HOW TO APPLY SELF-MANAGEMENT PRINCIPLES IN THE CONTEXT OF DIGITAL TRANSFORMATION

Benjamin Grab[1], Marieta Olaru[2], Mihaela Maftei[3] and Ioana Surugiu[4]
[1) 2) 3)4)] *The Bucharest University of Economic Studies, Romania*
E-mail: benny_grab@hotmail.com; E-mail: olaru.marieta@com.ase.ro;
E-mail: mihaela.maftei@ase.ro; E-mail: ioana.g.surugiu@gmail.com

Abstract
Digital transformation has profound social and technological implications. Given its magnitude and depth, it fundamentally challenges traditional ways of doing business. In this context, organizations need to adopt innovative strategies for changing customer requirements, keeping new market participants at bay and remaining relevant in the digital era. Given the pressure on companies to continuously adapt and innovative, organizations need to find equilibrium between stability and flexibility that requires a mind-set which goes beyond a traditional command and control narrative. The challenges associated with corporate digital transformation has given rise to reinvention of self-management principles. In this context, a structured questionnaire among 200 experts from the financial services serves the following three distinct objectives: (1) introduce the general perception of participants on self-managed teams, (2) present risks and opportunities of its introduction, and (3) outline the implications on the wider organization in the context of digital transformation. Against the background of the research conducted, the results highlight general openness and a positive attitude towards self-management principles, the requirement of senior management support, investments in skilled personnel, smart expectation management, as well as the need for a holistic approach including all relevant internal and external stakeholders. The research results are part of a comprehensive research project on strategic management and digital transformation at the Bucharest University of Economic Studies.

Keywords
Digital transformation, self-management, organizational development, digital skills, innovation skill

JEL Classification
L21, L25, L81, L83, M16

Introduction

Considering the latest wave of digital transformation, a profound and fundamental disruption of the business environment becomes apparent. Traditional rent-seeking business models come under pressure from new competitors entering the scene. Former barriers of market entry are swept away by lower transaction costs and a shift in supply and demand driven by digital business solutions. Hence, organizations are forced to reinvent their ways of doing business, in order to stay relevant. At the same time, digital transformation is not a local phenomenon that affects only isolated parts of the world. It has developed into a global challenge which sees various peculiarities among different regions around the world. The pace of development and current level of sophistication differs from country to country which translates into a mixed profile in terms of risks and opportunities. Lastly, there is the social dimension of digital transformation that is driven by a new digital savvy generation entering the workforce, the collaborative nature of the internet, as well as the prevalence of social media platforms. The combined force of the different factors of influence impact on the organizational structure of businesses. In this context, self-management principles have gained momentum across the academic world as well as in the professional discourse. Therefore, the paper aims to elaborate on the current state of research and contribute additional research on the perception, opportunities and requirements for implementing self-managed work teams.

Theoretical Framework

When it comes to the country dimension of digital transformation, individual indexes help to shed light on the current situation across borders. The Digital Scoreboard is based on more than 100 indicators selected by European Commission services divided into thematic groups, which illustrate some key dimensions of the European information society that measures the performance of Europe and the Member States in a wide range of areas, from connectivity and digital skills to the digitization of businesses and public services. An important indicator is the Digital Intensity score that counts how many out of 12 technologies are used by each enterprise. Then they are divided into four clusters of digital intensity: Very Low (scores 0-3), Low (score 4-6), High (score 7-9), Very High (score 10-12). The hierarchy in the Digital Scoreboard follows the hierarchy in the European Innovation Scoreboard, which shows us that learning and digitization are closely correlated (Murswieck et al., 2019) (Fig. no. 1).
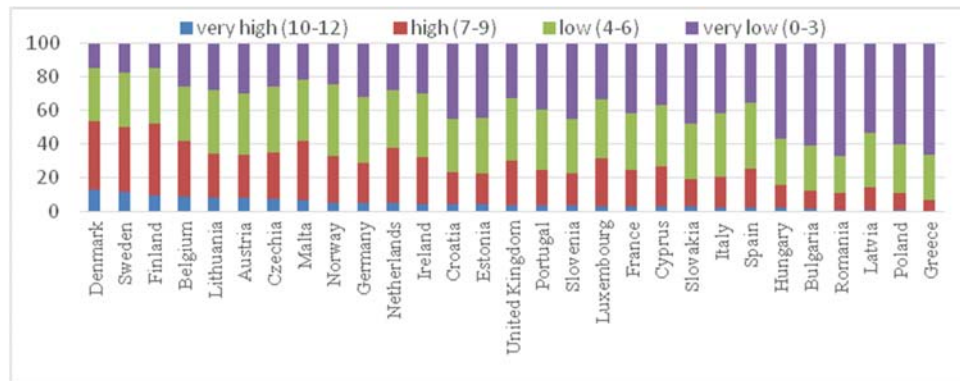

Fig. no. 1 Digital Intensity score for EU Enterprises 2019 (% of enterprises by level)
Source: Commission, E., 2020. Digital Scoreboard - Data & Indicators. [online] Digital Scoreboard.

Digital transformation has another important component, the social dimension. By exploring the dimension in more detail, it becomes evident that the substantial alterations in communication, collaboration, and social fabric force organizations to amend or reinvent their internal structures. In this context, self-management principles have regained momentum which feeds into the social dimension across three layers:

Personal layer*:* Digital skills are critically important not only for accessing the labour market but also for harnessing the benefits of the digital transformation that is currently underway. In Netherlands, United Kingdom, Finland, Denmark and Sweden at least half of the labour force in each of these countries have above basic skills, while, at the opposite pole, Romania and Bulgaria have half of the labour force with low or no digital skills (Fig. no. 2).
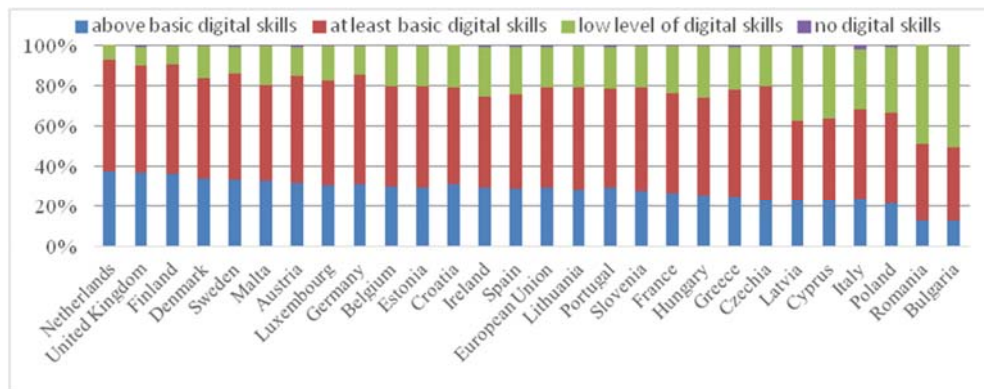

Fig. no. 2 Digital skills of the EU labor force, 2019 (% individuals, by skills level)
Source: Commission, E., 2020. Digital Scoreboard - Data & Indicators. [online] Digital Scoreboard.

When it comes to the individual dimension, it becomes evident that web-based services and solutions provide new ways of purchasing products, communicating among another, and collaborating in the workplace. People enjoy the collaborative power of the internet, where content and information can be shared within seconds. Transfer times and costs have sunk substantially allowing people to cooperate on common projects across borders and time zones. Connecting with people sharing the same interests is easier and the role of status is far less important than in the real world. All these components have significant repercussions for the business world. Alongside with new professions and knowledge, employees will be required to have new, improved skills and professions. Young people joining the workforce with the necessary skills for the digital economy want to see this flat hierarchy, collaborative nature reflected in their future employers. This stands in stark contrast to the command-and-control structures preserved in many companies. The fight for talent puts the younger generation in a better bargaining position. At the same time, organizations are forced to undergo fundamental changes to address the demands of their new hires. This, however, will only be mutually beneficial if the true benefits of such new organizations are clear and understood. In this context, value-driven organizations are likely to gain the upper hand over companies only paying lip service concerning their own transformation. (Hamel, 2012; Stahl, 2018, Grab et al., 2019a).

Team layer*:* Drastic changes in the technological environment as well as social ramifications are expected to have a considerable influence on the workplace of tomorrow. Current trends such artificial intelligence, internet of things, big data management and advancements in cloud computing will alter the course of many white- and blue-collar professions. With technological solutions gradually reaching a higher level of overall sophistication, work

activities mainly consisting of repetitive tasks are at risk of being replaced rather sooner than later. In this context, employees' expertise in operating digitalized processes and flows is critical, especially as according to recent studies (Marquardt et al., 2018), the main obstacle aligned with business digitalization is a lack of IT skills of the employees and availability of specialists. Manyika and Sneader (2018) describe the impact of technological solutions on close to 1000 professions, where almost half of all work activities could be replaced going forward. While this does not necessarily translate into a complete job loss, the implications for future work design is fundamental. Companies with self-managed teams' structure could use numerous possible ways to organize networks of employees to independently work towards a common target (Grab et al., 2019a). This requires individual teams to have a broader toolbox including problem-solving, communication and decision-making skills. Continuous learning is also expected to play a more prominent role going forward. All in all, the principles of self-management are likely to gain momentum given the challenge posed by digital transformation (Hamel, 2012; Landrum, 2017; Grab et al., 2018; Grab et al., 2019b).

Company layer: Considering the challenges discussed on personal and team level, it becomes evident that organizations are fundamentally tested to come up with new, innovative solutions for the future. For organizations and society in general, the innovation skill is vital to ensure development and competitiveness in new digital challenges, staff training and skills being important factors that lead to positive levels of innovation performance. There are two important points of consideration for companies to reinvent their organizations: trigger an innovation spirit and enhance their digital talent management. The most powerful force in business is culture, so successful leaders needs to support, plan and grow a innovation culture (Maier et al., 2014). The focus needs to shift from internal office politics and power play to the requirements of the customer. At the same time, change is likely to be the new normal, therefore building adaptive and change-embracing organizations can be a key advantage. This also means that a drastic mind-set change among all employees and the willingness of the senior management to give up control is an acceptable base case. Managing a transformation of such magnitude is a potential make-or-break scenario that requires diligence, perseverance, planning and the right people. Attracting employees with the right skills, intrinsic motivation and willingness to learn is crucial. Setting up the right work structures can assist skilled employees in improving performance, transparency and employee engagement. The results of the practical research aim to highlight key preconditions for a successful implementation of self-managed work teams, as a means of supporting this transformation (Hamel, 2012; Schallmo et al., 2017; Ross, 2017; Newman, 2018; Grab et al., 2019b).

Research Objectives and Methodology
In addition to the theoretical research part consisting of an extensive desk study, the results of practical research conducted in the form of a structured questionnaire shall be introduced. The survey was executed with the help of more than 200 international professionals from the financial services industry during a four-week period in August 2019. Based on twelve research questions (fig. no. 3), the adopted methodology aims to follow three distinct objectives: (1) introduce the general perception of participants on self-managed teams, (2) present risks and opportunities of its introduction, and (3) outline the implications of the wider organization in the context of digital transformation. The first four questions establish an understanding of the population by gathering information on personal points such as gender, age, type of employment and country of residency. Followed by three questions centring on the general understanding of the effects of digital transformation. Questions 8-12 focus exclusively on the different facts of self-managed work teams and therefore form the backbone of the research results. Against this background, the key results of the practical research part complement the academic results of the desk study. While it primarily aims to

support the academic discourse on the research topic, important lessons can be derived for formulating a transformation roadmap on organizational level.

1.-4. Personal questions	
Age Group	Gender
Country of Residency	Type of Employment

5. Based on your experience, digital transformation…	
Positive effect on global economy	Increases competition
Human-driven	Offers more choices for customers
Is a global phenomenon	Technology-driven
Positively impacts on the way people collaborate	

6. The main challenges of digital transformation are…	
Lack of work-life balance	Uncertainty in the work space
Lack of data security	Technology dependancy
Job losses	Lack of personal, social interaction
Information overload	Threat of surveillance
Global competition	Human-robot relationship

7. The positive effects of digital transformation are…	
Job enrichment	Improved means of communication
Participation in decision-making	Improved work-life balance
Variety of products	Access to information
Market transparency	Global connectivity
Less hierarchy/status	More democracy in business
Easier transactions	

8. How would you rate the following requirements for implementing self-management?	
Time for implementation	Supportive change management
Skills of team members	Methodological support
Setting objectives	Adequate resources
Rules of engagement	Adequate support systems
Clear relations with all stakeholders	Decision-making power
Management support	Access to information

9. The biggest upsides of self-managed work teams are?	
Employee engagement	Job enrichment
Enrichment of innovation capacity	Flexible work design
Swift decision-making	Fostering diversity
Facilitated learning	Better customer-focus
Cost efficiency	Flatter hierarchies
Improved team work	Better transparency
Improved communication	

10. The biggest downsides of self-managed work teams are?	
Conflicting objectives	Lack of coordination
Unclear leadership	Increasing requirements
Lack of resources (technical & social)	Conflict of personal and team objectives
Constant pressure	Responsibility
Inner-organization culture clash	No need for various job profiles
Success = Culture	Senior management requirements

11.How would rate your own experience with self-managed team structures?

12. Going forward, i would like to work in a self-managed team

Fig. no. 3 Overview of research questionnaire and survey questions categories
Source: own illustration

Research Results

Following the insights provided through the desk study on digital transformation and the role of self-management principles as a potential cornerstone for organizational development. The structured questionnaire provides the followings results based on the initial objective of the conducted research:

General perception of participants on self-managed teams. With reference to the objective of defining the general perception of survey participants on self-managed work teams, the question focusing on the willingness of individual experts to work in such an organization setting gives supporting insights. As showcased in fig. no. 4, responses indicate high approval (combined value of „strongly agree" and „agree" answers) ratings of 75%. This translates into a positive perception of survey participants towards the concept of self-management in a business context.

Risks and opportunities of self-management teams in the context of digital transformation. In light of the issue of risks and opportunities of self-managed teams, question 9 and 10 introduce various elements to be qualified by survey participants (table no. 1). When it comes to the positive aspects of the concept, self-management scores favourably concerning flexibility of work design, innovation capacity and job enrichment. Having said that, all elements show at least a combined approval rating of 61%. The picture differs considerably when the downsides of self-management are taken into consideration. The highest combined approval ratings are

less pronounced, while showcasing a tendency towards teams struggling with too many requirements, constant pressure and potential cultural clash, if self-management is introduced in a hierarchical organization. Interestingly, survey participants do not believe that self-managed work teams have a negative impact on job losses as shown by a combined approval rating of 35%.
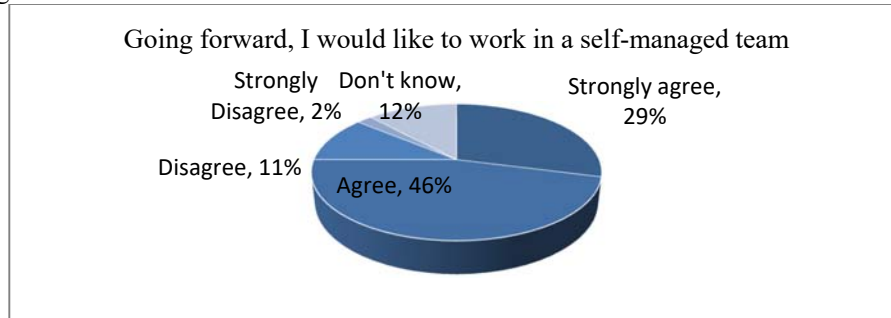

Fig. no. 4 Perception of survey participants towards willingness to work in self-managed teams in the context of digital transformation

Source: Own data processing based on research participants perception survey

Implications of self-managed teams on the wider organization in the context of digital transformation. When considering the introduction of self-managed teams, organizations need to factor in several important elements. Hence, question 8 focuses on the main requirements for such a roll-out. Given the generally high combined approval ratings of minimum 86%, all elements should be regarded as important (table no. 2). This asks for a holistic approach providing self-managed teams with adequate assistance, time and resources while senior management and wider organizational support shall be safeguarded accordingly.

Table no. 1 Upsides and downsides of self-managed teams in the context of digital transformation

Upsides of self-managed teams	Combined approval	Downsides of self-managed teams	Combined approval
Flexible work design	90%	Requirements for teams	79%
Innovation capacity	89%	Constant pressure	70%
Job enrichment	86%	Organizational culture-clash	67%
Flatter hierarchies	84%	Lack of available resources	66%
Employee engagement	80%	Assigning responsibilities	66%
Improved team work	80%	Lack of coordination	65%
Swift-decision making	79%	Unclear leadership structures	62%
Fostering diversity	78%	Conflicting objectives	61%
Improved communication	76%	Senior management requirements	58%
Better customer-focus	73%	Conflict of team and personal targets	57%
Better transparency	72%	Success depends on company culture	56%
Facilitated learning	68%	No need for various job profiles	35%
Cost efficiency	61%		

Source: Own data processing, based on research participants perception survey

Table no. 2 Requirements of self-managed teams, in the context of digital transformation

Requirements of self-managed teams	Combined approval
Setting clear objectives	96%
Provision of adequate resources	95%
Selecting team members with right skills	95%
Access to information	95%
Setting rules of engagement	93%
Provide decision-making power	92%
Senior management support	91%
Time for implementation	91%
Provision of methodological support	91%
Supportive change management	89%
Support from wider organization	89%
Provision of adequate support systems	88%
Define relations with all stakeholders	86%

Source: Own data processing, based on research participants perception survey

Conclusions

Digital transformation fundamentally impacts on the way companies compete in the market place. The rules of supply and demand, the degree of competition on a global scale and the pressure on organizations to be quicker, more efficient and increasingly customer-centric are essential questions for organizations in the digital era. Self-management is considered to be positive element that receives positive connotation by survey participants. However, the implementation comes with both risks (teams struggling with too many requirements, constant pressure and potential cultural clash, if self-management is introduced in a hierarchical organization) and opportunities (flexibility of work design, innovation capacity and job enrichment), which asks for a holistic approach focusing on the needs of the affected units as well as the wider organization during the introductory phase of self-managed teams. For future research it would be interesting to investigate to what extent self-managed teams could adapt to new forms of remote work (working from home, working from anywhere) and what are the risks and opportunities of organizing self-managed teams in the context of the new challenges of a pandemic that forces all organizations to reinvent the way employees work. Another point of interest would be to explore the perception of the international professionals regarding the coordination and the activity of the self-managed teams measured during or after such challenges undergo major changes.

References

Commission, E., 2020. *Digital Scoreboard - Data & Indicators*, [online] Digital Scoreboard. Available at: <https://digital-agenda-data.eu/datasets/digital_agenda_scoreboard_key_indicators/indicators> [Accessed at 7 Mar. 2020].

Grab, B., Bumbac, R., Gavril, R. and Ilie, C., 2018. The winner takes it all - business model innovation in the tourism industry. In: R. Pamfilie, V. Dinu, L. Tachiciu, D. Plesea and C. Vasiliu, eds. *BASIQ International Conference on New Trends in Sustainable Business and*

Consumption. Heidelberg, Germany. Bucharest: ASE, pp.251–258.

Grab, B., Olaru, M. and Gavril, R.M, 2019a. Self-managed teams as a key to unlocking digital transformation in business management. *Quality - Access to Success*, 20(S2), pp.280–286.

Grab, B., Olaru, M. and Gavril, R.M., 2019b. The impact of digital transformation on strategic business management. *Ecoforum*, [online] 8(1). Available at: <http://www.ecoforumjournal.ro/index.php/eco/article/view/885/568> [Accessed at 27 March 2020].

Hamel, G., 2012. *What Matters Now How to Win in a World of Relentless Change, Ferocious Competition, and Unstoppable Innovation.* Chicago: Jossey Bass.

Landrum, S., 2017. Millennials aren't afraid to Change Jobs, And Here's why. *Forbes*, [online] November. Available at: <https://www.forbes.com/sites/sarahlandrum/2017/11/10/millennials-arent-afraid-to-change-jobs-and-heres-why/#520f9fb219a5> [Accessed at 24 Jul. 2019].

Maier, A., Brad, S., Nicoară, D. and Maier, D., 2014. Innovation by Developing Human Resources, Ensuring the Competitiveness and Success of the Organization. *Procedia - Social and Behavioral Sciences*, 109, pp.645–648.

Manyika, J. and Sneader, K., 2018. *AI, Automation, and the Future of Work: Ten Things to Solve for.* [online] *McKinsey Global Institute: Briefing Note Prepared for the Tech4Good Summit, Organized by the French Presidency June 2018*. Available at: <https://www.mckinsey.com/featured-insights/future-of-work/ai-automation-and-the-future-of-work-ten-things-to-solve-for> [Accessed 22 Oct. 2019].

Marquardt, K., Olaru, M., Golowko, N. and Kiehne, J., 2018. Study on Economic Trends, Drivers and Developments of the 21 St Century. In: R. Pamfilie, V. Dinu, L. Tachiciu, D. Plesea and C. Vasiliu, eds. *4th BASIQ international Conference on New Trends in Sustainable Business and Consumption*. Heidelberg, Germany. Bucharest: ASE, pp.65–73.

Murswieck, R., Dragan, M., Maftei, M., Ivana, D. and Fortmuller, A., 2019. A study on the relationship between cultural dimensions and innovation performance in the European Union countries. *Applied Economics*, 52(22), pp.2377–2391.

Newman, D., 2018. 2018 Digital Transformation Trends: Where Are We Now? *Forbes*. [online] Aug. Available at: <https://www.forbes.com/sites/danielnewman/2018/08/20/2018-digital-transformation-trends-where-are-we-now/#3ad594c1c647> [Accessed at 28 Sep. 2019].

Ross, J., 2017. Don't Confuse Digital with Digitization. *MIT Sloan Management Review*, [online] September. Available at: <https://sloanreview.mit.edu/article/dont-confuse-digital-with-digitization/> [Accessed at 10 Jan. 2018].

Schallmo, D., Rusnjak, A., Abzebgruber, J., Werani, T. and Jünger, M., 2017. *Digitale Transformation von Geschäftsmodellen: Grundlagen, Instrumente und Best Practices. Jetzt digital transformieren*. Wiesbaden: Springer Gabler Verlag.

Stahl, A., 2018. Gen Z: What to Expect From the New Workforce. *Forbes*, [online] September. Available at: <https://www.forbes.com/sites/ashleystahl/2018/09/26/gen-z-what-to-expect-from-the-new-work-force/#61be369a63e0> [Accessed 19 Jun. 2019].