

MANAGEMENT REFLECTIONS ON INNOVATIONS IN DIGITALIZATION, WITH AN EMPHASIS ON DEGREE OF WORK AUTONOMY

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Abstract: The objective of this research study is to identify the degree of implementation of innovations in the field of job digitalization and to identify whether jobs allow employees to maximum autonomy in the performance of their work. This study uses Computer Assisted Self Interviewing (CASI) to meet this objective and to test the hypotheses. Data distribution and collection were conducted throughout the year 2020; the research sample includes 841 companies from the EU 27 international environment. The holistic finding is that economic sector does not show significant differences in current levels of or expectations for innovations in the field of digitalization. This finding demonstrates that digitalization is a phenomenon that is not only linked to certain specific industries of the economy, but that affects the economy as a whole. The authors' research demonstrates that EU 27 businesses, regardless of the sector in which they operate, are aware of the need to innovate in digitalization in order to remain competitive.

Keywords: Digitalization, freedom, innovation, management, work.

JEL Classification: M10, M12, M54.

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Introduction

Today's business environment requires leaders to be able to react quickly to the changes that are constantly emerging. Agile techniques help leaders face such challenges and engage the organization in an environment where it can respond flexibly to

emerging changes (Fincke et al. 2020; Hitka et al., 2018). Agile people leadership is based on motivating team members while allowing them to communicate with each other and set goals, with each of them involved in decision-making and capable of self-management (Salajová, 2020).

In the past, people leadership has mainly focused on the individual and his or her relationship with subordinates or successors. The field of leadership has primarily focused on the behavior, thinking, and actions of the leader in a team or organization (Blíšťáková et al., 2020; Jankelová et al., 2021; Salajová 2020). This paradigm has dominated the field of organizational behavior for decades. However, this idea has changed in recent years and people leadership is now conceptualized as an activity that is shared and distributed among team members, groups, or the entire organization. Today, the trend is for individuals to be given the opportunity to take on leadership responsibilities for a period of time, after which leadership will again pass to other individuals (Pearce et al., 2014; Vnoučková et al., 2015). Such conditions create an opportunity for a degree of work autonomy to be exercised by the individuals in the organization. Llopis and Foss (2016) argue that employees with greater work autonomy have greater creativity in the workplace and their need for a sense of belonging is fulfilled, which can ultimately lead to increased intrinsic motivation. Employee satisfaction is one of the key conditions for an organization to have a high level of performance, whether that organization is a business, a public authority, or an institution providing other public services (Kislingerová, 2008). A key prerequisite for employee satisfaction is the attitude of managers or leaders both toward the achievement of goals and to their subordinate employees.

Since we are now in the period of the fourth industrial revolution, it is necessary to adapt to the new conditions in order for organizations to be successful in the marketplace. While technology is the main driver of Industry 4.0 (Kupec et al., 2020), the processes and the entire organization are what must change in order for a business to be able to compete in the marketplace (Kohnová et al., 2019). According to a study by authors Sehlin et al. (2019) 70% of the resources companies invest in improving product and service offerings, 20% are used to find and implement opportunities from external environments and 10% of the investments are directed towards digital transformation. For most organizations, Industry 4.0 is still in its early stages and digital transformation requires appropriate people leadership, the possession of adequate skills, and the commitment to

overcome challenges for successful implementation (Salajová, 2020; Šulyová et al., 2021).

1. Theoretical Background

1.1 Implementing Innovation in the Context of Digitalization

Terms such as Industry 4.0 and the related terms digitalization (Alcácer & Cruz-Machado, 2019), internet of things (Xu et al., 2018), and big data analytics (Bawa et al., 2016) have now become synonymous with innovation, in almost all spheres of life.

Industry 4.0 is a revolution built on digitalization (Petrů et al., 2020), changes in manufacturing processes, and changes in business models in order to speed up and streamline production (Müller et al. 2018), as well as by integrating the different systems in a company from customer requirements to the final product through digitalization (Kagermann et al., 2013; Wojčák et al., 2018).

The main manifestation of digitalization is the integration of physical inputs into digital systems (Alcácer & Cruz-Machado, 2019). Digitalization enables the collection, execution, and production of large amounts of information on a daily basis using the capabilities of computational tools. On the basis of which, there is a growing demand for analytical tools for the use of digital data, which is reflected in the development of technology for Big Data analytics (Witkowski, 2017). Technologies for big data analytics are considered to be a catalyst for development and systems for managing and streamlining the use of company resources (Bawa et al., 2016; Blíšťáková et al., 2019).

The current trend for digitalization technologies supports the networking of systems and their components (Kupec et al., 2021), which enables the connection of production processes, the interaction of sub-processes, the availability of data, and the intervention of the human factor, has introduced the term internet of things (IoT) (Jankelová, 2020). The term internet of things was introduced in 1990 and can be considered the initiator of Industry 4.0 by providing full access to the internet through self-managed smart technologies (Qin, 2016). Thus, all physical devices gain the potential to become computers connected through the internet and thus use real-time data. The impact on the potential activities of companies on an international scale is significant (Belás et al., 2015). This strategic implementation of

IoT finds its use particularly in the area of geographically dispersed value chains and division of work in organizations with a global footprint (Buckley & Strange, 2015).

Tech Pro Research claims that 70% of companies have implemented a digital strategy or are working on its future development and use. Deloitte found that 87% of companies perceive digitalization as having had a large impact on their business, but only 44% of respondents are ready for digital transformation. According to the Harvard Business Review, only 23% of companies worldwide do not require digitalization. Digital transformation drives competitiveness and market growth by as much as 51%. In the wake of the COVID-19 pandemic, strategic business managers are setting goals to accelerate digital transformation (37%) and support remote working (37%) (AI Multiple, 2021).

Innovation in the sense of implementing different aspects of Industry 4.0 is now becoming a much more important factor for staying competitive than it was just a few years ago (Kucharčíková et al., 2015; Papula et al., 2019). The technologies used in this context are experiencing a tremendous boom, and the pandemic that since 2019 has significantly affected employee mobility represents an accelerator that has caused an enormously rapid spread of some elements of digitalization throughout the globe (Kalina, 2020; Kirchmayer et al., 2019; Qin, 2016; Urbancová et al., 2021).

1.2 Job Autonomy

The topic of employee autonomy in the performance of work is gaining importance primarily due to the advent of changes resulting from the onset of the 4th Industrial Revolution, the essence of which is massive digitalization (Fincke et al., 2020) and the replacement of simple monotonous worker activities (Franko et al., 2020; Ullrich et al., 2019). This results in the disappearance of jobs for employees with a low level of qualifications (Bradley & Kügler, 2019) while jobs for higher-skilled employees are in fact being created (Ližbetinová & Hitka 2016; Puciato et al., 2020; Wotschack, 2020). Whereas skilled workers inevitably need a considerable degree of autonomy in order to perform their jobs effectively (Fincke et al., 2020).

Autonomy is considered to be a highly motivating attribute/characteristic of work (Autin et al., 2021; Liu et al., 2020; Van der Burgt et al., 2019) – not only do people seek jobs in

which they have a sense of freedom to make decisions (Autin et al., 2021; He et al., 2021), but when they have such working conditions, their work performance (Liu et al., 2020) and level of creativity (Li et al., 2019) also increase, as does the potential for individual satisfaction and self-fulfillment (Autin et al., 2021). The degree of autonomy of individual jobs in a company must draw on certain assumptions. The alignment of individual efforts in pursuit of a common goal in particular is becoming the primary constraint on the level of delegation of authority and responsibility.

The recommendations of various authors are based on setting boundaries of action (Bartuska et al., 2016; Wulf & Finnestrand, 2021), while these usually are derived from the organizational culture (Hitka et al., 2015; Olexová & Gajdoš, 2016), and of course, while drawing on enough of the necessary resources for the performing the tasks, both informational and material (Çera et al., 2019; Korenkova et al., 2020). The key variables are the manager on the one hand and the employee, and his or her level of self-discipline and competence, on the other.

When discussing the degree of job autonomy, it is important to consider several attributes (Autin et al., 2021; Liu et al., 2020; Sirkova et al., 2016). It is necessary first and foremost to consider autonomy in the area of the job itself (Li et al., 2019) where the degree of autonomy is strongly linked to the specific aspects of the job (Kronberger, 2020). However, it is possible to find hidden opportunities for flexibility in many job roles that at first glance deny any degree of autonomy in their job description. Another much more significant attribute of autonomy is the manner in which work is performed (Li et al., 2019). In this area, there is significant scope for setting work conditions that allow for a significant degree of self-actualization by its performers. Effectively setting this attribute based on the values and principles of organizational culture (Jankelová et al., 2017; Kohnová et al., 2020; Shah-Nelson et al. 2020) is critical for effective performance management (Kupec, 2018). Marginally related to the degree of autonomy are flexibility of the place (Wessels et al., 2019) and time (Davidescu et al., 2020; Wielers & van der Meer, 2021) of work performance, but these are also significantly influenced by the specific aspects of the particular jobs. However, if room is created

for a certain degree of employee autonomy in this area as well, this may, like the previous attributes, contribute to increasing employee satisfaction and, as a result, performance. Another important attribute of job autonomy is room for flexibility in the choice of co-workers (Krammer et al., 2018). This attribute can be problematic for specific job roles, as well as for organizations with fewer employees. However, its overall importance to employee perceptions of job autonomy is highly significant (Autin et al., 2021; Čubranić-Dobrodolac et al., 2020; Lazarević et al., 2020) and thus has a significant impact on their performance.

The majority of the published scholarly research to date focuses primarily on the applicability of the individual elements of digitization to business processes (Bawa et al., 2016; Qin, 2016; Witkowski, 2017) or on changes to required employee competencies associated with the rise of digitization (Bradley & Kügler, 2019; Franko et al., 2020; Ullrich et al., 2019). And yet we are lacking an analysis of the extent of the use of digital tools and the associated need for a high level of employee autonomy in practice, as well as an analysis of the perceived need for their implementation for the future.

The research results presented in this paper enrich the current knowledge base specifically by demonstrating the current level of use of digital tools and the associated level of employee autonomy, as well as the perceived need for their implementation in the near future.

The authors of the paper have set the following research questions as part of their ambition to meet the research objectives:

- Do the respondents perceive the surveyed tools to be more important for the future than their current application in the company?
- Are there dependencies between the actual application of these tools and the number of employees, economic sector, or ownership of the company?
- Are there dependencies between the perceived level of importance and the size, sector, and/or ownership of the company?

2. Research Methodology

Data Collection

The research tool used to rate the readiness of companies to manage people in the era of digitalization was a questionnaire survey aimed at mapping trends in human resource management as a consequence of the digital

transformation of companies. The distribution and collection of data was conducted using the Google Forms platform from January to December in 2020. Respondents/companies determined the level of importance for the future of the company and the level of actual application/presence of the surveyed phenomenon in corporate practice. This level was rated on a scale of 1 to 5, with 1 representing the lowest level achieved or the lowest level of future relevance of the phenomenon under study and 5 the highest. The questions in the survey were thematically focused on modern tools and concepts in the human resource management system in the company related to the advent of Industry 4.0.

Research Sample

The research sample includes responses from 841 companies; when selecting the respondents, the authors of the research tried to reach out to companies in such a way that the structure of the sample would reflect both the regional aspect and the criterion of company size by number of employees. The authors of this paper are members of an international research consortium consisting of 55 researchers from the European Union. A total of almost 3,000 managers from private sector companies operating in the territory of the EU 27 responsible for managing and developing human resources in the company – were interviewed as part of the research carried out by this research network. Out of the 1,162 companies contacted, the sample was as large as 841, i.e., the return rate was 72%. In order to ensure the distribution of the research sample, the minimum number of respondents per country was set at 25, which was observed during the collection and processing of the acquired data.

Hypotheses

Based on the research questions identified, the authors formulated the following hypotheses:

H1: The rating of the expected state of the surveyed tools (maximum autonomy and innovation in digitalization) is higher than the rating of the current state.

H2: Companies with a higher number of employees show a higher rating of the current state of the surveyed tools (maximum autonomy and innovation in digitalization) than companies with a lower number of employees.

H3: Companies with foreign majority ownership have a higher rating of the current state of

Tab. 1: Structure of respondents to the 2020 survey

| Number of companies by number of employees | | Frequency | |
|--|------------|---------------|------------------------|
| 1–9 | | 256 | |
| 10–49 | | 174 | |
| 50–249 | | 176 | |
| 250–more | | 235 | |
| Number of companies by business area | | | |
| Production | | 272 | |
| Services | | 403 | |
| Other | | 166 | |
| Country | Frequency | Percent (%) | Cumulative percent (%) |
| Austria | 58 | 6.90 | 6.90 |
| Belgium | 30 | 3.57 | 10.46 |
| Croatia | 45 | 5.35 | 15.81 |
| Czech Republic | 87 | 10.34 | 26.16 |
| Denmark | 59 | 7.02 | 33.17 |
| Germany | 92 | 10.94 | 44.11 |
| Greece | 25 | 2.97 | 47.09 |
| Hungary | 61 | 7.25 | 54.34 |
| Ireland | 38 | 4.52 | 58.86 |
| Italy | 25 | 2.97 | 61.83 |
| Latvia | 26 | 3.09 | 64.92 |
| Poland | 76 | 9.04 | 73.96 |
| Romania | 27 | 3.21 | 77.17 |
| Slovakia | 98 | 11.65 | 88.82 |
| Slovenia | 25 | 2.97 | 91.80 |
| Spain | 28 | 3.33 | 95.12 |
| Sweden | 41 | 4.88 | 100.00 |
| Total | 841 | 100.00 | 100.00 |

Source: own

the surveyed tools (maximum autonomy and innovation in digitalization) than companies with domestic majority ownership.

H4: Companies from the manufacturing sector have a higher rating of the current state of the surveyed tools (maximum autonomy and innovation in digitalization) than companies from the service and other sectors.

H5: Companies with a higher number of employees show higher rating of the expected

state of the surveyed tools (the need for maximum autonomy and the need for innovation in digitalization) than companies with a lower number of employees.

H6: Companies with foreign majority ownership have a higher rating of expected state of the surveyed tools (the need for maximum autonomy and the need for innovation in digitalization) than companies with domestic majority ownership.

H7: Companies from the manufacturing sector have a higher rating of the expected state of the surveyed tools (the need for maximum autonomy and the need for innovation in digitalization) than companies from the service and other sectors.

We selected the following procedures for testing the hypotheses. To compare the expected and current state of the surveyed tools, we conducted a series of paired, non-parametric comparisons using the Wilcoxon test. To test the dependence of the current and expected state of the surveyed tools on company size and economic sector, we used a non-parametric Kruskal-Wallis one-way ANOVA. Where significant effects were found, the ANOVA was supplemented with multiple comparisons using Holm's correction for levels of statistical significance. The effect of majority ownership on the current and expected state of the surveyed tools was tested with the non-parametric Mann-Whitney U test. Where significant effects

were found, analyses were supplemented with substantive significance indices (r, η_{it}^2).

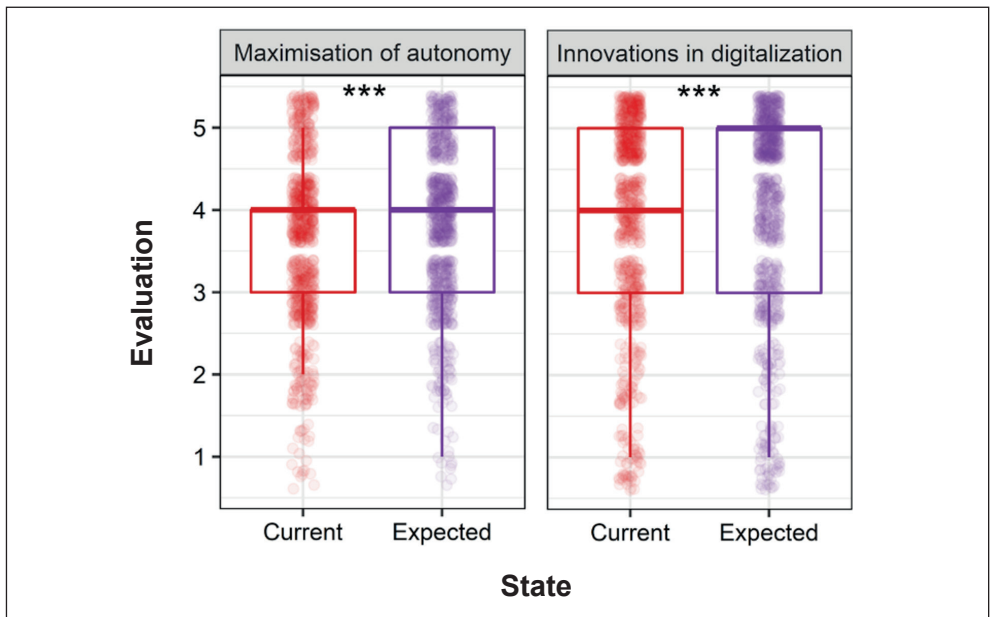
3. Research Results

The interpretation of the results of the research is structured in the context of the formulated hypotheses. First, we present the results of a comprehensive comparison of the ratings of current and expected state of the surveyed tools (Fig. 1).

A non-parametric pair comparison of the ratings of the surveyed tools showed that respondents rated the expected state more positively than the current state in both in tools that allow employees to maximum autonomy ($W = 11,264.5, p < 0.001, r = 0.441$), as well as the need for innovation in digitalization ($W = 5,772.5, p < 0.001, r = 0.364$), whereas in both tools the difference was comparable (Fig. 1).

Based on this result, hypothesis *H1* can therefore be confirmed: the rating of the expected state of the surveyed tools is higher than the rating of the current state.

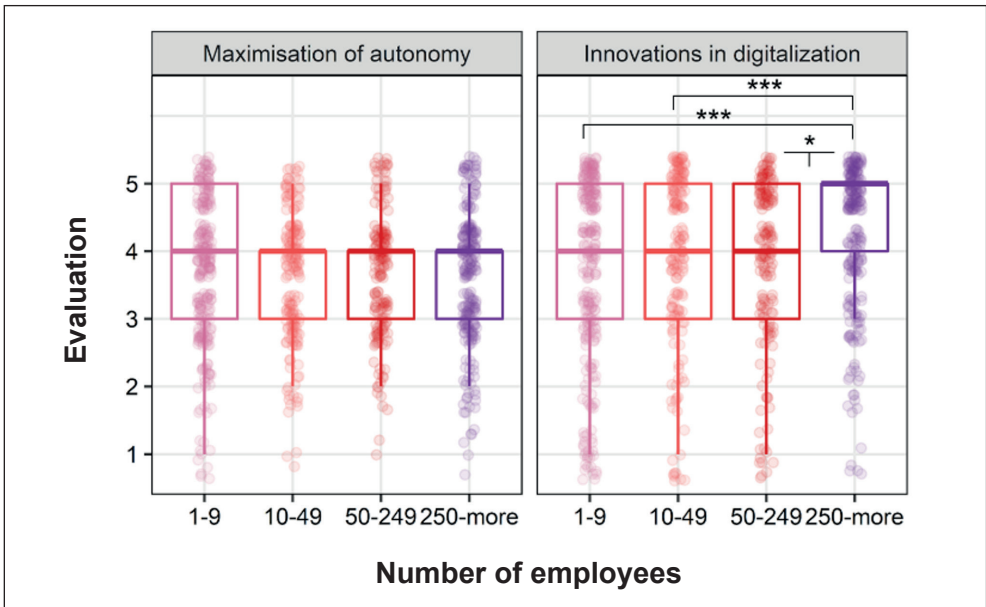
Fig. 1: Rating the expected and current state of surveyed tools



Source: own

Note: *** $P < 0.001$.

Fig. 2: Rating the current state of the surveyed tools by number of employees



Source: own

Note: * $P < 0.05$; *** $p < 0.001$.

When comparing the size of the company (number of employees) and the rating of the current state of the surveyed tools, a non-parametric Kruskal-Wallis ANOVA comparison showed no effect of number of employees on rating of the current state of maximizing employee autonomy, $H(3) = 3.250, p = 0.355$. However, there was a marginal but significant effect of number of employees on rating of the current state of perceived need for innovation in digitalization, $H(3) = 19.877, p < 0.001, \eta^2_{H^2} = 0.020$. Whereas multiple comparisons showed that businesses with 50–249 employees showed significantly higher ratings than businesses with 10–49 ($p_{Holm} < 0.001$) and 1–9 employees ($p_{Holm} < 0.001$). Likewise, businesses with 250+ employees showed significantly higher ratings compared to businesses with 50–249 employees ($p_{Holm} = 0.012$) (Fig. 2).

Based on this result, hypothesis $H2$ cannot therefore be confirmed: Companies with a higher number of employees show a higher rating of the current state of the surveyed tools than companies with a lower number of employees.

As there was no dependence in one of the observed attributes.

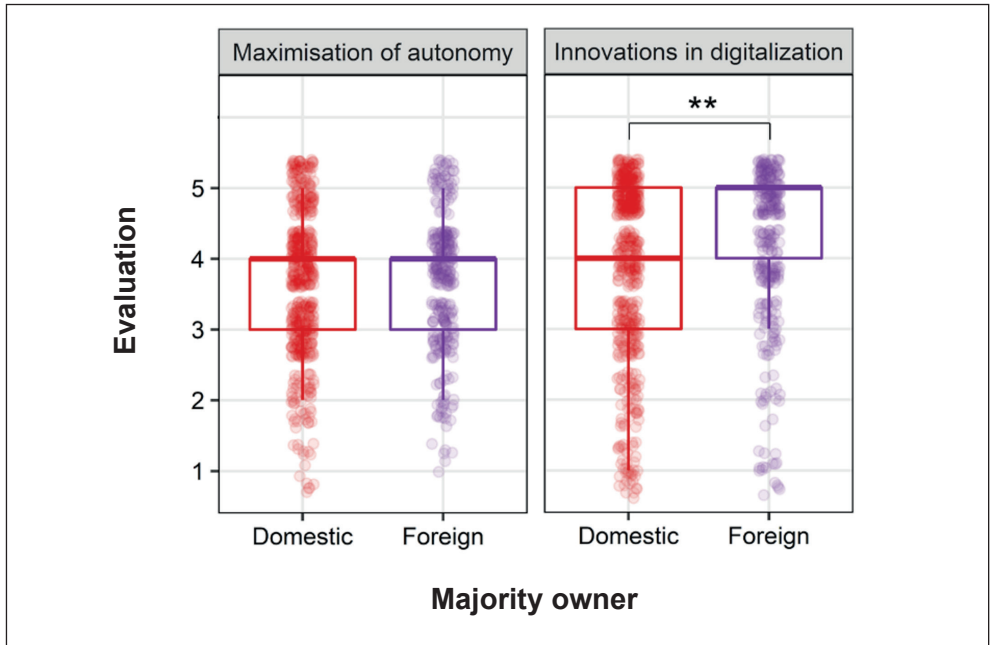
In identifying the relationship of the majority ownership of the company to the rating of the current state of the surveyed tools, the authors found that the level of rating of the current state of maximizing employee autonomy did not differ according to the majority ownership of the company, $U = 80,400, p = 0.992$. However, when rating the current state of digital innovations, companies with foreign majority ownership scored higher compared to domestic majority ownership, but the difference was marginal, $U = 71,696.0, p = 0.006, r = -0.107$ (Fig. 3).

Based on this result, hypothesis $H3$ cannot therefore be confirmed: companies with foreign majority ownership have a higher rating of the current state of the surveyed tools than companies with domestic majority ownership. As there was no dependence in one of the observed attributes.

As part of identifying the relationship between economic sector and rating of the current state of the surveyed tools, the authors found that economic sector had a small but significant

Fig. 3:

Rating the current state of the surveyed tools by majority ownership of the company



Source: own

Note: ** $P < 0.01$; * $p < 0.05$ † $p < 0.06$.

effect on the rating of maximizing employee autonomy, $H(2) = 20.472$, $p < 0.001$, $\eta_H^2 = 0.022$. In multiple comparisons, it was found that companies from other sectors ($p_{Holm} < 0.001$) and from the service sector ($p_{Holm} < 0.001$) showed significantly higher ratings than those from the manufacturing sector (Fig. 4). There was a marginal but significant effect of economic sector on innovation in digitalization, $H(2) = 8.984$, $p = 0.011$, $\eta_H^2 = 0.008$. Only the service and manufacturing sectors differed significantly ($p_{Holm} = 0.009$), whereas companies in the service sector had higher ratings (Fig. 4).

Based on this result, hypothesis $H4$ can therefore be confirmed: Companies from the manufacturing sector have a higher rating of the current state of the surveyed tools than companies from the service and other sectors.

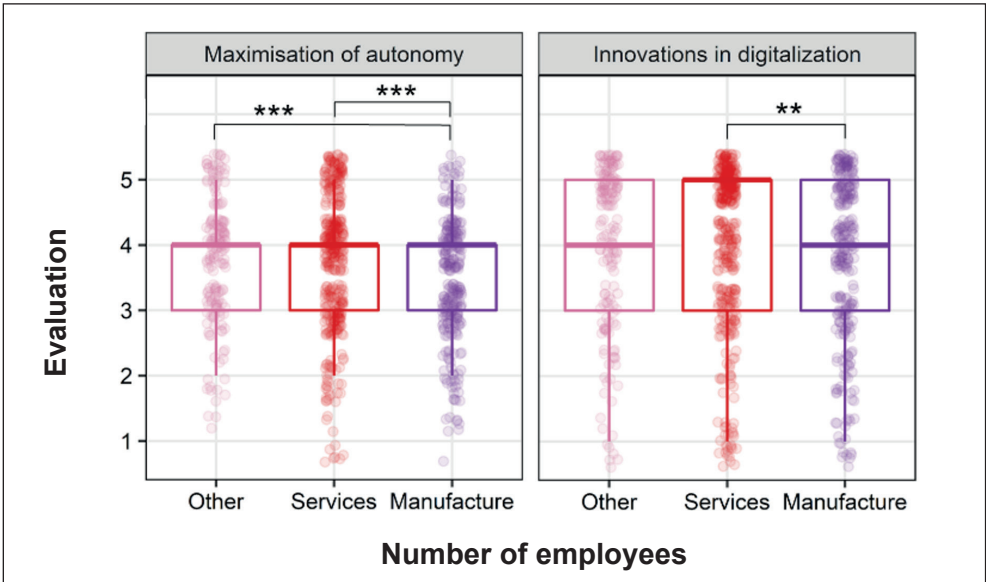
Subsequently, after identifying the current level of implementation of the monitored attributes by individual respondents, the authors focused their attention on the analysis of the

expected status of these attributes in the near future.

In identifying the effect of company size (number of employees) on the rating of the expected state of the surveyed tools, the authors found that company size had no significant effect on rating the expected maximizing of employee autonomy, $H(3) = 0.412$, $p = 0.938$, and yet there was a small but statistically significant effect of company size on expected innovations in digitalization, $H(3) = 21.596$, $p < 0.001$, $\eta_H^2 = 0.023$ (Fig. 5). However, in multiple comparisons, after correcting for levels of statistical significance, none of the differences turned out to be significant, ($p_{Holm} > 0.080$).

Based on this result, hypothesis $H5$ cannot therefore be confirmed: companies with a higher number of employees show higher rating of the expected state of the surveyed tools than companies with a lower number of employees. As there was no significant dependence in any of the studied attributes.

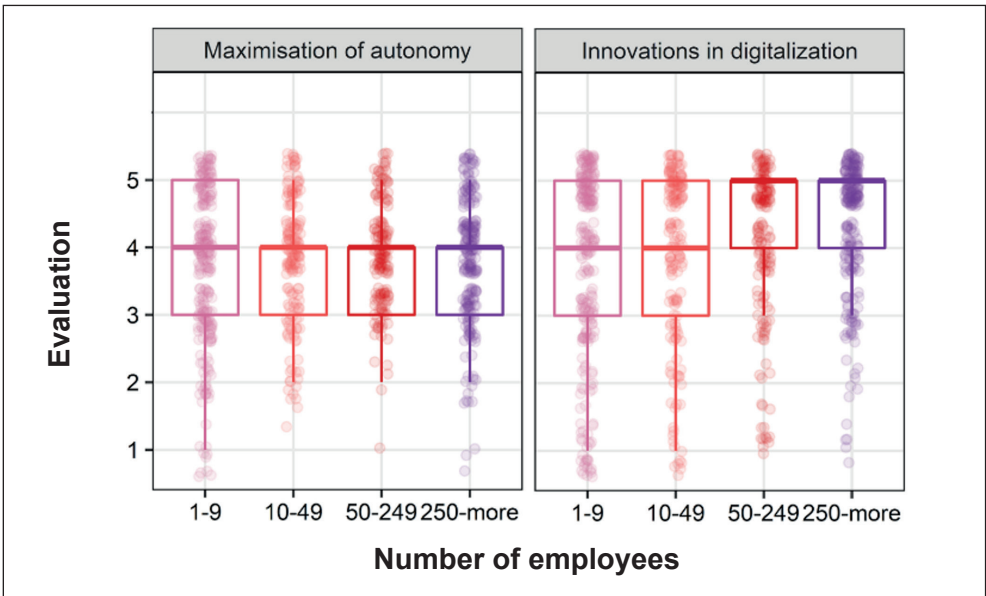
Fig. 4: Rating the current state of the surveyed tools by economic sector of the company



Source: own

Note: * $P < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

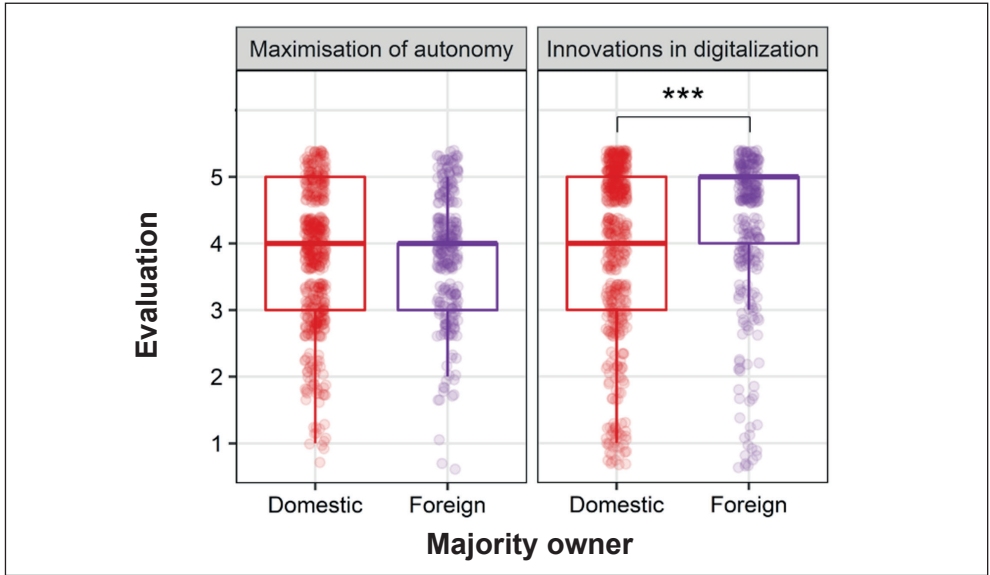
Fig. 5: Rating the expected state of the surveyed tools by number of employees



Source: own

Note: * $P < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

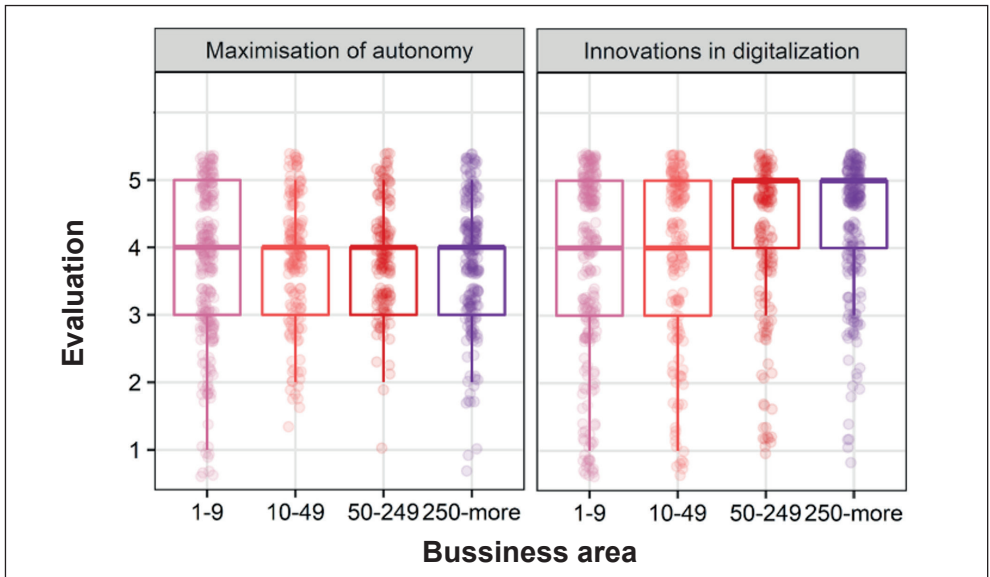
Fig. 6: Rating the expected state of the surveyed tools by majority ownership of the company



Source: own

Note: *** $P < 0.001$.

Fig. 7: Rating the expected state of the surveyed tools by economic sector of the company



Source: own

Note: * $P < 0.05$; *** $p < 0.001$.

In identifying differences in the rating of the expected state of the surveyed tools by majority ownership of the company, the authors found that the rating of the expected state of maximizing autonomy [$U = 74,891.5, p = 0.310$] did not differ significantly depending on the majority ownership of the company. However, foreign majority ownership showed slightly and significantly higher scores in the expected need for innovation in digitalization [$U = 68,361.5, p < 0.001, r = -0.129$] compared to domestic ownership (Fig. 6).

Thus, based on the result of the non-parametric pair comparison, we reject hypothesis *H6* foreign majority-owned companies have higher ratings of the expected state of the survey tools than domestic majority-owned companies.

In identifying differences in the rating of expected state of the surveyed tools by economic sector, the authors found that economic sector had a marginal but significant effect on rating of the expected state of maximizing employee autonomy, $H(2) = 16.125, p < 0.001, \eta_{H^2}^2 = 0.013$ (Fig. 7). Multiple comparisons showed that companies in other sectors ($p_{Holm} = 0.026$) and in services ($p_{Holm} < 0.001$) had significantly higher scores than companies in manufacturing. However, the effect of economic sector on expected need for innovation in digitalization was not statistically significant, $H(2) = 5.913, p = 0.052$ (Fig. 7).

Thus, based on the result of the non-parametric pair comparison, we reject hypothesis *H7* companies from the manufacturing sector show higher ratings of the current state of surveyed tools than companies from the service sector and other sectors.

4. Discussion

The non-parametric pair comparison of the ratings of the surveyed tools showed that respondents rated the expected state more positively than the current state both in terms of the need for innovation in a time of increasing digitalization and in maximizing employee autonomy, with a comparable difference in both tools. In multiple comparisons, the authors found that there were no differences in the individual attributes studied compared to the demographic characteristics of the respondents; however, the authors identified several differences that need to be interpreted.

In an analysis of the current state of implementation of the monitored attributes, the

authors identified a marginal but significant effect of number of employees on the rating of the current state of perceived need for innovation in digitalization, with multiple comparisons showing that companies with 50–249 employees showed significantly higher ratings than companies with 10–49 and 1–9 employees, while companies with more than 250 employees similarly showed significantly higher ratings compared to companies with 50–249 employees. Thus, larger companies are better off than smaller ones in having an active process for implementing innovations as well as in anticipating the future need for innovation, which is partly contrary to the view of McKinsey, who believe that firms belonging to the group of SMEs with less than 100 employees are three times more likely to succeed in digital transformation than large firms (AI Multiple, 2021). The question that arises from this comparison is therefore what the cause is of the more significant orientation towards digital innovation among larger companies, or rather the less significant orientation in EU 27 SMEs.

In addition, a higher share of implemented innovations was also identified for foreign majority-owned companies compared to domestic ones, although the difference was marginal (Rachinger et al., 2019; Szalavetz, 2019). Moreover, most of the major players in this sector of the economy have a foreign majority in their ownership structure. Given the fact that foreign majority ownership showed a moderately and significantly higher score also in the expected need for innovation in digitalization compared to domestic ownership, the reason for this difference remains questionable, as well as its implications for the competitiveness of companies with domestic majority ownership.

One interesting finding is that economic sector does not show significant differences in the current level or expectation of innovation in digitalization. This finding demonstrates that digitalization is a phenomenon that is not only intertwined with only certain industries of the economy, but that affects the economy as a whole. Although several studies point to different rates of implementation of digitalization depending on the different sectors of the economy, with construction and agriculture emerging as the slowest sectors in this area (Safronova et al., 2018; Skoda, 2019) the impact of digitalization as demonstrated by substantial research (Bienhaus & Haddud, 2018; Galera-Zarco et al.,

2020) is evident in every industry. However, the finding that economic sector shows a significant effect on ratings both of the current state of employee autonomy and the expected state in the future, where in multiple comparisons it was found that companies from the service sector showed a significantly higher rating than companies from the manufacturing sector, does not just indicate that the industrial sector may have a problem in the effective introduction and especially the application of digitalization with the necessary level of employee autonomy.

Conclusions

The authors' research has shown that EU 27 companies, regardless of the sector in which they operate, are aware of the need to innovate in the field of digitalization in order to remain competitive. This fact is reflected in the ESCP Digital Riser Report 2021 which ultimately looks positive and predicts a successful position in the future competitive battle (European Center for Digital Competitiveness by ESCP Business School, 2021).

One important finding was that larger companies are better off in having an active process of implementing innovations, as well as in anticipating the future need for innovation. Smaller enterprises are generally considered to be more flexible and innovative than large ones. Identifying the causes of this phenomenon, which is contrary to general assumptions, should be the subject of further research.

The finding that companies perceive the degree of employee autonomy at work comparably regardless of size or ownership, while companies operating in the manufacturing sector are less often aware of an increased need for employee autonomy in carrying out work activities than companies in other sectors, is likely to be primarily related to the different nature of the work of employees in these industries.

The authors of the paper see limitations in the research primarily in the structure of the research sample, which is not representative due to the sectoral structure of the economies of individual countries or the number of enterprises represented in the country. It would be advisable in the future for comparisons of the EU 27 countries to interview representative samples of respondents within each country.

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