
Deploy to Innovate – A Framework and Capabilities to Lead AI Deployment

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Abstract: The share of companies reporting financial or innovation impacts from AI remains low. Meanwhile, the gap in results between AI deployment leaders and others is widening. Despite increasing interest and investments, many companies struggle to deploy AI effectively. In this study, we interviewed C-level executives and board members of leading international companies and analyzed the data to identify, explain, and describe the key capabilities needed for AI deployment leadership and management. Additionally, we developed the AI Deployment Management Capability Framework (AI-DMCF) to demonstrate how top management can lead and manage AI deployment. Theoretically, the framework is based on the Capability View, and we confirmed its relevance and value through follow-up interviews and discussions with top management. This research makes a novel contribution to the theoretical discussion of AI deployment and defines a framework and essential capabilities for managing deployment and supporting innovation in companies.

Keywords: Strategy, Capability View, AI Deployment Management Capabilities, Innovation Management

1 Introduction

Despite increasing investments and interest, tangible benefits from AI remain limited. According to the AI Index Report 2025, companies reporting financial impacts from AI in their operations mention cost savings under 10% and revenue increases below 5% (Maslej et al., 2025). McKinsey (Hall et al., 2024) states that *companies with advanced digital and AI capabilities outperform laggards by two to six times in total shareholder returns* across the sectors analyzed. Another article by McKinsey (Mayer et al., 2025) on the state of GenAI (launched in late 2022) in business shows that, despite rising investments in recent years, *95% of organizations see no returns*. Only 1% of C-

level executives (typically managers with "Chief" in their job title) from the studied companies describe their GenAI rollout as "mature" (Mayer et al., 2025). The issue is that most company executives seem unsure of how to guide their companies' AI strategies. "The core barrier to scaling is not infrastructure, regulation, or talent. It is learning. Most GenAI systems do not retain feedback, adapt to context, or improve over time "(Challapally et al., 2025). Our study affirms the importance of learning but identifies several other critical factors and capabilities for successful AI deployment management.

Although academic interest in AI deployment and outcomes has increased, it remains at an early stage (Akter et al., 2023; Barney & Reeves, 2024; Brown et al., 2024; Heimberger et al., 2024; Ruotsalainen et al., 2024; Weber et al., 2023). The few extant studies analyze and explain adoption and deployment primarily from technological, individual, functional, or sectoral perspectives, whereas studies focusing on AI deployment issues from top-management and board perspectives remain scarce. Moreover, many current studies rely on literature reviews, and only a few (e.g., Ruotsalainen et al., 2026; Weber et al., 2023) bring fresh empirical data and analyses to the discussion. Sparsity, especially in empirical research, is understandably even more pronounced in the context of GenAI deployment (Brown et al., 2024). This observation also holds for the role and outcomes of AI in company innovation. While scarcity of results and frameworks is reported, e.g., in the above-mentioned articles, literature indicates that managing AI deployment and innovation are intertwined (Gama & Magistretti, 2023; Haefner et al., 2021; Truong & Papagiannidis, 2022; Verganti et al., 2020; Yang, 2024). As Gama & Magistretti (2023) outline, "AI requires innovation enabling capabilities to be successfully adopted. AI adoption influences innovation capabilities (i.e., enabling and enhancing) that enable organizations to innovate better."

Because deployment results and benefits remain limited, and many scholars call for new and improved theoretical frameworks, this study aims to *identify key deployment management capabilities*, develop a framework to address the identified gap, and help top management make crucial deployment decisions to achieve successful outcomes and innovation impacts. Therefore, we pose the following research question:

What are the leading companies doing differently to achieve concrete results in AI deployment?

Understanding deployment management, both in theory and practice, is essential due to its impact on productivity and innovation, the significant time and financial investments involved, the high rate of "failed" projects, and the reported difficulties in achieving tangible results. The roles of the top management team (TMT, typically including the CEO and managers reporting to them) and the Board are vital to guiding a company successfully. Therefore, we aim to explore their necessary capabilities, roles, and focus on AI deployment. We approach this by gathering empirical data from interviews with business executives and analyzing it through an appropriate strategic management theory and framework. By leading companies, we refer to those recognized as industry leaders at the regional, European, or global level.

Theoretical background and extant research

The essential determinants that guide and direct the role and tasks of a company's top management are grounded in shareholder and stakeholder expectations of success. For publicly listed companies, this typically means growth and profitability in the short term and strengthening and ensuring the competitive advantage in the long term. The top management team (TMT) and the Board are responsible for maintaining and updating the core philosophy (e.g., purpose, vision, values) and the strategy by which the company aims to succeed.

Strategy and the role of top management

There are numerous strategizing concepts and tools developed over the past decades (e.g., Reeves et al., 2015). One of the most well-known in academia and among practitioners is Porter's Five Forces strategy concept, introduced about 50 years ago (Peng, 2022; Porter, 1980, 2008). A capability-based approach (Capability View, CV) to strategy has roots in the Resource-Based View (RBV). Building on RBV and their own research, Teece et al. (1997) introduced the Dynamic Capabilities View (DCV) nearly thirty years ago. Since then, the DCV has been further developed and refined by David Teece himself and many other scholars (e.g., Eisenhardt & Martin, 2000; Peng, 2022; Pisano, 2017; Schilke et al., 2018; Teece, 2016, 2017, 2019a), becoming a widely cited framework for strategy development and implementation. This approach is considered especially suitable for today's fast-

changing business environment (Arndt & Bach, 2015; Foss et al., 2023; Leemann & Kanbach, 2022; Schoemaker et al., 2018).

The CV comprises a firm's ordinary and dynamic capabilities. "*Ordinary capabilities permit the performance of well-delineated tasks in the areas of administration, operations, and governance. Dynamic capabilities, by contrast, require entrepreneurial styles that contribute to the orchestration of a company's resources in alignment with changing demands of customers, the evolving possibilities opened up by new technology, and the need to respond to emerging threats*" (Teece, 2019b). Dynamic capabilities consist of sensing, seizing and transforming. Sensing means "identification and assessment of threats, opportunities and customer needs"; seizing is about "mobilization of resources to address fresh opportunities while capturing value from doing so" and transforming means "ongoing organizational renewal." In practice, it is often hard to distinguish between ordinary and dynamic capabilities, but they are analytically distinct with clear roles.

The essential viewpoints in the DCV are, that 1) firms are differentiated by their capabilities, especially their capabilities to decide, to innovate, and to change, 2) dynamic capabilities reside, in part, with individual managers and especially the top management team, who are required to take an entrepreneurial role in detecting and exploiting opportunities, 3) dynamic capabilities also reside in the organization's values, culture, and collective ability to quickly implement a new business model or other changes, and 4) capabilities, and other intangibles, are not only scarce but they are often difficult to imitate (Teece, 2017, 2019a). The DCV has stood the test of time and evolved into one of the most frequently used theoretical lenses in management research. It has maintained its consistency, coherence, and potential despite – and because of – the criticism and the support presented both from theoretical and practical perspectives (Cavusgil & Deligonul, 2024; Eisenhardt & Martin, 2000; Helfat & Martin, 2015; Leemann & Kanbach, 2022; Pitelis et al., 2024; Schilke et al., 2018; Schoemaker et al., 2018).

We reviewed the relevance of other management research streams, for example, the Upper Echelons and Change Management streams. After studying and analyzing the frameworks, we concluded that both of them have their place and value in management research and practice, however the CV is better suited for creating a consistent understanding and explaining the roles and effects of top management on company performance in a dynamic environment accelerated by AI deployment and innovation.

Digital transformation

Digital transformation (DT) has garnered growing interest among researchers and practitioners since the 1980s, but it remains less studied from the business and management perspectives (Butt et al., 2024; Imran et al., 2021; Kraus et al., 2022; Plekhanov et al., 2023; Vial, 2019; Warner & Wäger, 2019). Based on their extensive research, Vial (2019) noted that although there is an increased understanding of specific aspects of digital transformation, "we lack a comprehensive portrait of its nature and implications". They see *DT as an evolution of IT-enabled transformation*. Vial (2019) does not mention AI in their discussion of the digital technologies identified in the 282 works they examined.

Warner & Wäger (2019) studied how incumbent firms build dynamic capabilities for digital transformation. They consider DT an evolving concept and propose a definition: "*as an ongoing process of strategic renewal that uses advances in digital technologies to build capabilities that refresh or replace an organization's business model, collaborative approach, and culture*" (Warner & Wäger, 2019, p. 344).

In their comprehensive study based on research literature from 2010 to 2020, Kraus et al. (2022) found that while research on DT in business and management is still in its infancy, the existing research had addressed the role of strategy, dynamic capabilities, and the use of big data to tackle DT in companies. In their analysis, the term AI first appeared in the articles' keywords in 2020.

After reviewing DT literature and considering the rapid development of AI since 2015, especially in recent years, we conclude that DT research 1) provides important background for understanding the digitalization requirements companies are dealing with related to AI deployment, but 2) does not offer theoretical frameworks and management guidance for deploying AI.

Deployment of AI

As AI encompasses many technologies, applications, and disciplines, and is constantly evolving, it should not be defined too restrictively. For this study, we have used a definition slightly modified from (Mikalef & Gupta, 2021) and (Russell & Norvig, 2021). Terms such as diffusion, adoption, and deployment have been used "to bring AI into use and gain benefits". We have chosen the term deployment (Merriam-Webster, 2025) for this study because it better captures the critical role of top management and the organization (e.g., Aguinis et al., 2022; Iansiti & Lakhani, 2020; Ransbotham et al., 2020; Ruotsalainen et al., 2024). Hence, we define that:

AI is a system that observes its environment and takes actions to maximize its possibilities to reach objectives set for it.

Deployment means bringing into effective use a solution (method, data, and application) intended for enduring use with objectives, metrics for results, support, and updates.

There are a few AI adoption and deployment studies that have applied the DCV as the research lens (e.g., Akter et al., 2023; Ruotsalainen et al., 2026; Sjödin et al., 2021; van de Wetering et al., 2023; Weber, 2023). Other lenses used are the RBV (Böhmer & Schinnenburg, 2023; Mikalef & Gupta, 2021), readiness assessment (Jöhnk et al., 2021; Uren & Edwards, 2023), adoption studies (Heimberger et al., 2024), and strategy studies (Borges et al., 2021).

In conclusion, the literature we reviewed shows that very few studies – neither in management research nor in DT research – have examined AI deployment from the perspectives of top management and the board, especially regarding how to lead and manage deployment to achieve tangible results. This scarcity is largely due to the phenomenon's multifaceted (both broad and deep) nature and to the lack of frameworks that address the management perspective on AI deployment. The critical reasons we selected the CV and Dynamic Capabilities as the theoretical framework for this study are the strong, consistent CV literature, their applicability to dynamic, innovation-inclined environments, and their solid grounding in strategy and management research.

3 Methodology and the research process

To address the research question, we planned a qualitative research process (Creswell & Creswell, 2020; Yin, 2011) and drew from the extant research described above, the CV, and the qualitative methodology literature (Myers & Newman, 2007; Saldaña, 2014). We conducted thematic interviews with TMT and Board members of leading listed international companies from different industries. The unit of analysis is the company, and the critical data source is TMT and Board members of the companies. The interviews were held online, video-recorded, and transcribed using Teams software, and the edited transcripts were circulated to the interviewees for review and approval. Each interview yielded 15–20 pages of edited text, and a typical discussion topic comprised 20–40 lines of detailed, prose-style responses rather than brief one-line replies. The interviews were confidential, supporting rich data and diverse viewpoints for analysis.

We drew the initial codebook from prior research and the interview script, added the newly emerged codes after consensus, and repeated the process, producing the final list of codes shown in the online Appendix (Table 1). We continued coding, applying the abductive analysis process (Thompson, 2022; Timmermans & Tavory, 2012). We adopted the abductive analysis for this study because AI deployment is complex, prior research is scarce, and firsthand data—especially from top management—is limited. To continue, we merged the codings, examined discrepancies using NVivo's (QSR International, 2024) statistical tools, and discussed them until we reached consensus. Two researchers then independently reduced and condensed the coded material into spreadsheets, yielding two separate matrices of 8 companies by 26 final codes. We continued iteration using the spreadsheets and grouped the codes into themes based on the critical areas and deployment stages identified through the abductive process. We conducted a thematic network analysis (Attride-Stirling, 2001) to provide an additional visual and logical view of the codes, themes, and connections (online Appendix, Figure 1).

To verify and support (or refute) the outcome of the abductive analysis, we conducted several additional analyses. First, before starting the coding, we compiled a collection of interviewee quotations from the scripts to more precisely describe and demonstrate the companies' deployment situation. Second, we collected essential descriptive statistics by the themes developed through abductive reasoning. Finally, we conducted a deployment maturity analysis of the companies to evaluate and verify their deployment status. With these extensive analyses, we strive to

broaden the discussion, deepen the iteration of findings across the various viewpoints, and ensure the relevance and rigor of the findings and the study results.

In the final phase, we iterated the codes in each theme through the Dynamic Capability lens until we reached consensus on the themes, the five "Lead and Manage" capabilities, and their definitions. We present the capabilities, their definitions, the connections, and dependencies in the next Chapter, Findings. Finally, we followed up 17 to 30 months later with selected longitudinal interviews to confirm (or challenge) our observations and to get a longitudinal insight into changes in deployment management.

4 The Findings

First, we describe the five Deployment Management Capabilities (DMC), summarized in Table 1, along with a selection of company quotations. A more complete set of quotations is in Table 3 of the online Appendix. Second, we present the descriptive script analysis and the maturity analysis findings and finish with a brief summary.

The AI deployment management capabilities

Understanding the role of AI in digitalization and strategy is the "critical first" management capability, not only for the TMT but also for the Board, to support the deployment process. If the decisive items (such as cognition, assessment of importance, and positioning AI in the strategy) are not on top management's agenda, it is rarely possible to move ahead with deployment. It is crucial to start building this understanding from the very beginning of deployment. A quotation from a vice-chair of the Board of an advanced company reflects this well: *"Digitalization is for us one of the 3 megatrends, and AI is a strategic topic and a strategic enabler. We launched the first AI application nearly 10 years ago, and AI is present across all parts of the business. We now focus on efficiency and ease of use"*.

Working the roadmap to AI deployment means that the TMT takes the time and effort to build and update a vision, strategy, and approach to guide the company from the first target applications. The Board needs to be involved to contribute with questions, guidance, and support. A quote of a board-level philosophy for the roadmap describes: *"There needs to be a clear connection between strategic goals and how they are driven forward by using AI. We don't have to be the forerunners in everything; being an early adopter is OK... You must be prudent, e.g., with cyber security and data sensitivity... Selecting in which business functions to apply AI to is for the CIO, not for the Board."* Another quote by the Chair of the Board of a Medium-stage company summarizes: *"The difficulty for the Board is to see how this change will affect our company long-term."*

The capability of *Setting the building blocks for business, goals, and results* means concretely deciding on investments, setting objectives and metrics for progress and learning, and reflecting and understanding the results and benefits achieved. The challenge is not only deciding on financial investments but also recognizing the need for one's own resources to integrate AI into the company's business and processes. A board member of an Advanced-stage company informs: *"In the board, we focus on corporate business goals and objectives and expect the CIO and the CTO to make sure that AI goals and objectives are linked to these."* Another C-level quote from a Medium-stage corporation describes: *"We have a special development fund for bigger project initiatives, and a fast lane fund for smaller trials. In addition to our own experts, we have built a partner ecosystem. Objectives are set and followed up mainly on business level."* A third quote from a Medium-stage company board member summarizes: *"Funding is not the problem, mindset and culture are. We follow and discuss the progress monthly."*

Solidifying the bedrock for learning and development. Deploying AI is a long-term, continuously evolving process, since technology and the business environment are constantly changing. This is verbalized in the following highlight by a board member of an Advanced-stage company: *"How to harness the technology for concrete benefits must be in strategy and on the TMT agenda, organized into operations and projects with objectives and follow-up. This will differentiate winners from losers. People, their mindset, initiative, and innovation are crucial."*

Table 1. Deployment Management Capabilities (DMC, first column) with definitions, the corresponding theme characterizations, DC classification (temporal) and the codes.

<i>DMCs and the definitions</i>	<i>Theme characterization</i>	<i>DC (temporal)</i>	<i>Codes for themes</i>
<u>Understanding</u> the role of AI in digitalization and company strategy	Cognize, assess importance and urgency, intent, position (internal, customers, ecosystem)	Sensing	1 Digital transformation and its role 2.1- 2.2 Understanding of AI and deployment 3 Role of AI in digitalization 4 AI built into the strategy
<u>Working the roadmap</u> to AI deployment	Position (aimed value for business, role, processes, and risk), align strategy	Seizing	5.1 Vision for AI, 5.2 Strategy for AI, 5.3 Operating model 6.1 Target functions, 6.2 Target applications
<u>Setting the building blocks</u> for business goals and results	Commitment, resources, goals, and objectives	Seizing	7.1 Investments in AI, 7.2 Human resources 8 Objectives for deployment 9.1 Metrics for results, 9.2 Metrics for benefits, 10.1 Achieved results, 10.2 Achieved benefits
<u>Solidifying the bedrock</u> for learning and development	Support, encourage, learn, balance	Transforming	11.1 Enablers, 11.2 Capabilities, 11.3 Development of enablers and capabilities 12.1 Obstacles, 12.2 Challenges 13, Learnings
<u>Ensuring strategic leadership</u> for endurance and differentiation	Manage iteratively long and short term	Transforming	14, Importance of AI in 3-5 years 15, The role of TMT in deployment 16, How the role of AI appears in company strategy during the interview

Ensuring strategic leadership for endurance and differentiation is the critical deployment management capability for long-term success. The importance of longevity is reflected in the following two statements from advanced-stage company executives: "We deliver and manage the data and the models by ourselves, including legal and ethical follow-up and actions." "Low threshold, effective and agile organization, and risk tolerance are critical to be able to deliver. Confidence and trust come through delivered results".

The descriptive script analysis

Here, we outline the descriptive statistics derived from the interview scripts prior to finalizing the capabilities (for more details, see the online Appendix, Table 2).

When looking at the first DMC, "*Understanding the role of AI in digitalization and company strategy*", it seems that all the interviewed companies recognize the importance of data, and six out of eight see "AI coming". Overall, the TMT and Board members seem to be aware of AI and its potential; some companies have taken it into use and are piloting applications. Many companies still see AI as a tool and would rather treat it as part of the IT or technology strategy.

When discussing the topic of *Working the roadmap to AI deployment*, all interviewees say they envision increasing use of AI in the future. Still, many use just isolated functional applications or general tools without a common strategy.

In *Setting the building blocks for business goals and results*, half of the companies consider it appropriate to track AI project contributions using standard business metrics, while 2 of 8 companies have no metrics yet. Overall, half of the companies seem to take a firm grip on AI development, while the other half is counting on partners. Investment levels and the benefits achieved remain low, and only one of the eight companies has the entire deployment process in its own hands.

When *Solidifying the bedrock for learning and development* was discussed, two of the eight companies perceived AI as a management challenge, and kept asking themselves whether they were "doing enough on AI". Specific

mentions of capabilities mostly focused on individuals, their attitudes, ages, curiosities, and skill levels. The availability of robust proprietary data, AI understanding within business units, and the TMT were mentioned as critical obstacles. Three of eight companies see that "when and how to start in the face of the unknown" is a critical challenge.

In *Ensuring the strategic leadership for endurance and differentiation*, 2 out of 8 executives are "on the map" and understand AI and its meaning widely, including innovation; 3/8 do not cognize or care. Two out of eight say "AI is very important, we invest a lot," and 5/8 say "AI is important, it increases efficiency". In another formulation, 3/8 say AI is a question of survival for them.

In 2 of 8 cases, top management truly understands and leads their organizations in AI deployment. They are investing time and money, taking a firm, committed role in the deployment process, setting objectives, and measuring results. To achieve this (advanced) status has taken years, and it has meant developing and transforming the whole organization, not just "taking a technology in use". In half, AI is not yet widely understood, and hence, the deployment process is not yet established. Instead, data governance is being worked on, some experiments are underway, or standard/point solutions have been adopted. One company has chosen to pay little attention to AI or does not yet understand its significance for business.

Maturity of DMCs of companies

We completed the first maturity analysis (on a 1-5 scale) for 8 companies and the second for 4, selected from the 8 based on changes in their top management. These follow-up interviews used the same interview script but focused more on changes in deployment management since the previous interviews. First, we summarize the condensed results of the four companies of the first analysis. Next, we compare the results of the first analysis with those of the second (interviews conducted 18 to 30 months later). We present the results of these two analyses in Figure 1.

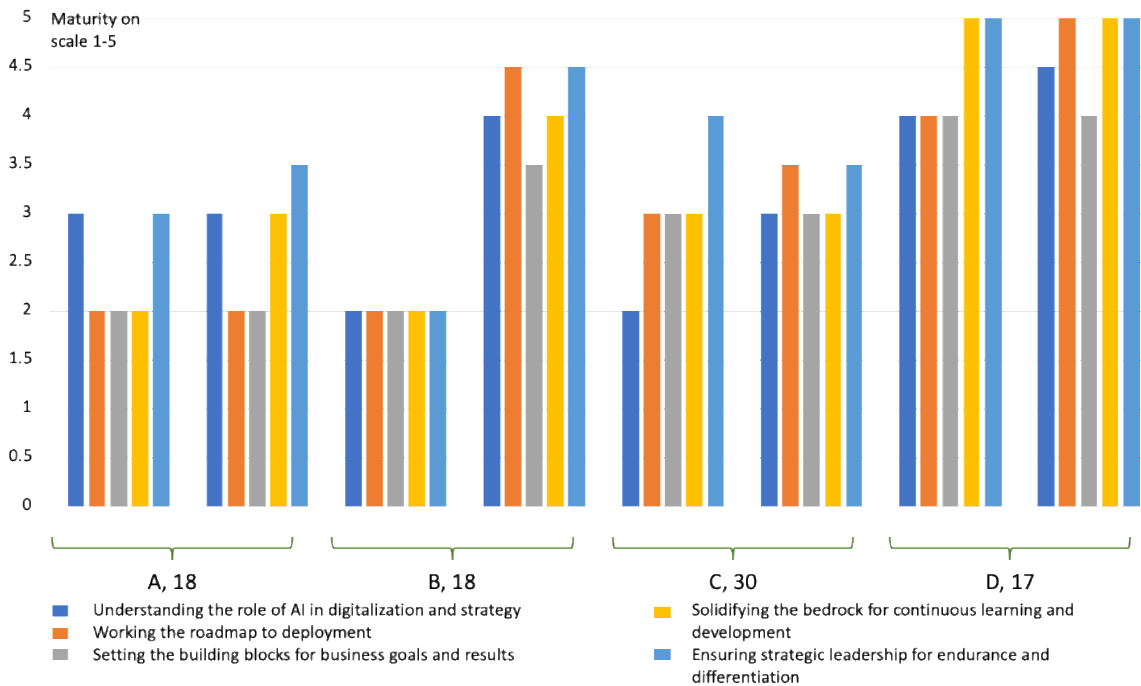


Figure 1. Changes in the estimated maturity of the Deployment Management Capabilities in four companies (A to D) between two time points. The numbers after letters A-D designate the months between time points.

There is one company (D in Figure 1) whose capabilities clearly exceed those of the others on the scale. This company began working on data governance and management almost 10 years before the interview, but it does not consider itself mature in AI. Those between two and three (A, B, and C) typically work on data management and

availability. Each company has its own history and background, which greatly explains its current situation in the deployment.

When reviewing the graphics representing the second interviews, we see that AI deployment is advancing in companies A and D. The progress in company A seems slow, whereas company D remains at a high maturity level. There have been some changes in the TMT of both A and D, but they do not seem to have affected the pace or the course. However, the changes in company B's leadership have led to drastic shifts in the speed and direction of AI deployment. Digital and data transformation in B was well advanced before these changes, making this acceleration feasible. Significant management changes also occurred at company C, but in this case, they led to a more conservative approach to AI than earlier. These results confirm the decisive role and importance of the TMT and the Board in leading AI deployment.

Summary of the Findings

We find the results of these analyses (abductive, interview quotations, descriptive statistics, and maturity) well aligned and mutually supportive. The findings also support the applicability of the DC view to this type of strategic management challenge and extend the DCV to AI deployment management. These findings demonstrate that a sufficient level of Deployment Management Capabilities must be established before systematic, wide-scale AI deployment, results, and innovation benefits can be achieved (Gama & Magistretti, 2023; Yang, 2024).

5 Discussion

In this chapter, we present and discuss the AI Deployment Management Capability Framework (AI-DMCF) developed as an essential part of this study. This framework is a consistent and concrete extension of the previous research on the AI Deployment Capability Framework (the AI-DCF) by Ruotsalainen et al. (2026). We conclude the chapter by addressing the theoretical contributions and practical implications and answering the research question.

The AI Deployment and Management Capability Frameworks

The five identified deployment management capabilities (Figure 2, left side) are connected into a process, represented by solid arrowhead lines. When deployed and developed together, they make the Integrated AI Deployment Management Capability, as highlighted in the figure. With this framework, we describe the essentials of top management's role and leadership in AI deployment. Developing and managing these capabilities is neither a "one person" nor a "once done it is ready"-type of thing, but an iterative process requiring constant, multi-proficient (i.e., representing business, technical, economic, and other talent domains) attention, innovation, and refinement.

Another essential observation is proactive, continuous collaboration within the TMT and with the responsible business, operational, and technology teams and their leaders. This innovative collaboration is crucial for business-driven deployment and continuous learning, as indicated by the straight dotted arrowhead lines in the figure. Early-stage companies are usually working on understanding, Sensing in DC terms. At an Advanced-stage company, Sensing, Seizing, and Transforming are connected, since continuous communication is needed across all deployment management capabilities to avoid missing opportunities or being too late to Seize. This also means that *the cycle time between dynamic and ordinary capabilities must be shortened to enable holistic sensing, seizing, and transforming*.

The role of the TMT at the Early stage is to get acquainted with AI, take an active role in deployment, and learn, encourage, and demonstrate the company's AI intent through swift, risk-prolific decision-making. As the company advances, the TMT focus will shift more toward objectives, results, learning, and support. The role of the Board is to proactively engage in strategy work and remain cognizant of the roadmap, results, and learning, thus ensuring that the TMT is actively leading and managing the company's AI deployment. To be effective and efficient, the DMC process needs to be strategically and operationally integrated to ensure future-oriented, business-results-driven working and communication. The AI-DMCF helps the TMT and the company identify the critical elements, their relationships, and the necessity of innovative, iterative collaboration when deploying AI to improve productivity and strengthen competitive advantage.

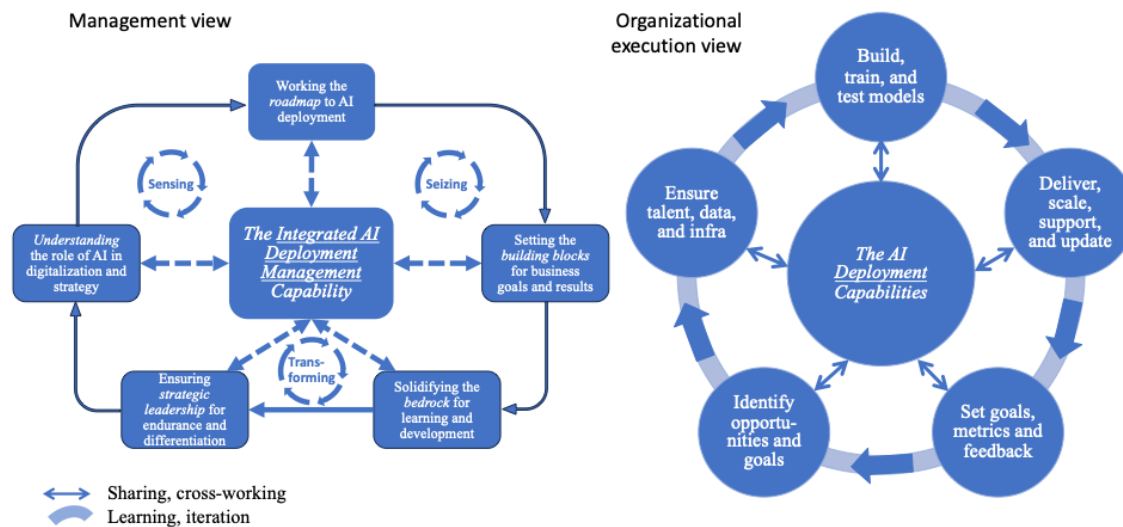


Figure 2. The Framework of AI Deployment Management Capabilities (AI-DMC) and its positioning in the DC view in a specific company situation and time point (The Management view, on the left). The AI Deployment Capability Framework (The Organizational execution view, on the right) modified from (Ruotsalainen et al., 2026)

On the right-hand side of Figure 2, we present the advanced AI Deployment Capability Framework, consolidated from current and earlier research (Ruotsalainen et al., 2026) and confirmed by the follow-up interviews in this study. Advanced-stage companies have repeated the full deployment iteration several times. They are enhancing and scaling AI across their business with significant ongoing financial and talent investments. They have their own resources in all critical areas and develop them in line with the dynamics of Sensing, Seizing, and Transforming across all deployment capabilities. All interviewed executives from companies with a maturity level of 3 or higher confirmed that this framework accurately describes the critical capabilities needed to deploy AI. It can take several years to develop the necessary capabilities to a level (3 or above) sufficient to achieve concrete productivity and innovation results.

We summarize this section and answer the Research Question (*What are the leading companies doing differently to achieve concrete results in AI deployment?*) through the following concluding points:

- *Make your TMT and your company familiar with AI technologies, their strategic deployment opportunities, and the associated business challenges.*
- *Ensure deployment and learning by using the AI-DMCF and the AI-DCF as guidelines, aligned with the strategy, goals, investments, and metrics to move forward on the deployment road.*
- *Solidify the enduring strategic AI deployment through collaboration with the Board and the stakeholders to create value, improve productivity, and strengthen competitive advantage.*

AI deployment must be led and managed from the inside out, with resources and capabilities under the organization's control, to enable an agile, iterative, and integrated learning and innovation process.

Theoretical Contributions

First, this research identifies five critical AI deployment management capabilities, describes their characteristics, purposes, and connections at different stages of the deployment process. A sufficient level of these capabilities is needed to deploy AI widely and systematically in a company.

Second, the developed AI-DMCF (Figure 2) describes the deployment management process connected to strategy, i.e., how to lead and manage the deployment capabilities needed to advance the deployment with results.

Third, the AI-DMCF and the identified capabilities fill the gap and address the scholarly calls for a theory-driven framework for entering, leading, and managing AI deployment with results. The research outcome is based on novel empirical data, an established and widely used qualitative methodology, and additional descriptive statistics, interviewee quotations, and maturity considerations.

Fourth, we enhance CV research into a new, underexplored area of AI Deployment Management. We find that the CV fits well to understand and explain the TMT and the Board perspectives on AI deployment.

Fifth, this research indicates a shift in the balance of TMT capabilities from ordinary to dynamic within the CV framework. This is due to the business environment becoming increasingly dynamic, requiring TMT to pay closer attention to the dynamic capabilities, thus paving the way for company-wide innovation.

We explored peer-reviewed studies, cited in the Background Chapter, that relate to deployment management capabilities (Akter et al., 2023; Ruotsalainen et al., 2026; Sjödin et al., 2021; van de Wetering et al., 2023; Weber et al., 2023; Yang, 2024). *The key differences we found between this study and other research are a) the TMT and the Board focus (vs. technology, individual, project or function), b) the theoretical lens (DCV versus e.g., readiness, adoption, RBV), c) the defined, dynamic, and iterative deployment management capabilities, and d) the collaborative innovation process (vs. e.g., readiness factors and indicators).* While the reviewed studies provide insights into understanding and describing specific aspects of AI deployment in companies, they do not address the critical question of how the TMT and the Board should lead and manage deployment. In summary, we make a much-needed novel contribution to the theoretical discussion of AI deployment by identifying the critical management capabilities, a framework, and a process for leading and managing AI deployment in companies. We also contribute by advancing the DC view in AI deployment management.

Practical Implications

The first and decisive practical implication is to recognize that AI deployment is an iterative, collaborative, long-term learning and innovation process, not a decision to acquire another IT tool left for the CIO to worry about. There are many capabilities to build, and this takes time (Ruotsalainen et al., 2026).

The second implication is to realize that the development of deployment capabilities is company- and path-dependent. This means that the business, organizational, and people aspects must be tightly coupled with technological opportunities and expertise to improve productivity and build long-term competitive advantage.

The third implication concerns time and the fast pace of change across all fronts. This requires continuous, increased focus on all five management capabilities, especially on Understanding and the Roadmap. The TMT must accelerate the pace of capability iteration cycles and emphasize parallel work. The leading companies have achieved cycle times of months from idea to delivery, and they work in parallel to improve data availability and develop their capabilities.

We argue that AI should be integrated iteratively into the company's innovative approach to strategy and operations, given the urgency of time and the connections among deployment, the business, and the people.

6 Conclusion

In this research, we identified five critical capabilities and developed a framework (the AI-DMCF) that outlines how companies can manage AI deployment to achieve tangible results. This study makes a novel theoretical and practical contribution, called for in existing research reports. We verified the framework through follow-up interviews with several executives from the companies we interviewed. Additionally, we presented and discussed the framework in confidential sparring sessions with board members from other, non-participating companies. These follow-ups and discussions confirm the framework's relevance, clarity, and practical applicability. The framework provides a solid, adaptable platform for the Board and TMT to deliver structured, evolving leadership to drive AI deployment and transformation to improve productivity and competitive advantage. We demonstrated that companies that proactively lead and manage the critical areas summarized in Figure 2 have built a comprehensive management capability system that generates business value through results, learning, and continuous capability renewal.

Appendix (available online at <https://doi.org/10.5281/zenodo.19690474>)

Table 1. Initial and final codes in the coding process (emerged codes in *Italics*).

Table 2. The AI Deployment Management Capabilities (AI-DMC) and the descriptive review of the executive interviews.

Table 3. Quotations from thematic interviews by Deployment Management Capability (DMC) and stage of AI deployment.

Figure 1. Thematic Network Analysis as a part of the coding-to-themes process.

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