HOW DIGITAL TRANSFORMATION DRIVES THE EVOLUTION OF SELF-MANAGED TEAMS?

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Abstract
The presented research was pursued within the framework of the Research Centre of Business Administration in The Bucharest University of Economic Studies, Romania. The research conducted for this paper is supposed to contribute to the wider academic discourse on the role of digital transformation for implementing self-managed work team structures. Against the background of strategic management considerations impacted by the latest wave of digitalization approaches, companies revisit organizational settings to exchange outdated command and control systems with more agile and customer-centric structures. While self-managed work structures have been around since the 1980s, impact factors of the digital era revive the topics relevance. In this context, the research paper combines an overview of the existing literature on the topic of digital transformation as well as the evolution of people management approaches with a case study on the challenges of introducing self-managed work team structures within a hierarchical set-up. While the first part of the paper focuses on assessing and qualifying the existing research conducted by international scholars and publishers, the second part is going to present the results of the quantitative and qualitative research conducted in a test case scenario in one of the leading German direct banks. Essentially, the results of the case study present new facets on the introduction of self-managed work teams and contribute to the overall value in terms of productivity and learning for organizations.

Keywords: *Digital transformation, Self-managed teams, Strategic management, People management*

JEL Classification: *D22, D70, D81, G21, M00*

I. INTRODUCTION

"The outlines of the 21st-century management model are already clear. Decision-making will be more peer-based; the tools of creativity will be widely distributed in organizations. Ideas will compete on equal footing. Strategies will be built from the bottom up. Power will be a function of competence rather than of position", states Gary Hamel (2012) and sets the tone for a collaborative future at work. This evolution clearly deviating from previously dominant command and control structures is the result of multiple socio-economic processes affected by the digitalization. In this context, organizations are challenged to provide viable solutions to stay in business. Hence, this paper will provide the results of a desk study on the development of people management theories to pave the way for the introduction of self-managed team structures as well as their crucial elements for functioning effectively, which will be supplemented by a discussion on the key drivers of digital transformation affecting organizations right now. In a final step, the results of the desk study will be enriched by a case study showcasing the experiences made by one German bank in introducing self-managed team structures in a predominantly hierarchical setting. The results will form the basis for further extending research in the field of digital transformation and its impact on establishing autonomous work structures.

II. EVOLUTION OF PEOPLE MANAGEMENT THEORIES

With reference to the evolution of people management approaches, it becomes evident that its development has been remarkable from the early organizational theories which were designed under the influence of the first steps conducted in the field of industrialization. Given the requirements of the time of industrial revolution, classical thinkers predominantly emphasized on the importance standardized processes in combination with adequate machinery. Hence, it spurred the introduction of concepts related to bureaucracy to guide and direct human resources. In order to guarantee the greatest degree of efficiency in the production process, people were treated just like any other commodity in the process. A full scale command and control system was installed to generate the maximum output. Matter like personal development or participation were not part of the early industrial agenda (Taylor, 1911; Scott & Mitchell, 1976; Hackman & Oldham, 1980; Weber

& Andreski, 1983). Participation of employees has only gained momentum with scholars picking up the topic prior to the Second World War (Roethlisberger & Dickson, 1939). However, the question of employee needs and first steps towards autonomous working found its most prominent advocate in Maslow (1954) only several years later. For the first time, academic considerations deviated from the sole focus on efficiency gains through industrial engineering which was developed by supporters of the participative management theories. The issue of mutual trust in the employer-employee relationship is a central theme for this group of scholars which is regarded as beneficial for the overall organizational development. The element of participation is further reinforced by including employees in the general decision-making process as a result of their expert knowledge and developed skills. In this context, this form of academic stream can be considered to be introducing the topic of self-management (Anthony, 1978; Hackman, 1978; Lawler, 1986). With the rise of systems theory scholars, the issue of the structure of the work environment took again center stage. The widespread use of machinery and the development of computers stimulated the discussion on creating links between social systems and technical structures. In this perspective, self-management was regarded a crucial element for bringing those two poles together under one organizational umbrella (Trist & Bamforth, 1951; Pasmore et al., 1982; Holt, 1990). Lastly, the contingency perspective assessed the requirements of turning regular firms into high performance organizations and the individual factors of influence to be considered: environment, technological and human elements. Self-managed work teams are introduced given their ability to take swift action while being most closely affected by those very elements (Cummings, 1978).

III. DEFINITION OF SELF-MANAGED TEAMS

Characteristics and work models of regular work teams and self-managed team structures are substantially different in nature, which come down to three essential elements as described by Tjepkema (2003):

1. The requirements of the customers and the product are at the core of the joint work journey. In order to reach the target of customer satisfaction, the team consisting of multiple members works autonomously, on a permanent basis and with sole responsibility for producing results.

2. The team commonly decides on work standards, methodology and direction to manage all required steps in the production process.

3. The availability and accessibility of information and data sources is a deciding factor for meeting customer requirements in a timely fashion. Additionally, the senior management in charge is obliged to provide for adequate resources, skills and freedom in making decisions for the self-managed team to perform successfully.

In addition to the individual characteristics of self-managed work teams, Hackman (1978) highlights the importance of establishing additional support mechanisms to safeguard the success of such team solutions. In this context, the importance of designated compensation schemes as well as the role of regular, structured feedback receives particular attention. Hence, the creation of stimulating reward and coaching structures is deemed to be important. In contrast to that, literature on the matter is not aligned on the question to what extend a supervisory figure is required or important for the positive development of self-managed teams.

The issue of establishing autonomous teams is not a straightforward exercise following a one size fits all principle. In contrast to that, there are multiple forms and structures possible to enable self-managed teams to work together effectively. In essence, such initiatives aim to enhance collaboration among coworkers and allow for cross-functional learning given a closer work experience. Against this background, senior management deciding to introduce such solutions intends to reap the projected benefits of higher productivity, coworker engagement and shared learning. In light of the complexity of setting-up of self-managed work structures, ten Vregelaar (2017) provided an integrated framework introducing the main elements for effectively establishing autonomous co-working structures. It combines the results of more than 50 different research contributions in the field. As a result, the framework is structured into three different compartments which cover the essential dimensions for utilizing self-managed teams in an organization context: individual, team and organizational. This is supposed to facilitate the understanding of the factors of influence to be addressed by organizations. In addition to that, it allows for further research in the field, since current trends can be mapped and analyzed against the results of the meta-study.
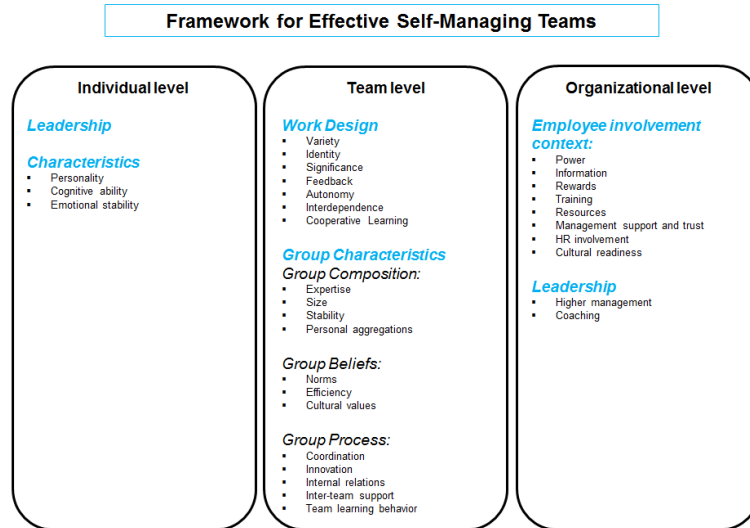
Fig. no. 1: Framework for Effective Self-Managed Teams

Source: ten Vregelaar, R., 2017.

IV. STIMULATING EFFECT OF DIGITAL TRANSFORMATION ON SELF-MANAGED TEAMS

The latest wave of digital transformation has brought a new set of characteristics posing challenges to firms worldwide. In order to assess the status of autonomous team structures, it is therefore crucial to determine those key drivers of the digital era. By detecting those driving forces on coporation level, organizations are enabled to critically define the viability of self-managed teams for their individual firm. Focusing on this matter is at the core of Futurum Research's (2018) analysis on digitalization effects. Figure 2 highlights the results of the annual study allowing firms to understand the value of key company values for weathering the challenges posed by digital transformation. It centers on a set of main parameters for successful digital evolution. While creating technology partnerships scores the highest approval rating in light of the importance of overall technological development, the following three elements company culture, manager support and employee skills are important factors for establishing autonomous team structures.
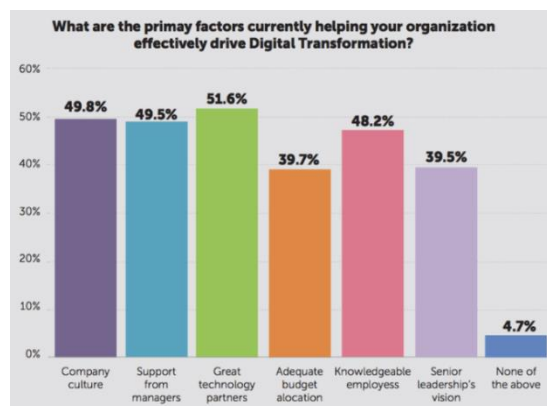

Fig. no. 2: Internal factors of Digital Transformation
Source: Newman, D., 2018.

Against the background of the integrated self-management framework, current digital evolution has a distinct influence on several key utilization elements according to the three compartments introduced earlier. In the following paragraphs, the effects of digital transformation on self-managed team structures are summarized and qualified:

Individual factors:

The importance of personality - using the internet and roaming around social media channels is at the core of daily activities conducted by the latest generation complementing the current workforce. In this contemplation, this group of people is used to utilizing the tools provided by digital solutions to cooperate and collaborate with other likeminded individuals across the globe. In this environment, status and hierarchy are overlapped by ideas and innovation, which are considered to be more valuable and sustainable. Hence, this generation expects to experience a different work environment allowing for participation, purpose and impact. In this context, traditional command and control structures will find it increasingly cumbersome to recruit the kind of digital savvy talent required to steer their own digital agenda. On the other hand, organizations genuinely showcasing their commitment towards more autonomous and self-directed work spaces are likely to excel in hiring promising candidates (Hamel, 2012; Stahl, 2018)

Team factors:

The role of work design – against the background of the drastic changes expected from the latest wave of technological developments, it becomes evident that a number of activities and jobs is likely to vanish due to digital solutions in the form of robotics, cloud computing or artificial intelligence. A recent survey published by consulting firm McKinsey introduces the scope and size of expected changes in the work environment. The results of the study present that 50% of the observed work activities could fall victim to automation solutions over a mid-term perspective. Making repetitive work elements obsolete could however enrich the individual job design in allowing employees to focus on more complex and potentially interesting components of the job. The fact that individual job profiles require the solution of more challenging tasks could further intensify the use of mixed, multi-disciplinary work teams for providing customer-centric solutions. By adding a greater degree of decision-making power and autonomy, the work design could foster the establishment of self-managed team structures in the future. (Hamel, 2012; Ford, 2015; Landrum, 2017, Manyika & Sneader, 2018)

Organizational factors:

Significance of participation and leadership – the need for firms to change and evolve becomes more and more evident, since the push is currently felt from two different sides. On the one hand, there is the drive towards continuous innovation with organizations seeing their current business models coming under pressure, leading to ever tighter margins, the occurrence of new competitors from unexpected places, as well as customer expectations concerning quality, availability and price. Against this background, firms need to set a revised and improved customer focus, which often requires organizations to revamp their entire organizational structures to accommodate new talent and show increasing resilience going forward. The question of attracting and hiring talent is the second big push, which is likely to have significant implications on employee participation and leadership approaches. Both market phenomena and new generations of employees are expected to steer the change towards more autonomous team structures. (Hamel, 2012; Newman, 2018; Grab et al., 2019)

V. Case study on the pilot phase introducing self-managed teams in one of the leading German direct banks

The presented case study introduces the results of a recently conducted pilot phase implementing self-managed team structures in a German direct bank. The rationale behind the decision by the senior management was mainly driven four different phenomena experienced across a department of roughly 500 employees. These drivers are:

Productivity problems: a continuously deteriorating performance across all operational teams in the department

Work presence issues: an increasing degree of absence rates

Poor degree of participation: innovative power was perceived as poor, as showcased by the lack of participation in company-wide activities

Reluctant to change: Little interest in trying new ways of working even in a smaller context

Despite the monetary success of the firm as whole as well as the department, the senior management decided to introduce a designated scrum team on the question of leadership to work towards designing and implementing solutions for solving the issues mentioned above. Give the role of the department as one of the main income earners of the bank, the work of the scrum team received immediate attention. Hence, the scrum team was given three months to elaborate answers for new ways of working as well as different leadership styles. This was particularly challenging given the hierarchical set-up of the firm which sported centralized decision-making with the major part of the employees being occupied with handling client requests leading to a high share of repetitive tasks. Individual performance of employees was not assessed in line with the standards agreed upon with the work council. Reaching volume targets on group level however dominated the overall discussion on management level with little room to drill down further given the limitations described before.

In this regard, the scrum introduced three pilot teams based on autonomous decision-making and self-management to effectively address the key issues faced by the department and against the background of digital

transformation pressures. Each of the teams consisting of 15 volunteers from regular operational teams was supposed to begin the journey with a slightly different focus:

Group 1: Reaching maximum productivity while detecting potential hurdles along the way

Group 2: Experimenting on new ways of collaborating and setting targets

Group 3: Putting the customer in the center of the entire work

All three groups were allowed to select their team coach from a list of volunteering team heads with the new role deviating from the standard setting in the sense, that the team coach was supposed to work as a mediator facilitator and door opener. In this case, there was a distinct difference to the previous supervisory role. A short introduction by the scrum team was provided to the three groups concerning the objectives (Figure 3) and expectations prior to sending them on their two month journey towards self-management:

Fig. no. 3: Triangle of Objectives

Source: own illustration based on supporting documents of the team experiment

In consideration of the formulated pilot phase objectives, all three could be reachesd as showcased by quantitative and qualitative assessment. Work presence increased substantially, productivity targets were exceeded and employee satisfaction jumped to an elevated level during the time of the pilot phase. In addition to that, numerous ideas for improving the work environment and customer experience were gathered and implemented which speaks for the innovative energy during the time of the experiment. In addition to the quantitative feedback which strongly supported the idea of introducing self-management, there was additional qualitative feedback gathered from the key people involved in the set-up of the pilot phase.

Subsequently to the pilot phase, interviews with several key members of the management and scrum team were conducted to gather structured feedback on the experienced made with self-managed team structures. Overall seven experts including team coaches, members of the scrum team as well as the responsible department head responded to a standardized set of 11 questions. At the core of the questions was the aim of identifying the main benefits and challenges of implementing and sustaining self-managed work teams within a predominantly hierarchical organization. On the basis of the different responses, there are three distinct levels to be considered:

1) Self-managed work teams:

Contrary to the background of the acquired interview answers, there are several points to consider in the context of designing and establishing autonomous work structures:

Choosing the right personalities in terms of motivation and commitment

Being equipped with the right skill set, especially concerning communication skills, responsibility-taking and conflict management

Awareness of the requirements and foundations of self-management and the importance of deviating from traditional centralized decision-making

Setting clear goals and guidelines for the team, in order to provide a well-defined framework to work in

Allowing coworkers to get acquainted to the new work environment, in order to readjust their mindset while getting used to the new tools

2) Selected team coaches:

As part of the implementation phase, the fact that teams were able to choose their own team coach was considered to be an important element for creating trust in the pilot phase. It was intended that team coaches were supposed to take on a different, more collaborative role, in contrast to their previous supervisory position. Essentially, there were three success factors for team coaches:

Coaches had put a strong emphasis on presenting convincing arguments, since the previous hierarchy was no longer in place.

Interviewees highlighted that providing trust was not equal to giving up control

The provision of advice and guidance without actively dominating the decision-making process was crucial for stimulating new collaborative atmosphere in the team.

3) Organization:

The behavior and feedback of the wider organization does have an impact on the overall work of self-managed team structures, therefore it is important for the senior management in charge to assist the set-up of such teams through effective communication, the provision of resources and through setting a clear framework. Equally important is the consideration of other stakeholders and their emotions driven by an outsiders' perspective. Mitigating those potentially negative feelings may reduce the risk of creating a harmful sentiment towards the new venture. This is particularly important in culture clash scenario, where self-managed teams are established within predominantly hierarchical organizations. Otherwise the problem of inner-company friendly fire can easily obstruct the development process.

Despite the evident points of consideration and potential obstacles in establishing self-managed team structures, all interviewees were convinced that given the right mix of people and resources, autonomous work teams are an effective tool for tackling the challenges posed by digital transformation.

VI. Conclusions

The latest wave of digital transformation represents a considerable obstacle for organizations to formulate to strategies while at the same time reinventing their internal work structures. In this context, self-management has regained momentum. Individual factors such as expectations of latest generations entering the work space, customer expectations as well as the drive for constant innovation puts pressure on the old command and control structures. In contrast to that, more collaborative options favoring pooled-resources of hierarchy provide a new value proposition for firms to effectively create a new way of working. Against the background of the pilot phase described, there are various factors of influence which shall be addressed as part of additional research efforts. In order to substantiate them, further extended qualitative and quantitative research will be required to assess the long-term effects associated with such team structures.

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