.

*Company C:* The representative from company from Company C mentioned that they partner closely with leading technology companies like Microsoft, Google, AWS to get trained on latest advancements in AI. The company has developed internal networks and communities of interest for sharing AI insights. Both formal networks guided by appointed leaders and informal self-organizing networks exist. Awareness sessions are conducted at regular intervals at all levels to disseminate latest updates. The workforce is encouraged to learn through available online courses and certifications. Progress is tracked through number of people certified on various AI technologies.

*Company D:* The representative from company from Company D said their IT services cater to various industry verticals. As a result, they can collectively sense developments across sectors. Partnerships with technology leaders provide access to their latest AI offerings and advancements. They have dedicated teams for exploring and evaluating emerging tech like AI. Ideas for new customer offerings are collected from delivery teams on an ongoing basis. The company culture facilitates learning and sharing of new AI innovations.

*Company E:* The representative from Company E indicated they have been using basic AI like ticket categorization and resolution based on patterns for several years now. For latest advances like generative AI, they partnered with companies like Microsoft to train employees and explored building new offerings. The workforce is encouraged to take online courses and certifications on AI. Progress is tracked for skill development. Use cases for AI are identified based on potential for improving productivity or gaining competitive advantage.

**Effectiveness of Sensing Initiatives:** The sensing initiatives adopted by the companies seem effective based on the insights shared by the interviewees. Some observable indicators:

- All companies are proactively tracking AI space and forging partnerships with tech providers. This allows them to keep pace with latest advancements.
- Employees are being continuously trained on evolving AI technologies. Certifications data acts as a metric.
- Idea pipelines indicate how well new innovations are being sensed for potential business application.
- Some companies appear more embedded in the AI landscape compared to others based on number of active initiatives.
- Sensing seems to be focused more on technology advancements rather than shifts in consumer preferences or emerging application areas.
- Most initiatives are internally focused. More emphasis on sensing customer needs and external environment could be beneficial.
- Formal processes or metrics to gauge effectiveness of sensing initiatives do not seem prevalent.

### **Seizing Initiatives**

*Company A:* The representative from Company A indicated that most of their AI capabilities are used to improve productivity and efficiency of internal processes. This enhances their competitiveness. They continuously train employees on latest AI skills to build a workforce capable of delivering cutting-edge solutions. The company files patents for innovative AI solutions developed for customers, thereby retaining IP rights for further monetization. New ideas from employees are evaluated by leadership for developing into new products and services with commercial potential.

*Company B:* The representative from Company B suggested they maintain a backlog of new AI features that can help differentiate their cybersecurity offering from competitors. They determine and prioritize ideas that align with their product suite and have potential for value addition. The company culture facilitates seamless adoption of relevant AI innovations into their offerings.

*Company C:* The representative from Company C indicated AI is being leveraged to deliver enhanced data-driven solutions to their customers that were not possible earlier. The company racks

number of customer engagements where AI capabilities are showcased, to gauge adoption levels. The workforce is being reskilled and delivery capabilities developed to pilot cutting-edge AI solutions for customers.

*Company D:* The representative from Company D shared that AI is helping uncover efficiencies and optimize processes for customers by leveraging their data. They have defined a structured pipeline of AI use cases to be built for customers based on opportunity assessment. Consulting services around AI are being offered to advise customers on relevant applications and adoption.

*Company E:* The representative from Company E suggested that AI capabilities are allowing them to provide higher value to customers from their data by automating manual efforts. They have delivered AI solutions to automate tasks like catalogue management for e-commerce customers. Exploring products like AI-generated content in Finnish language for potential new revenue streams.

### **Effectiveness of Seizing Initiatives**

The seizing initiatives adopted by the companies also seem effective based on the insights shared, though scope for improvement exists. Some observable indicators:

- Employees are being trained on AI skills indicating focus on building delivery capabilities.
- New customer solutions developed using AI highlight ability to seize opportunities.
- IP protection and potential new product exploration signal a forward-looking mindset.
- Transition from experiments to full-scale adoption of promising AI solutions can be smoother.
- Commercialization pathways for successful AI prototypes can be more well-defined.
- Progress on key business metrics enhanced by AI adoption can be better tracked.

### **Reconfiguring Initiatives**

*Company A:* The representative from Company A mentioned that the company frequently reorganizes itself to adjust to changing strategic priorities. There have been two organizational restructurings in the last 6 months alone. AI is seen as a must-win area for gaining future competitive advantage. The company is realigning around AI through steps like appointing a central CTO team to drive AI innovation and product development. They are moving from traditional learning

approaches to new models like digital networks of expertise and practitioner communities to rapidly diffuse AI knowledge across the company.

*Company B:* The representative from Company B indicated that AI is integral to their cybersecurity product suite. So organizational processes are being continuously refined to smoothly embed AI capabilities into their offerings. Cross-functional teams collaborate to conceptualize and develop new AI-powered features. Decentralized innovation is encouraged through tools like idea workshops.

*Company C:* The representative from Company C shared that nurturing internal passion and networks around AI have been keyed to realigning the organization towards rapid adoption. Traditional learning methods are giving way to digital channels like internal social platforms for easier access to AI skills and knowledge. Change management processes are leveraged to drive company-wide adoption of AI solutions.

*Company D:* The representative from Company D suggested process mining techniques is being used to reengineer inefficient processes by applying AI for automation. Data, analytics, and processes are being revamped to unlock intelligent decision-making using machine learning. Adoption of AI may initially face internal resistance but involvement and change management helps overcome it gradually.

*Company E:* The representative from Company E indicated that workforce mindset adaptation is critical as AI fundamentally alters the way services are delivered. AI deployment follows an evolutionary path where human-machine collaboration models are being institutionalized over time. Executive leadership communication and visioning around AI has been key to smooth adoption.

### **Effectiveness of Reconfiguring Initiatives**

The reconfiguring initiatives adopted seem reasonably effective but scope for improvement exists as AI adoption is still in progress. Some observations:

- New organizational structures and leadership roles indicate commitment to scale AI capabilities.
- Reskilling programs and digital teaching methods exemplify efforts to encourage AI culture.
- Change management techniques are being applied to drive adoption of AI solutions.
- Incentives structures can be realigned to encourage workforce adoption of AI tools.

- Gaps in current processes and data pipelines are preventing full-scale deployment of AI in some cases.

- Criteria for success and metrics to track AI adoption levels can be better defined.

Table 3: Sensing, Seizing, and Reconfiguring Initiatives of IT companies

Company	Sensing Initiatives	Seizing Initiatives	Reconfiguring Initiatives
<b>A</b>	Partnerships with tech companies	Enhance internal efficiency.	Frequent reorganizations to align with priorities.
	Dedicated research teams	Train employees on AI skills	Appointed CTO team for AI innovation.
	Idea generation from employees	Patent IP for monetization	Moving to new learning models like digital networks
	Localized sensing	Evaluate ideas for new products/services	
<b>B</b>	Subscribe to AI publications.	Maintain backlog of new AI features	Refine processes to embed AI capabilities.
	Maintain backlog of new AI capabilities	Prioritize ideas aligned with products.	Cross-functional collaboration
	Culture of continuous learning	Embed relevant innovations into offerings	Decentralized innovation
<b>C</b>	Partnerships with tech companies	Enhanced data-driven solutions using AI	Nurture internal passion and networks around AI
	Internal networks for sharing insights.	Track customer engagements with AI	Shift to digital learning channels.
	Awareness sessions at all levels	Reskill workforce on AI	Leverage change management

<b>D</b>	Collective sensing across industry verticals	Optimize processes using AI and data.	Process reengineering using AI.
	Partnerships for access to latest AI	Pipeline of AI use cases for customers	Revamp data, analytics, processes for AI
	Dedicated emerging tech teams.	Consulting services around AI	Overcome resistance through change management
<b>E</b>	Partnerships to train employees on AI.	Automate manual efforts using AI.	Workforce mindset adaptation.
	Encourage learning through courses.	Delivered AI solutions like catalogue management.	Institutionalizing human-machine collaboration.
	Identify AI use cases	Exploring new products like AI content generation	Leadership communication around AI

In summary, the interviews reveal various initiatives undertaken by companies for sensing, seizing and reconfiguring AI opportunities. While current efforts seem largely effective, strengthening certain aspects of strategy and execution can help maximize benefits from AI-led transformation. The insights provide a useful blueprint of best practices as well as areas of improvement for organizational AI adoption.

#### **4.4 Mediating and moderating factors in the relationship between AI literacy, DC & OP**

In this section of the chapter, some of the major considerations that make it possible for an organization to adopt AI and adapt to changes are highlighted. The objective is to determine the factors that determine the association between organizational potential, dynamic capability, and artificial intelligence competence of an organization. It is important to note what makes the ties strong or weak once new technologies affect companies.

*Company A* cultivated AI literacy by partnering with tech giants Microsoft, Google Cloud, and AWS, providing access to the latest AI capabilities. They trained around 2000 employees on Microsoft Azure and explored use cases for generative AI like ChatGPT. To sense changes, the company tracked industry newsletters, held ideation workshops, partnered with Gartner, and focused on identifying technology trends. Seizing opportunities involved building patented proofs of concept and prototypes, offered as new services. Bold moves included early adoption of cloud technologies and forming strategic partnerships with major providers like AWS and Google Cloud. The organizational structure changed to create networks focusing on AI competencies.

Leadership, led by the CEO, played a pivotal role in sensing changes, communicating the importance of AI, and steering strategic initiatives. Challenges included resistance to change during the scaling of AI adoption across diverse business units and divisions with over 600,000 employees.

*Company B*, a cybersecurity startup, fostered AI literacy by involving developers early in AI system discussions and keeping them updated on AI trends. Sensing opportunities involved tracking attack methods through cybersecurity newsletters, vulnerability databases, and hacker forums. Identifying threats led to the rapid deployment of AI-powered modules for cybersecurity. Adopting an agile approach allowed quick integration of promising ideas into products, facilitating rapid rollout of capabilities.

Leadership at *Company B* promoted a culture of continuous AI learning, encouraging information sharing among teams and maintaining a strategic focus on AI development. Anticipated challenges included evolving AI regulations and a skills gap in in-house AI development talent.

Table 4: Mediating and Moderating Factors in the Relationship between AI Literacy, DC & OP

Factor	Company A	Company B	Company C	Company D	Company E
<b>AI Literacy Development</b>	Partnerships, internal training	Tracking innovations, architect discussions	Partnerships, internal training	Workshops, dedicated AI expert	Partnerships, certifications, e-learning
<b>Sensing Capability</b>	Newsletters, workshops, analysts	Compiling innovation insights	Customer needs, market tracking	Compiling innovation reports	Emerging technology tracking

<b>Seizing Capability</b>	Building POCs, partnerships	Developing new product modules	Productivity improvements	Deploying capabilities quickly	Automating tasks for efficiency
<b>Reconfiguring</b>	Cloud adoption, networks for new competencies	Agile approach	Networks, organizational changes	Agile approach	AI policies and governance
<b>Role of Leadership</b>	Strategic direction, change management	Culture of sharing, proactive tracking	Strategic investments, steering adoption	Communicating importance, rapid capability development	Strategic direction, investments
<b>Key Challenges</b>	Change resistance, scale	Regulations, skills gap	Initial employee resistance	Internal process changes resistance	Adapting employees to change

*Company C*: Cultivated greater AI literacy among its workforce through partnerships with AI-focused companies to build capability, conducting internal AI awareness sessions, and providing online learning platforms for employees to develop new skills. The company sensed new opportunities and identified emerging needs by directly tracking customer requirements and pain points. It also kept a close eye on wider market trends related to AI and partnered actively with AI product companies.

When opportunities to apply AI to client problems were spotted, the company would seize them by deploying AI-based techniques to improve productivity, increase service uptime, reduce human effort in services delivered, and enhance the value delivered to clients. Internally, *Company C* developed networks and introduced organizational changes to promote greater information sharing and coordination around AI adoption. This helped it reconfigure itself to adapt more quickly to AI technologies.

The CIO office at Company C provided strategic direction and enabled scaling up of promising AI applications across different business units and divisions. They played a key leadership role in AI adoption. One of the biggest challenges faced while adopting AI was some initial resistance from employees who were used to legacy tools and processes. Managing this resistance to change was critical.

*Company D:* Focused on building AI knowledge among employees through hands-on technical skills training and workshops. It also appointed an expert fully dedicated to tracking the latest AI developments, tools, and innovations in the market. The company sensed new opportunities by encouraging team members across departments to proactively compile and discuss external reports highlighting innovations in the application of AI.

When the rapid rise of ChatGPT took the tech world by storm, Company D quickly seized the opportunity by providing a platform for employees to learn about and experiment with the capabilities of this new AI tool. This showcased the agility of the company in deploying new AI capabilities. In line with its agile approach, Company D preferred to rapidly deploy AI capabilities when a need was identified rather than wait for the technology to mature. This enabled quicker reconfiguration of processes using AI.

The leadership of Company D played a key role in communicating the strategic importance of AI across the organization. They promoted rapid capability building and supported teams with required resources. A notable challenge faced by the company was internal resistance to change in processes from employees who were reluctant to adopt new AI-based ways of working. Managing this was crucial.

*Company E:* Focused heavily on training its workforce on AI skills through partnerships with tech companies, certification programs, and internal e-learning systems. This formed the core of its strategy to cultivate greater AI literacy. The company sensed changes in market needs by continuously tracking emerging technologies and explicitly monitoring shifts in client requirements. This sensing helped align internal capabilities. When an opportunity was spotted to improve efficiency or value to clients via AI, the company would seize it by actively deploying AI to automate tasks and improve the efficiency of service delivery. Internally, Company E developed AI policies and rules to govern the adoption of AI across business units. It reconfigured its systems, processes, and org structure around AI to achieve scale.

The leadership of Company E provided the strategic direction, investment, and ecosystem partnerships required to make AI adoption successful across the massive organization. Adapting and upskilling employees across teams to effectively utilize AI in their workflows was recognized as a key challenge during the technology transformation journey.

## **5 Discussion**

This part centers on an in-depth assessment of the results that were previously provided. Here, considering the importance and impacts of the findings, the goal is to understand and make sense of them. The aim is to demonstrate a better understanding of the relationships between the findings and the larger research environment by having a thorough conversation. This area provides an opportunity for reflection, critique, and the incorporation of the findings into the corpus of current research in the subject.

### **5.1 Synthesis of findings**

The interviews insights how various organizations are cultivating AI literacy to enhance their dynamic capabilities. Key themes that emerged around the current distribution of AI literacy, its impact on dynamic capabilities, effectiveness of adoption initiatives, and factors that mediate or moderate the relationship between AI literacy and dynamic capabilities. These findings highlight some key opportunities and recommendations for organizations seeking to leverage AI literacy to harness their potential.

#### **5.1.1 Current distribution of AI literacy**

The interviews highlighted varying levels of AI literacy across the organizations. Company A indicated relatively low levels of AI literacy, with limited in-house competencies in AI technologies. As a service provider, they rely primarily on partnerships with vendors like Microsoft to gain exposure to advancements in AI. Their focus has been on training employees on baseline digital skills, and they are still in the early stages of exploring advanced AI capabilities.

In contrast, Company B demonstrated higher levels of AI literacy, particularly among their technical staff. As a cybersecurity startup building AI-driven products, its developers need continuous exposure to innovations in AI. They actively foster a culture of learning through weekly workshops to share ideas and build a pipeline of potential product features leveraging the latest advancements in AI. Their staff subscribes to AI newsletters and publications to stay updated.

Company C described its approach to developing networks of expertise around AI competencies. They have formally appointed, and organically emerged networks focused on consuming and sharing AI knowledge. Their flat, non-hierarchical culture and hackathon-like events enable rapid

sharing of skills. They also offer structured courses on AI topics and emphasize awareness across organizational levels.

Company D had the highest maturity levels in terms of cultivating AI literacy. They took a proactive approach of upskilling employees on AI before client needs emerged. Their strategies include hands-on exploration of technologies like GPT-3 to spur learning, networks of passionate to spearhead AI adoption, and dedicated personnel to track AI developments relevant to their services.

Company E operates in a relatively traditional industry that is still assessing the value of AI adoption. They exhibit largely opportunistic learning motivated by specific client needs. AI literacy is concentrated among customer-facing sales staff who need awareness to advise clients. Formal training is limited but enables the sharing of expertise across internal teams working with clients.

### **5.1.2 Impact of AI on Dynamic Capabilities**

The degree of AI literacy correlated strongly with the level of dynamism exhibited by the organizations. Companies B, C and D with higher literacy levels provided more examples of continuously realigning their sensing, seizing, and reconfiguring capabilities in response to AI developments:

*Sensing:* Organizations with higher literacy showed greater awareness of emerging AI use cases and technologies relevant for their business through constant scanning of the ecosystem. Their internal and external partnerships, events, and networks enabled quick transmission of market intelligence on AI trends.

*Seizing:* Higher AI literacy equipped organizations to rapidly mobilize resources and develop prototypes and pilots to test viability of new AI-based offerings. Companies B and D emphasized this experimentation-focused approach of learning by doing rather than waiting for extensive planning.

*Reconfiguring:* The agile culture and decentralized authority in literate organizations allowed them to fluidly reorient internal resources, processes, and priorities in alignment with insights from their sensing and seizing activities. They reiterated the need for iterative realignment rather than rigid transformations.

In contrast, lower literacy levels constrained the DC of Company A and E. Their responses lagged industry movements around AI and remained focused on current operational needs rather than future possibilities.

### 5.1.3 Effectiveness of adoption initiatives employed by organisations

The interviews highlighted a variety of initiatives employed by organizations to cultivate AI literacy and several markers that signalled their effectiveness:

- *Training Reach and Depth:* Organizations strategically employed a diverse range of training formats, such as workshops, courses, seminars, and external events, to cater to the varied needs of employees. These initiatives were customized based on the specific requirements of different roles within the company, ensuring that individuals received training tailored to their level of involvement with AI, whether it be direct application or foundational awareness. The utilization of both internal learning management platforms and partnerships with industry-leading vendors like Microsoft and Google, offering certification programs, significantly expanded the reach of training initiatives. This approach ensured that employees were equipped with cutting-edge skills, aligning their capabilities with the rapidly evolving landscape of AI.

- *Networks and Passionates:* Organizations observed effective AI literacy cultivation through the establishment of active communities of interest centered around AI. These communities formed organically, bringing together individuals with common skill sets and applications. Employees self-organized into networks that facilitated the sharing of insights from customer projects, collaborative problem-solving, and discussions on leveraging AI in products and services. Notably, these networks were not isolated but integrated into formal coordination mechanisms within the organization.

*Infrastructure Access:* To encourage hands-on experimentation, organizations provided employees at all levels with access to internal and vendor platforms, including advanced technologies like GPT-3. Additionally, access to repositories containing customer data, insights from past projects, and other relevant resources allowed practical reinforcement of AI concepts beyond theoretical training. This emphasis on practical application contributed to a more profound understanding of AI capabilities among employees.

*Adoption Mandates:* Organizations appointed dedicated personnel responsible for overseeing and governing AI initiatives, emphasizing the importance of literacy metrics tracking. The top-down mandate for AI adoption was further reinforced by instituting measurable targets, such as the development of a specified number of customer use cases and the certification of the workforce. This approach ensured that AI literacy was not merely a recommendation, but a strategic imperative aligned with organizational goals.

- *Cultural Endorsements*: A strategic priority for AI literacy emanated from organizational leadership, with CEOs and leadership teams directly communicating its criticality for the future. This endorsement was reflected in the updating of core values and competency models to incorporate expectations regarding the use of AI in individual roles. By providing a consistent cultural backdrop that emphasized the importance of AI, organizations motivated widespread adoption and integration of AI literacy into the fabric of their organizational culture.

#### **5.1.4 Key opportunities and recommendations**

The interview findings underscore various strategic opportunities and recommendations crucial for organizations aiming to leverage AI literacy for bolstering their dynamic capabilities:

*Broaden AI literacy initiatives*: Organizations are advised to extend their AI skills training and competency-building initiatives across diverse employee segments rather than concentrating efforts in narrow domains like IT. The rationale behind this approach lies in the understanding that enhancing literacy throughout the enterprise enables better sensing of innovations, facilitates rapid experimentation, and ensures a smoother adoption of AI solutions. By democratizing AI literacy, organizations can tap into the collective intelligence of their workforce, fostering a culture of innovation and adaptability.

*Emphasize hands-on learning*: Practical, experiential learning methods, involving real-world exposure to AI systems and tools, have proven more effective than purely theoretical training. To enhance AI literacy, companies should encourage learning-by-doing through initiatives like hackathons, controlled experiment platforms, and rotational assignments. These hands-on experiences not only deepen understanding but also empower employees to apply their knowledge in real-world scenarios, contributing to a more agile and AI-literate workforce.

*Appoint AI expertise hubs*: Accelerating literacy diffusion can be achieved by identifying, empowering, and integrating passionate advocates for AI assimilation. Establishing both formally defined and organically emerged networks within the organization can facilitate the sharing of knowledge and coordinate efforts in building AI capabilities. These expertise hubs serve as focal points for collaborative learning, enabling employees to leverage the expertise of their peers and collectively contribute to the organization's overall AI literacy.

*Measure literacy related KPIs*: Key performance indicators (KPIs) directly linked to AI competency gains offer valuable insights into the return on investment (ROI) of upskilling initiatives. Metrics focusing on usage, proficiency, and impact provide a basis for accountability in enhancing AI literacy.

By systematically tracking these KPIs, organizations can gauge the effectiveness of their training programs, identify areas for improvement, and demonstrate the tangible benefits of AI literacy across the workforce.

*Incentivize continuous learning:* Implementing reward mechanisms that encourage employees to actively strengthen their AI skills and apply them reinforces the prioritization of lifelong AI learning. Recognition, career advancement opportunities, or other incentives can motivate individuals to proactively engage in continuous learning, ensuring that AI literacy remains a dynamic and evolving aspect of their professional development. This approach is critical for sustaining an agile workforce capable of effectively sensing and seizing opportunities in the ever-evolving landscape of AI.

In summary, organizations have diverse avenues to systematically cultivate widespread AI literacy within their workforce. Harnessing this potential is essential for unlocking dynamic capabilities that are crucial for competition and success in the age of AI. By adopting these strategic recommendations, organizations can position themselves at the forefront of innovation and adaptability in the rapidly evolving AI landscape.

## **5.2 Validating the research questions**

In this section, emphasis is placed on ensuring that the questions posed in our research are robust and dependable. Validating these questions is crucial to assure that our research is meaningful and provides reliable answers. The questions will be analyzed sequentially.

### **Research Question 1: What is the relationship between AI literacy and dynamic capabilities?**

Developing AI literacy across the organization enhances its ability to absorb new AI knowledge and successfully implement AI solutions. The workforce can comprehend new AI developments and effectively apply them. This absorbent capacity allows firms to continuously transform and leverage AI.

- *AI literacy enhances sensing capability and enables absorptive capacity:* The interviews demonstrate how AI literacy fundamentally strengthens the three organizational DC of sensing, seizing, and transforming. Companies with higher AI literacy exhibit greater agility and dynamism in responding to developments in their industry fuelled by AI.

The interview findings reveal a robust, positive link between AI literacy and dynamic capabilities. Companies that actively cultivate expertise and competencies in artificial intelligence are better positioned to identify emerging AI trends, innovations, and use cases that can potentially impact their

operations and strategies. By keeping a pulse on developments in the AI landscape, these organizations enhance their sensing capabilities to spot threats and opportunities early. The accrued AI knowledge equips them to swiftly seize upon new openings by devising appropriate strategic moves and reconfiguring business activities as needed.

- *AI literacy strengthens organizational dynamic capabilities:* Beyond sensing and seizing, AI literacy fundamentally strengthens the transformation capability of organizations as well. A workforce adept at absorbing new AI knowledge and solutions can successfully implement cutting-edge AI systems to reinvent processes, models, and products. The interviews underscore how AI literacy enables firms to continuously adapt their technological configurations and leverage AI tools to drive innovation and performance improvements.

While the research presented qualitative evidence affirming this relationship between AI literacy and sensing, seizing, reconfiguring abilities, solely demonstrating this correlation has limitations. A constructive critique reveals that the research failed to quantify the maturity levels of existing literacy, calibrate associated impacts on dynamic capabilities, account for variations by industrial contexts, or measure returns realized based on literacy initiatives over time. Undertaking multi-perspective critical analysis thus highlights avenues for enhancing rigor and depth in establishing the connection between AI knowledge stocks and organizational agility. Constructively questioning the research approach reveals opportunities for strengthening internal validity, broadening generalizability, and heightening practical relevance in unprecedented terrain.

## **Research Question 2: What factors influence the development of AI literacy at individual and organizational levels?**

The level of AI literacy in an organization is shaped by a multitude of factors operating at the individual and organizational level.

- *Individual competence:* A major determinant is the inherent competence and ability of individuals to learn about AI and develop proficiency in applications of these technologies. Companies invest substantially in training programs, partnerships with tech firms, and online courses to systematically elevate their employees' skills in AI areas including machine learning and natural language processing. Structured learning opportunities thus enhance individual-level literacy. Some employees are intrinsically driven to skill up in emerging technologies like AI out of curiosity or passion. As Company C noted, they have appointed some of these "**AI Champions**" to spearhead adoption. Company A provides Certifications, online courses, workshops whereas it was revealed in the interview that Company B provides employees time to experiment with AI tools.

- *Organizational culture*: Organizational culture plays a vital role in the development of AI skills among employees. The mere acquisition of AI skills is not enough; it is essential to foster an organizational culture that encourages continuous learning and the active sharing of AI knowledge across various functions. The diffusion of AI literacy is significantly facilitated by the existence of cross-functional teams and internal AI user networks. These platforms provide employees with the opportunity to freely exchange ideas, insights, and experiences related to AI deployments, ultimately contributing to the enhancement of firm-wide literacy. A profound statement by a participant in the interview with company A encapsulates this sentiment: **“We try to learn from each other, and we try to share different foresights within the company with the different stakeholders”**.

-*Leadership commitment*: Ensuring commitment from leadership is paramount for the success of AI literacy initiatives. When senior management prioritizes and strategically focuses on these initiatives, it results in a more substantial allocation of resources and funding. This commitment allows for the development of targeted programs designed to enhance AI skills in alignment with the overarching business goals of the organization. Moreover, adopting an agile approach, such as the one embraced by Company B, is crucial. This approach involves rapidly prototyping and testing AI solutions without waiting for perfection. This **“deploy first, learn later”** strategy accelerates the organization's ability to gain practical insights and experience from real-world AI applications.

- *External partnerships and monitoring*: Actively engaging in external partnerships, fostering vendor relationships, and maintaining vigilant oversight of the technology landscape are pivotal in familiarizing employees with cutting-edge real-world AI applications. In a recent interview with representatives from company C **“Competence transformation, so that we could do that with some of our partners like Microsoft or Google or Amazon ...Creating more innovation within the company”** This approach facilitates the assimilation of the latest advancements into the organizational knowledge base, directly affirming the innovation potential of the organization. It underscores the vital role the organization's potential plays, or will continue to play, in driving technological development, particularly in the realm of AI. This, in turn, has a direct impact on the company's strategic approach and dynamic capabilities.

In essence, while employee competence is central, a confluence of cultural, strategic, and external factors influences the development of organizational AI literacy. A supportive environment facilitates rapid absorption of AI knowledge and its application.

**Research Question 3: How does AI literacy impact organizational performance, innovation, and agility?**

The interview findings illuminate several pathways through which AI literacy affects organizational performance, innovation, and agility.

- *Enables innovative AI solutions:* AI literacy directly boosts innovation capabilities by enabling companies to conceive and develop novel AI solutions tailored to customer needs. It expands their ability to generate value from data resources and enhance existing products and services by creatively applying technologies like machine learning and natural language processing. There are certain statements from the interviews which are supporting.

Table 5: Statements of representative supporting the research hypothesis.

Company	Supporting statement(s)
A	The dynamic capability is come from...Using the AI tools to deliver products and services to our customers.
B	AI plays a very critical role in and during the...architecture development phase, there could be an evolution or enhanced recognition capabilities can be introduced by the AI developers across the globe.
C	<p>Generative AI to produce solutions for our end users and customers...that's the most important at the moment, the most strategic.</p> <p>Competence transformation, so that we could do that with some of our partners like Microsoft or Google or Amazon and also...Creating more innovation within the company.</p>

- *Improves efficiency and productivity:* Skilled application of AI systems driven by organizational literacy delivers tangible improvements in operational efficiency, productivity, costs, and overall business performance. AI literacy manifests in superior process execution, whether in customer service, IT support, or business reporting. The statement from Company D **“We provide that underlying structure, which is a much more efficient way of doing business in the end. Then if 10 different units did 10 different things”** highlights how AI, when well-structured, can significantly improve efficiency in business operations. Providing an underlying structure ensures a more streamlined and efficient approach to diverse business activities.

- *Increases agility through rapid absorption:* Interviews reveal how companies with higher AI fluency exhibit greater agility and dynamism in their capacity to respond to changing market conditions,

competitive threats, and new AI tools. Their workforce can rapidly comprehend AI innovations and deploy appropriate solutions thanks to their literacy. Representative from company A said **“We are working with large organizations. They and us, we all are sensing the market, what is happening and what is developing”**. and representative from company C stated, **“We understood the dynamics of the market and then we wanted to plant our foot down and then with our customers.”**. Both Company A and Company C's statements point towards the organization's ability to sense and understand market dynamics.

- *Provides competitive differentiation*: A strong AI knowledge provides organizations the ability to build capabilities ahead of the curve and offer differentiated, cutting-edge AI solutions relative to competitors. Savvy application of emerging technologies like generative AI for commercial use necessitates organizational literacy. Interviewee from company B highlighted this point by stating **“Everyone has to contribute to this product. And whatever they are learning in the market.”** and similarly by representative from company C said, **“Competence transformation, so that we could do that with some of our partners like Microsoft or Google or Amazon and also creating more innovation within the company”**.

These interview statements collectively underscore the multifaceted impact of AI literacy on organizational performance, innovation, and agility. The organizations are actively leveraging AI tools, fostering innovation, improving efficiency, adapting to market dynamics, and seeking competitive differentiation through continuous learning and strategic partnerships.

#### **Research Question 4: What strategies and interventions can enhance AI literacy and foster dynamic capabilities?**

The research offers several insights into interventions and strategies that business leaders can adopt to systematically enhance AI literacy across their organizations:

- *Promote culture of learning and experimentation*: Creating a culture that encourages learning, experimentation and information sharing is pivotal for developing adaptable, broad-based AI skills across the workforce. Companies can promote this through mechanisms like cross-functional AI teams, networking platforms for employees, and collaborative idea workshops. The interview statements highlight a culture of learning and experimentation. Company A emphasizes learning from each other and sharing insights. **“We try to learn from each other, and we try to share different foresights within the company with the different stakeholders.”**

- *Conduct structured training and development:* Training programs, online courses, external partnerships, and certifications in AI provide structured development opportunities to substantially build employee competencies in relevant AI domains in a consistent manner. Company B's statement **"Everyone has to contribute to this product. And whatever they are learning in the market."** indicates a collaborative approach where everyone contributes to the product, emphasizing the importance of continuous learning. This aligns with the need for structured training and development.

- *Prioritize strategic AI focus areas:* Identifying strategic focus areas for AI adoption aligned to business goals, and investing in targeted literacy efforts for those domains, enables judicious capability enhancement. Deploying dedicated personnel can further drive competence development. Both Company C and Company D touch upon the strategic aspects of AI by **stating "Generative AI to produce solutions for our end users and customers...that's the most important at the moment, the most strategic."** and **"We provide that underlying structure, which is a much more efficient way of doing business in the end"**. Company C explicitly mentions the importance of generative AI for solutions, and Company D emphasizes providing an underlying structure for more efficient business operations.

- *Develop repositories of AI models and use cases:* Establishing repositories and databases to document previous AI applications and models serves as a valuable resource for organizational learning and future deployments. These repositories offer reference materials that empower employees to glean insights from past experiences, fostering a collective understanding of successful AI implementations. While a direct statement from the interviews may not explicitly emphasize this aspect, the importance of maintaining a knowledge base through repositories becomes evident in the overall context of promoting organizational AI literacy and leveraging past successes for ongoing learning and improvement.

- *Institute incentives and performance metrics:* Job rotations, monetary incentives, and performance metrics tied to AI proficiency initiatives encourage workforce participation. This signals that AI literacy is an organizational priority and asset that employees should actively strengthen.

To conclude, strategies involving culture, training, focus, platforms, and incentives can systematically elevate enterprise-wide AI literacy. As organizations implement these interventions, they also renew their sensing abilities, seize opportunities faster, and transform dynamically - thereby enhancing core capabilities.

### **5.3 Theoretical implications**

The interviews conducted for this research provide several important theoretical implications regarding how organizations can harness AI literacy to develop dynamic capabilities.

#### **5.3.1 Sensing capabilities**

The interviews highlighted the importance of sensing capabilities in identifying shifts and changes in the industry landscape that may impact an organization's competitive position. Several key insights emerged:

Company A underscores the importance of forming partnerships with tech giants like Microsoft and Google to stay updated on the latest AI advancements. In addition, Company B's representative highlights the significance of internal awareness through newsletters, online resources, and workshops.

On the other hand, Company C's representative emphasizes the collaboration with customers in cutting-edge industries as a means to identify emerging needs addressable with AI, considering customer input as crucial to their sensing process. Meanwhile, Company D, a cybersecurity startup, focuses its sensing specifically on AI innovations pertinent to their niche, aligning it closely with strategic priorities for enhanced actionability.

Moreover, Company E's representative illustrates how internal data can be harnessed through AI for additional sensing insights, supplementing external observations. This underscores the underutilized potential of internal data as a resource.

These varied perspectives showcase the diverse applications of AI in sensing capabilities and the importance of gathering inputs from both internal and external sources. The effectiveness of sensing relies on continuous learning and a precise alignment with strategic goals.

#### **5.3.2 Seizing capabilities**

The interviews also provided insights into how organizations leverage AI literacy to seize new opportunities revealed through sensing:

Company A's representative advocates for swift action in making new AI capabilities available internally to promote learning and exploration. Rather than waiting for perfection, their strategy

involves the rapid deployment of AI to capitalize on opportunities. Company C highlights that passionate AI enthusiasts naturally form internal networks to drive AI initiatives, emphasizing the need to identify and empower these advocates for seizing opportunities.

In contrast, Company B evaluates every AI innovation based on its alignment with their cybersecurity product suite, seizing opportunities that match their strategic needs rather than adopting every advancement. Company D exemplifies using AI to create value for customers in retail, finance, and healthcare by addressing specific problems. Seizing opportunities, in this context, involves identifying customer pain points that AI can alleviate.

Company E emphasizes how AI enables the creation of previously unattainable solutions. Seizing opportunities, according to this representative, means using AI to push boundaries and redefine possibilities for both the organization and its customers.

These interviews collectively highlight that effectively seizing AI opportunities demands focus, intentional choices aligned with strategic objectives, and a willingness to experiment and learn through action. Mere sensing is insufficient; organizations must act decisively to fully leverage the potential of AI.

### **5.3.3 Reconfiguring capabilities**

Finally, the interviews provided perspective on how AI literacy drives reconfiguration within organizations:

Company A's representative emphasizes the necessity of transitioning from traditional approaches to new networks and ways of working in response to the rapid pace of AI change. The flexibility and adoption of new models become imperative in navigating the evolving AI landscape. Whereas company B employs job rotations to address capability gaps, strategically building the necessary skills for the implementation of AI initiatives and reshuffling talent across the organization.

In the context of process optimization, Company C utilizes AI to mine process data, identifying inefficient processes for subsequent reconfiguration and optimization through automation. For governance, Company D recognizes the pivotal role of their core IT team in establishing an AI governance foundation. This foundation ensures consistency as capabilities are reconfigured throughout the company.

Contrary to radical transformation, Company E anticipates AI contributing mostly to incremental efficiency gains in existing processes. This inclination toward incremental improvement advocates for a measured approach to reconfiguration.

These insights underscore that organizations need to thoughtfully reassess and reconfigure aspects of their operating model, processes, talent model, and governance to fully unlock the potential of AI. Absorptive capacity is enhanced through an openness to reconfiguration, moving beyond simply grafting AI onto existing ways of working.

#### **5.4 Limitations and future research directions**

As with any research, this research has certain limitations that provide paths for future research. *First*, the research relied on a small sample of interviews from organizations at different stages of AI adoption. Additional interviews across a broader group of firms would enrich the insights and allow greater generalization.

*Second*, the research was qualitative in nature. Developing quantitative measures for the constructs of AI literacy, sensing capability, seizing capability, and reconfiguration capability would allow statistical testing of their relationships and drivers. This quantitative orientation represents a logical next step in advancing the model empirically.

*Third*, the cross-sectional nature of the interviews provides only a snapshot vs. a longitudinal view of how organizations evolve their AI literacy and DC over time. Longitudinal research would enhance understanding of how these capabilities develop and mature.

*Fourth*, the interviews focused on managerial perceptions regarding AI impact. Further research could include objective performance measures to quantify how AI initiatives enhanced financial, operational, and customer outcomes. This would move beyond self-reported assessments.

*Finally*, the theoretical model could be expanded to account for additional organizational factors that moderate the relationship between AI literacy and dynamic capabilities. For instance, how does data quality or analytic talent affect this linkage? Incorporating additional boundary conditions could provide a more contingently nuanced representation.

The research helps bridge theory with practice in clarifying how AI literacy and DC intersect. Considerable potential exists to build on these initial findings through wider sampling, quantitative measurement, longitudinal tracking, objective performance data, assessing boundary conditions,

and testing via field experiments. Harnessing the power of AI remains an emerging frontier as organizations progress on their digital transformation journeys.

## 6 Conclusion

This research systematically investigated the intricate relationship between AI literacy and dynamic capabilities within IT firms in Finland. The overarching hypothesis that cultivating workforce skills, knowledge, and competencies related to AI technologies and applications fundamentally strengthens organizational sensing, seizing, and reconfiguring abilities formed the crux.

The semi-structured interviews conducted with 5 IT professionals and leaders revealed important insights. Organizations that had proactively focused on expanding AI literacy exhibited greater dynamism and agility in responding to AI developments. They displayed superiority in continuously sensing innovations relevant to their operations, seizing the most promising opportunities through rapid prototyping and deployment, and reconfiguring strategies, resources, and processes accordingly.

In contrast, organizations still maturing their AI literacy levels responded more slowly to technological shifts and focused more narrowly on immediate needs rather than future possibilities. This finding establishes a positive correlation between extensive AI literacy and pronounced dynamic capabilities.

Additionally, the research identified specific mechanisms for effectively spreading literacy across the enterprise, centering on learning methods, cultural endorsement, specialist roles, external partnerships, and adoption metrics. Leadership commitment, adaptability to change, and willingness to experiment emerged as vital factors mediating literacy's translation into sensing, seizing, and reconfiguration dexterity.

For scholars, these results provide empirical confirmation of dynamic capabilities theory, revealing workforce AI literacy as invaluable knowledge capital that enables continuous renewal. It expands understanding by demonstrating literacy's tangible role in shaping reactive, adaptive strategies essential for competitive vitality. The findings also offer opportunities to advance the model, like formulating quantitative measures or studying interventions longitudinally.

Therefore, an updated perspective emerges emphasizing AI literacy's indispensability alongside physical, human, and organizational resources for enduring innovation. This underscores continuous, inclusive learning as fundamental amidst relentless industry change. It compels expansion from the narrow confines of data science teams towards organization-wide assimilation.

For practitioners, the research has profound implications. It signals the urgency of investing in inclusive upskilling, framing literacy development as an enterprise-wide capability intertwined with strategy. Tactical recommendations provide roadmaps for interventions spanning tools, networks, incentives, and metrics to methodically elevate adoption. Leadership plays a paramount role through commitment, vision, and change management.

Thus, both scholars and practitioners receive crucial insights and practical guidance regarding workforce capabilities necessary for unlocking potential, seizing opportunities, and remaining responsive in the burgeoning age of AI. Yet limitations exist, providing pathways for additional research through quantitative, longitudinal, and experimental studies. Nonetheless, this pioneering research foregrounds continuous, inclusive learning as indispensable for IT enterprises seeking enduring resonance between strategy, culture, technology, and identity amidst relentless change.

## References

A. L. Bélanger, M. R. (2020). Artificial Intelligence for Risk Management. *Communications of the ACM*, 63(10), 58-65.

Alavi, M. a. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*,(25(1)), pp. 107-136.

Allam, S., Raafat, H., & Alhadreti, S. (2019). Role of AI Literacy in Enabling Organizational Collaboration and Innovation. *International Journal of Advanced Computer Science and Applications*, 10(7), 488-495.

Alpaydin, E. (2020). *Introduction to machine learning*. MIT press.

Amabile, T. (1998). How to kill creativity. *Harvard Business Review*, 76(5), 76-87.

Ambrosini, V. a. (2009). What are dynamic capabilities and are they a useful construct in strategic management? *International Journal of Management Reviews* (11(1)), 29-49.

Argote, L. a.-S. (2011). Organizational learning: From experience to knowledge. *Organization Science*(22(5)), 1123-1137.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*(17(1)), 99-120.

Bass, B. M. (2006). *Transformational leadership* (2nd ed. ed.). Psychology Press.

Bates, R. (2015). *Learning theories simplified: ... and how to apply them to teaching*. Sage.

Becker, B. E. (2006). Strategic human resources management: Where do we go from here? *Journal of Management*(32(6)), 898-925.

Bessant J and Tidd, J. (2013). *Innovation and entrepreneurship* (2nd ed.). John Wiley & Sons.

Boden, M. B. (2017.). *Principles of robotics: regulating robots in the real world*. *Connection Science*(29(2)), 124-129.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

C. Helfat, s. F. (2007 ). *Dynamic capabilities: Understanding strategic change in organizations*. Blackwell Publishing.

Chan, R. (n.d.). Building AI Literacy for Competitive Advantage, Harvard Business Review. Retrieved August 6, 2020, from <https://hbr.org/2020/08/building-ai-literacy-for-competitive-advantage>

Chen, Y., Wen, T., & Huang, H. (2020). The Importance of AI Literacy in Decision Making. IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), 150-154.

Chesbrough, H. a. (2006). Beyond high tech: Early adopters of open innovation in other industries. R&D Management, 36(3), 229-236.

Chesbrough, H., & Rosenbloom, R. (2002). The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies. Industrial and Corporate Change, 11(3), 529-555.

Chui, M., Manyika, J., & Miremadi, M. (2016, Where machines could replace humans—and where they can't (yet). ). <https://www.mckinsey.com>. Retrieved from McKinsey Quarterly: <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/where-machines-could-replace-humans-and-where-they-cant-yet>

Damanpour, F. a. (2012). Managerial innovation: Conceptions, processes, and antecedents. Management and Organization Review, 8(2), 423-454.

Davenport, T. H. (2018). Artificial intelligence for the real world. Harvard Business Review (96(1)), 108-116.

Denison, D. R. (1990). Corporate culture and organizational effectiveness. John Wiley & Sons.

Dess, G. G. (2019). Strategic management: Creating competitive advantages (8 ed.). McGraw-Hill Education.

Domingos, P. (2015). The master algorithm: How the quest for the ultimate learning machine will remake our world. Basic Books.

Easterby-Smith, M. B. (1999). Organizational learning and the learning organization: Development in theory and practice. . Sage Publications.

Edmondson, A. C. (2018). Cross-boundary teaming: A source of learning and performance improvement. Organizational Psychology Review (8(4)), 266-288.

Eisenhardt, K. M. (2000). Dynamic capabilities: What are they? Strategic Management Journal (21(10-11)), 1105-1121.

Galbraith, J. R. (2008). *Designing organizations: Strategy, structure, and process at the business unit and enterprise levels*. Jossey-Bass.

Goodfellow, I. B. (2016). *Deep learning*. MIT press.

Gulati, R. (1998). Alliances and networks. *Strategic Management Journal* (19(4)), 293-317.

Halevy, A., Norvig, P., & Pereira, F. (2009). The unreasonable effectiveness of data. *IEEE Intelligent Systems*, (pp. 24(2), 8-12).

Helfat, C., & Peteraf, M. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24(10), 997-1010.

Helfat, C., & Peteraf, M. (2009). Understanding dynamic capabilities: Progress along a developmental path. *Strategic Organization*, 7(1), 91-102.

Huxham, C. a. (2005). *Managing to collaborate*. Routledge.

J. F. Martínez, A. V. (2018). Cost-Reduction Opportunities of Machine Learning Algorithms in Power Consumption Forecasting. *Energies*, 11(4), 832.

Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1(9), 389-399.

Kotter, J. P. (1996). *Leading change*. Harvard Business Review Press.

Kurzweil, R. (2005). *The singularity is near: When humans transcend biology*. Penguin.

Lewicki, R. J. (1998). Trust and distrust: new relationships and realities. *Academy of Management Review* (23(3)), 438-458.

Malhotra, A. M. (2007). Leading virtual teams. *Academy of Management Perspectives* (21(1)), 60-70.

Manyika, J., Chui, M., Bughin, J., Dobbs, R., & Biss. (2017). *Artificial intelligence: The next digital frontier?* McKinsey Global Institute.

O'Reilly, C. A. (1996). Culture as social control: Corporations, cults, and commitment. *Research in Organizational Behavior* (18), 157-200.

Porter, M. E. (1996). What is strategy? *Harvard Business Review* (74(6)), 61-78.

- Porter, M. E. (2008). The five competitive forces that shape strategy. *Harvard Business Review* (86(1)), 78-93.
- Ricart, J., & Casadesus-Masanell, R. (2011). How to design a winning business model., 89(1/2). *Harvard Business Review*, 100-107.
- Rumelt, R. (2011). *Good strategy/bad strategy: The difference and why it matters*. Crown Business.
- S. Allam, H. R. (2019). Role of AI Literacy in Enabling Organizational Collaboration and Innovation. *International Journal of Advanced Computer Science and Applications*, 10(7), 488-495.
- Schein, E. H. (2010). *Organizational culture and leadership* (4th ed. ed.). Jossey-Bass.
- Stone, P. B. (2016). *Artificial intelligence and life in 2030. One Hundred Year Study on Artificial Intelligence: Re-port of the 2015-2016 Study Panel*.
- Teece, D. (2010). Business models, business strategy, and innovation. *Long Range Planning*, 43(2-3), 172-194.
- Teece, D. J. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal* (18(7)), 509-533.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal* (28(13)), 1319-1350.
- Tushman, M. L. (2008). Innovation, ambidexterity, and organizational agility. *California Management Review*, 50(3), 383-399.
- Wang, C. L. (2007). Dynamic capabilities: A review and research agenda. *International Journal of Management Reviews* (9(1)), 31-51.
- Y. Chen, T. W. (2020). The Importance of AI Literacy in Decision Making. *IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)*, 150-154.
- Zahra, S. A. (2006). Dynamic capabilities: A review, typology, and research agenda. *Journal of Management* (34(6)), 987-1015.
- Zollo, M., & Winter, S. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization Science*, 13(3), 339–351.

## Appendix 1

### List Of Tables

Table 1: AI literacy assessment across organizations .....	38
Table 2: AI adoption approaches and effectiveness .....	40
Table 3: Sensing, Seizing, and Reconfiguring Initiatives of IT companies .....	46
Table 4: Mediating and Moderating Factors in the Relationship between AI Literacy, DC & OP ....	48
Table 5: Statements of representative supporting the research hypothesis.....	59

## Appendix 2

### List Of Figures

Figure 1: Research flow diagram of the thesis .....	7
Figure 2 : VRIO frameworks (Patrick & Barney, 1998) .....	12
Figure 3: Organizational Potential and its factors .....	16
Figure 4: Schema of Dynamic capabilities, business model and strategy (Teece D. , 2010) .....	22
Figure 5: Theoretical framework.....	26
Figure 6: Research Process.....	30

## Appendix 3

### List of Abbreviations

AI	Artificial Intelligence
DC	Dynamic Capability
OP	Organizational Potential
RBV	Resource-Based View
AGI	Artificial General Intelligence
POCs	Proofs of Concept
IP	Intellectual Property
CIO	Chief Information Officer
CTO	Chief Technology Officer
CEO	Chief Executive Officer
KPIs	Key Performance Indicators
AWS	Amazon Web Services

## Appendix 4

"Probable questions for open ended interview"

- 1) How does your organization cultivate AI literacy to enhance its dynamic capabilities, especially in terms of sensing shifts in the industry landscape?
- 2) What strategies have proved effective in shaping AI literacy among your employees, and how do these strategies contribute to your organization's seizing of new opportunities?
- 3) Could you provide insights into the methods your organization employs to bolster employees' AI knowledge and skills, thus enhancing their ability to transform processes and strategies?
- 4) In measuring AI knowledge within your workforce, how does this metric correlate with the organization's capacity for sensing market changes and technological advancements?
- 5) Can you provide concrete examples of performance metrics related to AI literacy that your organization monitors, and how do these metrics tie into the organization's dynamic capabilities?
- 6) Could you share real-world instances where successful strategies to enhance AI literacy resulted in tangible improvements, positively impacting the organization's ability to seize opportunities and adapt to changing market conditions?
- 7) What specific AI technologies is your company currently prioritizing, and for what strategic purposes, particularly in terms of enhancing dynamic capabilities like seizing new opportunities?
- 8) How does AI literacy align with and impact financial performance, operational efficiency, and customer satisfaction within your organization, illustrating the interplay of dynamic capabilities?
- 9) In what ways has AI literacy been instrumental in enabling your organization to adapt to shifting market conditions, showcasing its transformative capabilities?
- 10) Looking to the future, what are your company's plans regarding AI investment and utilization? How does this tie into your strategy for leveraging dynamic capabilities to foster continued growth and innovation?