

St. Petersburg University  
Graduate School of Management

Master in Management

THE STRATEGIC ROLE OF MIDDLE MANAGERS IN THE  
FORMULATION AND IMPLEMENTATION OF DIGITAL  
TRANSFORMATION PROJECTS

Master's Thesis by the 2<sup>nd</sup> year student

Concentration — Master in Management, CEMS

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## АННОТАЦИЯ

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Название ВКР	Стратегическая роль менеджеров среднего звена в разработке и внедрении проектов цифровой трансформации
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Описание цели, задач и основных результатов	Главной целью магистерской диссертации является исследование стратегического участия менеджмента среднего звена в разработке и внедрении проектов цифровой трансформации, а также определение ролей и действий, которые имеют наибольшее влияние на успешное внедрение таких проектов. Для достижения данной цели был проведен анализ связанных с темой существующих научных работ и на их основе была разработана новая и подходящая для исследования структура. На ее основе были собраны и проанализированы данные по стратегическому поведению менеджмента среднего звена в контексте цифровой трансформации через призму опыта управленческих консультантов. Главные результаты исследования включают в себя определение стратегических ролей и действий менеджеров среднего звена, присутствующих на проектах цифровой трансформации, а также оценка важности конкретных ролей и действий для успешного внедрения таких проектов.
Ключевые слова	Менеджмент среднего звена, цифровая трансформация, организационные изменения, стратегические роли, стратегические действия

## ABSTRACT

Master Student's Name	Ivanov Kirill Vadimovich
Master Thesis Title	The Strategic Role of Middle Managers in the Formulation and Implementation of Digital Transformation Projects
Educational Program	Master in Management
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Academic Advisor's Name	Ioannis Christodoulou, associate professor
Description of the goal, tasks and main results	The main goal of the research is to explore strategic involvement of middle managers in formulation and implementation of digital transformation change projects and identify what roles and strategic activities are the most important for projects' successful implementation. To achieve specified goal previous research background was examined resulting in the development of new and appropriate for the study framework. It was then applied to gather and analyze data about middle management strategic behavior in digital transformation context through the experience of management consultants. Main results of the study include identification of middle management strategic roles and activities that are present in digital transformation projects and their importance evaluation of the successful implementation of such projects.
Keywords	Middle management, digital transformation, change projects, consulting, strategic roles, strategic activities

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## **Introduction**

Digitization is not a new phenomenon and it is happening in every part of the society. However, in recent years many companies initiated so called “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 integration of digital tools into everyday business processes to full-scale organizational restructurations (McKinsey, 2017). According to McKinsey (2018) 8 out of 10 companies in S&P500 have undertaken digital transformation efforts in the period of 2013 - 2018. Most vivid examples include companies like General Electric, ING, Disney and Lego (KMDA, 2018). Though, historically, less than 30% percent of digital transformational activities bring the results which fulfill all the stated targets (McKinsey Global Survey, 2012; 2014; 2016; 2018).

Information Systems (IS) research has long been studying initiatives covering changes related to information technologies (IT) in the organizations. Significant attention was given to the importance of top management support and to the role that end users play in the technology implementation. However, IS research almost completely ignored the role that middle managers play in digital transformation. From the perspective of general management research, even though there are papers focusing on the middle management roles in different change types (Wooldridge, 2008), digital transformation projects have been largely neglected. Though, there are occasional studies, that highlight middle management importance for digital transformation development, almost none have explored this involvement in depth (Buss, 2011; Tabrizi, 2014; Ukil and Akkas, 2016; Jaoua, 2018).

In the research literature strategic contributions of middle managers are well recognized. Middle managers are positioned between the operationally focused front-line managers and strategically focused executive managers which allows them to develop and promote innovative actionable ideas (Dougherty and Hardy, 1996), increase effectiveness in reaching companies’ targets (Floyd and Wooldridge, 1997) and execute strategic plans (Floyd and Wooldridge, 1992).

However, there is a research gap in the research of middle management strategic role in the development of digital transformation projects. Even though the topic of digital transformation has gained a lot of attention in the recent years there is a lack of studies that explore strategic role of middle managers in the strategy formulation and implementation in such projects. The only

relevant identified study was conducted by Paavola et al (2017) which was a case study of a Finnish public sector company. Other digital transformation studies did not explore the topic of middle management involvement in depth, though, acknowledging their role in the creation of emergent strategies (Chanias and Hess, 2016; Hirte and Sieger, 2018; Kolbjørnsrud et al., 2017). Additionally, the role of management was identified to be crucial for the success of such projects and even superior to the technological issues that companies face (Kane, 2019).

Current study is a response to both the lack of relevant studies and a response to Floyd and Wooldridge (2012) call for additional research about strategic role of middle managers in the transformational projects.

The main goal of the research is to explore involvement of middle managers in strategy formulation and implementation in digital transformation change projects and evaluate the importance of middle management strategic roles and strategic activities for projects' successful implementation.

Objectives of the thesis are to investigate presence of middle management strategic roles and associated with them activities in the digital transformation projects and evaluate their importance for the successful projects' implementation.

To address the abovementioned problem and achieve the main goal of the research the following research questions will be stated:

RQ1: Which middle management strategic roles are applied in digital transformation projects?

RQ2: Which key activities are associated with each middle management strategic role in digital transformation projects?

RQ3: How important is each middle management strategic role for the successful implementation of digital transformation projects?

RQ4: Which middle management strategic activities within each strategic role are important for the successful implementation of digital transformation projects?

Thesis is structured in 4 chapters. Chapter 1 will explore previous literature on the topics of digital transformation and strategic involvement of middle managers in the strategy formulation and implementation in general and with the focus on change projects and digital transformation projects in particular. Chapter 2 will present the methodology applied in the thesis explaining the chosen approach, research methods, sampling criteria for the respondents, used techniques of data

analysis, interview design and limitations of the research. In Chapter 3 findings from the data will be presented following the structure of the chosen theoretical framework. Chapter 4 will summarize findings, present answers to the research questions, discuss theoretical and practical implications of the thesis and provide a direction for future research.

## Chapter 1. Literature review

### 1.1 Digital Transformation research overview

#### 1.1.1. Definition

So far digital transformation, 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”, was widely neglected in the research literature (Verhoef, Kannan & Inman, 2015). Subject started gaining academic attention in specific areas since 2016. It was mainly focused on diversified areas within particular disciplines. Marketing researches were studying areas such as digital advertising (Lamberton & Stephen, 2016) and omni-channeling (Verhoef, Kannan & Inman, 2015), while strategic management literature focused on renewal of business models and capabilities (Foss & Saebi, 2017). Information systems researches explored adoption of technologies and its impact on business performance (Nambisan, Lyytinen, Majchrzak, & Song, 2017).

Studies in the Information Systems literature imply that the core of development of digital capabilities with the organizations lies in alignment of IT and business strategies (Luftman & Brier, 1999). IT has to be applied in appropriate and timely way in harmony with existing business strategies. Study used the data of 500 firms within 15 industries in the aim of identification of key enablers and inhibitors of IT and business strategic alignment as they are presented in Table 1.

**Table 1. Key enablers and inhibitors of business and IT alignment**

Enablers	Inhibitors
Senior executive support for IT	IT/business lack close relationships
IT involved in strategy development	IT does not prioritize well
IT understands the business	IT fails to meet its commitments
Business/IT partnership	IT does not understand business
Well-prioritized IT projects	Senior executives do not support IT
IT demonstrates leadership	IT management lacks leadership

Achieving strategic alignment was recognized to be one of the most important factors that enable organizations to leverage IT capabilities and transform the business (Faltermayer, 1994).



Treating IT as a cost center was determined to be an approach that does not lead to the build-up of competitive advantage. Therefore, both IT and business executives and middle managers have to participate in strategic discussions enabling alignment to delineate strengths and weaknesses of particular technologies and their implications for business model changes. As a result of the study by Luftman & Brier (1999) a process approach aimed at making the strategic alignment work in any organization was developed:

- Set the goals and establish a team;
- Understand the business-IT linkage;
- Analyze and prioritize gaps;
- Specify the actions (project management);
- Choose and evaluate success criteria;
- Sustain alignment.

This approach allows business and IT middle managers and executives share the same vision of the strategy and align relevant organizational processes and activities. However, as the approach was developed in late 90s it is questionable whether it is relevant to the current digital transformation projects that are performed by organizations. Study of the current phenomenon requires analysis of the recent literature.

There is a lack of studies that explore digital transformation phenomenon in a cross disciplinary area. To understand the subject from a cross disciplinary point of view a description from most recent meta research paper by Verhoef et al. (2019) will be used. Authors adopt a flow model to divide digital transformation in three areas: external drivers, phases and strategic imperatives. Each of the areas has relevant subsections as shown on the Figure 1.

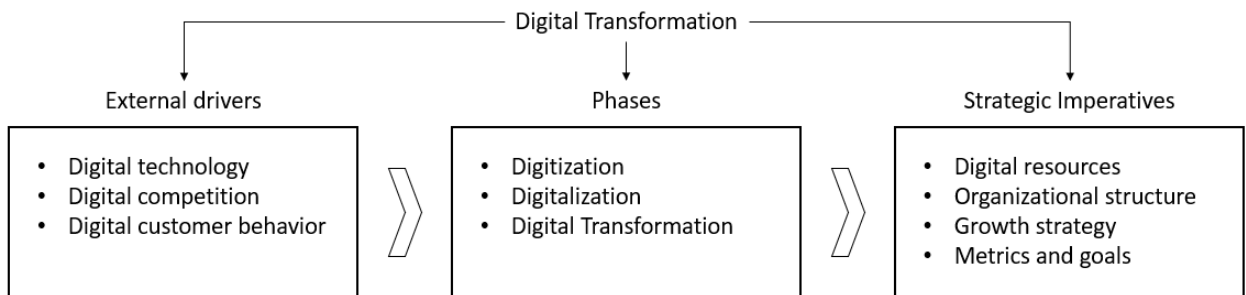


Fig. 1. Flow Model for Discussion on Digital Transformation (Verhoef et al., 2019)

Considering the focus of this research on the strategic role of middle managers in digital transformation projects following sections will be concentrated on the phases and strategic imperatives. Phases will provide the knowledge of how to distinguish between digital initiatives and strategies present in the companies to narrow the scope of the research. Strategic imperatives will define the context in which digital transformation is happening within the organization and provide insight of what to focus on during the research of strategic roles. External drivers will be left out of scope as the need for digital transformation is evident and the reasons of why it is happening arguably do not affect middle managers behavior.

### **1.1.2. Phases of digital initiatives**

Verhoef et al. (2019) conducted a scoping review of papers related to digital transformation from various research areas such as marketing, information systems, operational and strategic management and concluded that all streams share similar characteristics of distinct digital stages that companies undergo, ranging from trivial ones to more persistent and transformative. Authors identified three stages: digitization, digitalization and digital transformation.

*Digitization* is translation of information from analogous sources to digital ones (Dougherty & Dunne, 2012), change from analog to digital tasks and development of more cost-efficient configurations of internal processes using IT systems. Example of the digitization activity would be usage of digital surveys for information gathering or integration of digital document processing systems. Therefore, digitization usually refers to conversion of internal and external documentation and information processing to 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 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 organizations improve processes and their coordination within the firm as well as with external parties. Therefore, compared to digitization, it is focused mostly on enhancing customer experiences and not only cost savings.

*Digital transformation* describes the change that affects the organization as a whole and it ultimately leads to the development of new business models (Pagani & Pardo, 2017). Developing new business models allows organizations to increase their competitive advantage responding to the changing conditions in the external environment or even anticipating and altering these

conditions through deliberate initiatives and actions. Digital transformation is distinct from digitalization in a sense that it not only improves the internal processes but rearranges them creating a new business logic or new value creation processes (Li, Su, Zhang, & Mao, 2018). Therefore, only digital transformation is deeply linked with core strategy of the organization as it leads to the development of new business models via utilization of digital technologies.

Other important factor relevant to digital transformation is that it primarily affects established incumbent firms, which face challenges in the rapidly changing market environments due to their legacy. Vivid example of that is that top 5 S&P 500 companies in 2000s were Exxon, GE, Microsoft, Gazprom and Citigroup. However, as of April 7<sup>th</sup> 2020 top 5 are Microsoft, Apple, Amazon, Facebook and Johnson & Johnson, four of them being truly digital compared to only one, Microsoft, a decade ago. 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, Bartman, & Van Bever, 2016). Thus, the approach that they pursue is usually gradual, they undergo all three stages one after another.

### **1.1.3. Strategic Imperatives of digital transformation**

In this section attention will be drawn mainly to digital resources, organizational structure and metrics and goals, as those three components are the most relevant to understand strategic role of middle managers. Middle managers are the ones that utilize and develop resources within the set organizational structure in the aim of achieving desired goals. Growth strategies in this context are out of scope as they are mostly relevant to the exact initiatives that middle managers develop and not their behavior or role.

Digital resources incorporate firm's assets, both physical and intellectual, and capabilities. Capabilities include all types of capital that are in the possession of the organization including organizational, information and human. Additionally, capabilities include firms processes which enable different capitals interact within and with each other ultimately creating the value for the customers.

Digital assets include resources like storage of data, information systems infrastructure and other digital technologies. Example technologies like Artificial Intelligence, Machine Learning, Internet of Things and Big Data require both software and hardware infrastructural components that organizations have to modify or acquire. Usage of technologies is not beneficial on their own.

Technologies allow organizations to acquire and leverage their internal knowledge ultimately delivering more value to the customers.

Digital agility is another digital resource which is considered a strategic imperative in digital transformation. It describes the ability of organization to react and anticipate changing market conditions to develop and transform its products and services. Middle managers are key in exercising this resource as they are the ones who have both operational knowledge and strategic view of the organization to spot and execute emerging opportunities.

Digital networking becomes a key in the digital environment with the increased connectiveness of all business parties. Companies have to utilize them to increase their competitive advantage as reliance on them increases significantly. Accenture report from 2017 indicated that 75% of executives believe that to achieve digital transformation their companies have to utilize the strength of new partnerships and ecosystems. This resource includes firms' abilities to attract, select, link and engage parties like customers, suppliers and even competitors to stimulate growth of their platforms. One of the recent examples of this on the Russian market would be the partnership of Sberbank with Yandex to share data with each other and engage in development of shared services and products like marketplace Beru and financial service Yandex Money.

Organizational structure changes are necessary to achieve successful digital transformation (Eggers & Park, 2018). Previous research suggests that to achieve the necessary agility to adopt changes and fast exploitation of market opportunities organizational structure have to become more flexible being composed of separate business units, more agile forms of existing structures and enabling digital functional areas.

Business model innovation research suggests that to neglect the slowness and rigidity of incumbent companies they have to create separate autonomous business units, outside of headquarters. This approach allows to combine the agile and reacting fast startup-like culture while still working in the direction of head company's goals and strategy. Additionally, separation allows to neglect conflicts, struggle for power and cannibalization within the head company.

Traditional hierarchical top-down structures result in too much rigidity and bureaucracy that damages the needed quickness and adaptability of digital environment. Thus, organizations were found to flatten their organization structure and making them more flexible. One of the iconic examples of digital transformation was the case of ING and one of the key initiatives that company adopted was creation of self-steering small teams. These teams could act with their own

responsibility enabling them to test and update their market assumptions in short cycles increasing the speed of organizational learning.

Key feature of digital transformation is the reliance on IT capabilities and integration of them into the business practices. In digital companies' IT function transforms from the supporting business function into the business driving division. On top of that, not only the functional role of IT department should change, the employees' in other functional departments have to develop digital capabilities themselves. For middle managers this means that one of their key responsibilities now is to ensure that everyone in the organization is getting the necessary digital training and has the ability to utilize their learned skills on the job. Middle managers themselves have to understand new digital technologies that are becoming one of the key resources they are managing.

Lastly, introduction of new digital technologies to the organization's pool allows organizations to collect more internal data about the processes which enables them to introduce new key performance indicators (KPIs) and metrics. Relying on the traditional return on investment, profit and revenue growth while still important is no longer the only way to measure success. Companies can track attributes like user retention rates, their satisfaction and engagements with the content. Relying on these measures will allow organizations to understand whether the particular initiative is working or not in a fast fashion speeding up the overall learning process. Additionally, studies of digital companies show that they rely much more on the growth figures than the raw profitability (Libert et al., 2016). Focusing on growth enables companies to collect more data which could be used to increase the quality of the value proposition that they generate for their users or, in case of internal improvements, increase the possible cost-cutting.

All in all, digital transformation is a complex organizational change that usually requires preparation in incumbent companies through digitization and digitalization. During these stages companies are gradually building up their digital resources and capabilities allowing them to undergo organizational changes with the introduction of new metrics to enable development of new business models gaining competitive advantage in the market. Middle managers during these projects are key strategic players that make changes happen through creation of emergent initiatives and facilitation of improvements.

## **1.2. Strategic roles of middle managers in organizations**

### **1.2.1. Middle management perspective research**

Large change projects in organizations are usually being initiated by top management and its support is critical for their success. Top managers have the necessary strategic power and access to internal as well as external resources to promote such changes in organizations (Sumner, 1999). As mentioned previously, they often hire management consulting companies to assist in the development of digital transformation projects. Though, top managers and consultants are not the single actors that are important for the development and implementation of such projects.

Discussions about the relevance of middle management to strategy arose mainly from the pioneering study of Joseph Bower (1970). The author analyzed the process of allocating resources in a large corporation and associated strategy formation with the selection of investments in new businesses. Previous theories indicated that this capital budgeting was conducted by senior management, based on technical and financial aspects. However, Bower (1970) has shown that such investment decisions were influenced by social and political dynamics that occurred from the bottom up in the formal hierarchy of the organization. The reality was that middle management individuals identified opportunities and defined the characteristics of capital proposals that would increase their chances of being accepted. Middle managers are important agents that play a valuable role as agents of change.

Mintzberg (1978) gathered early findings about the role of middle management in corporate strategy and developed his own framework with the focus on emergent strategy. He argued that existing theory was incomplete, and that strategy is not formulated only at the top and then executed below top management level. Middle managers are not only implementers and information providers, they are a part of emergent upward influencing strategy system. Therefore, processes of strategy formulation and implementation are processes of social learning, when all company's employees are adapting to the changing environment and middle managers are key actors in them.

Following the increased attention to the strategic role that middle managers play in the organizations three core motivations for their further research emerged in the literature. First, middle managers are serving as connectors between exclusively operational and exclusively strategic levels of the organizations, between top and front-line managers, due to their positioning

in the organizational structures (Floyd & Wooldridge, 1999; Nonaka, 1991). Even though this position was firstly regarded as a source of resistance (Guth & MacMillan, 1986), later studies indicated that middle managers are playing beneficial roles as agents of change (Huy, 2002). Second, even though it is clear that top management is the key source of organization's strategy (Hambrick & Mason, 1984), middle managers are perceived as complementary strategic agents. With modern organizations spanning across industries and countries their leadership is distributed throughout the organizations and middle managers are acting as mediators between functions, divisions and organizational levels (Balogun & Johnson, 2004). Third, middle managers, due to their closer positioning to the operational activities, are more likely than top managers to identify gaps in organization's capabilities impacting the economic performance (King & Zeithaml, 2001). Middle managers are then using this knowledge to come up with initiatives on how to build lacking and improve existing capabilities.

Burgelman (1983a) 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 allocation of resources to the particular initiatives and found out that idea generation for these initiatives was concentrated at the lower levels of the organizations. Middle managers then recognized and promoted strategic initiatives to the top management which decided 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.

Contributing further to this stream Bartlett and Ghoshal (1993) recognized that middle managers 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 a later research of 185 organizations Andersen (2004) confirmed, that for companies in dynamic environments dissolution of strategic decision-making authority across the organizational levels leads to increased financial performance.

With the increasing amount of organizations that rely on knowledge-based value generation the position of middle managers in strategy process was also changing. Organizations are becoming flatter and more entrepreneurial-focused. Burgelman (1994) was studying the case of Intel exiting memory market and identified, that middle managers played a critical role in

company's market shift. They acted as mediators between front-line managers and top managers in the development of new core competence. Bartlett and Ghoshal (1993) built on top of this study identifying middle managers not only as vertical connectors in the organizations but also as horizontal integrators. Middle managers ensured the distribution of information across divisions and functions of organizations.

Perspectives of vertical and horizontal influences of middle management were combined in one concept by Nonaka's (1994) research. He argued that middle managers contribute to the strategy process by integrating operational knowledge of front-line managers with big picture view of top management. Additionally, he observed how middle managers interact in both horizontal and vertical directions integrating explicit and implied organizational knowledge. He concluded that these interactions are the primary source of organizational innovation and strategic change.

Strategic role of middle management continued to be studied throughout the years. Coming to the subject of digital transformation, recent studies by Chanias & Hess (2016) have evaluated the role of middle management and identified it as a significant contributor to the development of the emergent digital strategies contributing to the organizational environment even before the top management comes forward with the deliberate digital transformation strategy. Gupta (2018) had analyzed organizational problems of digital transformation and proposed a collaboration between middle management and human resources department in order to support and coach line managers and specialists on how to cope with challenges in the new digital environment. Fuchs & Hess (2018) studied two cases of large-scale agile transformations in organizations and identified an exclusion issue that arose with the creation of a designated agile department within the company. Majority of middle managers were excluded from this department activities which later slowed down the adoption of Agile methodology throughout the company.

Therefore, the perspective of middle management role in strategy shifted from solely being the implementors of top management intentions and their information source to also being the center of strategy formation. Middle managers are positioned between operational and strategic levels allowing them to be central actors in knowledge storage and creation as well as timely reactors to changing market conditions developing new demanded internal capabilities.



### **1.2.2. Middle managers foster corporate entrepreneurship in organizations**

With the increasing importance of knowledge-focused organizations corporate entrepreneurship becomes the central capability that determines organizations success. One of the key goals of digital transformation is to improve entrepreneurial process in organization by facilitating information flow, giving more decision-making responsibility to managers and providing them with appropriate tools and processes to conduct experiments fast. Whether middle managers are successfully integrated into the new environment determines the success of the whole transformation.

First research that focused on middle managers role in corporate entrepreneurship was conducted by Quinn (1985) when he highlighted the role of middle managers in entrepreneurial processes in established companies. While top executives are excluded from day-to-day operational activities, middle managers translate company's mission, goals and priorities downwards, allowing them to stimulate entrepreneurship through formal and informal networks. Burgelman (1983a) also noted that middle managers are critical in translation of ideas upwards to top management for further evaluation and consideration within the firm's strategic context.

In the following years corporate entrepreneurship was further defined by dividing it into three key areas: innovation, venturing and strategic renewal (Zahra, 1996). Innovation refers to “a company's commitment to creating and introducing products, production processes, and organizational systems”. Venturing means “the firm will enter new businesses by expanding operations in existing or new markets.” Strategic renewal concerns “revitalizing the company's operations by changing the scope of its business, its competitive approach, or both” (Zahra, 1996). All these areas are crucial for middle managers in the digital transformation context as they are the ones who are able to leverage interim positioning in the organization to identify and evaluate new emerging opportunities.

Middle managers are able to resolve the capability-rigidity paradox that emerges in organizational entrepreneurial activities (Floyd and Wooldridge 1992, 1997). While the goal of organization is to perform well on its core activities and develop its existing businesses, too much focus on it can lead to increasing rigidity. The organization would fail to adapt to drastically changing market conditions as its organizational learning abilities would be dampened thus leading to lowered competitiveness. On the other hand, exploration of non-core activities can lead to the

loss of focus and result in poor organizational performance (Hoskisson, Hitt, & Hill, 1991). Middle managers positioning between the deliberate and emergent forces (Mintzberg & Waters, 1985; Floyd & Wooldridge, 1996) is where the change and inertia collide.

Strategic roles that middle managers have in corporate entrepreneurship process were examined by Floyd and Wooldridge (1999). They found out that to create and integrate knowledge middle managers show three crucial behaviors.

First, middle managers identify prospective ideas. Middle managers in the organizations are a part of wide cross-boundary networks. This positioning helps them to leverage weak social ties that are the source of new ideas, promoting new mindset deviating from the conventional wisdom established at the particular function or division (Glade, 1967).

Second, they champion new opportunities. To bring the idea into reality it is required to accumulate necessary resources and connections. Middle managers are positioned to leverage their formal and informal networks and power to bring resources to the prospective ideas. As ideas transition to the initiatives stage all involved are learning to do new things, which in turn triggers the development of new processes, scripts and schemas (Anderson, 1983) as well as complex relational and processual knowledge (Stubbart & Ramaprasad, 1990) thus contributing to the organizational learning.

Third, middle managers renew organizational capabilities. As the pilots of new initiatives progress, they gain the attention of top management, which triggers additional empirical studies like market studies or consultancy projects. Through these processes, if they confirm viability, initiatives are gaining credibility in the eyes of top management and are receiving additional resources becoming part of main stream of organizational effort contributing to the overall organizational learning and refinement of its knowledge.

Contribution of middle managers towards corporate entrepreneurship has evolved over the years expanding on the existing knowledge and redefining the established concepts (Kuratko et al., 2015). The concept of corporate entrepreneurship itself was reevaluated by authors continuously (Dess et al. 2003; Kuratko and Audretsch 2013). Attention-based effects have been found to have a significant impact on the behavior of middle managers in corporate entrepreneurship domain contribution to the impact of such organizational initiatives (Ren & Guo, 2011). Next, implementation issues were studied including human resource practices, institutionalizing the concept of corporate entrepreneurship, environment and industry issues,

control and operations management, and specific difficulties in implementation (Goodale et al. 2011; Kuratko et al. 2014). Coming to the strategic impact of corporate entrepreneurship, Glaser et al. (2015) focused on the strategic renewal as a form of corporate entrepreneurship examining the impact of boundary-spanning through top and middle management levels on business units' exploratory innovation. Authors have identified that there is indeed a positive relation between exploratory innovation and boundary spanning, though with an existing cascading effect on middle managers increasing perceived role conflict.

In sum, corporate entrepreneurship is a dynamic concept that has been evolving over the years. Its understanding is crucial in understanding of the middle management strategic behavior involved in the creation of emergent strategies especially relevant for the digital transformation projects concerned with high degree of uncertainty and relying on middle management initiatives driving it forward.

### **1.2.3. Four key strategic roles of middle managers**

Role of middle managers in strategy implementation and formulation is well defined. They are positioned as linking pins coordinating top and operating level activities. Therefore, middle managers involvement in strategy can be defined as coordination of particular functional or divisional units' operational activities with activities of vertically integrated groups.

Floyd and Wooldridge (1992) were studying particular activities of middle managers and came up with a matrix which combines actions and cognition patterns that they use. First, middle managers take actions that have both upward and downward influence. Upwards influence is target on top management perspective and changes its view of organizational circumstances (Bower, 1970) as well as stimulates consideration of alternative strategies (Burgelman, 1983b). Downward influence is targeted on middle managers subordinates with the aim of aligning operational activities with the strategic context of the organization (Nutt, 1987). Second, actions are based on the ideas that are flowing the organizations. On the one hand these ideas have to be divergent to alter the strategic consensus that is currently present. On the other, strategy has to coordinate actions within the organization so that it goes in a particular direction. Thus, ideas have to be integrative. Even though it hard to classify all ideas into pure categories of divergent and integrative, this classification allows to distinguish middle managers cognitive contributions.

As a result of combination of these 4 categories: upward and downward influence as well as divergent and integrative cognition a matrix with four types of middle management actions emerges as shown on the Figure 2. In the next paragraphs specific descriptions of each of the given types will be provided.

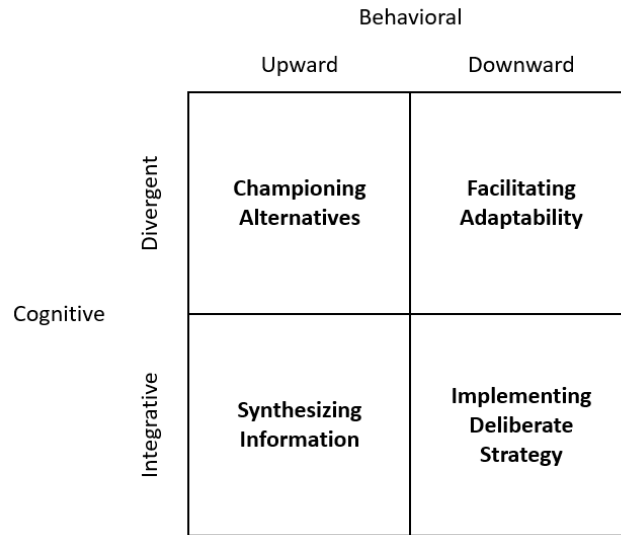


Fig. 2. A typology of middle management involvement in strategy, Floyd and Wooldridge (1992)

*Championing alternatives.* As described in the previous section about corporate entrepreneurship, middle managers are often the ones who spot and develop emerging at the operational level initiatives. This role is distinct from corporate entrepreneurship in a sense that here middle managers focus on promoting the initiative to top management and persuade it to adjust current strategy, not on the development of the initiative itself. Therefore, championing alternatives is defined as communication of strategic options to top management.

*Synthesizing information.* Not all the information that flows from middle management to top level is concerned about the strategic initiatives. Middle managers provide to the top information about events (Westley, 1990), combine strategic and operational information (Nonaka, 1988) and process it through their subjective judgement. Therefore, synthesizing information is defined as the interpretation and translation of information which in turn affects top management judgment. Function is integrative because managers translate ambiguous and uncertain data into the given strategic context.

*Facilitating adaptability.* 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). To experiment with new approaches and allow emergent strategies to develop middle managers facilitate learning process in organizations by relaxing regulations and allowing emerging initiatives to gain momentum. Therefore, middle managers prioritize adaptability over concrete plans and strategies from the top sometimes getting in the direct conflict with those deliberate plans (Bower, 1970). Facilitating adaptability is defined as fostering flexible organizational approaches.

*Implementing deliberate strategy.* Implementation is considered the main function that middle managers are concerned with and this approach is consistent with the early literature on the subject. However, due to the access of middle managers to the operational information compared to the top management view, implementation requires managerial interventions that align deliberate strategy with reality of the organization.

Described four roles are not discrete, middle managers engage in activities related to them in a synergic fashion and they are interweaved with each other. As an example, a manager that is providing top management with synthesis of information can utilize that to champion alternatives that he has on his mind.

Framework developed by Floyd and Wooldridge has proved to be fitting to analyze middle management contribution to the strategy formulation and implementation. A recent study conducted by Jaoua (2018) has shown that all four roles are relevant to assess the successful strategy implementation within the organization and that middle management indeed is impactful on only through the behavior expressed through implementing deliberate strategy role as suggested by some researchers (Buss, 2011) but also through other three strategic roles with a specific focus on divergent behavior. Ukil and Akkas (2016) have taken four strategic roles as factors to determine whether they have an impact on the effective strategic change happening in the studied organizations and confirmed relevance of such factors by quantitative methods consisted with Floyd and Wooldridge (1992) theoretical model.

The relevant framework is used in a wide range of studies including ones relevant to the concept of digital transformation. Paavola et al. (2017) examined Finish public sector meal production company that was undergoing modular digital transformation. Transformation was divided into three distinct stages: core digitalization, expanded digitalization and complimentary

digitalization. Authors conducted a longitude study of all stages and gathered information about activities that middle managers performed on each stage.

Main takeaway of the study was that depending on the stage of digitalization middle managers relative mix of engagement in activities and therefore their emergent roles shifts dramatically. In the core digitalization stage middle managers dominantly engaged in integrative activities, selling new ideas about the suggested system improvement to top management and explaining to end users how digitization will allow them to conduct their operational activities with increased efficiency. In the second stage of expanded digitization their focused switched more to the divergent extremum. Middle managers were pushing more new divergent ideas about the improvement and automation of systems to top management as well as extracting new information from external parties and pushing it to end users to test whether it is viable in the organizational context. In the final complimentary stage of the digitalization almost  $\frac{3}{4}$  of middle managers activities were divergent as they lacked the strategic support of top management and had to make strategic decisions on their own.

Authors mention, that study is limited to the particular case of the Finish company. Nevertheless, research brought light on the roles of middle managers during the digital transformation and confirmed that indeed they play a significant role in the strategy formation and formulation. Study also proved that framework is relevant and could be used to understand strategic roles of middle managers in digital transformation projects.

#### **1.2.4. Fifth strategic role: Leadership**

Strategy and leadership are interweaved with each other. As stated by Ann Marie E. McSwain, Assistant Professor at Lincoln University, “leadership is about capacity: the capacity of leaders to listen and observe, to use their expertise as a starting point to encourage dialogue between all levels of decision-making, to establish processes and transparency in decision-making, to articulate their own value and visions clearly but not impose them. Leadership is about setting and not just reacting to agendas, identifying problems, and initiating change that makes for substantial improvement rather than managing change” (Pearce, 2008). Strategic leadership therefore is defined as manager’s ability to enhance long-term viability of the organization by influencing others to accept responsibility and make everyday decisions towards achieving a particular set vision (Rowe, 2001).

In one of the most recent and comprehensive studies of digital transformation by Kane (2019) author examined how companies are rethinking digital leadership and talent. Author interviewed executives in a global survey with 16,400 responses over the course of 4 years to understand what capabilities are of utmost importance to transition into the digital realm. It was found that leadership is more capabilities affect digital maturity of companies much more than technical technology-related factors. It is relatively easy to implement a new technology stack in the company while building required culture, talent, organizational structure and strategy is difficult and significantly slows companies down on the way to transformation.

Already existing leadership capabilities are staying relevant in the digital age. First, middle managers still have to focus on the business value that initiatives deliver and invest according to the expected returns. Experimenting blindly with technologies like Artificial Intelligence and Internet of Things, while still beneficial from the organizational learning standpoint, ultimately has to contribute to the bottom-line of the firm. Therefore, when beginning the Research & Development activity managers should clearly state business goals that they aim to achieve with technology. Second, digital leaders must empower their employees to succeed through creation of relevant opportunities. These opportunities are present in various forms, starting from conventional trainings to learn the technology and relevant processes to rotation programs enabling employees to accumulate cross-boundary knowledge necessary to boost organizational learning capability.

However, Kane (2019) states, that during the digital transformation there are 8 key traits that middle managers as leaders have to possess.

*Direction.* Leaders have to provide their top management, peers and subordinates with vision and purpose which was found out to be most important leadership skill. This capability incorporates having a transformative vision for the whole organization with long-term and short-term outlooks.

*Business judgement.* Digital transformation brings a lot of uncertainty into the environment and organization. Therefore, it is necessary to demonstrate commercial understanding through making right business decisions. Key difference of digital transformation compared to the common way companies are used to conducting business is that environment is changing quickly and there is incomplete and uncertain information. Middle managers have to make decisions not waiting for the thorough ROI analysis and rely on the limited data available.

*Execution.* Middle managers rely on their peers and subordinates to achieve results. Thus, they have to empower people around them to think differently and guide them through the change process.

*Inspirational leadership.* Studies have shown that when employees of the organization are faced with uncertainty and big change projects their performance depends on whether middle managers are able to inspire them making people want to follow the new vision and not being forced to do it.

*Innovation.* One of the major goals of digital transformation as discussed in previous chapters is to facilitate organizational learning through continuous experimentation. Experiments, on the other hand, are always associated with risk. In incumbent corporation has long been nurtured the culture of success and thus, making decisions that can fail is very uncomfortable. However, during the digital transformation middle managers have to foster experimental culture and design organizational processes and reward systems accordingly within their functions and divisions encouraging calculated risk-taking to promote innovation.

*Talent building.* As mentioned previously, digital environment is deeply connected with uncertainty and big change. To succeed in it, people have to adapt a continuous learning and self-development mindset. Middle managers have to provide their subordinates with opportunities to strive for new challenges and promote education outside of organization.

*Influence.* Hierarchical formal power-focused organizations are not equipped for turbulent changing environment as stated in study by Eggers & Park (2018). Digital companies are usually organized as networks of self-driven teams and to execute actions and build support for initiatives in the new environment middle managers have to persuade and influence key stakeholders, peers and subordinates.

*Collaboration.* Accenture (2017) report stated that digital environment assumes creation of coalitions and partnerships between companies and people within the organization to promote cross-functional and cross-boundary learning extending organization's learning capabilities.

All these leadership traits are not fundamentally new to the incumbent organizations, but they become the most important ones during the change. Middle managers who are able to learn how and execute them will contribute to the transition of their organizations through the digital transformation into the digital maturity. Therefore, strategic roles of middle managers should be studied while taking into account described leadership activities.



### 1.2.5. Consideration of other strategic roles

There are plenty of frameworks developed by researchers that classify middle management involvement in strategy formulation and implementation. A thorough literature research resulted in the creation of the Table 2 where existing frameworks are presented in the chronological order. The table is adopted from the study by Van Rensburg et al. (2014).

**Table 2. Chronological summary of roles identified in the previous research (Van Rensburg et al., 2014).**

<b>Author (year)</b>	<b>Roles identified</b>	<b>Strategic activities</b>
Burgelman (1983)	Initiator Implementer	Implementing strategies Upward influencing
Nonaka (1988)	Innovator Implementer	Implementing strategies Interpreting and communicating
Westley (1990)	Communicator Implementer	Upward influencing Implementing strategies
Floyd and Wooldridge (1992)	Champion of alternatives Synthesizer of information Facilitator of adaptability Implementer of deliberate strategy	Interpreting and communicating Facilitating adaptability Implementing strategies Upward influencing
Dutton and Ashford (1993)	Issue seller	Upward influencing
Floyd and Wooldridge (1999)	Builder and integrator of knowledge domains, social networks and resources Implementer	Implementing strategies Interpreting and communicating
Huy (2001)	Entrepreneur Communicator Therapist Tightrope artist	Implementing strategies Facilitating adaptability Downward supporting
Huy (2002)	Emotional balancer Helper of others to adapt Downward supporting Implementer	Implementing strategies Facilitating adaptability
Marginson (2002)	Prioritiser	Implementing strategies Facilitating adaptability

O'Shannassy (2003)	Implementer	Implementing strategies
Briggs (2005)	Corporate agent Implementer Staff managers Leader Liaison	Facilitating adaptability Implementing strategies Downward supporting Interpreting and communicating
Ika'valko (2005)	Empowerer Reflector Facilitator Implementer of intended strategy	Downward supporting Interpreting and communicating Facilitating adaptability Implementing strategies
Mantere (2005)	Strategic champion Implementer	Implementing strategies
Herzig and Jimmieson (2006)	Implementer Supporter Facilitator of communication between senior management and employees	Implementing strategies Downward supporting Facilitating adaptability
Mantere and Vaara (2008)	Narrator Resource allocator Referee	Interpreting and communicating Implementing strategies Upward influencing
Nordqvist and Melin (2008)	Social craftsman Implementer	Interpreting and communicating Implementing strategies Facilitating adaptability
Rouleau and Balogun (2011)	Sensemaker Implementer of change strategies	Interpreting and communicating
Kane (2019)	Leader	Downward supporting

Considering all the strategic activities that are described in the studied frameworks it can be derived that they are revolving around 4 key areas: implementing strategies, downward supporting, facilitating adaptability and interpreting and communicating. Therefore, to study the underexplored subject middle management involvement in strategy formulation and implementation of digital transformation author tends to rely on the most complete, classical and proven frameworks that are supported by recent studies. This framework in the one created by Floyd and Wooldridge (1992) which was also used by the recent digital transformation study by Paavola et al. (2017).

However, author cannot neglect the most recent digital transformation study by Kane (2019) who claims that the role of leader with specific strategic activities described in the previous section is the most crucial one. Strategic activities that Kane (2019) has identified are very different to the ones of downward supporting activities identified by Floyd and Wooldridge (1992) and very tailored to the digital transformation subject in hand. Therefore, it was decided to merge two frameworks together and study all five roles together in the aim to identify which roles and strategic activities are of utmost importance for the success of such projects.

### **1.3. Research gap & questions**

Analysis of theoretical background of the research topic revealed that even though digital transformation is a hot research topic studies on the strategic involvement of middle managers in the strategy formulation and implementation are very limited. The only relevant paper on the subject was a case study of the Finish public sector company conducted by Paavola et al. (2017). Apart of that study no actual research has been conducted to evaluate and describe strategic roles and relevant to them activities in digital transformation projects.

However, the general research on middle managers strategic involvement is broad with multiple theoretical frameworks present. Middle managers are recognized to be not only implementors of deliberate strategies developed by top management executives, but also facilitators and information synthesizers. Additionally, they execute upward strategic influence by championing their own emergent strategic initiatives to top management.

Floyd and Wooldridge (2008) conducted a thorough analysis of the present research literature and identified streams the require further development. Among them is understanding of the strategic roles that middle managers have in different types of change projects and initiatives. This study is a response for both lack of such literature and exploration of the digital transformation phenomenon in the aim to understand the critical success factors regarding the middle management involvement in them.

To address the identified research gaps, four main research aims have been formulated. First, the research will aim to study what are the strategic roles played by middle managers in digital transformation projects. Second, the research will study what key activities executed by middle managers are associated with each strategic role in these projects. Third, it will be evaluated whether any strategic role is more important for the success of digital transformation projects.

Fourth, thesis will examine what is the importance of each strategic activity for the success of digital transformation projects. The presented study focuses on the problem of strategic involvement of middle managers in digital transformation projects as middle managers are considered to be the key factor that determines the success of change projects in organizations. More specifically, research focuses on strategic roles and strategic activities activities that enable them to execute these roles.

The main goal of the research is to explore involvement of middle managers in strategy formulation and implementation in digital transformation change projects and what roles and strategic activities are the most important for projects' success.

Objectives of the thesis are to investigate presence of middle management strategic roles and associated with them activities in the digital transformation projects and evaluate their importance for the successful projects' implementation.

To address the abovementioned problems and achieve the main goal of the research and its objectives the following research questions will be stated:

RQ1: What middle management strategic roles are applied in digital transformation projects?

RQ2: What key activities are associated with each middle management strategic role in digital transformation projects?

RQ3: How important is each middle management strategic role for the successful implementation of digital transformation projects?

RQ4: Which middle management strategic activities within each strategic role are important for the successful implementation of digital transformation projects?

## Chapter 2. Methodology

This chapter will describe the research methodology that will be applied in this thesis.

### 2.1. Research philosophy and approach

Discussion of the methodology that will be applied in the thesis should begin with a review of different philosophical approaches to the research subject itself (Lyons & Doueck, 2010). Research philosophy is a system of researcher's thought which researcher uses to obtain new and reliable knowledge about the research subject (Padilla-Díaz, 2015). This is the core of the research from which the choice of research strategy, formulation of the problem and data analysis approaches are inferred. Scientific research philosophy is a method which application allows researchers to contribute knowledge to the research area (Bryman and Bell, 2007).

There are four main research paradigms that are usually used by authors of the business social science studies: positivist, interpretivist, pragmatist and realistic. Paradigms differ in terms of epistemology, ontology, and methodology (Matthews & Ross, 2010). Description of these three main components is provided in the Table 3 (Žukauskas et al, 2018).

**Table 3. Description of three components of the research paradigm**

Components of the research paradigm	Description
Epistemology	General parameters and assumptions associated with an excellent way to explore the real-world nature.
Ontology	General assumptions created to perceive the real nature of society (in order to understand the real nature of society).
Methodology	Combination of different techniques used by the scientists to explore different situations.

Mackenzie and Knipe (2006) have conducted an analysis of research paradigms in relation to the components discussed above. Mackenzie and Knipe (2006) state that the choice of data collection and analysis methods should be guided by the research paradigm which is in turn derived from the research question or hypothesis of interest.

This thesis in particular is attached to the interpretivism research philosophy. From the ontological standpoint interpretivism states that researcher and reality are inseparable (Hitchcock & Hughes, 1989). Epistemologically in the interpretivism paradigm knowledge is based on the abstract descriptions of meanings, formed of human experiences (Walker, 1988). Finally, methodological approaches and research methods in particular that are most commonly used by interpretivism guided researchers are case studies, interviews, phenomenology, ethnography, ethnomethodology. Interpretivism states that knowledge is gathered through people's interpretations with a main focus on different perspectives to be absorbed and compared in order to generate theory (Matthews & Ross, 2010).

Author of this thesis uses interpretivism paradigm as he tries to explore the social phenomena of middle managers strategic behavior on digital transformation projects. This behavior is not independent from the social factors is bound to the culture and social factors of the company where digital transformation is happening. In order to answer key research questions of this thesis qualitative has to be gathered about the behavior of middle managers. Additionally, the researcher is trying to find evidence to answer the research questions by trying to explain a phenomenon or behaviors. Granted these facts, this research is more influenced by interpretivism even though it uses a rather structured method of research.

Following the choice of research paradigm is the choice of the appropriate research approach. Author of this thesis has reviewed the relevant existing literature but did not find any previous studies concerned with the strategic roles of middle managers in the digital transformation projects and the importance of strategic roles and relevant activities to the success of such projects. However, there are indeed established studies of middle management strategic roles in the broad scope. There are no hypotheses in this thesis, but research questions were posed. The answers to these questions and the comparative analysis of gathered data would result in the findings in order to make the proper conclusions and derive managerial implications. Therefore, it makes the most sense to use deductive approach viewing the gathered data through the theoretical lens of the existing frameworks (Braun and Clarke, 2015).

The topic of the research is quite new and digital transformation is currently a buzzword in the strategic management studies (Tolboom, 2016). It can excite much debate and combined with the lack of existing literature examining the strategic role of middle managers in the strategy formulation and implementation in such projects it results in the selection of exploratory focused

study using deductive research approach in order to test whether the gathered data fits the existing frameworks of middle management strategic behavior in digital transformation projects. Reflection upon the theoretical themes that the data and literature reviews suggest will be made according to the specified approach (Saunders et al, 2009).

In conclusion, the research philosophy which was chose is interpretivism and it will be supported by the deductive research approach. The choice is justified by the reasons mentioned previously.

## **2.2. Research methods**

To address identified research gaps and answer stated research questions it is required to select the fitting research method and strategy for the study. In general, research methods could be classified into three categories: quantitative, qualitative and mixed (Ayiro, 2012). Qualitative is a multimethod that is used to study things in their natural settings attempting to interpret phenomena in terms of meanings that people bring to them (Denzin and Lincoln, 1994). Qualitative analysis is usually described as the one providing rich data and in-depth view of the research subject. The main source of the qualitative research are interviews: structured, semi-structured and unstructured. Quantitative methods examine numerical data using mathematical and statistical methods. In strategic management sciences involving middle management quantitative data is usually gathered using surveys.

Both methods have advantages and disadvantages (Miles & Huberman, 1994). Quantitative method is superior to the qualitative in a sense that it allows testing the specific hypotheses and drawing general conclusions about the subject as well as allows replications and verifications. However, this method decontextualizes human behavior and neglects context in which particular phenomenon is studied if relevant variables are not included in the resulting model. Qualitative methods provide complete and detailed descriptions of relationships and gives the ability to adjust for new information as it emerges. However, qualitative methods do not allow generalizations to be made about the conclusions of the study and there is a distinct possibility of researcher bias.

As discussed previously, current study is conducted on the underexplored topic of digital transformation with lack of relevant articles about strategic involvement of middle managers in it. The aim of the research is to analyze the strategic roles, activities and leadership traits of middle managers in strategy formulation and implementation. Application of statistical methods implied

by quantitative research might result in misidentification of the strategic roles that are present in the behavior of middle managers in Russian banking companies undergoing digital transformation. At first, it is required to gather rich primary data allowing to pose hypotheses and test them. Thus, exploratory-themed aim of the research results in the choice of exploratory qualitative research method for this study. Exploratory method is the most appropriate as it allows to get a broad understand and define the underlying concept (Zikmund, 2003).

Qualitative methods include interviews, panels, 'postcards', secondary data sources and observations (Patton, 1990). Interviews can be structured, semi-structured and unstructured and are used to explore a topic in depth with other people. Panels are useful in gathering opinions of individuals, reviewing a process and gathering reactions. 'Postcards' are small written questionnaires that ask small number of focused questions leaving space for individuals' thoughts. Secondary data can include sources like diaries, emails, reports and written accounts of past events. Observations are conducted to uncover information that could not be gathered with other qualitative methods due to various reasons.

For the purpose of the current study semi-structured interview approach will be chosen as it allows to explore research questions while still gathering insights that might emerge during the interview process (Longhurst, 2003).

Another issue that has to be discussed is that interviewing the middle managers themselves about their strategic roles and activities is subject to biases (Rice, 1929). People tend to overestimate their positive and underestimate negative traits and actions. Reasons for that could be willingness to appear better and more impactful than they actually are, giving socially desirable and acceptable answers, resistance to answer socially sensitive questions, and giving answers that the interviewer expects in their opinion. This is a major concern for the current study, as it targets middle managers themselves, their actions and behavior, and not a particular event or phenomenon.

Theory behind biased behavior in interviews is impression management which states that in social interactions people tend to manipulate and control outgoing information and behavior to maintain a desired self-image (Leary, 1990). There is a wide range of factors that result in impression management including being a subject that is monitored, specific goals of the person and unwillingness to self-disclose.



Impression management and the resulting social desirability bias were identified by researchers as major concerns for empirical studies that are primarily based on the interviews (Kovačić et al., 2014). When asked about their behavior during face-to-face interviews respondents were found to give socially acceptable answers in order to preserve the preferred image of oneself overestimating the behavior that lead to the results that are viewed as positive by the society and underestimating the behavior that lead to the negatively viewed by society results (de Vries et al., 2014).

In the current study impression management is posing a significant problem as middle managers might overestimate their positive strategic behavior and be unwilling to disclose actions that had a negative impact on the project, though, also having strategic influence. The goal of the study is to analyze all described strategic roles and their impact on the project including both positive and negative ones. Authors of studies in the middle management strategic research also acknowledge the impact of impression management during interviews and state it a limitation to their studies (Birken et al., 2015; Way et al., 2018; Hansell, 2018).

Additionally, there is no way to grant anonymity with the usage of semi-structured interviews approach. There is a possible way of lowering the effect of impression management from the study using anonymous surveys and asking middle managers to complete them. However, surveys' data gathering method lacks the richness that interviews provide and does not fit exploratory goal of the study (Longhurst, 2003). Additionally, impression management bias was found to be a major problem even in anonymous surveys (Dodou & de Winter, 2014).

Therefore, to lower the effects of impression management and resulting biases from the study it was decided to conduct interviews with management consultants. As it was found out in first two exploratory interviews, consultants are working closely with middle managers on digital transformation project both in terms of strategy formulation and implementation. They are serving as observants providing gathered on the project information. Consultants arguably have no reasons to blur and distort exact activities and behaviors of middle managers providing a more objective view of their strategic roles. Similar approach was used by Pappas and Wooldridge (2007) when authors analyzed middle managers divergent strategic activity by asking their peers about it.

However, there are not any studies in the management field that specifically use consultants to study strategic behavior of middle managers and therefore methodological approach in this study can be viewed as innovative and subject to further adjustments by future researchers.

Usage of consultants as primary data sources allows to incorporate features of multiple case study in the research. Interviewed consultants have been working on multiple digital transformation projects in the banking sector and thus they share experiences across multiple cases of such projects. This approach allows to tackle the single source bias (Avolio, et al., 1991) both through exposure to multiple digital transformation cases as well as through consultants' exposure to multiple middle managers they have been working with on each of these projects.

The primary qualitative approach was reinforced by addition of triangulation approach to answer research questions 3 and 4, for added weight. Triangulation was conducted by asking consultants to evaluate the importance of strategic activities and strategic roles on a Likert scale from 1 – not important at all to 7 – extremely important. This method was chosen as multiple studies had noted that analysis of exclusively qualitative data is not reliable to draw conclusions from. Qualitative data is viewed as subjective and not directly measurable. Incorporating quantitative measurement of strategic activities' and strategic roles' importance provides a more valid and reliable measurement to make inferences based upon (Kinard, Capella 2006, Gliem, Gliem 2003). The results of the importance evaluation by consultants on all studied projects were analyzed and mean importance values were presented on charts. Author acknowledges the limitations of the small sampling size from which quantitative data was gathered and addresses them in the "Limitations of the research" section.

### **2.3. Data and respondents**

As stated previously primary data in this thesis should be collected through interviews with management consultants to neglect the bias from middle managers describing their behavior themselves. To have a homogeneous sample of respondents and exclude as many external factors affecting strategic roles of middle managers purposive sampling was chosen for the research. This type of sampling allows to gather more representative data and thus more trustworthy findings compared to the heterogeneous sampling with much more changes and variation (Maxwell, 2012).

Firstly, all behavioral activities were observed from middle managers employed in the Russian banking industry. Banking is the most appropriate choice to investigate digital transformation related topics in Russia as this sector is positioned just behind Information Technologies and Telecommunications sectors in the KMDA (2018) study of digital transformation in Russia. According to the authors methodology most of banking companies have

already gone through the stages of digitization and digitalization and are now highly motivated to integrate IS and business strategies which is the main purpose of the last and focused in this research stage – digital transformation. Information Technologies and Telecommunications which are leaders of the rating have not been recently conducting any large-scale projects (KMDA, 2018) and thus are of less priority since this study focuses on extracting insights about middle managers' behavior via interviews and people tend to forget details about events and behaviors as the time goes (Bradburn et al., 1987). Having access to the consultants participating in the recent digital transformation projects is thus beneficial.

Secondly, consultants in the banking industry were ensured to have extensive experience observing the behavior of studied middle managers. Each consultant spent at least 6 months working on digital transformation projects in banking. The range of experience on such projects from gathered respondents was from 6 months to 1.5 years with the average of 1.1 years. Number of projects they have done varied from 1 to 3 with the average of 1.2.

In order to obtain the data necessary for the research 8 consultants were interviewed. Each consultant was asked to provide data about middle managers he was working the closest with and about activities and behavior that they have spotted. Data was gathered about 12 digital transformation projects in the banking sector. The resulting sample of 12 projects is sufficient for the pilot study as stated by several authors. Sampling size of 12 cases is regarded to be a “rule of thumb” for pilot studies (Julious, 2005; van Belle, 2002).

## **2.4. Data collection**

Primary data was collected using in-depth semi-structured interview approach with management consultants as well as through importance survey conducted through Excel sheet completion after the end of the interview. In-depth interviews are superior to surveys in a sense that they allow to gather deeper information with more insights about the behavior (Merriam and Tisdell 2015).

Selected consultants which contacts were gathered through author's professional networks and who fitted the sampling criteria were contacted via Telegram where the purpose and subject of the study was explained and invitation for the interview was provided. 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 thesis including names of respondents, names of discussed middle managers, consultants' employers, clients' companies and specifics of the projects.

In the end 8 interview recordings were obtained. Each recording varied in duration from 1 hour and 10 minutes to 2 hours. In total, 13 hours and 30 minutes of recordings were gathered. Additionally, 12 filled excel sheets with evaluation of strategic activities and roles importance were gathered with respect to each studied digital transformation project.

## 2.5. Interview design

In order to answer research questions a set of guiding activities was developed which is presented in the Table 4. Each activity is associated with the studied strategic role. First set of activities was taken from the original Floyd and Wooldridge (1992) study on middle management involvement in strategy formulation and implementation. To add the leadership dimension relevant to the digital transformation change projects number of activity topics was expanded to include identified by Kane (2019) key leadership activities.

For each activity consultants were asked a question:

- Have you observed any behavior associated with this activity?
- What did middle manager do (or not do) and how it affected the project?

Further questions that came up during the interview to expand on the researched topic were also asked following the semi-structured interviews methodological guidelines.

**Table 4. Researched activities during the semi-structured interviews**

Strategic role	Activity
Championing alternatives	<ul style="list-style-type: none"> <li>• Justify and define new programs</li> <li>• Evaluate the merits of new proposals</li> <li>• Search for new opportunities</li> <li>• Propose programs or projects to higher level managers</li> <li>• Justify programs that have already been established</li> </ul>
Facilitating adaptability	<ul style="list-style-type: none"> <li>• Encourage informal discussion and information sharing</li> </ul>

- Relax regulations to get new projects started
- 'Buy time' for experimental programs
- Develop objectives and strategies for unofficial projects
- Encourage multidisciplinary problem-solving teams
- Locate and provide resources for trial projects
- Provide a safe haven for experimental programs

Synthesizing information	<ul style="list-style-type: none"> <li>• Gather information on the feasibility of new programs</li> <li>• Communicate the activities of competitors, suppliers, etc.</li> <li>• Assess changes in the external environment</li> <li>• Communicate implications of new information</li> </ul>
Implementing deliberate strategy	<ul style="list-style-type: none"> <li>• Monitor activities to support top management objectives</li> <li>• Implement action plans designed to meet objectives</li> <li>• Translate goals into action plans</li> <li>• Translate goals into individual objectives</li> <li>• Sell top management initiatives to subordinates</li> </ul>
Leadership	<ul style="list-style-type: none"> <li>• Direction</li> <li>• Business judgement</li> <li>• Execution</li> <li>• Inspirational leadership</li> <li>• Innovation</li> <li>• Talent building</li> <li>• Influence</li> <li>• Collaboration</li> </ul>

To facilitate comprehension of the first four strategic roles guiding diagrams were developed that structure activities in a sequential order. Example of this diagram is presented on the Figure 3.

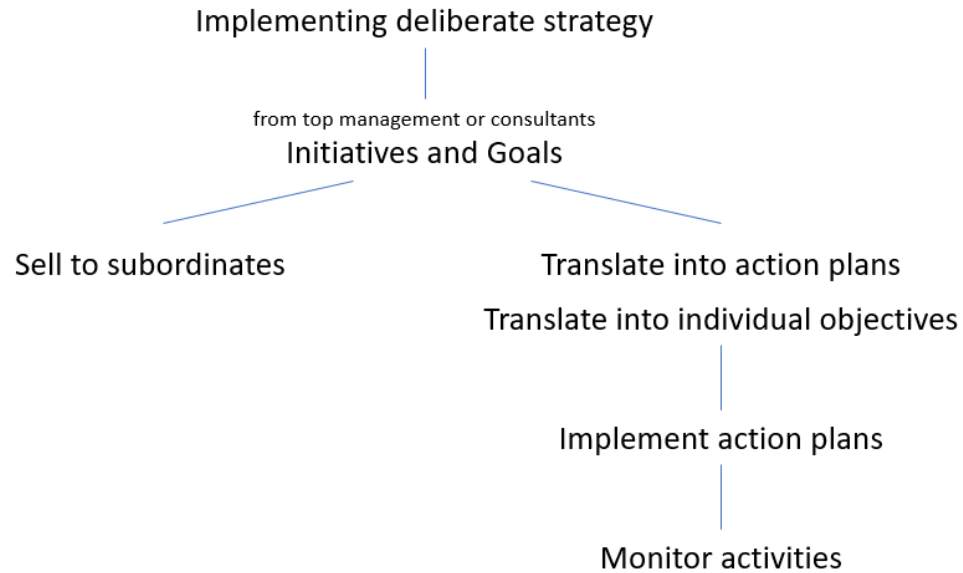


Fig. 3. Facilitating diagram for “implementing deliberate strategy” strategic role

After the end of the interviews, consultants were sent an excel sheet to fill in. Excel sheet contained all the strategic activities of middle managers listed in the Table 3. Consultants were asked to evaluate the importance of strategic activities within each strategic role and then evaluate importance of strategic roles themselves on the Likert scale from 1 to 7.

Interview guideline and excel sheet for importance evaluation are provided in the Appendices 1 and 2.

## 2.6. Data analysis

All data collected during in-depth interviews was recorded for the analysis purposes using Open Broadcasting Software proprietary software package. Verbatim transcriptions of the relevant sections of the interviews were created later and analyzed in order to identify key statements relevant to the strategic roles and activities of middle managers.

Transcription data can be analyzed using either computer software packages like NVivo, ATLAS.ti or using the manual method. NVivo and ATLAS.ti are useful in the analysis of large quantitative data sets as they process large chunks of information automatically selecting relevant topics and subtopics. However, considering the relatively small size of qualitative data gathered it was decided to use manual approach in order to extract all insights from the data at hand.

A six-phase guide from Braun and Clarke (2015) on the thematic analysis of the gathered interview data was used. First, author relistened to all the recordings and reread the produced transcripts to familiarize himself with the gathered data. Next, manual coding was conducted throughout the transcripts in order to identify patterns in the data by labelling relevant to the research questions data. Thirdly, 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 in order to review the created themes and check whether there is a plausible fit between the coded data and identified themes. Each theme had to have clear and distinct meaning relevant to the research questions and dataset at hand. Review process led to several changes in the themes allowing to further expand 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' sections write-up (Braun and Clarke, 2015).

Example of the identified themes with the relevant descriptive codes and exemplary interview statements is presented in the Table 5.

**Table 5. Illustration of the coding scheme**

<b>Exemplary Interview Statement</b>	<b>Revised, Descriptive Code (1<sup>st</sup> cycle)</b>	<b>Theme (2<sup>nd</sup> cycle)</b>
<i>“Well, level of this selling differs obviously. In regional offices no one cares about it and getting data from there was quite a challenge”.</i>	Selling: Uneven distribution across client departments (IDS)	IDS: Involvement issues
<i>“Senior middle manager who was responsible for this stream of work became aware of the situation and wrote a letter to everyone involved motivating, explaining its necessity and thanking for cooperation. After this letter there were 0 problems with data gathering with this instrument”.</i>	Selling: Motivating line managers after issues arose (IDS)	IDS: motivating

<p><i>“They (middle managers) have to prove decisions to tops. If you could not explain these decisions having all the sufficient information, then there were questions. The problem laid in regulations. They did not foster any experimentation culture”.</i></p>	<p>Leadership:      Regulations diminish      experimentation (LS, FA)</p>	<p>LS: experimentation culture</p>
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Finally, results of the analysis were compared between respondents to extract information and generalize conclusions about strategic roles and strategic activities of middle managers.

## 2.7. Limitations of the research

The current study is subject to multiple limitations. First, the chosen methodological approach assumes the analysis of middle management behavior through the experience of management consultants. Minimum experience requirement of 6 months in digital transformation project ensures that consultants’ observations are sufficient and are not based on the occasional extremes. But the essence of consultants’ presence on the projects assumes two core limitations:

1. All studied projects had consultants as drivers of digital transformation activities. Results of the research most likely will be different if projects with digital transformation driven exclusively from the inside will be studied.
2. Consultants are not exposed to the inner workings of clients and therefore are unable to provide input on several strategic activities of middle managers. This is a necessary limitation that is derived from the more objective opinion that they have about other strategic activities and roles.
3. Additionally, the chosen innovative approach to handle impression management from middle managers and it was not yet tested in other studies.
4. According to the chosen sampling data was analyzed on the projects’ basis and not on the basis of individual consultants. One consultant sharing experience across multiple projects could lead to single source bias even though it is mitigated by other consultants and their projects.

For the purpose of the study convenience sampling approach was chosen as it was determined to be the most fitting for the exploratory nature and to exclude as many exogeneous



factors as possible. These factors are geographical, cultural and industry-related. Therefore, two additional limitations emerged:

5. Only Russian companies were studied. There might be difference in middle management strategic behavior related to the country specifics, namely culture, information background on digital transformation topic, and adoption rate of information technologies.
6. Only banking industry was studied. Results might be different in other industries, however, identifies core characteristics of the studied projects match with the theoretical background on digital transformation (Eggers & Park, 2018).

Further, gathered from the interviews qualitative data was supported by survey quantitative data, but with a very limited number of respondents, which resulted in the final limitation of the study:

7. Small quantitative sample does not allow to make conclusions about the population in general. Therefore, importance evaluation by consultant should be treated as a support to the qualitative data from the interviews and thus valuable for the current exploratory study.

## **Chapter 3. Findings**

This chapter presents findings and insights that were gathered through thematic analysis of semi-structured interviews with consultants working on digital transformation projects in the Russian banking industry. Presentation of the findings follows the structure of the research objectives, studied strategic roles and corresponding activities.

Firstly, common characteristics of digital transformation projects that consultants were working on will be discussed without disclosure of any client sensitive information or any other information that will allow to identify the consultant respondent or his employer. Secondly, results of discussion of 4 strategic roles as well as corresponding strategic activities as identified by Floyd and Wooldridge (1992) will be presented. These 4 roles are: implementing deliberate strategy, facilitating adaptability, synthesizing information and championing alternatives. Thirdly, leadership strategic role will be discussed with respective identified leadership activities as stated by Kane (2019). Fourthly, importance of strategic roles for the success of digital transformation projects will be discussed.

### **3.1. Common characteristics of the projects**

Analysis of 8 interviews' data that was gathered resulted in 12 total digital transformation projects that consultants had experience in. These projects were rather diverse. Scope of the project as well as the role of consultants on them differed. However, several key characteristics that most of the projects shared were identified.

Scope of the projects included 3 main components: flattening of organizational structure and reorganization of relevant organizational processes, employees' education on Agile workflow methods and adaptation of IT infrastructure. All projects had one of these components in the scope, 7 had two and 2 had all three.

Organizational component was the one that occurred the most. Most important aspects of digital transformation are preparing 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 Russian banking industry:

*“Rapid change activities cannot happen when you have to approve projects and even get an idea started as a middle manager or even a specialist pushing it through 5 organizational levels. Competition from more modern banks and young fintech companies will outperform you simply due to all that time it takes to push through all decision makers”.*

Thus, every bank that was undergoing the digital transformation reorganized its internal structure, in the studied cases with the help from consultants.

Second most common component was Agile education. Digital Transformation essence is in the integration of business and IT strategies (Kane, 2019) and Agile has proven to be the methodological approach that allows to integrate them together additionally granting newly formed cross-functional teams with decision power to implement and test their ideas on the go. All projects that had Agile education component in them had implemented backlog management systems and product sprints with regular feedback systems and renewed KPIs. Significant part of these consulting projects was dedicated to the education of employees on how to work in these new paradigm conditions:

*“When you suddenly put a person from a distinct support function like security into a cross-functional team he will have a lot of questions. He will not understand what is expected from him in the Agile as he was working as a support with a risk related KPI for 10 years. If you do not explain to him that his new role is about helping his team to deliver the product in compliance with bank’s security standards and not just controlling and saying that this will not work nothing of value will come from this transformation”.*

Third was adaptation of IT infrastructure. Most banks were built using monolithic enterprise software solutions. This means, that there is one main server or system of servers which are responsible for handling of all queries. As a result, any change in the system leads to reassembly and redeployment of new version of the server part. These redeployments cannot happen often as system is down during this time. This approach works well when bank has a traditional support IT department which is handling all improvement ideas from primary functional departments and is deploying them regularly. However, when a particular product cross-functional team in the new organizational structure comes up with an improvement, it has to wait for the scheduled update time of the main system therefore reducing the speed at which it can deploy new solutions and test product hypotheses.

Solution to this dilemma is the switch from monolithic applications to the system of microservices. Microservices are independent server applications that can be redeployed and reassembled on their own. Each bank's product or service during the digital transformation is usually divided into the number of microservices with each cross-functional team responsible for their own solution:

*“Our goal was to integrate diversified IT systems with each other and create a new IT landscape where product teams would be responsible for their own microservice. The old approach was that employees had to send their requests to IT guys and they had to integrate them into one main bank backlog, which took a lot of time. New structure with the communication through APIs would be much more rapid and efficient”.*

### **3.2. Implementing deliberate strategy**

#### **Sell top management initiatives to subordinates**

Selling top management initiatives to subordinates was identified by consultants as the role that is critical for the success of digital transformation projects. These projects have a high degree of uncertainty within them at the start and are usually developed on the go. This uncertainty means, that without the 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 organization which means, that it is critical to get approval and support from the majority of employees and not only top managers:

*“Digital projects are not typical consulting projects. Nothing will work here if client is not engaged in the whole initiative and does not believe in it. And it relates to everyone in the company, not only to top and middle managers”.*

After the analysis of the consultants' interviews 5 distinct scenarios of how selling to subordinates can go on the digital transformation projects were identified. Other projects shared similar features with these 5 scenarios.

**Scenario 1.** Digital transformation is usually initiated at the head office of the bank and initially deployed there. In this scenario top management was actively involved in the project and engaged middle managers explaining to them thoroughly why the initiative is important and how it will benefit them personally. Middle managers bought in it rather easily and with the help of

consultants developed the necessary vision of the company's future. There still were differences in the behavior of middle managers though and it mainly depended on the level of responsibility that the middle manager initially had. If he was a leader of his functional department, he actively engaged his employees, but leaders of support functions like risk control and IT did not get the value of the transformation and resisted the increased responsibility:

*“In general, we had a lot of support from middle managers and it was unusually easy to get data from people. We collaborated closely with junior middle managers and served rather as guides for them, the majority of input came from their high engagement. However, there were different types of cases. People in support functions opposed new KPIs and did not want to cooperate. I assume the reason for that was the increase in responsibility. People who already were responsible for a lot of things viewed this transformation as a tool that will help them get the job done easier and better. Because of this understanding they engaged their subordinates too”.*

Additionally, even though in head office transformation went very well in general, employees in the regional offices also did not have any understanding of what is happening and how it will affect them:

*“Well, level of this selling differs obviously. In regional offices no one cares about it and getting data from there was quite a challenge”.*

**Scenario 2.** In the second scenario digital transformation was driven by the leader of IT function in the bank and he was the main contact person for consultants and the client leader of the whole project. In the organizational structure this person was 2 levels below the CEO, so he falls into the category of middle managers. The main problem that the consultants encountered on this project was the lack of cooperation from the functional departments. Digital transformation on this project was focused on the development of new integrated IT solutions, but these solutions would in the end be used by the business departments. Therefore, consultants were developing solutions with the input and collaboration with middle managers from other functional departments. However, it was very hard to collaborate with them as they did not see any purpose of the project:

*“On my first meeting with credit department line manager said to me: to be honest I do not even understand why you are here. Everything is working rather well, and no changes are needed”.*

This interaction happened because middle managers who were leaders of functional departments did not translate the necessity of the change to their subordinates. Consultants' hypothesis of why this could happen was that probably IT head as an owner of the project did not have enough power in the organization and could not share digital transformation vision to other middle managers and thus these middle managers also did not sell the project to their subordinates.

**Scenario 3.** In the next scenario project was sold to the top management but still the translation to the line managers failed:

*“I stood in front of five line managers from small and medium enterprises credit department and heard them speak: What do you want to optimize here? We are getting 30k RUB per month. Everything is already optimized here”.*

Consultant clarified that interactions with middle managers were much easier and without this passive aggressive attitude, but the essence of project necessity to line managers never reached them. Line managers viewed digital transformation project as a way to increase the control on their activities which will allow middle managers to spot inefficiencies in their work and lead to potential harm:

*“Mindset of line managers on this project was very tough. They treated digital transformation as a new tool of personnel control that will expose more of their mistakes leading to layoffs and compensation cuts”.*

**Scenario 4.** The fourth scenario is similar to the previous one in a sense that projects were sold to top management, but top managers did not have the necessary vision of the transformation themselves and did not translate it to middle managers. Middle managers also did not develop this vision with the consultants help which resulted in the situation where line managers and specialists became very demotivated:

*“We came to make a revolution in digital banking and excited engineers that worked with us with this idea. But middle managers did not share the same revolutionary spirit, they were just doing their work. Towards the end of the project almost everyone on the client team lost motivation and wanted this project to come to an end”.*

**Scenario 5.** Fifth scenario occurred in one case but is still valuable to the study as it provides insight into the proper recovery from initially failed downward translation. On this project consultants initially encountered lack of understanding from line personnel. Consultants developed an instrument to gather data from specialists to understand on what activities do they spend time.

However, this instrument was not used actively by specialists as junior middle managers and line managers failed to explain its necessity, but the selling of the initiative eventually happened:

*“Senior middle manager who was responsible for this stream of work became aware of the situation and wrote a letter to everyone involved motivating, explaining its necessity and thanking for cooperation. After this letter there were 0 problems with data gathering with this instrument”.*

In sum these five scenarios provide insight that there are cases when the translation fails, and middle managers are unable to sell the digital transformation initiative to their subordinates. Four possible reasons of why this could happen were identified:

- Digital transformation happens unevenly in organization;
- Transformation is driven from IT function and it is hard to get other functional middle managers to buy in;
- Middle managers fail to explain digital transformation to subordinates and work with their concerns;
- Top management does not believe in the project and thus middle managers do not either.

## **Translate goals into action plans**

Translation of set by 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 middle managers initiatives and approved or corrected their approach:

*“I was working together with product owner on our functional stream developing new procedures and backlog for the next stream. This product owner had the drive and initiative and it was a pleasure working with him together. I found myself serving as a guide for him approving things he comes up with and sometimes challenging them if it did not make sense. This is the best approach in my opinion because when the client comes to the plan himself it is very likely that this plan will come to life in the end”;*

*“I think middle managers lacked the initiative and did not understand Agile enough. Plans that they came up with did not fit the end goal as they were focused on the old increment approach. They developed a backlog plan for the whole year. Is that Agile?”.*

*“I went to this head of commerce and told him -We asked you to get this and this, how is it going? -We could not do it because we need support of other function. -Well, let's ask that function for support then. -Oh, it is difficult. -But if we do not get this data project will not progress. -Ok, we will try”.*

Consultants with the negative experience commented that lack of initiative from middle managers in coming up with appropriate action plans is the direct result of lack of proper vision translated from top management or senior middle managers and thus is connected with the first strategic activity – “selling top management initiatives to subordinates”.

### **Translate goals into individual objectives**

Translation of goals into individual objectives was done very similarly with the previous section about action plans implementation. Consultants noted that these two strategic activities go hand in hand during the project development. Usually this process was conducted well by middle managers themselves when they understood how digital transformation will impact their workflow in a positive light. However, there were two cases when projects slowed down due to lack of this understanding and particularly because middle managers did not create the necessary KPIs for their subordinates:

*“Owner of the project (senior middle manager) from the client side failed to tailor project goals to individual KPIs of managers representing other functional departments. This resulted in a situation when there was very low engagement and cooperation from their side. Middle managers there did not understand the value of digital transformation and treated it as an abstract thing not creating any impact”.*

Very similar situation happened on another project and it was described in the “sell initiatives to subordinate” section. Middle managers from supporting functions did not understand new Agile paradigm and did not approve new KPI systems for themselves and their subordinates.

However, KPIs are not always needed. Four consultants noted that rigidity that KPIs bring can work as a tool that allows to get the work done, however, often this results in the lack of proactiveness from subordinates. They start treating transformation as a part of the job and do the minimal required amount of work. Approach that works the best is getting the commitment and sharing vision of the transformation with employees:



*“Because projects are very uncertain and have a flavor of experiment in nature and failures that come with them are a part of learning. Managers (senior middle managers and top managers) keep managing from the old perspective asking for concrete plans and results. Middle managers thus are feared because they can't deliver stated results and this fear results in low commitment”.*

### **Implement action plans designed to meet objectives**

Implementation of action plans similarly with the translation from goals into action plans on the majority of the projects was done by middle managers in close cooperation with consultants. They proactively discussed 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 owner of the project:

*“We had a round table where we discussed the positioning of the new initiatives. It was tough, because the initiative would likely lead to income cuts to line managers and specialists, which would result in questions to middle managers from their subordinates. But middle managers were proactive and cooperative and participated actively in the discussion”.*

However, on several projects implementation lead to unsatisfying results because of poor quality of objectives posed by top management in the first place:

*“Action plans were created, but they did not fit the motivation that engineers had while creating the solution. Top management wanted to just make any digital solution, not the revolutionary product and that was exactly what middle managers supported and pushed”.*

On two other projects implementation also slowed down because of the resistance from line managers and poor quality of the line managers work:

*“We sometimes heard a question: can we not do it please?”*

*“We had to revisit some project streams from SME department as the output from their side did not fit the agreed-on roadmap and we had a lot of questions to the data they used”.*

In sum, implementation was identified as one of the most crucial activities and was done well by middle managers, but issues still persisted on several projects.

### **Monitor activities to support top management objectives**

In almost all cases consultants noted that monitoring activities by middle managers was done in accordance with top management objectives. Top managers translated initial project goals to middle managers and tied them to their KPIs which resulted in their direct interest in ensuring that project is being done on schedule and with appropriate quality. In turn middle managers also closely monitored project related workflow from their subordinates. Only on three projects consultants spotted issues with the monitoring of activities and appropriate reaction to them.

**Project 1.** On this project middle managers cared primarily about their own interests and not objectives posed by top management:

*“We asked for data, but middle managers did not want to give away data that showed their work in bad light. Every query had to be forced. They were scared the advance of the project will expose inefficiencies and sluggishness in their work”.*

**Projects 2 and 3.** In these cases middle managers closely monitored progress of their subordinates, but did not react appropriately when issues arose:

*“When all tickets in the backlog were blocked, there are were no tasks to do. Middle managers did not come out with initiative how to spend time productively on other tasks. They said go play ping-pong guys”.*

*“Junior middle manager spotted poor quality of data that was provided by third party company. He went to his boss and asked to push the conflict further as the data was crucial for the project. But this senior middle manager did not want this conflict to escalate. Most likely he understood that the conflict itself could lead to much bigger potential problems than the poor quality of the project and thus did not want to take any action. My guess is that he was safe on his place with a lot of friends upward in the organizational chain and was not scared of being fired.”*

### **Importance of implementing deliberate strategy activities**

On almost all projects consultants stated that “sell top management initiatives to subordinates” is the most important strategic activity of middle managers in the implementing deliberate strategy role. Successful selling ensures the support from subordinates and speeds up the workflow of the project. With the support from line managers and specialists consultants do not need to go to their supervisors every time they need to get additional data, subordinates are actively engaged in the development of digital transformation itself and propose new ideas and

with their engagement they also support implemented changes ensuring that initiatives will come to life and actually be used after the consultants are gone.

Second most important initiative was “implement action plans designed to meet objectives”. Digital transformation projects are very focused on implementation in terms of technological, organizational and Agile comprehension as well as adoption perspectives. Thus, correct action plans that achieve these goals are crucial for the success and it is middle managers who are mainly responsible for them.

Third relative importance place was shared between “translate goals into individual objectives” and “monitor activities to support top management objectives”. These activities were likely identified as less important due to the nature of digital transformation projects. As noted previously, they are very uncertain with high degree of experimentation involved and it is impossible to ensure success through development of hard-coded KPIs or strict controlling. “Selling” is more important.

Least important activity was identified to be “translate goals into action plans”. According to the feedback from several consultants this is not important as consultants are able to serve as guides ensuring that developed action plans are appropriate and thus middle managers responsibility in this activity is significantly lower compared to others. If middle manager is unable to come up with proper action plan consultants would intervene and correct his approach.

**Table 6. Consultants survey results of implementing deliberate strategy activities’ importance**

<b>Implementing deliberate strategy activities’ importance (1 – not important at all, 7 – extremely important)</b>					
<b>Project</b>	1. Sell top management initiatives to subordinates	2. Implement action plans designed to meet objectives	3. Translate goals into action plans	4. Translate goals into individual objectives	5. Monitor activities to support top management objectives
<b>P1</b>	7	6	1	5	5
<b>P2</b>	7	6	3	3	6
<b>P3</b>	7	5	3	2	7
<b>P4</b>	6	7	2	6	6
<b>P5</b>	5	7	3	4	5
<b>P6</b>	6	5	4	6	5
<b>P7</b>	7	6	2	5	3
<b>P8</b>	5	7	1	5	3

<b>P9</b>	7	5	2	7	6
<b>P10</b>	7	7	3	5	6
<b>P11</b>	6	6	2	6	3
<b>P12</b>	7	5	5	5	4
<b>MEAN</b>	6.4	6.0	2.6	4.9	4.9

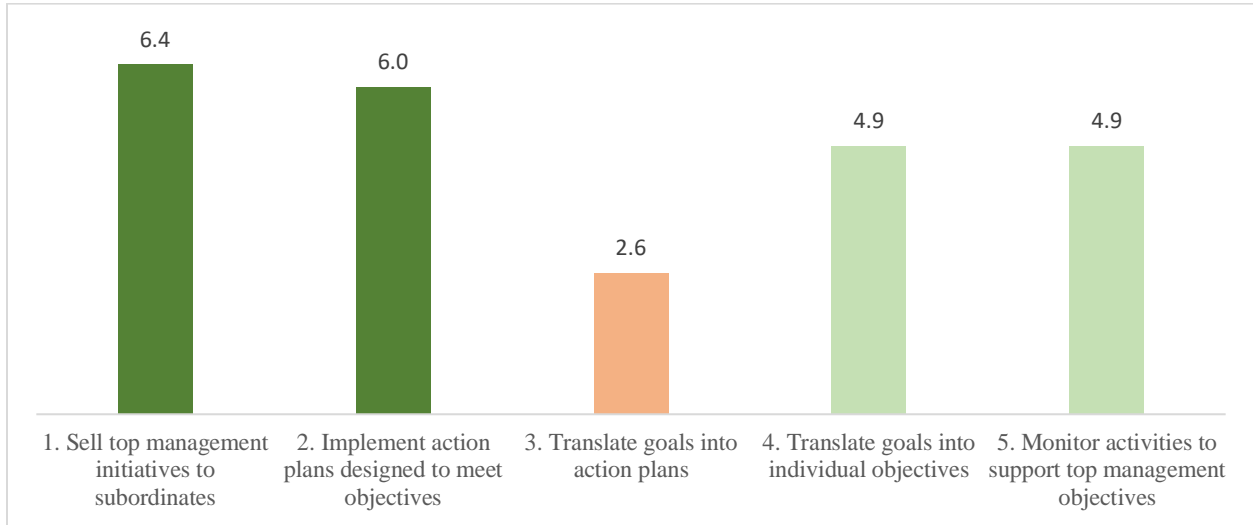


Fig. 4. Mean importance of middle managers' activities in implementing deliberate strategy role

### 3.3. Facilitating adaptability

#### Overlapping of activities in Facilitating adaptability

According to the interview design consultants were asked to provide their description of middle managers' strategic behavior on digital transformation projects which corresponded to each activity of facilitating adaptability role. These activities are:

1. Encourage informal discussion and information sharing;
2. Encourage multidisciplinary problem-solving teams;
3. Relax regulations to get new projects started;
4. Provide a safe haven for experimental programs;
5. 'Buy time' for experimental programs;
6. Develop objectives and strategies for unofficial projects;
7. Locate and provide resources for trial projects.

Consultants were asked about each activity separately, in the provided consequence and in the form of standalone questions. However, significant overlapping was identified from their side and it was hard for respondents to distinguish between several activities' items. Overlapping was identified in the activities 3, 4 and 5 and in the activities 6 and 7.

**Activities 3, 4 and 5.** All interviewed consultants stated that all initiatives on projects connected with digital and especially in digital transformation projects are very experimental in nature and thus, it is not possible to distinguish between “new” and “experimental”:

*“Digital projects have a high degree of uncertainty in them and usually everything is done in the form of experiment. We come up with hypotheses and test them to see what it worth developing further, implementing and scaling”.*

Additionally, “safe haven” term in the activity 4 seemed to be incorporating in itself “relaxing regulations” in the activity 3 and “buying time” in the activity 5:

*“I think I already answered this question (about safe haven). We did have problems getting through all the old and established bureaucratic procedures that they had in place since forever”.*

Finally, “buying time” in the corporate environment, especially in banking, is already included in the “relaxing regulations” activity as was also mentioned by the majority of consultants:

*“If some initiative that was proposed by us or in collaboration with middle managers did not get through let's say risk control department then we had to sit down together and discuss on what conditions it will be possible to get it through and how much time it will need to be adjusted”.*

Therefore, discussion of the activities 3, 4 and 5 will be merged under the name of “Defend new projects against established procedures”.

**Activities 6 and 7.** As stated by the interviewed consultants providing new emerging projects and initiatives with resources and developing strategies and objectives for them goes hand in hand with each other. When middle manager identifies and initiative that is appealing to him, he actively participates in its development as well as in making sure that this initiative will be granted sufficient resources from the company. And when particular initiative for some reason get rejected on his side, this also results in the lack of support in terms of both strategic support and resource support. Thematic analysis of consultants' answers about these two activities did not reveal any differences in related behavior and thus they also will be discussed together under the name of “Provide direct support for new projects”.

## **Encourage informal discussion and information sharing**

Regarding activity number 1, “encourage informal discussion and information sharing”, all of the consultants stated that during the work on their projects they did not have a chance to know whether this activity is middle managers encouraged such behavior from their subordinates. Several consultants did know that informal chats in WhatsApp and Telegram messengers exist in banking departments where employees share news and discuss events that are happening in the bank. However, none of the consultants had a confident answer to whether middle managers anyhow stimulated their usage and encouraged information sharing there.

Informal interactions did happen between consultants and middle managers from companies as a part of any consulting engagement, but it was done with the initiative of consultant and not middle managers:

“It (informal discussions) happens quite often. There even is a special part of case expenditures: ‘client dinners’”

Consultants did mention that as a result of digital transformation new communication channels were established:

*“Every newly formed cross-functional team had a channel in Slack where all the work-related questions were discussed as well as a separate channel for informal discussions”.*

However, these initiatives were proposed by consultants as a part of renewed workflows with Agile methodology. Middle managers did support these new forms of communication and actively used them. In general, author believes that there is not enough information to support or disprove whether middle managers do have such strategic behavior specifically on digital transformation projects. Possible reason for that is the limitation of the consultants’ perspective and therefore chosen methodology.

## **Encourage multidisciplinary problem-solving teams**

Interviewed consultant all stated that creation of multidisciplinary problem-solving teams and adaptation of relevant organizational procedures are the key aspects of digital transformation projects. Applied agile methodology results in organizational structure changes when experts from previously independent support functions like IT and risk-control are being integrated into commercial product teams accelerating the workflow:

*“Middle managers previously had to submit (IT-related) changes to the main backlog of the bank getting it through several organizational layers. Then these changes would be implemented by bank’s IT department of third-party vendors. This results in the situation when changes are implemented over the course of the year and they are either outdated or realized incorrectly, but it is already late to adjust.”*

*“New teams are working in 2 weeks sprints delivering the (IT) solution to (middle) manger and thus he has the possibility to give corrections and approve direction on the go”.*

Middle managers on the majority of the projects were identified to be very supportive of such changes as they provided more control over what is being actually developed. Additionally, they appreciated the newly gained support from previously exclusively control-focused functions like risk-control:

*“Newly developed KPIs for risk-control ensured that their role switches from being a “gateway” that does not allow to go in anything that is not in accordance with bank rules but rather to a consultant which job is to help the product achieve its goals while still maintaining the healthy level of risk. It was a huge change and a long-expected relief for product managers and indeed supported it”*

However, as stated in the scenario 1 of “sell top management initiatives to subordinates” activity in implementing deliberate strategy role not every middle manager from the support function understood and appreciated these changes.

Additionally, multidisciplinary problem solving was encouraged by the very nature of the consulting engagement. At the start of all projects working groups were formed which consisted of senior middle managers form different functional departments as well as consulting team representatives. These groups tasks include evaluation of the project’s progress, discussion of cross-boundary challenges that arose during formulation and implementation of initiatives and formulation of next steps. All consultants stated that these groups were crucial to the projects’ development:

*“Regular meet-ups allowed to solve issues that came out on the project and involved several functions. This was the place where they all were usually resolved.”*

When asked directly whether middle managers supported these working groups discussions and involved their subordinates, majority of the consultants confirmed it. However, on

one project carried out in the rather small bank consultants encountered some resistance from middle managers:

*“When booking a meeting for the next check-up we sometimes heard: -Why do we need to spend time on this? If we need to discuss something tell us now, we will communicate it further to everyone”.*

Consultant who was working on this project assumed that this interaction happened because the culture of multidisciplinary discussions was not established yet in the company and thus middle managers did not understand the need for it.

### **Defend new projects against established procedures**

As stated previously much of the digital transformation projects’ content is being developed on the go and a lot of activities emerge after the evaluation of internal data and processes. These initiatives can be initially treated as “unofficial” as they are not yet confirmed and approved by top managers or senior middle managers, depending on who is the owner of the project or the main client representative that drives it from the client side. Sometimes issues arose due to old KPIs that top managers assigned to middle managers:

*“(On the project where IT director was the owner) it was very hard to push and test more experimental initiatives. He was not sure whether they will work, and he had to report to his boss on the results. There was a lot of pressure on him to achieve tangible financial results in the end. Of course, he very carefully examined each proposition negating the high risk – high reward ones”.*

Several consultants also noted that when digital transformation is being driven from the top management and they assign appropriate KPIs embracing its experimental nature the progress is much more satisfying:

*“It is easier to get middle managers to support initiatives and get their help when CEO is personally engaged and understands what is happening”.*

On another project consultant experienced a lack of support from middle management when proposing a more efficient way of how team should spend their time. There was a regular downtime for IT engineers during the monthly check-ups when work group discussed achieved results and agreed on the following course of development. Consultant suggested a way to utilize



this downtime proactively and initially gained an approval from middle managers, but they did not follow-up on it as there were no procedures established to bring it to life:

*“I had a feeling that middle managers treated this project just as a part of their job and wanted to stick to the plan as much as possible not paying attention to any emerging opportunities”.*

When asked whether this “defense of the new projects” behavior was similar with the direct subordinates of middle managers consultants struggled to give direct answer. They noted that communication with middle managers was specific to the digital transformation project and related to the part of consultants’ job. They did not have a chance on the projects to look into the internal strategic communication of middle managers with their subordinates which would enable them to identify whether middle managers defend proposed initiatives:

*“Did not see that. But not because it is nonexistent but because the specifics of the projects were that they are short and main communications were about the projects I was on, not on inner workings. I think that such activities indeed are present. If communications in the organization internally are working well, consultant does not know about it, he is not needed. It starts to be needed when middle managers do not hear line managers. There were cases when line manager or junior middle managers does not agree with senior middle managers course and then there are conflicts and they go through consultants”.*

### **Provide direct support for new projects**

As the digital transformation projects are usually mainly driven by the consulting team and senior middle managers are the client representatives it is fair to assume that junior consultants can be viewed as subordinates to these senior middle managers. Thus, the direct support that they provide to consultants’ initiatives and projects is likely to represent their strategic behavior to their subordinates within the banks.

Majority of middle managers cooperated with consultants closely on the development of objectives and strategies for the initiatives. Consultants stated that this cooperation was essential to ensure that middle managers in the end would buy-in these initiatives:

*“We had regular discussions about what and how we should implement. If we did not have them there would be questions on the steering committee meetings”.*

Only on two projects among twelve studied consultants had revealed issues that they had encountered.

On one case consultant came up with an idea on how to develop a competitive advantage for the bank. However, responsible middle manager did not agree with the proposed approach and pushed this initiative back as he needed more formal review and additional research to include this feature in the backlog.

*“He proposed to use an old waterfall-like approach when company would update buyers’ personas, then conduct interviews, then create the design and only then include the feature in the development stream”.*

This example shows that middle manager suggested a specific strategy on how to support the unofficial initiative, even though this approach was not fitting to the digital transformation environment from the consultant’s perspective.

On the second case consultant was proposing to launch a hackathon to the client company that would benefit both consulting company and the client company and received an agreement to allocate client’s resources to it:

*“We initially went to top management and it was kind of supportive but not very excited. Then sent us to talk about it with IT director (middle manager) and his colleagues. He was initially supportive too, but he wanted to guide the direction of hackathon to solve problems of the IT department. Now we are trying to find the balance”*

*“Yes, IT director agreed to provide resources for the hackathon if we agreed on common terms”.*

Middle manager supported unofficial project in terms of its objectives, strategies and resource allocation but only if it would fit the specific goals of his department.

## **Importance of Facilitating adaptability activities**

As stated in the previous sections the resulting importance assessment of the strategic activities in this role assumed a necessary adaptation. First, taken from the initial methodology activity “encourage informal discussion and information sharing” was identified as impossible to confirm whether it exists or not. Consultants are not involved in the inner workings of middle managers and their direct subordinates. Thus, this activity was ranked the lowest among seven studied. Second, strategic activities “relax regulations to get new projects started”, “provide a safe

haven for experimental programs” and “‘buy time’ for experimental programs” as confirmed by qualitative analysis of the interviews were ranked very closely by consultants with mean difference less than 0.1 points. Another merging occurred in “develop objectives and strategies for unofficial projects” and “locate and provide resources for trial projects”. These two activities were also ranked very closely to each other with mean difference of less than 0.1 points. As the discussed activities were identified to be overlapping with each other their discussion will be merged under the new names provided in the previous sections.

The most important strategic activity in the facilitating adaptability role was identified to be “provide direct support for new projects” (activities 6 and 7). From the thematic analysis of consultants’ answers to the relevant to this section questions it was identified that majority of them emphasized how important it is to “have middle managers support” in the strategies and objectives of the new initiatives. These strategies and objectives are usually developed in cooperation with consultants and similarly to the implementing deliberate strategy role it is especially important for the success of the project to make initiatives to be accepted internally. Digital transformation project would not benefit even if consultants come up with a brilliant idea but fail to convince middle managers of its worthiness. This idea will be rejected and never will reach implementation stage.

Second most important activity was “encourage multidisciplinary problem-solving teams”. Similarly, it was put on the second place by majority of consultants and only one consultant put it on the last place, while two consultants put it on the first. Multidisciplinary problem-solving was identified to be essential to digital transformation projects as suggested by the theory. The essence of digital transformation is merging of digital and business strategies and consultants confirmed that collaboration between business people and IT people is crucial for the success.

On the last place of relative importance consultants had put “defend new projects against established procedures” (activities 3, 4 and 5). Although it is placed last three consultants noted that this role is of especial importance on digital projects in other industries. However, on banking projects that they have worked on there was a lot less rigidity present and middle as well as top managers were prepared for the change. They quickly accepted and adopted new practices and were “ready to change established procedures”.

**Table 7. Consultants survey results of facilitating adaptability activities’ importance**

**Facilitating adaptability activities' importance**  
**(1 – not important at all, 7 – extremely important)**

<b>Project</b>	1. Encourage informal discussion and information sharing	2. Encourage multidisciplinary problem-solving teams	3. Relax regulations to get new projects started	4. Provide a safe haven for experimental programs	5. 'Buy time' for experimental programs	6. Develop objectives and strategies for unofficial projects	7. Locate and provide resources for trial projects
<b>P1</b>	4	4	3	2	1	5	6
<b>P2</b>	4	5	2	5	4	5	4
<b>P3</b>	2	3	3	2	2	5	6
<b>P4</b>	2	5	4	2	5	4	5
<b>P5</b>	1	5	2	3	3	6	4
<b>P6</b>	1	6	2	2	1	6	5
<b>P7</b>	1	4	2	2	5	5	5
<b>P8</b>	4	5	3	3	4	6	6
<b>P9</b>	3	3	4	2	2	5	5
<b>P10</b>	2	5	4	4	4	4	4
<b>P11</b>	1	5	5	5	2	5	5
<b>P12</b>	3	6	3	5	3	5	5
<b>MEAN</b>	2.3	4.7	3.1	3.1	3.0	5.1	5.0

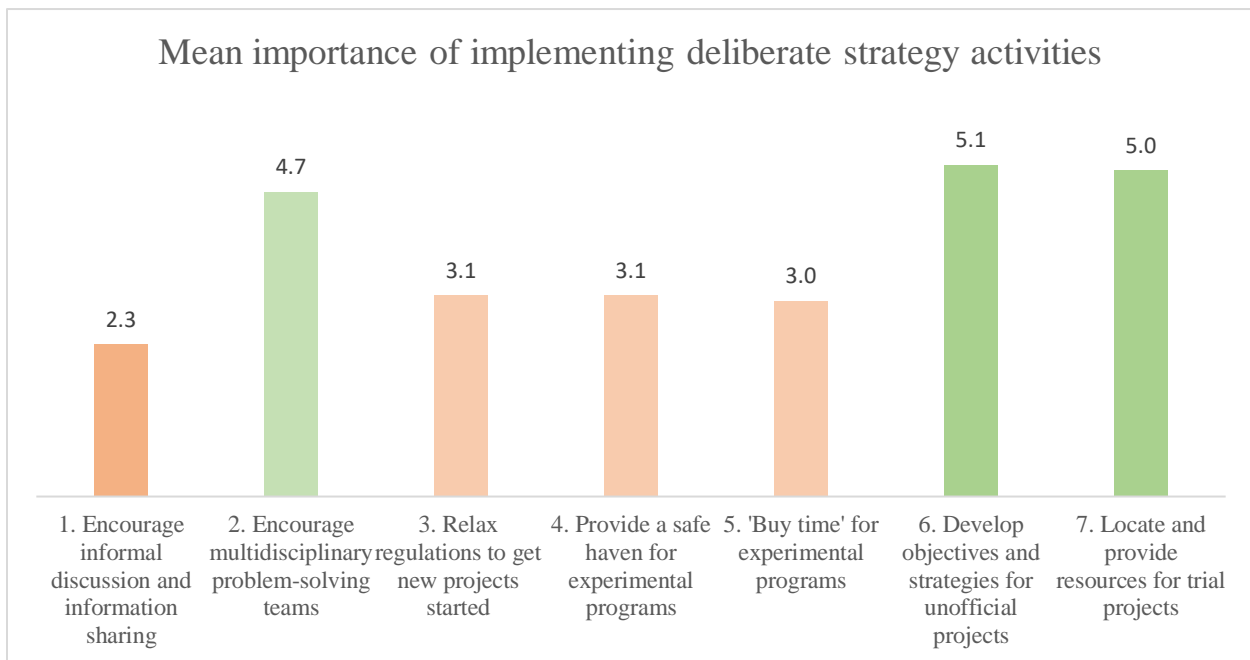


Fig. 5. Mean importance of middle managers' activities in facilitating adaptability role

### **3.4. Synthesizing information**

#### **Overlapping of activities in Synthesizing information**

In the synthesizing information strategic role similar overlapping of activities was identified as in the section of facilitating adaptability strategic role. It was hard for consultants to distinguish behavior of middle managers that related to assessment and communication of activities of banking industry players and other external changes relevant to the digital transformation projects. Sets of themes that were identified from consultants' answers to these two strategic activities were identical.

Changes in the macro environment (e.g. potential technologies to be applied) fell in the section of “communicate implications of new information” as on digital transformation projects what middle managers reported to their senior middle managers and top managers has already gone through analysis of consultants. Only the implications of this information reached higher level management.

Therefore, it was decided to merge activities “communicate the activities of competitors, suppliers, etc.” and “assess changes in the external environment” into the “assess and communicate changes in external environment” activity.

#### **Gather information on the feasibility of new programs**

All consultants stated that at the start of digital transformation projects they already come with an engagement proposal which includes an initial estimate of the project feasibility. It is then further assigned for verification by top management or senior middle management to other middle managers. Therefore, middle management input in verification of digital transformation feasibility is crucial for the project to even be started:

*“The usual process is that we present numbers to top managers and they then send it to either special department, if they have it, or assign feasibility check to the most relevant middle manager”.*

Another aspect of feasibility check that middle managers were identified to carry out is evaluation of ongoing consultants' initiatives propositions. Over the scope of digital transformation projects initiatives are being developed to a deeper level and new ones emerge

when internal client data and organizational processes are assessed. These propositions are initially assessed by consultants to identify whether they are feasible, but majority of consultants noted that this assessment is done in close collaboration with middle managers:

*“We sat together with middle managers from departments and presented them with data analysis that we gathered. Output from such meeting was usually very valuable as we made sanity checks and identified further development areas”.*

In general, the propositions that were assessed could be classified into two categories: introduction of new IT instruments (e.g. project management software, issue tracking software, developer environments) and organizational transformation (e.g. new reporting structures, hiring decisions, agile methodology applications). Middle managers were identified to participate actively in both.

### **Assess and communicate changes in external environment**

Similarly with the previous section about feasibility assessment, all consultants stated that for digital transformation engagement proposal already includes analysis of the external environment. It consists of competition performance of companies that have already undergone digital transformation both in Russia and outside of the country, trends in the consumption of banking products and banking clients' preferences and analysis of technological solutions' suppliers. Relative mix of these three components in the engagement proposal depends on the company where digital transformation is going to be done as it is based on the project scope and goals.

What middle managers usually do though is assessment of competitors who provide the similar consulting services. Competition for digital transformation consulting projects is fierce among the firms that have specialization in it. Middle managers have to choose the one company that suits clients' needs the best and is within the budget.

When consultants were asked whether middle managers exhibit their own initiative on projects to communicate to consultants or top managers activities of competitors and any other related to the industry player none of the consultants remembered such a case. However, several consultants noted that this might be due to the same reason of unawareness of internal organizational communication and other inner workings. It is quite possible that middle managers do exhibit such behavior and alert top management of digital transformational activities that are

happening in other banks, as an example. But such interactions were not spotted by consultants. One consultant was rather skeptical of whether this is happening:

*“I am sure that 80% of middle managers do not start or push to top management any projects related to digital on their own initiative by assessing competitors’ action”.*

This was not the uniform opinion though, as majority of consultant stated that even though they are unable to spot it, it is likely happening:

*“I did not see it myself, but most likely it is happening. Top management is usually busy dealing with high level things. It is in middle management perspective to spot and translate environment changes”.*

Another distinct case emergent with an answer to the question whether middle managers in the clients’ bank were attending industry-related conferences:

*“I do know that are different meet-ups about banking, but none of middle managers came up with initiative to go there”.*

This might be an evidence that on this particular project middle managers did not exhibit the behavior of assessing and communicating external environment information to upper level managers.

## **Communicate implications of new information**

Implications of new information was identified to be the crucial role in middle management behavior. In digital transformation projects similarly to any other consulting project upper level managers are closely monitoring the processes of formulation and implementation of strategies. This results in regular meetings of middle managers as well as consultants with client representatives, who are usually top managers or senior level managers. On these meetings middle managers translate the flow of the project from their perspective assuring top management that their goals are being achieved and project is being done according with stated objective and schedule. These behavior characteristics were identified to be uniform across all projects that were examined.

Additionally, on two cases middle managers were identified to proactively find external information that could be of use to the initiatives’ development relevant to digital transformation and further communicated these implications to upper level management with consultants’ support:

*“One client (middle manager) was very good at his topic and often came to us saying: -I know there is this tech that works like this and this”. Then we researched and discussed it together and proposed to leadership”.*

*“We had to come up with the hiring decision on a new and crucial engineering position in product department. Middle manager that was aware of this and suggested one of his friends that recently quit his job at a competitive bank to the senior middle manager. He ended up being hired”.*

## **Importance of Synthesizing information activities**

Importance discussion of Synthesizing information activities required the same adaptation as was used in the facilitating adaptability role. Activities 2 and 3 were identified to be overlapping with each other from the qualitative analysis of interviews and supported by quantitative analysis of surveys. Therefore, their discussion in this section will be conducted under the name “assess and communicate changes in the external environment”.

The most important identified activity was “communicate implications of new information”. Consultants stated that this is a core activity in middle manager behavior that is targeted on ensuring that upper level management has the appropriate information about the digital transformation project. Utilizing this information management can steer the project in the direction that supports its objective and goals and be aware of that the consultants are doing their job appropriable.

Second most important activity with a significantly lower importance was identified to be “gather information on the feasibility of new programs”. It is less important compared to the first one because thematic analysis of consultants’ answers suggests that feasibility analysis is being carried out by “consultants exclusively” or rarely “in collaboration with middle managers”. But nevertheless, consultants are the diver of this process and majority of work is being carried out by them.

Least important activity in synthesizing information role was “assess and communicate changes in the external environment”. Thematic analysis revealed similarly to the previous activity that external environment analysis is being carried “dominantly by consultants”. Even though several cases were identified where middle managers proactively contribute to these activities it was not of crucial importance to the success of the project.

### **Table 8. Consultants survey results of synthesizing information activities’ importance**



**Synthesizing information activities' importance  
(1 – not important at all, 7 – extremely important)**

<b>Project</b>	<b>1. Gather information on the feasibility of new programs</b>	<b>2. Assess changes in the external environment</b>	<b>3. Communicate the activities of competitors, suppliers, etc.</b>	<b>4. Communicate implications of new information</b>
<b>P1</b>	4	1	2	5
<b>P2</b>	5	1	2	5
<b>P3</b>	5	2	2	4
<b>P4</b>	2	2	1	4
<b>P5</b>	4	3	1	7
<b>P6</b>	2	1	1	7
<b>P7</b>	4	2	2	4
<b>P8</b>	3	2	1	4
<b>P9</b>	3	2	3	7
<b>P10</b>	2	2	1	7
<b>P11</b>	1	2	4	4
<b>P12</b>	2	1	1	4
<b>MEAN</b>	<b>3.1</b>	<b>1.8</b>	<b>1.8</b>	<b>5.2</b>

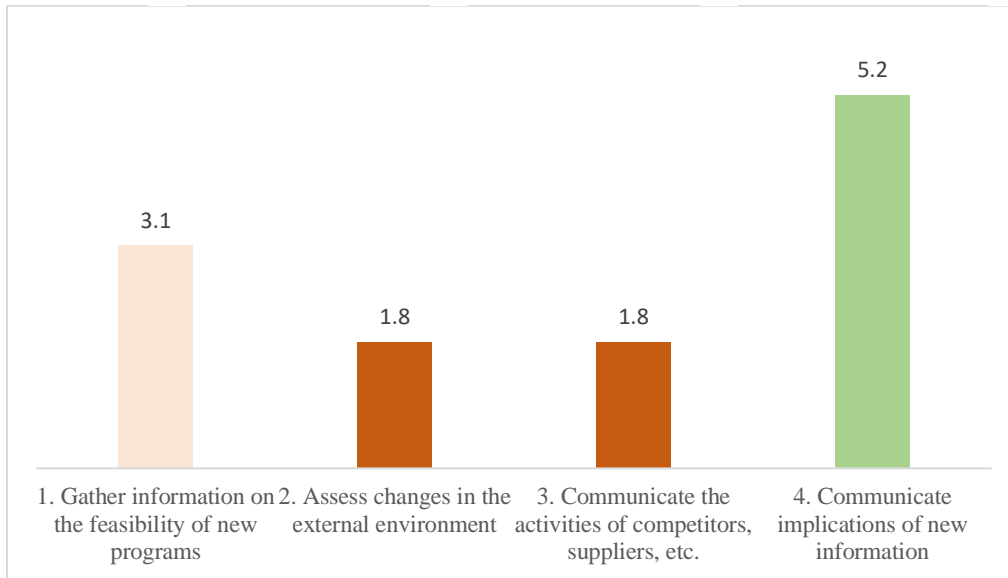


Fig. 6. Mean importance of middle managers' activities in synthesizing information role

### 3.5. Championing alternatives

#### Overlapping of activities in Championing alternatives

Overlapping was also identified in consultants' interviews related to the championing alternatives strategic role. Consultants were asked about strategic behavior related to the championing alternatives strategic activities in the following order:

1. Search for new opportunities;
2. Justify programs that have already been established;
3. Justify and define new programs;
4. Evaluate the merits of new proposals;
5. Propose programs or projects to higher level managers.

On strategic activity "evaluate merits of new proposals" all consultants noted that they have already answered this question in the previous two sections. Further thematic analysis of interview transcripts revealed that benefits of proposals were assessed by middle managers as a part of "justification" process in activities 2 and 3. These merits were assessed both for new and already established programs. Therefore, it was decided to exempt activity number 4 and include discussion of it in activities number 2 and 3.

### **Search for new opportunities**

Consultants stated that searching for new opportunities on the digital transformation project is usually their part of the job and not middle managers. Consultants are being hired to identify, evaluate, formulate and implement opportunities that clients' organization has.

When asked whether there is contribution from middle managers on identification of these new opportunities, consultants did acknowledge their impact:

*"A lot of ideas were generated on the meetings with middle managers. Either personal when discussion workflow happened or regular group meet-ups".*

*"There was a middle manager who found out interesting data himself and came to us to discuss whether it's worth investigating".*

As a follow-up question regarding this activity 3 consultants were asked what percentage of middle managers ideas ends up being included in the final implementation plan. Consultants gave three numbers: 5%, 5% and 10%, while noting that it is hard to distinguish between personal impact of middle manager and an opportunity that emerge through a normal workflow discussion.

In general, it can be stated that on the projects that consultants worked on this strategic activity was mostly in the scope of their responsibility and not middle managers. Though, on some

cases they came up with their own initiative to discuss implications of new information that they got where there was a potential to turn it into a new opportunity.

### **Justify and define programs that have already been established**

In this section initiatives and programs that consultants proposed to top management or senior middle management, depending on who was the owner of the project, as a part of initial consulting proposal or emerging programs with exclusive consultants' contribution without middle management participation will be discussed. The latter was the minority and happened in only one specific case when client company did not have any middle manager with the expertise in the initiative. Vast majority of the cases related to in this section and fitting "already have established" fall into the former category.

Consultants noted that even before the start of the consulting engagement leadership assigned feasibility check to justify whether the digital transformation proposal is worth pursuing within the target client's company. This justification was carried out by groups of middle managers when they assessed merits of the proposals:

*"Justification is in the scope of middle managers, tops do not have time for it"*

Definition of the initiatives to be carried out after the start of the project was also done by consultants with close collaboration with senior middle managers. It differed on the set of initiatives what middle managers were involved:

*"We discussed what workflow tools to implement to cross-functional teams. Product owners provided us with input of what they feel most comfortable working with and then we discussed alternatives".*

*"There were questions on how conflicts are going to be resolved under the new organizational structure with new processes. We communicated both with HR and new product owners on these topics".*

All consultants noted that participation of middle managers was important in justification of these initiatives as their buy-in in them would later be translated to implications to senior level management approving or challenging consultants' work.

However, one case was identified where top management did not believe in digital transformation that was happening in the bank and it translated to the majority of middle managers.

On this case was one middle manager who believed in the project despite the lack of vision from top management and pushed initiative himself:

*“There was one middle manager who helped us justify new organizational processes immensely. We did not have much support from others, but he was pushing it on the client side. That was a lot of help to get through all the friction”.*

### **Justify and define new programs**

Apart from already established programs that were introduced at the beginning of the consulting engagement a lot of opportunities emerged during the actual work. Participation of middle managers in justification of these initiatives and programs was crucial to ensure their acceptance by leadership:

*“In the majority of the cases we could not expand the scope without it being justified by middle management”.*

Some consultants noted that whether middle managers actually hear their subordinates or not and participate in the justification of programs that they propose depends largely on the corporate culture of the bank:

*“In some banks this is already a part of the culture and middle management actively monitors input from junior middle managers and line managers. In others it is not the case though. If you are low in the organizational chain it is very likely that no one pays attention to what you are saying. More often though, if you do not do it – you will be fired”.*

Another consultant shared a story where justification was done poorly by involved middle management:

*“I went with the initiative first to the leadership to get their approval of it. Then to middle managers with the aim of bringing it to life. Middle managers evaluated it and were eager to do it. But then initiative overlapped with another activity in the bank and leadership decided to cancel it. I expected middle managers to fight to it and find ways to reschedule event but instead their attitude was more like: -No means no, we do not care. I had a feeling that they were actually happy to have less work to do”.*

This was the single case when middle management failed at justification of new proposals. In general, it was done properly and contributed to the consultants’ part of work as mentioned by most of the consultants.

## **Propose programs or projects to higher level managers**

Proposition of initiatives developed over the course of digital transformation projects was identified to be done in collaboration of middle managers and consultants. All consultants noted that they are not sure whether such activities are happening without their participation related to the scope of digital transformation. This is explained by the fact that if consultants are already on the engagement with the bank than it is expected from them to drive the change process and if middle manager comes up with an opportunity that benefits the project in general it goes through the consultants.

One consultant had an experience of two contradicting behaviors of middle managers during the digital transformation projects:

*“There were two contradictory cases in two banks. One is when director understands the value of the project and pushes it to top management which was initially skeptical and the other when project went from top to middle and middle uses any ways to push it back saying: -No, it cannot be done, it does not work like this, what is the value?”.*

On another case consultant also had a negative experience with lack of initiative from middle managers to propose ideas that emerged from bottom:

*“Sometimes I felt that there is not enough visibility and information does not get to top management and it is lost in translation. That possibly happened due to two reasons. First, they did not think that such details are important. Second, they did not want to look like "team came up with initiatives, not me". When I became a product owner, I felt like middle managers translated a message "why does she even step up?". Middle managers were not ready to receive feedback and defend our ideas. Partly because of leadership, as tops did not want it and thus middle managers did not want it too”.*

Majority of consultants stated that one of the parts of digital transformation on their projects was implementation of project offices that would enable middle managers to propose projects to upper level management in a more convenient way. They stated that middle managers already were doing it, though more senior middle managers close to the level of CEO minus one:

*“It could have been done better. Middle managers already have started projects that they have been later proposing to leadership. Leadership either were accepted or challenged and*

*depending on this they continued working receiving additional resources or modified the proposition. Now it will be more formalized and more convenient for them”.*

On another case middle manager proposed a new project to his upper level managers on his own notifying consultants:

*“Middle was digging the data and found some interesting information. He wrote a letter to his bosses saying: -Hey, look, it could be done like this and this. What do you think? And the boss then forwarded the letter to consultants”.*

This example shows that even though these interactions between middle managers and their direct upper level managers happen without consultants’ notice, sometimes they become aware of it.

### **Importance of championing alternatives activities**

As stated in the “overlapping of activities in Championing alternatives” section, discussion of “evaluate the merits of new proposals” importance will be included in activities 1 and 3.

First importance place was shared between “justify and define new programs” and “propose programs or projects to higher level managers”. Thematic analysis of consultants’ interviews revealed that these two activities are crucial in getting the “leadership approval” of emerging initiatives during the digital transformation projects. Due to the usually large scale of such projects not everything can be approved by top management at the start of the consulting engagement. Thus, all the emerged over the scope of the project initiatives, programs and projects need to be reevaluated and justified by middle managers of the bank. Justification is conducted in cooperation with middle managers and client’s top management is much likely to support them if middle managers themselves support the initiative and participated in its justification process.

On the second place consultants have put “justify programs that have already been established”. This activity is also crucial of the success of the project as leadership of the banks relies on middle management information when deciding whether the digital transformation project is worth pursuing in the first place. And if it is worth what activities are the most important ones allowing objective prioritization.

Majority of consultants had evaluated “search for new opportunities” strategic activity as “not important at all”. Thematic analysis allowed to identify the reasoning for it. Almost all consultants in the interviews had noted that new opportunities identification is in the scope of their

work and not middle managers. Though, their support in provision of consultants with required data and access to employees is crucial it falls in the role of implementing deliberate strategy. Therefore, even though cases were identified where middle managers exhibited their own initiative on new opportunities identification it is of less importance because can be carried out by consultants.

**Table 9. Consultants survey results of championing alternatives activities' importance**

<b>Project</b>	<b>Championing alternatives activities' importance (1 – not important at all, 7 – extremely important)</b>				
	1. Search for new opportunities	2. Justify programs that have already been established	3. Justify and define new programs	4. Evaluate the merits of new proposals	5. Propose programs or projects to higher level managers
<b>P1</b>	2	2	6	5	6
<b>P2</b>	1	4	5	7	4
<b>P3</b>	1	5	7	3	6
<b>P4</b>	2	2	5	5	7
<b>P5</b>	4	3	6	5	6
<b>P6</b>	2	5	5	5	5
<b>P7</b>	2	3	6	7	5
<b>P8</b>	1	5	5	3	5
<b>P9</b>	3	4	4	5	6
<b>P10</b>	1	5	7	3	5
<b>P11</b>	2	6	6	4	5
<b>P12</b>	1	6	5	7	7
<b>MEAN</b>	1.8	4.2	5.6	4.9	5.6

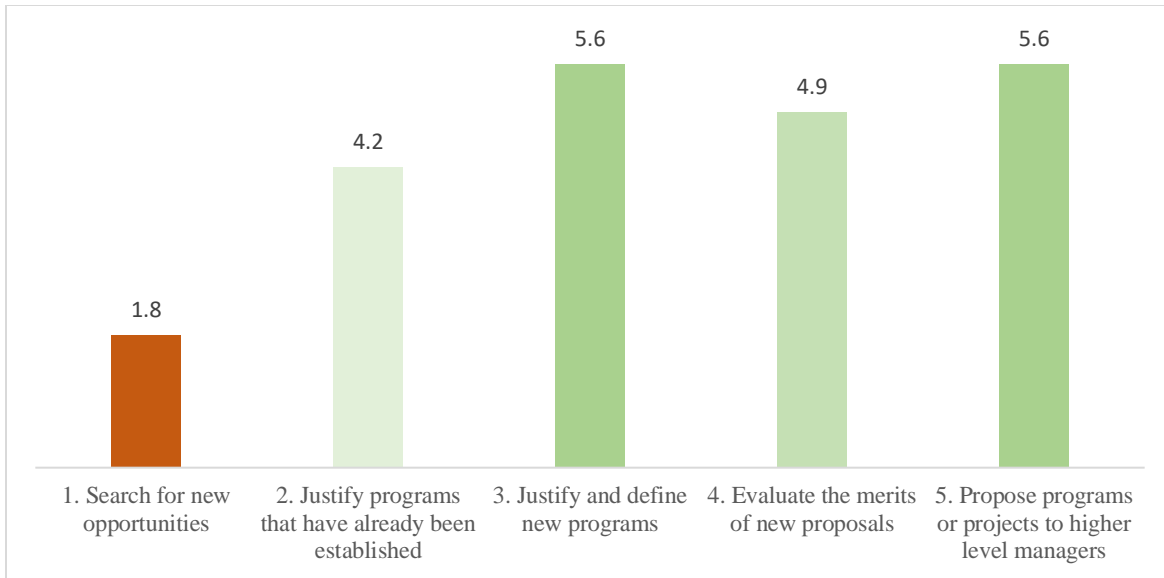


Fig. 7. Mean importance of middle managers' activities in championing alternatives role

### 3.6. Leadership

The last strategic role that was discussed with consultants was leadership. This was the only role that was identified to be of specific importance to the digital transformation projects as stated in the literature review (Kane, 2019).

Leadership strategic activities are distinct compared to the ones described in the previous sections. They are not connected directly with strategy formulation and implementation processes and thus are treated as facilitating ones. They are targeted at support of other strategic activities and even act as their enablers.

In the following sections consultants' answers to the leadership-related questions will be analyzed.

#### **Direction – providing vision and purpose**

Direction leadership activity was identified to be one of the most crucial ones in the section of leadership. This finding confirms Kane's (2019) research on digital transformation and results of his survey.

Consultants stated that direction activity depends a lot on the transferability. Sometimes on the digital transformation projects top management already had the necessary vision and successfully translated it to middle management. It was then translated by middle management to



line managers and specialists further down on organizational hierarchical chain. This interaction was identified to be very similar to the “sell top management initiatives to the subordinates” strategic activity from the “implementing deliberate strategy” strategic role of middle management.

However, this transfer sometimes did not occur. There were two reasons for it identified through the thematic analysis of the interviews.

First, vision and purpose of the project were not shared to middle managers when top management themselves did not have it. Middle managers did not understand fully what the project is about, why it is important and what is its end goal:

*“Middle managers understood where to go but they did not understand how to get there and how to resolve blocks. However, this was only related to plan. There was not a vision like “we want to be the best digital bank”. They just had a plan so that top managers are satisfied with them sticking to this plan. And they called this “vision””.*

Consultant suggested that reasoning for such middle management behavior was both lack of previous experience on digital transformation projects and lack of technical knowledge as well as lack of top management shared vision.

Second, when top management did not transfer the vision themselves it was the goal of consultants to ensure that they have it:

*“On most cases middle managers understood the project’s vision. When they did not have it – we had to step in and explain”.*

The same consultant stated though that the efficiency of vision transfer from consultants to middle management was lower than from top management to middle management:

*“It was way easier to work on project (in another bank) when top management had already explained and shared this vision to middles”.*

Another consultant shared his view on the percentages of middle managers who exhibit the direction activity on the digital transformation projects and those who did not:

*“I believe that 20% have no idea what is happening in the bank, 20% are doing only the things that consultants tell them to do without having any vision or purpose behind it and the majority, 60% actually have the vision, but even in these cases it is rather short-termed and framed in the “what can be done right here right now to achieve immediate results” form”.*

In general, though, the majority of consultants did not have problems with middle managers not understanding the purpose of the transformation happening.

### **Inspirational leadership – getting people to follow**

All eight consultants stated that this leadership activity is directly related to the previous one:

*“It is impossible to inspire people if you do not have the vision for it”.*

*“Inspiration comes together with the vision and purpose in my opinion. Though some managers are more successful in it, while others less”.*

Thematic analysis of answers revealed that inspiration was also critical to the success of the projects due to the following reasons. First, inspired employees were much more likely to closely collaborate with consultants and less likely to push away tasks that were asked to do. Second, result of the tasks were of superior quality compared to the results from ones who were forced to do it by their middle and line managers. Third, inspired employees were more likely to come out with initiatives that could benefit the project and that are then further researched and analyzed by consultants.

Success of the inspirational leadership was identified to be related with personal capabilities of middle managers:

*“We explained the vision (of the transformation) to the director of infrastructure maintenance department and he seemed to agree with it fully. However, the delivery to his line managers was very uninspiring. It is understandable, he became the director because he was an expert at his topic, not because he was a brilliant inspirational leader”.*

There is a lot less trust to consultants within the banks compared to the middle managers with long tenure and thus they are unable to translate the vision to line managers covering the unsuccessful attempt by the director.

On another case middle managers did exhibit inspirational leadership when they were hiring new employees which is a sign of them having the necessary vision. However, it was not later transferred into the actual workflow:

*“There were some inspirational attempts at hiring. But when people were already hired it was like -We have a sprint. Work on it. The did not provide direction and vision of the future*

*product that could inspire engineers. No dialog was established between engineers and middle managers and they did not try to guide engineers where to go”.*

On another consultant’s case he encountered a middle manager who was initially aggressive towards consultants who then changed her mind and inspired her employees to collaborate with consultants:

*“Her (middle manager’s) initial relation to us was negative as she did not work with us thoroughly. Project was long and after some time after she understood that we create value (for the bank). She then took our side and inspired her employees to collaborate with us and supported all the initiatives and helped with their implementation”.*

In general, it was concluded that even though inspirational leadership is very beneficial if it is expressed by middle managers, but not critical as employees are often willing to collaborate with consultants even when no one inspired them.

### **Influence – persuading and influencing stakeholders**

Influence was identified to be of less importance compared to the previous leadership activities. Persuasion and influencing on digital transformation project were mostly done by consultants who were hired to transform banks and therefore it was in their scope to influence key stakeholders of the bank to accept the proposed changes.

Influence was relevant to middle managers when they had to push initiative of the digital transformation to the bottom to their subordinates. Though, inspiration was usually used as a way of such influence and therefore overlapping was identified through the thematic analysis of the consultants’ answers.

Four consultants shared the same vision that persuasion is not working well in digital-related projects including digital transformation:

*“Digital is always something new, unusual and if the employee will just do his job it would not lead to satisfying results most likely. On one case I came to a line manager asking him to get this and this data. He asked us to sit down and explain to him what exactly is needed and why because otherwise he would not do it correctly. We discussed and then he was like: Okay, you need this, this and this. I will do it right now”.*

Therefore, downward persuasion without explaining the reasoning behind the work is likely to not work in digital transformational projects. Though, correctly formed influence is indeed important as it allows the work to be done.

### **Business judgement – making decisions in an uncertain context**

Business judgement was identified to be crucial for digital transformation projects. All consultants noted that due to the high degree of uncertainty present over the scope of usually rather long projects it is absolutely required that middle managers are able to make decisions of good quality without all the information for a 100% correct one. It was stated by consultants that gathering all the information is often either completely impossible because no one on the market has this data and it cannot be obtained without conducting experiment in the bank or it would require too much time and resources. Therefore, when making a decision about particular initiative middle managers had to have a proper business judgement through their experience embracing the uncertainty and be willing to experiment to obtain the early results.

As one of the key benefits of digital transformation in the bank on consultant noted the new KPI system that provided middle managers with much more flexibility on how they are able to spend the resources and creating a space for more willingness to experiment and actually use their business judgement without the fear of being punished for it:

*“They (middle managers) have to prove decisions to tops. If you could not explain these decisions having all the sufficient information, then there were questions. The problem laid in regulations. They did not foster any experimentation culture”.*

Another consultant criticized the ability of middle managers to make decisions in the uncertain context that they have exhibited on the project:

*“In these cases, it was very hard to talk for them (middle managers). They tried to reschedule meetings to the point when they will get information. It was not like "here are the scenarios, let's think what is priority". Rather "There is no data right now, let's talk when it will be there"”.*

Third distinct case was when middle managers were separated by their business judgement abilities. Some of them were successful at it while others lacked it:

*“Both cases were present. Sometimes they (middle managers) said "we need to calculate everything and then make a decision". On one project guy spotted inefficiency and reported to*

*middle manager. However, middle manager was like "let's investigate it ourselves, get all the information and then give it to consultants when it will be 99% ready. But more often employees wanted these changes and understood that it is impossible to get all the information. On another case we could not get all the data and started using scenarios and some middle managers really liked this idea and supported the pilot, though others did not understand what the value will be in the end and said, "we are used to the old approach, let's not do it"*.

## **Execution – empowering people to think differently**

Thematic analysis of consultants' answers revealed that execution is exhibited by middle managers when they are explaining the benefits and purpose of the new approach to their subordinates. Digital transformation assumes a completely new workflow approach that in the end affects all the employees in the organization. Agile workflow paradigm is very different compared to the way banks are doing business traditionally. New ways of working assume the new ways of thinking and it is in the scope of middle managers to articulate how it is going to be done in the new environment.

On majority of the cases middle managers successfully exhibited this leadership activity with the help of Agile coaches that consultants brought with them or hired for the bank:

*"Whether middle managers do this or not directly impacts whether the project will be successful or not. When you are implementing Agile you have to be sure that your employees understand how they have to think. Example: if you do not explain to your subordinates why they need to put information in Trello most likely there will not be any entries there. Middle managers did successfully explain that to their employees and it ensured that the approach will be used"*.

The magnitude of execution activities though differed between the projects:

*"On one project everyone got the new approach fast and it went very well from there. Middle managers quickly engaged their subordinates and we had very little friction when they started working using sprints. On the second project people did not understand for a long time what is required from them and how they should work. We had to organize additional trainings for middle managers and explain to them how they should translate the approach"*.

## **Innovation – creating conditions for people to experiment**

Agile approach assumes a degree of experimentation and as it is a part of digital transformation in banking fostering experimentation is one of the leadership activities of middle managers.

All consultants stated that they did not see middle managers deliberately fostering experimentation nor in consultants they were working with nor in their direct subordinates. Fostering experimentation was already in place in some banks that consultants had projects with:

*“There are KPIs for participation in project-related activities. Middle managers have to start them, and line managers have to participate in them. Though, not all employees are engaged in this. Most likely this was a common initiative from middle managers and consultants during some of the previous projects”.*

Another consultant noted that she tried to push similar initiative to middle managers, but they resisted it:

*“I tried to push 20% (20% of time designated to experimental tasks, approach used most famously in Google) to Product Owner and he almost agreed, but then Christmas period started, and it stopped going forward. After we left the project no one wanted to push it forward”.*

Resulting relation to the initiative was likely due to the negative relation to the digital transformation that persisted in the minds of both middle and top management of the bank:

*“My project started in the middle of Agile transformation of the main bank. There were also Agile coaches from our company coaching middle managers and tops. But they were like “Okay, you will do something right now and get out of here”. Not actively involved. “Yeah, that’s cool, maybe one day, you know””.*

## **Talent building – supporting continuous self-development**

Regarding the talent building activity seven of the interviewed consultants struggled to come up with the answer whether they have spotted such behavior from middle managers. Consultants have noted that if this behavior is present on digital transformation projects from middle managers towards their subordinates most likely it goes unnoticed by the consultants.

One other consultant though said that middle manager on their projects pushed line managers to visit conferences and meet-ups that were happening during the time of the project:

*“Tech lead on the project was trying to push people to go to conferences. I do not know whether they went in the end as my project ended by that time”.*

Therefore, talent building behavior was indeed explicitly present on one of the studied projects. However, there was approving or disproving data from other consultants. Talent building activity can be treated as an activity which existence cannot be confirmed due to the limitations of the chosen methodological approach.

### **Collaboration – getting people to collaborate across boundaries**

Collaboration was also identified as an essential part of applied Agile methodology. On the majority of the projects that had involved organizational changes middle managers with the support of consultants had formed cross-functional teams. Middle managers actively supported these changes as they provided them with more control over how the end products that they are developing will look like:

*“Middle managers who were managing their own P&L (profit and losses) encouraged the initiative of business and IT functions integration. They now had an opportunity to have feedback from developers on the 2 weeks basis. In the previous approach they had to submit a requirements list to the third-party IT developer and wait for a year to receive a product that they did not like and that did not fit departments goals anymore”.*

Two distinct cases emerged when analyzing consultants’ answers to the questions related to this activity.

In one, which was stated to happen by three consultants, middle managers were introduced to the practice of cross-boundary and cross-functional collaboration by consultants. Middle managers in turn supported the new approach and translated it further to their subordinates and even pushed cross-functional project to upper level management:

*“Fundament for cross collaboration was created by our (consulting) company. We were gradually replacing our engineers with hired ones. And the practice to use cross-boundary meetings persisted. Middle managers supported this part of the culture”.*

However, on one project consultant had noted that middle managers did not use the same approach when solving their own tasks while still being supportive of it being used on the lower organizational levels:

*“They had a position “If it works, do not touch”. But they did not suggest anything that improved productivity and collaboration or used the similar approach with their peers”.*

In the second, which was confirmed by five consultants, the practice of cross-boundary and cross-functional collaboration was already in place when the digital transformation started. Middle managers were used to this workflow approach and were supportive of its further development using the Agile methodology:

*“Middle managers were already starting and pushing to the top cross-functional projects. They did support our propositions of how to simplify and enhance the existing related processes that were in place”.*

### **Importance of leadership activities**

In the resulting ranking of leadership activities first place was assigned to the “direction” leadership activity. Thematic analysis revealed that consultants expected middle managers to “share the vision and direction” of digital transformation projects with their subordinates. Having this vision was important to ensure the collaboration of employees with consultants.

Second most important activity was identified to be “business judgement”. Digital transformation projects involve a high degree of uncertainty with them and being able to make a decision in such environment is the dividing point between having any work done at all and none of the progress. As one consultant stated:

*“Business judgement seems to be the only activity that middle manager cannot delegate to someone else. Without it his projects and initiatives will not succeed”.*

Third place was taken by “innovation” leadership activity. It was rated very closely with “business judgment” and reason for that as thematic analysis suggests the connection that business judgment and innovation have in relation to “uncertainty”. The only way to gather information in the new environment that digital suggests is by conducting experiments. Therefore, for middle managers to make appropriate business decisions it is absolutely required from them to foster innovation culture both within themselves and in their subordinates. Having this innovation culture would allow them to test scenarios and hypothesis fast acquiring new knowledge.

On the fourth place consultants had put “execution”. This activity is also interconnected with “innovation” and thus they were put rather closely together. Execution assumes that middle managers guide their employees and teach them how to think differently in the new environment when it is needed. Consultants stated that whether middle managers have this activity or not directly impacts the success rate of the project. However, this seems to be the case only in



situations where line managers and employees do not get the new approach fast on their own, which happened on some projects.

On the fifth place is “inspirational leadership”. This was a rather surprising result as author expected it to be the second after “direction” as they are closely tied together. Further analysis of the rankings confirmed this assumption as all the consultants had put “direction” just one place higher than “inspirational leadership”. Inspirational leadership can be treated similarly as “execution” in a sense that it serves as an enabler of the whole digital transformation and ensures the necessary in such projects imitative from the bottom.

“Collaboration” has taken the sixth place. Agile methodology stimulates cross-boundary collaboration and eases these interactions. One possible answer to the question while consultants had put it in the bottom half of activities is that such culture already existed on the majority of the projects they have been working on. Middle managers already had the necessary qualities and relevant behavior and thus consultants decided that it does not need further improvement.

Seventh place was occupied by “talent building”. As stated in the section about this leadership activity consultants did not have a chance to notice this behavior due to its nature, except of two cases. This might be the reasoning to put it on the second to last place as it did not have impact on the projects they were working on.

Last eighth place was taken by “influence”. This finding is very contrary to the methodology suggested by Kane (2019). In his research it was posed as a second most important activity in this strategic role. The possible explanation supported by thematic analysis of interviews is that persuasion and influencing to the key stakeholders is mainly “carried out by consultants” themselves during the digital transformation projects. Middle managers act as supporters in these negotiations if they support the initiatives that consultants propose.

**Table 10. Consultants survey results of leadership activities’ importance**

Project	Leadership activities' importance (1 – not important at all, 7 – extremely important)							
	1. Direction	2. Inspirational leadership	3. Influence	4. Business judgement	5. Execution	6. Innovation	7. Talent building	8. Collaboration
P1	6	4	1	7	6	7	3	4
P2	7	7	3	5	6	5	1	4
P3	4	2	1	5	6	5	4	4
P4	7	4	2	6	4	5	2	4

<b>P5</b>	4	5	3	5	3	7	4	3
<b>P6</b>	6	2	3	6	3	2	2	2
<b>P7</b>	5	7	2	4	3	4	3	2
<b>P8</b>	5	2	2	6	5	7	1	6
<b>P9</b>	5	4	1	6	5	4	1	3
<b>P10</b>	7	4	2	4	4	5	2	6
<b>P11</b>	7	6	3	6	3	6	4	3
<b>P12</b>	7	5	3	7	7	6	4	3
<b>MEAN</b>	5.8	4.3	2.2	5.6	4.6	5.3	2.6	3.7

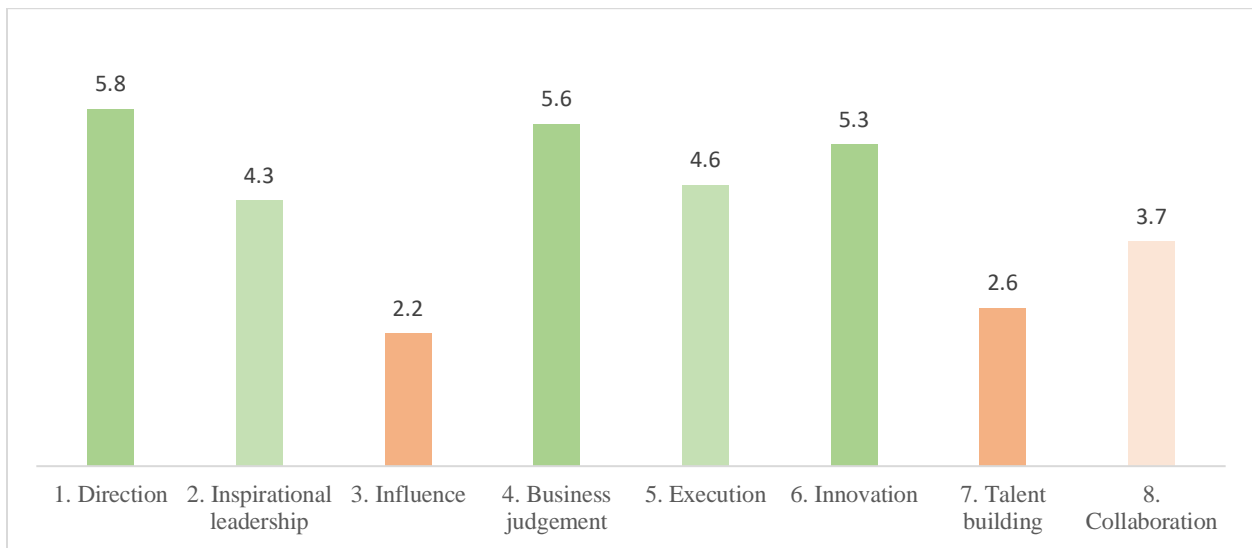


Fig. 8. Mean importance of middle managers' activities in leadership role

### 3.7. Importance of strategic roles

The most important strategic role overall was identified to be “implementing deliberate strategy”. This finding is in line with the analysis of activities' importance in this role as only in “implementing deliberate strategy” 2 activities: “sell top management initiatives to subordinates” and “implement action plans designed to meet objectives” scored over 6 points. None of other activities in other roles scored that high. Implementing deliberate strategy and especially those two highly ranked activities seem to be the crucial enablers of digital transformation. Consultants can develop perfect strategic plans and initiatives, but they would not work without middle managers actually implementing them as well as pushing and selling them down to their subordinates.

Second most important strategic role was identified to be “leadership”. Consultants had stated that this role is a crucial enabler of strategy formulation and implementation. Three highest

ranked activities in this role: “direction”, “business judgement” and “innovation” are the crucial supporters that enable middle managers to successfully formulate, implement and sell digital transformation strategy.

Third importance place was taken by “championing alternatives”. Two highest ranked activities “justify and define new programs” and “propose programs and projects to higher level managers” were identified to be the key activities that support propositions that were developed in collaboration between middle managers and consultants. Higher level managers are much more likely to support new strategic initiatives if they are backed up by their subordinate middle managers.

On the fourth place was put “facilitating adaptability” strategic activity. The merged strategic activity “provide direct support for new projects” was ranked over 5 points in importance and was identified to be very important to secure “buy-in” from middle managers to consultants’ propositions.

Last place was taken by “synthesizing information” strategic role. Even though “communicate implications of new information” seemed to be very important for acceptance of digital transformation initiatives by higher level managers, other activities in this role were identified to be significantly less important which was supported by the overall low importance ranking of this role.

**Table 11. Consultants survey results of strategic roles’ importance**

Project	Strategic roles' importance (1 – not important at all, 7 – extremely important)				
	1. Implementing deliberate strategy	2. Facilitating adaptability	3. Synthesizing information	4. Championing alternatives	5. Leadership
P1	4	5	1	7	6
P2	7	5	1	3	5
P3	5	3	1	5	5
P4	7	5	2	2	6
P5	7	2	2	3	6
P6	4	5	2	5	4
P7	7	3	2	6	7
P8	5	4	1	4	4
P9	7	2	1	2	6
P10	3	5	2	7	2

<b>P11</b>	4	5	3	2	6
<b>P12</b>	6	5	2	5	7
<b>MEAN</b>	5.5	4.1	1.7	4.3	5.3

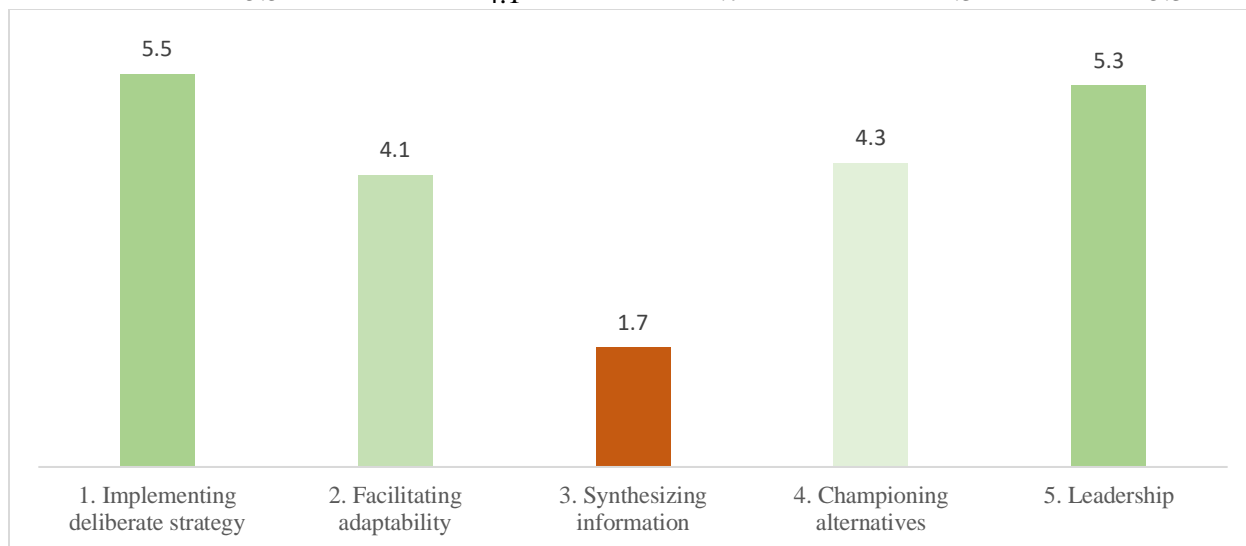


Fig. 9. Mean importance of middle managers' strategic roles

## Chapter 4. Discussion of findings and implications

In the final chapter of the thesis discussion of the main findings of the research will be provided. Research questions will be answered with relation to the theoretical background of the current research. In the following sections theoretical and practical implications will be provided as well as suggestions for the future research.

### 4.1. Summary of the results

Consultants' answers about middle managers strategic behavior on digital transformation projects were analyzed in order to answer the stated research questions in the Chapter 3. Findings. This section will summarize the findings and present answers to the stated research question.

RQ1: What middle management strategic roles are applied in digital transformation projects?

To answer the first research question a summary Table 12 was created.

**Table 12. Presence of strategic roles**

Strategic role	# of projects where role was present (out of 12)
Implementing deliberate strategy	12
Facilitating adaptability	12
Synthesizing information	12
Championing alternatives	12
Leadership	12

Unsurprisingly and consistently with the previous strategic management research on the behavior of middle managers they do exhibit strategic activities associated with each role derived from the theoretical background.

RQ2: What key activities are associated with each middle management strategic role in digital transformation projects?

To answer the second research question a summary Table 13 was created.

**Table 13. Presence of strategic activities**

<b>Role</b>	<b>Framework activity</b>	<b># of projects where activity was present (out of 12)</b>
IDS	1. Sell top management initiatives to subordinates	7
	2. Translate goals into action plans	10
	3. Translate goals into individual objectives	10
	4. Implement action plans designed to meet objectives	10
	5. Monitor activities to support top management objectives	11
FA	1. Encourage informal discussion and information sharing	--
	2. Encourage multidisciplinary problem-solving teams	11
	3. Relax regulations to get new projects started	9
	4. Provide a safe haven for experimental programs	9
	5. 'Buy time' for experimental programs	9
	6. Develop objectives and strategies for unofficial projects	12
	7. Locate and provide resources for trial projects	12
SI	1. Gather information on the feasibility of new programs	12
	2. Assess changes in the external environment	--
	3. Communicate the activities of competitors, suppliers, etc.	--
	4. Communicate implications of new information	12
CA	1. Search for new opportunities;	9
	2. Justify programs that have already been established;	12
	3. Justify and define new programs;	11
	4. Evaluate the merits of new proposals;	12
	5. Propose programs or projects to higher level managers.	11
LS	1. Direction	9
	2. Inspirational leadership	7
	3. Influence	11
	4. Business judgement	8
	5. Execution	3
	6. Innovation	0
	7. Talent building	--
	8. Collaboration	11

In sum, each strategic activity was identified to be present at least on one project. The only two strategic activities with a low identification rate were the leadership activities “execution” and “innovation”. Former appeared only on three projects and the latter was identified on none.

Additionally, it was impossible to confirm existence of strategic activities “encourage informal discussion and information sharing”, “assess changes in the external environment”, “communicate the activities of competitors, suppliers, etc.” and “talent building” as they are related to the inner workings of consulting companies’ clients. Consultants were not exposed to such behavior of middle managers and therefore the lack of their assessment should be treated as a limitation due to the chosen methodological approach.

RQ3: How important is each middle management strategic role for the successful implementation of digital transformation projects?

Strategic roles importance was assessed in the section 3.7. Summary of the findings is presented in the Table 14.

**Table 14. Summary of strategic roles’ importance**

<b>Role</b>	<b>Mean importance (1 lowest - 7 highest)</b>	<b>Reasoning</b>
Implementing deliberate strategy	5.5	Middle managers were identified to be crucial for implementation of initiatives and consultants are unable to do it solely
Facilitating adaptability	4.1	Support of middle manager in initiatives development is required to ensure that they will promote initiatives to higher level managers
Synthesizing information	1.7	Consultants are acting as synthesizers of information on such projects and thus middle managers support is not required

Championing alternatives	4.3	Consultants require middle managers collaboration to promote initiatives to higher level managers
Leadership	5.3	Leadership was identified as a key supporting role that enables successful strategy formulation and implementation

RQ4: Which middle management strategic activities within each strategic role are important for the successful implementation of digital transformation projects?

Strategic activities importance was discussed in the relevant subsections of the findings section and summarized results are presented in the Table 15.

**Table 15. Summary of strategic activities’ importance**

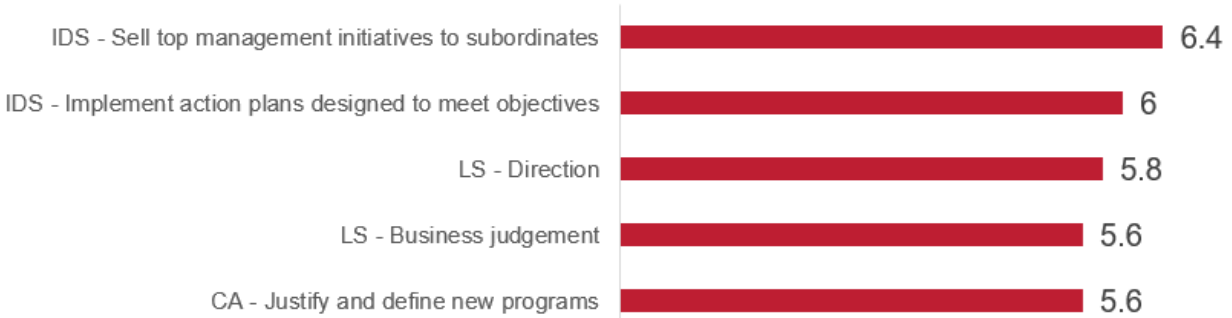
<b>Role</b>	<b>Framework activity</b>	<b>Mean importance (1 lowest - 7 highest)</b>
IDS	1. Sell top management initiatives to subordinates	6.4
	2. Translate goals into action plans	2.6
	3. Translate goals into individual objectives	4.9
	4. Implement action plans designed to meet objectives	6.0
	5. Monitor activities to support top management objectives	4.9
FA	1. Encourage informal discussion and information sharing	2.3
	2. Encourage multidisciplinary problem-solving teams	4.7
	3. Relax regulations to get new projects started	3.1
	4. Provide a safe haven for experimental programs	3.1
	5. 'Buy time' for experimental programs	3.0
	6. Develop objectives and strategies for unofficial projects	5.1
	7. Locate and provide resources for trial projects	5.0
SI	1. Gather information on the feasibility of new programs	3.1
	2. Assess changes in the external environment	1.8
	3. Communicate the activities of competitors, suppliers, etc.	1.8
	4. Communicate implications of new information	5.2
	1. Search for new opportunities;	1.8



CA	2. Justify programs that have already been established;	4.2
	3. Justify and define new programs;	5.6
	4. Evaluate the merits of new proposals;	4.9
	5. Propose programs or projects to higher level managers.	5.6
LS	1. Direction	5.8
	2. Inspirational leadership	4.3
	3. Influence	2.2
	4. Business judgement	5.6
	5. Execution	4.6
	6. Innovation	5.3
	7. Talent building	2.6
	8. Collaboration	3.7

From the summarized results it is possible to identify most important and least important strategic activities of middle managers which are presented on the Figure 10.

**Identified most important activities**



**Identified least important activities**

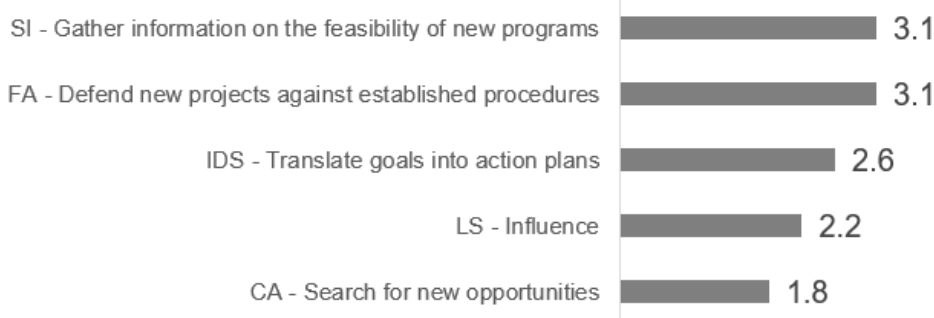


Fig. 10. Most and least important strategic activities for the successful implementation

Quantitative surveys’ results are supported by the qualitative findings in the interviews which were presented in the findings chapter.

Top 5 activities are defined by following reasons:

- Selling and direction are required for engagement;
- Business judgement is essential because environment is uncertain;
- Implementation is in hands of middle managers;
- Without justification initiatives will not be adopted.

Bottom 5 activities are defined by following reasons:

- Information is gathered by consultants;
- Defending was important in several cases, but on average banks were prepared for change by top management;
- Action plans are created by consultants;
- Influencing does not work well in digital;
- Consultants are searching for opportunities and it is not in the scope of middle managers.

## **4.2. Theoretical and practical implications**

In view of stated research questions, the relevance of Floyd and Wooldridge (1992) and Kane (2019) frameworks was confirmed both by the analysis of qualitative data and by analysis of consultants' surveys. Developed frameworks allow the assessment of middle management strategic involvement in the formulation and implementation of digital transformation projects.

However, Floyd and Wooldridge (1992) framework requires adaptation when studying middle managers behavior. First, strategic activities “relax regulations to get new projects started”, “provide a safe haven for experimental programs” and “buy time for experimental programs” in the facilitating adaptability role were identified to be overlapping with each other. In the digital transformation context relaxing regulations, buying time and providing a safe haven were found to always be related to the same activities conducted by middle managers. Therefore, author proposes to merge them into “defend new projects against established procedures” strategic activity which should be sufficient to analyze relevant strategic behavior in the facilitating adaptability role. Second, strategic activity “evaluate merits of new proposals” was identified to be excess for the championing alternatives role. Findings suggested that merits are being evaluated

by middle managers in the process of justification of new and existing projects. Therefore, all relevant behaviors could be classified to the activities mentioning justification.

Another theoretical contribution of the study is directly connected with the research gap that is present in the existing strategic management and information systems literature. Researchers have recognized the role that middle managers play in digital transformation projects, especially their impact on development of emergent strategies (Jaoua, 2018; Buss, 2011; Ukil and Akkas, 2016), but there was a lack of understanding which strategic roles and activities play the most significant role. Current study presented qualitative findings supported by quantitative survey of consultants who have been working on such projects identifying the importance of each role and strategic activity for the successful implementation of digital transformation projects.

Finally, an innovative methodological approach to assess middle management strategic behavior through consultants' experience was created which allows to neglect impression management bias present when asking middle management about their strategic behavior directly (Birken et al., 2015; Way et al., 2018; Hansell, 2018). Though, it should be mentioned that this methodological approach has its limitations. It was impossible to identify existence of several strategic activities related to the inner workings of companies in which consultants have been working. These strategic activities are: "encourage informal discussion and information sharing" from facilitating adaptability strategic role, "assess changes in the external environment" and "communicate the activities of competitors, suppliers, etc." from synthesizing information strategic role and "talent building" from leadership role.

For practitioners this study presents a highlight into middle management strategic behavior on digital transformation projects. Practitioners can use findings presented in the study to lower the 84% failure rate across all digital transformation projects (Rogers, 2016). In the findings section consultants' experiences of their interactions with middle managers and observations of middle management behavior were presented. These cases provide practitioners with examples of what can go wrong on digital transformation projects and reasons for such failures in relevance to middle managers. Additionally, successful implantation cases are described providing insight of what key activities are required from top and middle management to ensure the successful implementation of the projects. Key decision makers can use such examples as guidance when they are developing strategic processes within the companies, allocating key responsible persons and monitoring the implementation phase. By evaluating middle managers present in the

companies on their potential impact through the described strategic activities practitioners will be able to assign fitting middle managers to the positions of crucial responsibility and will know which activities they should monitor with the most attention. As an example, study suggested that the three most crucial strategic activities are “sell top management initiatives to the subordinates”, “implement action plans designed to meet objectives” and “direction”. Thus, selecting middle managers who can excel at these three strategic activities will increase the chances of successful implementation of digital transformation projects.

### **4.3. Direction for future research**

Exploratory nature of the current study assumes that to further develop the topic the support from future studies is absolutely required. Findings of the study indicate that middle managers indeed have a significant impact on the formulation and implantation of digital transformation projects through various strategic roles and activities with varying importance for the successful implementation.

Thus, first direction is to confirm the findings with the larger sample of projects preferably across multiple industries and countries. This will allow to identify whether qualitative and quantitative findings of the current study are applicable in the broader than Russian banking industry context. Author suggests to apply the developed in this study framework and survey and conduct a large-scale quantitative study.

Additionally, the developed methodological approach of examining the middle management strategic behavior through consultants’ experience requires application in other research contexts to be confirmed to be valid. Author suggest to apply this approach in the context of already researched area to examine differences between middle management self-reported strategic behavior and consultants’ perception.

Finally, emergent qualitative findings from the interviews suggested the existence of correlations between middle managers’ personal characteristics and their strategic involvement in different framework activities. Therefore, it would be valuable to conduct research examining the impact of personal characteristics on each strategic role and activity.

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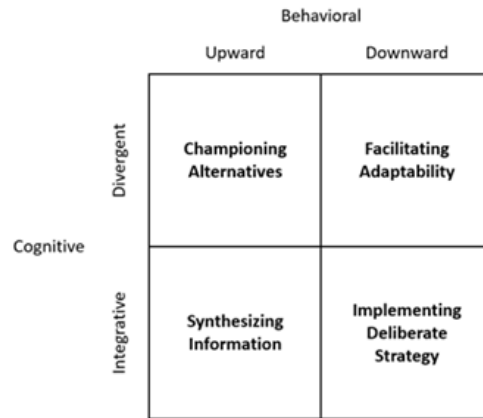
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## Appendix 1. Interview guideline

1. Interviewer is explaining the purpose of the study and is stating research questions
2. Please provide a brief description of digital transformation project(s) that you have been working on in Russian banking sector including scope and your role as a consultant.
3. Providing interviewee with structure of first 4 strategic roles

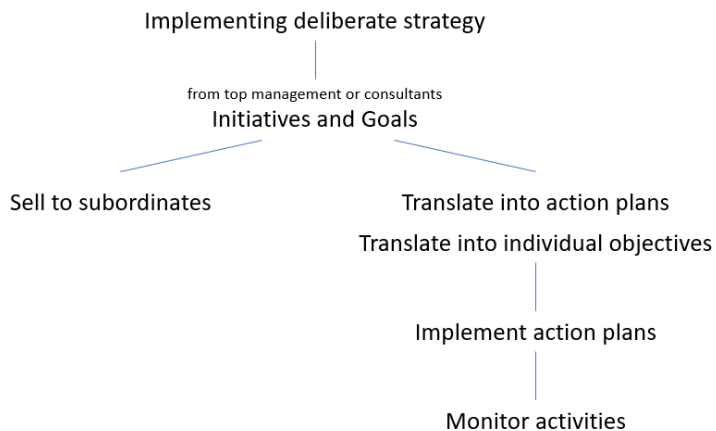


4. Providing the interview with core questions for the following parts:

**Have you observed behavior associated with \_\_ activity?**

**What did middle manager do (or not do) and how it affected the project?**

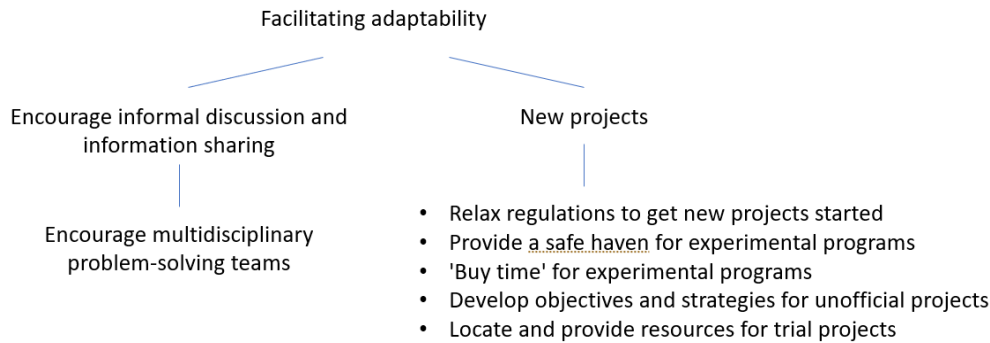
### Role 1. Implementing deliberate strategy



1. Sell top management initiatives to subordinates
2. Translate goals into action plans

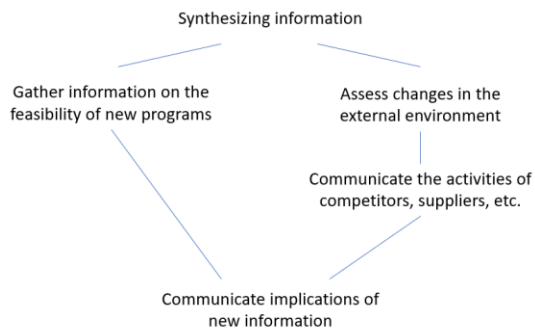
3. Translate goals into individual objectives
4. Implement action plans designed to meet objectives
5. Monitor activities to support top management objectives

## Role 2. Facilitating adaptability



1. Encourage informal discussion and information sharing
2. Encourage multidisciplinary problem-solving teams
3. Relax regulations to get new projects started
4. Provide a safe haven for experimental programs
5. 'Buy time' for experimental programs
6. Develop objectives and strategies for unofficial projects
7. Locate and provide resources for trial projects

## Role 3. Synthesizing information



1. Gather information on the feasibility of new programs
2. Assess changes in the external environment
3. Communicate the activities of competitors, suppliers, etc.
4. Communicate implications of new information

## Role 4. Championing alternatives



1. Search for new opportunities
2. Justify and define new programs
3. Evaluate the merits of new proposals
4. Justify programs that have already been established
5. Propose programs or projects to higher level managers

## Role 5. Leadership

1. Direction - *Providing vision and purpose*
2. Inspirational leadership - *Getting people to follow*
3. Influence - *Persuading and influencing stakeholders*
4. Business judgement - *Making decisions in an uncertain context*
5. Execution - *Empowering people to think differently*
6. Innovation - *Creating conditions for people to experiment*
7. Talent building - *Supporting continuous self-development (feedback)*
8. Collaboration - *Getting people to collaborate across boundaries*

## Appendix 2. Excel survey to evaluate importance of strategic roles and activities

Please state how important each strategic activity and each strategic role of middle managers was for the successful implementation of digital transformation project (1 – not important at all, 7 – extremely important)

<b>Implementing deliberate strategy</b>	X
1. Sell top management initiatives to subordinates	X
2. Implement action plans designed to meet objectives	X
3. Translate goals into action plans	X
4. Translate goals into individual objectives	X
5. Monitor activities to support top management objectives	X
<b>Facilitating adaptability</b>	X
1. Encourage informal discussion and information sharing	X
2. Encourage multidisciplinary problem-solving teams	X
3. Relax regulations to get new projects started	X
4. Provide a safe haven for experimental programs	X
5. 'Buy time' for experimental programs	X
6. Develop objectives and strategies for unofficial projects	X
7. Locate and provide resources for trial projects	X
<b>Synthesizing information</b>	X
1. Gather information on the feasibility of new programs	X
2. Assess changes in the external environment	X
3. Communicate the activities of competitors, suppliers, etc.	X
4. Communicate implications of new information	X
<b>Championing alternatives</b>	X
1. Search for new opportunities	X
2. Justify and define new programs	X
3. Evaluate the merits of new proposals	X
4. Justify programs that have already been established	X
5. Propose programs or projects to higher level managers	X
<b>Leadership</b>	X
1. <b>Direction</b> - <i>Providing vision and purpose</i>	X
2. <b>Inspirational leadership</b> - <i>Getting people to follow</i>	X
3. <b>Influence</b> - <i>Persuading and influencing stakeholders</i>	X
4. <b>Business judgement</b> - <i>Making decisions in an uncertain context</i>	X
5. <b>Execution</b> - <i>Empowering people to think differently</i>	X
6. <b>Innovation</b> - <i>Creating conditions for people to experiment</i>	X
7. <b>Talent building</b> - <i>Supporting continuous self-development</i>	X
8. <b>Collaboration</b> - <i>Getting people to collaborate across boundaries</i>	X