The strategic role of middle managers in the formulation and implementation of digital transformation projects

Ioannis P. Christodoulou1 | Jahangir Wasim2 | Robert J. Reinhardt3 | Kirill Ivanov4

1University of Westminster, London, UK
2Business Management, Heriot-Watt University Malaysia, Putrajaya, Malaysia
3Sustainable Business Consultancy & Research, Bonn, Germany
4Saint Petersburg State University, St. Petersburg, Russia

Correspondence
Robert J. Reinhardt, Sustainable Business Consultancy & Research, Hohenzollernplatz 7, 53173 Bonn, Germany
Email: rr.robert.reinhardt@gmail.com

Abstract
Middle managers play a crucial role in implementing digital strategy. They directly influence the success or failure of an organization's digital transformation. They are the enablers of digital strategy implementation and company transformation and sometimes can cast a sabotaging shadow side when not involved and engaged in the process. However, there are ways to engage them and divert their sabotaging behavior.

1 | INTRODUCTION

Digitization is not a new phenomenon and has been proven invaluable, especially in the ongoing global COVID-19 pandemic and is now more than ever present across all aspects of life. A recent study by Ratten (2021) on the impact of the ongoing global COVID-19 pandemic on entrepreneurship found that “... life has evolved considerably. Human life has transformed with the use of digital technologies becoming the norm.” In recent years, many companies initiated “digital transformation initiatives.” Despite the agreed-on vagueness of the term, it is commonly used to describe all types of digital-related corporate change projects, from integrating digital tools into everyday business processes to full-scale organizational restructuration (de la Boutetière et al., 2018). According to de la Boutetière et al. (2018), 8 out of 10 companies in S&P500 have undertaken digital transformation (DT) efforts between 2013 and 2018. Most vivid examples include companies like General Electric, ING, Disney, and Lego. However, historically, less than 30% of digital transformational activities bring results that fulfill all the stated targets (de la Boutetière et al., 2018; Tabrizi et al., 2019).

Studies in the Information Systems (IS) literature imply that the core development of digital capabilities with organizations lies in the alignment of Information Technology (IT) and business strategies (Luftman & Brier, 1999). Thus, IT must be applied appropriately and timely in harmony with existing business strategies. Significant attention is given to top management support’s importance and end-users’ role in the technology implementation. However, available studies lack robust research data on middle managers’ (MMs) role in DT. From a general management research perspective, there appears to exist research focusing on the middle management roles in different change types (Wooldridge et al., 2008), yet DT projects have been largely neglected. Studies highlight the importance of middle management for DT development, yet few have evaluated this involvement in more depth (Jaoua, 2018).

Relatedly, the strategic contributions of MM have been well recognized within available academic literature. For instance, MM is positioned between the operationally focused frontline and strategically focused executive managers. This position allows them to develop and promote innovative and actionable ideas (Dougherty & Hardy, 1996), increase the effectiveness in reaching companies’ targets (Floyd & Wooldridge, 1997), and execute strategic plans (Floyd & Wooldridge, 1992). However, there is a gap in available research and knowledge on the strategic role of middle management in developing DT projects.

This research gap is confirmed in reviewing relevant literature since it appears that the only relevant paper on the subject was a case study (of a Finish public sector company) conducted by Paavola et al. (2017). Other studies on DT appear to have failed to provide an in-depth exploration of the topic of middle management’s involvement, though acknowledging their role in the creation of emergent strategies (Charias & Hess, 2016). Additionally, management’s role was identified as crucial for the success of such projects and even superior to the technological issues that companies face (Kane, 2019). Furthermore, available research on MM’s strategic involvement is broad, with multiple theoretical frameworks present. MM is recognized to be not only implementors of deliberate strategies developed by top
management executives but also facilitators and information synthesizers. In addition, they execute strategic influence upward by championing their emergent strategic initiatives to top management.

This paper responds to both the lack of relevant studies and the research call from Wooldridge and Floyd (2012) for additional research studies about the strategic role of MMs in transformational projects. This research aims to explore the involvement of MM in strategy formulation and implementation in DT change projects and evaluate the importance of middle management strategic roles and strategic activities for projects’ successful implementation. To achieve this aim, we identified the following objectives for our study:

1. Evaluate the middle management's strategic roles in DT projects.
2. Explore the key activities of each middle management strategic role in DT projects.
3. Evaluate the importance of middle management's strategic roles for successfully implementing DT projects.

This article is structured as follows. Sections 2 and 3 explore available literature on DT and the strategic involvement of MM in the strategy formulation and implementation in general, with a focus on change and DT projects. Section 4 describes the methodology applied in this study, followed by the results and discussion in Section 5. The study concludes in Section 6 with the implications, future research direction, and conclusions.

2 | DIGITAL TRANSFORMATION

DT is commonly defined as “a change in how a firm employs digital technologies, to develop a new digital business model that helps to create and appropriate more value for the firm” (Verhoef et al., 2015). DT started gaining momentum in 2016 and was mainly focused on diversified areas within disciplines. For example, digital advertising (Lamberton & Stephen, 2016) and Omni-channeling (Verhoef et al., 2015) have become popular. While strategic management literature focused on the renewal of business models and capabilities (Foss & Saebi, 2017), available research on IS explored the adoption of technologies and their impact on business performance (Nambisan et al., 2017).

Research on DT from various perspectives, such as marketing, IS, and operational and strategic management, concluded that all streams share similar characteristics of distinct digital stages that companies undergo, ranging from trivial ones to more persistent and transformative (Verhoef et al., 2021). Scholars have identified three stages in this transformation: digitization, digitalization, and DT.

Digitization is translating information from analogous sources to digital ones (Dougherty et al., 2012), changing from analog to digital tasks and developing more cost-efficient configurations of internal processes using IT systems. An example of digitization activity would be the usage of digital surveys for information gathering or integrating digital document processing systems. Therefore, digitization usually refers to converting internal and external documentation and information processing to the digital realm without any added value activities.

Digitalization uses IT to alter existing business processes in the aim of seizing new business opportunities. One example could be the development of digital communication channels to interact with customers and suppliers improving the overall quality of the service provided and speeding up procurement processes. Digitalization allows for the improvement of processes and their coordination within the firm and with external parties. Therefore, compared to digitization, it is focused mostly on enhancing customer experiences and not only on cost savings.

Digital transformation (DT) describes the change that affects the organization as a whole and ultimately leads to the development of new business models (Pagani & Pardo, 2017). Developing new business models increases their competitive advantage by responding to the changing conditions in the external environment or even anticipating and altering these conditions through deliberate initiatives and actions. DT is distinct from digitalization as it not only improves the internal processes but also rearranges them, creating a new business logic or value creation processes (Li et al., 2018). Therefore, only DT is deeply linked with the organization’s core strategy as it leads to developing new business models via utilizing digital technologies.

Another important factor relevant to DT is that it primarily affects established incumbent firms, which face challenges in the rapidly changing market environments due to their legacy. A vivid example is the top five S&P 500 (Johnston, 2013) companies in the 2000s were Exxon, GE, Microsoft, and Citigroup. However, as of August 31, 2020 (Amadeo, 2020), the top five are Microsoft, Apple, Amazon, Facebook, and Alphabet. All five are truly digital compared to Johnson and Johnson and Berkshire Hathaway at numbers seven and eight. Incumbent companies are struggling to adapt fast as they have to deal with trade-offs and internal conflicts while adapting their business models to the new environment (Christensen et al., 2016). Thus, the approach they pursue is usually gradual, they undergo all three stages one after another.

Organizational structure changes are necessary to achieve successful DT (Eggers & Francis Park, 2018) as the correct processes and human resources play a vital role in DT (Almeida & Wasim, 2022a). Literature suggests that to achieve the necessary agility, adapt changes, and fast exploitation of market opportunities, an organizational structure must become more flexible, composed of separate business units, more agile forms of existing structures, and enable digital functional areas.

3 | STRATEGIC ROLES OF MIDDLE MANAGERS

Research on MMs’ strategic involvement is broad, with multiple theoretical frameworks present. MMs are recognized to be not only implementors of deliberate strategies developed by top management executives but also facilitators and information synthesizers. In addition, they execute strategic influence by championing their emergent
The role of MM in strategy implementation and formulation is well defined, and they are positioned as linking pins coordinating top and operating-level activities. Therefore, MM involvement in strategy can be defined as the coordination of particular functional or divisional units’ operational activities with activities of vertically integrated groups.

A study by Chianias and Hess (2016) has evaluated the role of middle management and identified it as a significant contributor to the development of emergent digital strategies contributing to the organizational environment even before the top management comes forward with the deliberate DT strategy. Gupta (2018) analyzed the organizational problems of DT and proposed a collaboration between middle management and the human resources department to support and coach line managers and specialists on coping with challenges in the new digital environment.

Mintzberg (1978) gathered early findings about the role of middle management in corporate strategy and developed his framework with a focus on emergent strategy. He argued that the existing theory was incomplete, and that strategy is not formulated only at the top and then executed below the top management level. MM are not only implementers and information providers but also a part of an emergent upward influencing strategy system. Therefore, strategy formulation and implementation are processes of social learning when all company’s employees are adapting to the changing environment, and MM are key actors in them. Following the increased attention to the strategic role that MM play in organizations, three core motivations for their further research emerged in the literature:

First, MM serve as connectors between exclusively operational and exclusively strategic levels of the organizations, between the top and frontline managers, due to their positioning in the organizational structures (Floyd & Wooldridge, 1999). Even though this position was first regarded as a source of resistance (Guth & MacMillan, 1986), later studies indicated that MM play beneficial roles as agents of change (Huy, 2002). Second, even though it is clear that top management is the key source of the organization’s strategy (Hambrick & Mason, 1984), MM are perceived as complementary strategic agents. With modern organizations spanning across industries and countries, their leadership is distributed throughout the organizations and MM acts as mediators between functions, divisions, and organizational levels (Balogun & Johnson, 2004). Third, due to their closer positioning to the operational activities, MM is more likely than top managers to identify gaps in the organization’s capabilities impacting the economic performance (King & Zeithaml, 2001).

Burke (1983) developed a model with a new perspective of how the strategy work is divided between middle and top management. In his research, he identified mechanisms that govern the allocation of resources to particular initiatives and found that idea generation for these initiatives was concentrated at the lower levels of an organization. MM then recognized and promoted strategic initiatives to the top management, deciding whether to allocate resources to them. In this approach, the role of top management is to create the necessary processes to facilitate adaptive strategy development. Bartlett and Ghoshal (1993) further reinforced this notion of thinking, who recognized that MM should no longer be viewed as focused exclusively on control but rather as coaches and supporters for frontline managers, empowering them for entrepreneurial activities and nourishing their initiatives. In this context, top managers now become managers of the entrepreneurial process, who develop the general approach, broad targets, and performance standards. In later research, several studies indicated that MM play beneficial roles as agents of change (Floyd & Wooldridge, 1992, 1997). While the goal of an organization is to perform well on its core activities and develop its existing businesses, too much focus on it can lead to increased rigidity. Such an organization would fail to adapt to drastically changing market conditions as its organizational learning abilities would be dampened, thus leading to lowered competitiveness. Many external factors should be carefully considered as they play a critical role in determining a firm’s strategic direction to maintain its competitive advantage (Almeida & Wasim, 2022b). On the other hand, exploring noncore activities can lead to a loss of focus and result in poor organizational performance (Hoskisson et al., 1991). MM positioning between the deliberate and emergent forces (Floyd & Wooldridge, 1997) is where the change and inertia collide. Literature highlights five key roles MM plays in the transformation strategy (Table 1).

A recent study conducted by Jaoua (2018) has shown that all roles are relevant to assess the successful strategy implementation within the organization and that middle management is indeed impactful through the behavior expressed through implementing a deliberate strategy role. Having critically reviewed the MM roles and their connection to DT processes, we now move to the methodology section.

4 | METHODOLOGY

The topic of the research is relatively new, and DT is currently a buzzword in strategic management literature, creating much exciting debate. Due to the lack of existing literature examining the strategic role of MM in the strategy formulation and implementation in such
TABLE 1  Five key roles of middle managers in the transformation strategy

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Championing alternatives</td>
<td>Communication of strategic options to top management.</td>
</tr>
<tr>
<td></td>
<td>Middle managers often spot and develop emerging operational-level initiatives.</td>
</tr>
<tr>
<td></td>
<td>Middle managers promote the initiatives to top management rather than developing initiatives.</td>
</tr>
<tr>
<td>2. Synthesizing information</td>
<td>The interpretation and translation of information which in turn affects top management judgment.</td>
</tr>
<tr>
<td></td>
<td>Not all the information that flows from middle management to the top level is about strategic initiatives. Middle managers provide information about events (Westley, 1990), combine strategic and operational information (Nonaka, 1988), and process it through their subjective judgment.</td>
</tr>
<tr>
<td></td>
<td>Synthesizing information is defined as a function that is integrative because managers translate ambiguous and uncertain data into the given strategic context.</td>
</tr>
<tr>
<td>3. Facilitating adaptability</td>
<td>Fostering flexible organizational approaches.</td>
</tr>
<tr>
<td></td>
<td>Middle managers utilize their position to increase flexibility in organizations and sometimes stimulate behavior that diverges from the one intended by top management (Bower, 1970).</td>
</tr>
<tr>
<td></td>
<td>To experiment with new approaches and allow emergent strategies to develop, middle managers facilitate the learning process in organizations by relaxing regulations and allowing emerging initiatives to gain momentum.</td>
</tr>
<tr>
<td></td>
<td>Middle managers prioritize adaptability over concrete plans and strategies from the top, sometimes in direct conflict with those deliberate plans (Bower, 1970).</td>
</tr>
<tr>
<td>4. Implementing deliberate strategy</td>
<td>Managerial interventions that align strategy with the reality of the organization.</td>
</tr>
<tr>
<td></td>
<td>Implementation is considered the main function that middle managers are concerned with, and this approach is consistent with the early literature on the subject.</td>
</tr>
<tr>
<td></td>
<td>Due to the access of middle managers to the operational information compared to the top management view, implementation consists of deliberate strategy alignment.</td>
</tr>
<tr>
<td>5. Leadership</td>
<td>Manager's ability to enhance the long-term viability of the organization.</td>
</tr>
<tr>
<td></td>
<td>Leadership sets agendas rather than reacting to it, it also identifies problems, and this starts a change for improvements rather than just being a facilitator of change management (Pearce et al., 2010).</td>
</tr>
<tr>
<td></td>
<td>The strategic leadership of the middle manager influence others to accept responsibility and make everyday decisions toward achieving a particular set vision (Rowe, 2001).</td>
</tr>
</tbody>
</table>

projects, this study adopted an exploratory research method as it allows a broad understanding and defines the underlying concept (Zikmund et al., 2003). Thus, a qualitative multiple-case study research approach was considered as most suitable (Lee & Saunders, 2017) since it principally relies on the participants’ view of the phenomenon in question and allows researchers to explore these subjective viewpoints to comprehend in-depth meanings and beliefs (Flick, 2014; Wasim et al., 2018).

Following this study’s research objectives and applying deductive reasoning (Floyd & Wooldridge, 1999), this research tests whether the gathered data fits the existing middle management strategic behavior frameworks in DT projects. In other words, viewing the gathered data through the theoretical lens of the existing frameworks (Braun et al., 2019). Reflection upon the theoretical themes that the data and literature reviews suggest will be made according to the specified approach (Saunders, 2017).

To have a homogeneous sample of respondents and exclude as many external factors affecting strategic roles of MM, purposeful sampling was chosen for this research. This type of sampling allows for gathering more representative data and thus more trustworthy findings than the heterogeneous sampling with much more changes and variation (Maxwell, 2012). Using consultants as our primary data sources allowed us to incorporate features of multiple case studies in the research. The interviewed consultants have been working on multiple DT projects in the banking sector and thus share experiences across multiple cases of such projects. This approach allows tackling the single source bias (Avolio et al., 1991) both through exposure to multiple DT cases as well as through consultants’ exposure to multiple MM they have been working with on each of these projects. Consultants are a valid and trustworthy target source of primary data. They have long and diverse experience in the particular field, thus being key information holders with a holistic perspective. They regularly interact with MMs having a deep and broad understanding of how MMs behave. On the other hand, MM does impression management if directly contacted versus the consultants that offer a more objective perspective of the real picture. At the same time, their holistic perspective comes from experiences with various companies and not just one case. Thus, we get an aggregated perspective that compensates for large numbers of MM.

The semi-structured interview approach was chosen as it allows in-depth exploration of the research questions while still gathering insights that might emerge during the interview process (Longhurst, 2003). Using qualitative semi-structured interviews, which principally rely on the participants’ view of the phenomenon in
question, allows researchers to explore these subjective viewpoints to comprehend in-depth meanings and beliefs (Flick, 2014). Data were collected using eight in-depth interviews with management consultants to get a holistic view of the role of middle management. These consultants were involved in 12 total DT projects and closely observed MM’s involvement. Consultants were interviewed using in-built Telegram audio calls as well as Zoom and Google Hangouts video conferencing software. As consultants are subject to non-disclosure agreements with their employers and clients, they were ensured that all data is gathered only for academic purposes and no sensitive information will be disclosed in the research, including names of respondents, names of discussed MMs, consultants’ employers, clients’ companies, and specifics of the projects.

A set of guiding activities were developed regarding the interview design and building on our research objectives (Table 2). Each activity is associated with the studied strategic role and builds on MM’s five key strategic roles (Floyd & Wooldridge, 1999; Kane, 2019).

To facilitate our interview design, a facilitating diagram for implementing a deliberate strategy role was developed (Figure 1). This diagram structures the activities in sequential order.

The collected data were analyzed following the six-phase thematic analysis guide similar to Ukanwa et al. (2022). Thus, we followed a process of identifying themes and/or patterns within our collected interview data (Lee & Saunders, 2017). First, we relistedened to all the recordings and reread the produced transcripts to familiarize ourselves with the gathered data. Next, manual coding was conducted throughout the transcripts to identify patterns in the data by labeling relevant to the research questions data. Third, searching for themes was conducted by clustering the identified codes to create a plausible mapping of the key patterns in the data. After the last stage, the process was paused to review the created themes and check whether there was a plausible fit between the coded data and identified themes. Each theme had to have a clear and distinct meaning relevant to the research questions and dataset. The review process led to several changes in the themes, further expanding on their sense (Braun et al., 2019). When themes were finalized, a final description of each theme was created, providing a roadmap for the findings section write-up. An example of the identified themes with the relevant descriptive codes and exemplary interview statements is presented in Table 3.

The analysis results were compared among respondents to extract information and generalize conclusions about MM’s strategic roles and strategic activities.
5 | RESULTS AND DISCUSSION

This chapter presents findings and insights that were gathered through the thematic analysis of our interview data with consultants working on DT projects in the banking industry. We are both excited and surprised by our results.

5.1 | Common characteristics of the projects

The organizational component was the one that occurred the most. The most important aspects of DT are preparing an organization to react to rapid market changes, accelerating decision-making processes, and equipping middle and line managers with tools that accelerate their learning and, as a result, organizational learning in general. All these three goals are impossible to achieve with the traditional strictly hierarchical and very bureaucratic organizational forms that were present in the banking industry:

The MMs as catalysts or disablers in these processes seem crucial to reducing decision-making time.

The second most common component was “Agile education.” DT’s essence is in integrating business and IT strategies Kane (2019) and Agile have proven to be the methodological approach that allows integrating them together, additionally granting newly formed cross-functional teams with decision power to implement and test their ideas on the go. All projects with an Agile education component implemented backlog management systems and product sprints with regular feedback systems and renewed KPIs. A significant part of these consulting projects was dedicated to the education of employees on how to work in these new paradigm conditions led by MM, which had a substantial role in these projects.

The third was the adaptation of IT infrastructure. Most that went through DT were built using monolithic enterprise software solutions. Building on such solutions means that there is one main server or system of servers responsible for handling that there is one main server or system of servers responsible for handling that there is one main server or system of servers responsible for handling all queries. As a result, any change in the system leads to the reassembly and redeployment of a new version of the server part. These redeployments cannot happen when the system is down during this time. More importantly, though, it is the human factor of MM as quick fixers and facilitators speeding up the process.

Selling top management initiatives to subordinates was identified by consultants as the role that is critical for the success of DT projects. These projects have a high degree of uncertainty at the start and are usually developed on the go. This uncertainty means that without client engagement project slows down significantly, and results become obsolete after the consultants are gone. Additionally, the very nature of the project is the transformation of the whole, which means it is critical to get approval and support from most employees, not only top managers. Here the top manager’s roles as communicators in translating the top management initiatives into an action plan for lower-level employees are crucial. Furthermore, it seems that championing ideas, in the opposite direction, toward the upper management improves the quality of the project’s output.

5.2 | Translate goals into action plans and individual objectives

Translation of top management goals into specific action plans on most of the projects was done in close cooperation with consultants. However, on some projects, consultants were the primary driver of this interaction, while on the other, consultants served as guides who analyzed MMs’ initiatives and approved or corrected their approach.
It was found that the lack of initiative from MM in coming up with appropriate action plans is the direct result of lack of proper vision translated from top management or senior MM and thus is connected with the strategic role of Championing “selling top management initiatives to subordinates.”

Very similar situation when MM from supporting functions did not understand the new Agile paradigm and did not approve of new KPI systems for themselves and their subordinates, thus potentially posing an obstacle to the strategy implementation acting on the opposite perspective of the facilitator role.

However, KPIs do not always seem to be needed. It was interesting to discover that the rigidity KPIs bring can work as a tool for getting the work done. However, it often results in a lack of proactivity from subordinates. They start treating transformation as a part of the job and do the minimum required amount of work. An approach that works the best is getting the commitment and sharing the vision of the transformation with employees.

### 5.3 Implementing action plans

Implementation of action plans, similarly to the translation from goals into action plans on the majority of the projects, was done by MMs in close cooperation with consultants. MM seems to proactively discuss the best ways to ensure the success of the project as well as meeting the top management or senior middle management objectives, depending on who was the project's owner. However, we confirm that in several projects, implementation leads to unsatisfying results because of poor quality of objectives posed by top management and lack of engagement of MM in the strategy design process.

Similarly, project implementation also slowed down because of the resistance from line managers and poor quality of the line managers' communication in inspiring action. Implementation was identified as one of the most crucial activities. It was done well by MM, but at the same time, it was part of the strategy process wherein most issues persisted on several projects. Although this strategy process might seem to confirm an existing issue on strategy implementation in general, we emphasize that a major cause is the lack of MM engagement or even the sabotaging of the process. The last fact is not caused necessarily deliberately but rather as a lack of engagement.

In summary, the consultants' answers about MM strategic behavior on DT projects as well as the assessment of the importance of strategic roles. Following the five elements, the importance of these strategic roles has been highlighted in Table 4.

Further, and following our surprising yet interesting results, it was possible to identify the most important and least important activities of MM, which are presented in Figure 2.

Further information and evidence can be further provided extensively through the interview transcripts upon request and with relevant summarizing tables. In the following section, the theoretical and practical implications are discussed and the conclusions of this research are presented.

### 6 IMPLICATIONS AND CONCLUSION

This research contributes to increasing knowledge on the strategic role of MMs in formulating and implementing DT projects. Floyd and Wooldridge's (1992) seminal framework that most authors follow now requires adaptation when studying MM behavior. First, strategic activities relax regulations to get new projects started, provide a safe haven for experimental programs and buy time for experimental programs; the facilitating adaptability role were identified to be overlapping with each other. This major weakness in applying what now is the classic theory on MM calls for special attention to better understand strategy design and implementation.

In the DT context relaxing regulations, buying time, and providing a safe haven were found to always be related to the same activities conducted by MM. Therefore, the authors propose merging them into defending new projects against established procedures and strategic activity, which should be sufficient to analyze relevant strategic behavior in facilitating adaptability. Second, strategic activity evaluates the merits of new proposals that were identified to be excess for the championing alternative's role. Findings suggest that MM is evaluating merits in the process of justification of new and existing projects. Therefore, all relevant behaviors could be classified to the activities mentioning justification, thus creating new categorizations that could be customized per case of analysis.

Data recognized the role that MM play in DT projects, especially their impact on the development of emergent strategies, which was
highlighted by Jaoua (2018), but there was a lack of understanding of which strategic roles and activities have the greatest effect. Middle management strategic behavior through consultants’ experience allowed to neglect impression management bias present when asking middle management about their strategic behavior directly (Birken et al., 2015; Hansell, 2018; Way et al., 2018).

For practitioners and managers, this study highlights middle management strategic behavior on DT projects. Practitioners can use the findings presented in the study to lower the 84% failure rate across all DT projects (Rogers, 2016). In the findings section, consultants’ experiences of their interactions with MM and observations of middle management behavior were presented. These cases provide practitioners with examples of what can go wrong on DT projects and reasons for such failures in relevance to MM.

Additionally, successful implantation cases provide insight into what key activities are required from the top and middle management to ensure the successful implementation of the projects. Key decision-makers can use such examples as guidance when developing strategic processes within the companies, allocating key responsible persons, and monitoring the implementation phase. By evaluating MM present in the companies on their potential impact through the described strategic activities, practitioners will be able to assign fitting MM to the positions of crucial responsibility. They know which activities they should monitor with the most attention. For example, the study suggested that the three most crucial strategic activities are selling top management initiatives to subordinates, LS - Influence, and CA - Search for new opportunities.

We believe that by exploring the strategic involvement of MMs in formulating and implementing DT change projects, we offered new insights into identifying what roles and strategic activities are the most important for successful implementation and future adaptation.

REFERENCES

FIGURE 2 Most and least important strategic activities for the successful implementation [Color figure can be viewed at wileyonlinelibrary.com]


Flick, U. (2014). An introduction to qualitative research (5th ed.). SAGE.


Maxwell, J. A. (2012). Qualitative research design: An interactive approach. SAGE.


Theobald, S., Prenner, N., Krieg, A., & Schneider, K. (2020). Agile leadership and agile management on organisational level—a systematic literature review. *International Conference on Product-Focused Software Process Improvement, 12562*, 20–36. [https://doi.org/10.1007/978-3-030-64148-1_2](https://doi.org/10.1007/978-3-030-64148-1_2)


**AUTHOR BIOGRAPHIES**

**Ioannis P. Christodoulou** is Senior Lecturer in Business Strategy, Westminster Business School, University of Westminster. He joined Westminster Business School as a Senior Lecturer in Business Strategy in 2011. He previously worked in the Higher Education of the United Kingdom in various institutions, having served as an active member of the British Academy of Management as the Track co-chair for the Strategy Track. He also received the title of Senior Fellow of the Higher Education Academy of the United Kingdom for his contributions to Learning and Teaching. He also worked in leading courses as well as in the consulting industry. His competence areas are executive training in leadership, teamwork, crisis, and complexity management. His interest in the business environment led him to more entrepreneurial endeavors, where he co-founded a corporate governance rating company and became a partner in a consulting company for knowledge transfer and synthesis. He was a consultant in the field of management with extensive research activities and academic achievements.

**Jahangir Wasim** is Head of Business and Management, Edinburgh Business School, Heriot-Watt University Malaysia. He is currently an Associate Professor in Strategy and Enterprise and Head of Business and Management at Edinburgh Business School. He has previously held academic positions at Robert Gordon University, the University of Portsmouth, and several board positions for international organizations.

**Robert J. Reinhardt** is a sustainable business consultant, visiting lecturer, and researcher. He is currently working as a sustainable business and strategy consultant, circular economy expert, visiting lecturer, and researcher with a track record of driving sustainable business model innovations in academia, businesses, and international organizations through a science and evidence-based approach.

**Kirill Ivanov** is management consultant. He is currently working as a management consultant specializing in digital transformation, operational transformation, and CAPEX excellence. Kirill primarily operates in the sectors of transportation and logistics, banking, and metals and mining.

**How to cite this article:** Christodoulou, I. P., Wasim, J., Reinhardt, R. J., & Ivanov, K. (2022). The strategic role of middle managers in the formulation and implementation of digital transformation projects. *Strategic Change, 31*(6), 613–622. [https://doi.org/10.1002/jsc.2528](https://doi.org/10.1002/jsc.2528)