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RESEARCH ARTICLE

Ready or Not, Here Comes the Digitalization: Assessment of Workforce Readiness and Change Perception

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Abstract

The digital world is an indispensable reality of the new century. While technical aspects for transformation are heavily evaluated, the readiness of human resources for digital transformation is not handled as a basic change management principle. This study aims to enrich the literature by determining the perception of the readiness for a digital change of individuals. The purpose of the study is to investigate the factors that have a direct association with the readiness of the workforce during the digitalization process. The vast majority of the digital integration efforts are aimed at increasing digital maturity levels. However, in order to ensure human resources' participation in a digital transformation, it will be useful to measure their perception of readiness for digitalization and develop strategies that will enable participation. Therefore, this research will be a guide in the journey of digital change management of the workforce. Structural Equation modelling has been used to analyse the data. The research sample consisted of 460 participants that implement a digital restructuring process in companies. The results of the research evaluated, indicate that an individual's readiness for digital transformation is related to their perceived self-efficacy, need for change, management support and the benefit for the organization, and they are all like wheels in a machine wheels working for a successful digital transformation of workforce.

Keywords

Digital Transformation, Digital Human Resources, Readiness for Change, Need for Change, Organizational Benefit, Self-Efficacy

Introduction

The profuse possibilities that arose from the industrial revolutions have already started to exploit themselves through different contexts from business life to social life. Specifically, the so called - 4th Industrial revolution- era raised the importance of digitalization in consequence to an advance in manufacturing related technologies. A considerable number of companies that aim to compete globally in the high demanding context of business rivalry, and that adapt

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processes of digital integration are increasing frequently. Most of the works accomplished so far are related to the investment in new manufacturing technologies, the consideration of relevant design processes, the technology maturity level and the augmentation (Matt, Hess, & Benlian, 2015). Especially with the pandemic that the world has witnessed in recent years, the need to increase the level of digital maturity has emerged so that organizations can be less susceptible to changes and transformations. In other word, digitalization has become an obligation rather than an option (Fletcher & Griffiths, 2020). At this point companies direct the workforce towards those efforts only for the purpose of increasing their competencies in the usage of newly adopted technologies. However, it is mostly considered to be more useful to measure their readiness and acceptance level of digitalization, and then develop strategies accordingly that follow technical competencies (Cetindamar, Abedin, & Shirahada, 2021). Some researchers have paid attention to the effects of digital transformation at the workforce level (Kozanoglu & Abedin, 2021; Warner & Wäger, 2019). Respectively, the literature lacks the depth of this specific research to depict the human resources' readiness for, and acceptance levels of, sustainable digitally oriented change in the organizations.

For sustainable digitalization, not only the technology but also the management of the change imposed from this technology are crucial and needed. Organizational culture, management style and business processes have key effects on human resources' adaptation to digital transformation, and hence need to be designed and strategized accordingly. In total, those factors mentioned constitute the general framework of organizational change. Organizational changes cover both reactive and proactive moves to environmental changes such as technology, politics, economics etc. for a larger transformation during which the success of the change requires a common structure accepted by all the organizational functions (Hanelt, Bohnsack, Marz, & Marante, 2021). Specifically, during the digitalization if companies do not go beyond the investment and integration of manufacturing related technologies, a real organizational change may not flourish. Digitalization is more than a fixed technology investment that covers internal competencies development for sustainable advantage. Digital competencies serve companies in developing a technology-based business model, an efficient and effective use of resources in an agile manner, differentiating customer experiences, and innovating new products and services. Therefore, a narrow understanding of digitalization solely as a technological change will impede an organizations implementation of those competencies. To better establish the structure of digitalization and competencies, all the factors affecting these changes through human resources' readiness and acceptance levels, need to be clarified.

In that respect, this study covers quantitative analysis of the factors that affect human resources perceived readiness during digital transformations. A pilot industry with a moderate level of digital maturity can be stated as the interest area of the research to develop a scale to measure the perceived readiness of human resources. A quantitative analysis was imple-

mented through a questionnaire to the human resources of the companies. In the light of the quantitative analysis, a thorough interpretation of the findings is aligned to the literature on human resources roles in digital transformation.

This study makes an original contribution to the field by measuring the perception of the new generation of working principles of human resources. This further adds value to the increase in socio-economic value of digitalization by identifying proposals to create a communication network using the combination of technology and human factors and a flexible production /service environment in companies.

Literature Review

Change Management and Digitalization

In the dynamic environments, firms like all organizational actors, need to keep up with the rivalry and manage change continuously and repeatedly. According to Kotter (1995) technological developments, globally integrated economies, maturation of markets in developed countries create more competition with bigger markets and fewer entry barriers therefore causing shifts in the perception and application of organizational elements such as strategy, structure and culture (Pettigrew, Woodman, & Cameron, 2001).

Technological developments in particular create a cycle of change in which businesses regularly try to adapt innovation to survive. The reiteration of such changes, either incremental or radical changes within short time periods, plays an important role in achieving competitive advantage (Lewis, 2000).

Organizational change is "*adoption of new idea or behaviour by an organization*" (Pierce & Delbecq, 1977, p. 64). From other angles "change is to reveal some differences even if they are not new" (Robbins & Judge, 2012, p. 312). Prediscan and Roiban (2014) define change as "doing something apart from the initial condition that threatens the current forces and pushes organizations to face the unknown" (p. 280).

Change management comes with change process and change agents. The main process starts with the recognition of the need for change and initiation. Reasoning and explanation to all actors and planning for how to intervene to achieve the desired change are followed by implementation and follow-ups to produce a loop of feedback (Moran & Brightman, 2000). Therefore, it is crucial for organizations to assess and handle the change agents and change processes concurrently.

According to Lunenburg (2010); "*The individual or group that undertakes the task of initiating and managing change in an organization is known as a change agent. Change agents*

can be internal, such as managers or employees who are appointed to oversee the change process. In many innovative-driven companies, managers and employees alike are being trained to develop the needed skills to oversee change" (p.1).

Hence, the argument stressing that one of the critical factors in the successful completion of change is the attitude of employees towards change can be underlined (Miller, Johnson, & Grau, 1994). From this point of view, readiness for change is expected to have a positive effect on employees' attitudes. Beliefs, attitudes and intentions that the need for change and organizational capacity are prerequisites to explain the readiness for change (Armenakis, Harris, & Mossholder, 1993; Rafferty, Jimmieson, & Armenakis, 2013).

Various factors that affect the employees' perceptions of readiness for change are:

•Self-efficacy in technological change,

•Perceived senior management support,

•Perceived organizational benefit,

•Need for technological change (Kwahk & Lee, 2008; Holt, Armenakis, Feild, & Harris, 2007; Oreg, 2006).

In this context, organizational change emphasizes the need for the system logic of the organization to be considered as strategy, structure, culture, technology, shared values, leadership style and personnel in relation to its environment, the upper system and its sub-systems and their interaction and communication (Garvin, 1993). It is not possible for businesses to avoid changes in the digital age. Therefore, in order to achieve transformation, organizational change structure should be established.

Kurt Lewin's Power Field Analysis, which is the most cited model of organizational change in the literature, emphasizes the aim of equilibrium over supporting propulsive forces and restricting forces in change and clarifies this equilibrium with the unfreezing-action-re-freezing system. According to Lewin (1939) change / transformation occurs when there is an imbalance between limiting and driving forces, and this leads to dissolution in the first stage through behavioural patterns. Under this model, it is aimed to identify the institutional power resources in the dissolution phase and to reveal them at a level that will protect the existing structure, until the change in the action phase is realized and the improvement and the restraining forces are in balance, the desired change and innovation in the re-freezing phase are stereotyped and institutionalized.

For digital transformation, these processes have similar driving and limiting forces and have shortened the intervals of the processes in the applications that put technology at the forefront of organizational change models and put the change in a centre that constantly renews itself.

Marcon, Marcon, Le Dain, Ayala, Frank, & Matthieu (2019) states that "*Digitalization, is understood as the process of using digital technologies to create and obtain value in new ways. It has been enabled by the miniaturization of hardware, powerful microprocessors and wide access to the internet. The use of digital technologies can increase firms' performance and competitiveness. In a product-service system context, digital technologies can improve both the innovation process, by facilitating the orchestration and collaboration, and the outcome, since they can offer new functionalities and deliver value through a digital solution*" (p.255).

The majority of the research on digital change includes what kind of changes in the fourth industrial revolution will lead to future job descriptions, measuring the level of digital maturity of enterprises, analysis of the current situation and competence on the basis of country, sector and enterprise (Rüßmann, Lorenz, Gerbert, Waldner, Justus, Engel, & Harnisch, 2015; Forschungsunion & Acatech, 2013; TUSIAD, 2017; Trends, 2017). A few studies were found that measure employee perceptions during the digital transformation process (Kumar, Renjith, & Nimal, 2019; Schneider and Sting, 2020). Academic interest of the digital transformation of workforces focusses on digital literacy measurements (Kozanoglu & Abedin, 2021), evaluations of employee satisfaction, the perceived use and easiness (Kumar, Renjith, & Nimal, 2019) measurement of employees' feelings (Schneider and Sting, 2020), resistance of employees to digital chances (Frick, Mirbabaie, Stieglitz, & Salomon, 2021; Stam, Stanton, & Guzman, 2004). However, employees' beliefs and perceptions, which are one of the important stakeholders of the change, influence the completion of the process (Cunningham, Woodward, Shannon, MacIntosh, Lendrum, Rosenbloom, & Brown, 2002; Eby, Adams, Russell, & Gaby, 2000). Because it is possible to encounter employee resistance in organizations where radical changes such as digital transformation are experienced. Therefore, transformational leadership is important in order to provide involvement of employees by understanding the benefits and purposes of the transformation (Riasanow, Setzke, Böhm, & Krcmar, 2019).

Organizational change is the most striking element in digital transformation and it can be said that this change is accepted by organizational employees and corporate culture (Kilmann & Covin, 1988; Lundberg, 1996; Schein, 2010). The attitude towards machinery and equipment in the first industrial revolution is similar enough to guide attitudes towards digitalization in the information age (Hitt & Sirmon, 2009).

"*Changes in the environment in which the organization is located begin to affect the organization through its inputs and disrupt the balance of the organization. When changes in the environment of the organization reach great dimensions, the organization has to change according to the demands of the environment in order to continue its vital activities. Every change leads to an interaction and as a result of this interaction, it may change the organization, work, business, technology and group structures and significant changes in the existing relationships, habits, ways and methods may have to be made*" (Yeniçeri, 2002, p.102).

The expectation of the need for human beings will decrease with the integration of production technologies into more business processes, and the implications that developments are perceived as a threat to employees constitute bias against change in digital transformation. However, it is argued that digitalization will create new job descriptions and competency-based employment will come to the fore in the industries. Employees are expected to take on tasks such as solving complex problems, following processes, and improving production processes rather than using machines in the production line and in the processes (Hecklau, Galeitzke, Flachs, & Kohl, 2016; Huws, 2018; Friedman, 2018) Therefore, the uncertainties experienced by employees in digital transformation should be examined to prepare them for digital working conditions. It is necessary to involve employees to prevent the transformation within the organization from being solely technology investment and to ensure the continuity of digital transformation. Besides, technology should be evaluated as an individual growth opportunity and competency development process (Solberg, Traavik, & Wong, 2020).

All stakeholders in the value chain, especially employees, should be involved to achieve horizontal and vertical integration in the transformation process (Lai & Ong, 2010; Schumacher, Erol, & Sihn, 2016). As it has been stated, employees must be aware of the need for change, know the reasons for the change, be prepared for and be open to the idea of change, and accept change (Backer, 1995; Eby et al., 2000; Madsen, Miller, & John, 2005). Thus, readiness to change is expected to have a positive effect on the attitudes of employees towards digitalization. Employees as individuals'; their readiness is related to their willingness to support change and feel confident about their competencies in the change process (Vakola, 2012).

The scope of technology acceptance model, which is has been widely applied to measure individuals' perceptions of technology acceptance, is aimed at determining the behavioural intentions of technology users. The model argues that technology acceptance depends on two main factors: the perceived ease of use and the usefulness (Yucel & Gulbahar, 2013; Ma & Liu, 2004). However, the research model of this study differs from the technology acceptance model as it is aimed to measure individual perceptions of readiness, needs, self-efficacy exc. in the transformation process rather than technology acceptance in digital transformation.

Research Methodology

Research Design

In this research, it is aimed to create the future projection by determining the perception of readiness for change of human resources that will create the greatest added value in the production/service environments of the future towards the new generation of working principles. It is aimed to formulate suggestions for creating a communication network and flexible production/service environment with the combination of technology and human factors.

The research was designed to enable the human resources to be interpreted according to their readiness and the factors that affect readiness in the digital transformation process. The research consists of different phases. The phases of the study are explained in detail below.

The research question of the study is "What is the perception of human resources readiness for digital transformation and what are the factors affecting this perception?". The research was conducted in companies in the automotive sector that aim primarily to adapt to digitalization due to the nature of the sector. The attendances were voluntary in giving support to conducting the research.

Initially, the adaptation of technologies, which are the basic requirements of digitalization, is questioned. It is expected that the organizational structure (investment, design and skill development activities) related to digital technologies within the value chain will be implemented. It is important for firms to reach a certain level of maturity in order to determine the readiness of the human resources regarding the subject of digital transformation subject through research. For this reason, a preliminary assessment was made with the attendees regarding the digital structuring activities of their company. Within the framework of this research, 5 main constructs were emphasized to measure the readiness of the employees, and the factors that are supposed to affect their readiness for the digital structuring process (Kwahk & Lee, 2008; Oreg, 2006).

Research Model

Digital transformation is an emerging phenomenon that carries concerns related to causing unemployment and the changing role of human beings in business life. Therefore, companies should make an effort to prepare human resources for digitalization to avoid such discussions in during the process of change. Even though previous theories and measurement models exist to understand the change reaction of HR, the content of this study is relatively new due to focusing on their perceived readiness. An exploratory approach was necessary to provide adequate insights into an individual's perception of digital transformation (Venkatesh, Brown, & Bala, 2013). Therefore, a quantitative survey was used.

Within the framework of this research, 5 main elements were focused on to measure the readiness of employees in the digital structuring process. In accordance with the content and objectives of the study, the following hypotheses were tested; (Armenakis et al., 1993; Bandura & Adams, 1977; Choi & Ruona, 2011; Holt et al., 2007; Jimmieson, Terry, & Callan, 2004; Kwahk & Lee, 2008; Oreg, 2006; Rafferty et al., 2013; Van den Heuvel, Schalk, & Van Assen, 2015).

Readiness for Digital Change: Digital transformation should be considered a long-term organizational change. It is important that employees are ready for this change process. Rea-

diness plays an important role in accepting technological changes and reducing the resistance to change by shortening the familiarization period. For this reason, various expressions were directed to measure the readiness of the employees for the change process.

***Perceived Need for Digital Change*:** How much individuals need change is closely related to accepting the change process. For this reason, the short-term and long-term need for digital solutions was questioned.

H_1: A perceived need for change has a positive effect on individual's readiness for digital transformation.

Perception of Self-Efficacy in Digital Change: The fact that individuals feel competent in change is a motivating factor in performing the necessary actions for change. Expressions about whether they perceive their knowledge and skills as sufficient about digitalization/technology are directed.

H_2: The self-efficacy of an individual has a positive effect on an individual's readiness for digital transformation.

***Perceived Senior Management Support*:** The justification for change and the right flow of information to individuals in the process reinforces the belief in change. Top management is expected to build trust and support the change within the organization. Therefore, the level of perceived support and trust in senior management was measured.

H_3: The perceived senior management support has a positive effect on an individual's readiness for digital transformation.

***Perceived Organizational Benefit**:* In addition to the individual benefit of change, it is expected that the change will be beneficial within the organization, especially in the case of a high employee portfolio. Therefore, it has been measured whether the employees have expectations to gain an organizational benefit during the change process.

H_4: A perceived organizational benefit has a positive effect on an individual's readiness for digital transformation.

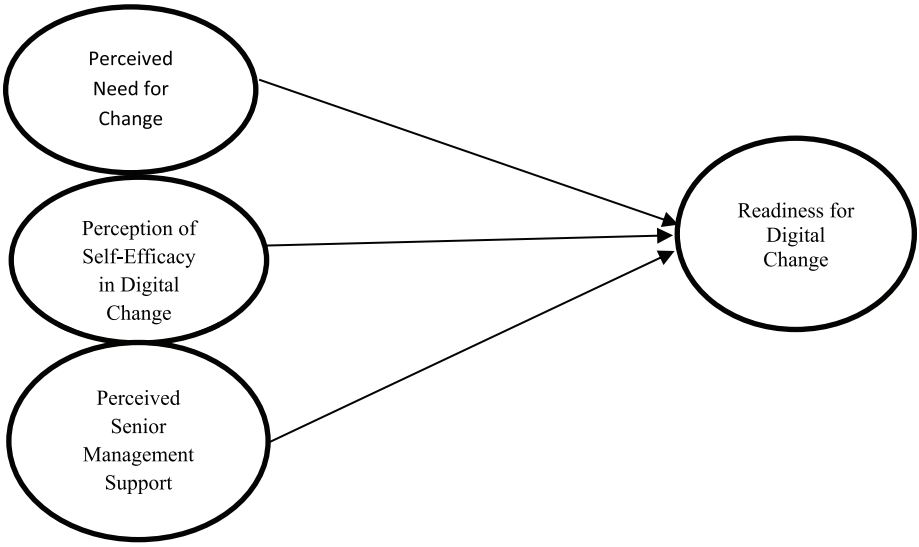


Figure 1. Research Model

Instrumentation

For the factors that affect individuals' perception of readiness for digital transformation, some variables were determined based on a theoretical basis. A structured questionnaire was developed in order to evaluate the variables obtained as a result of the literature review in accordance with the measurement rules. The definitions and scopes of all the variables related to the study are examined. As a second step, possible scale items of the variables obtained from the literature were determined. The instrument consists of 5 constructs and sub-items of the constructs in addition to a demographic characteristics part.

The perceived readiness of individuals constructs included 7 items that were adapted from Kwahk & Lee (2008) to capture employees' attitudes towards technological improvement. The need for change (10 items) and self-efficacy (6 items) were assessed with the scale adapted from Holt et al. (2007). Management support is another factor that is assumed to have effect on readiness. Therefore, 8 items were found from the previous studies (Holt et al., 2007; 0reg, 2006). Perceived organizational benefits from digital transformation as an indicator of the research were measured by a 6 item scale that was adapted from (Holt et al., 2007). However, the original language of the scale was in English. The items were translated back and forth between English and Turkish (Brislin, 1986). In the last part of the questionnaire, some statements were formed in order to determine the demographic characteristics of the participants. All constructs of the study were measured on five-point Likert type scales (From 1= Strongly disagree to 5= Strongly agree).

In order to measure the variables of the study, the correlation between the scale developed and the one that is to be measured should be consistent. Therefore, the scales used in the models in the literature were scanned and an item pool was formed with the ones suitable for the purpose of the research. Afterwards a pilot test was conducted by a random sample and 9 items were eliminated due to insufficient factor loadings.

Table 1
The Items of Scale

Construct	Number of items	Cronbach Alpha
Readiness for Digital Change	7	,894
Perceived Need for Digital Change	5	,751
Perception of Self-Efficacy in Digital Change	6	,817
Perceived Senior Management Support (ManSup)	5	,822
Perceived Organizational Benefit (Orgben)	5	,893

Data Collection and Sampling

The research sample consisted of 460 full-time white or blue colour employees working in different companies and organizations. Participation in this research was on a voluntary basis and respondents joined the research via an online survey. A snowball sampling method was used as a sampling procedure. As suggested by Marsh, Balla & Macdonald (1988) the appropriate minimum sample size of a study that has a structural equation model should be around 200. Considering this, it was decided that the number of samples was sufficient.

The majority of participants were male (92%) while female comprised 8% of the sample. Participants were distributed in terms of age; 21% of them 35-44, 69% 5-34, 4% 18-24, and 4 % above 55. Added to this, 80% of the participants were field workers while the rest were office workers.

Results

Structural Equation Modelling was used as the data analysis method in order to explain the causality relationship between the variables constructed in the research model. Structural equation modelling was preferred because it is a technique that demonstrates the power and direction of the relationship between the dependent and independent variables by taking into account possible measurement errors in the model that is based on the literature (Simsek, 2007). In structural equation modelling, it is possible to perform analyses regarding the relationship between different but related dependent variables in addition to this relationship (Hair, Black, Babin, & Anderson, 2010). Therefore, in this research, it is aimed to test the relations between the variables which are thought to exist theoretically by structural equation modelling.

Measurement Model

Initially, a measurement model was assessed as recommended by Segars & Grover (1993). The validity of the measurement model was ensured by conducting an exploratory factor analysis and a confirmatory factor analysis that specifies the relationships of the constructs (Selim, 2007.)

The KMO value should be higher than 0.60 and the Bartlett sphericity test should be significantly significant ($p < 0.05$) for the data to be compatible with factor analysis (Tabachnick & Fidell, 2007). In this study the KMO value was .933 and the Bartlett sphericity test found was to be significant. Furthermore, the constructs of the study exhibited a normal degree of internal consistency. The composite reliability of the items exceeded 0.70 as recommended by Nunally and Bernstein (1994).

The range of factor loadings of the measures was 0.47- 0.77. Only the self-efficacy Q2 was below the suggested level. However, it was decided not to drop the item. Each item loaded significantly on the underlying construct.

Table 2

Assessment of the Measurement Model

Construct	Mean	Std. deviation	Loadings	Composite Reliability
Readiness Q1	3,93	,958	,709	
Readiness Q2	3,76	1,015	,763	
Readiness Q3	4,34	,825	,641	
ReadinessQ4	3,98	1,031	,698	0,85
Readiness Q5	4,09	,823	,624	
ReadinessQ6	4,19	,839	,654	
ReadinessQ7	3,97	1,034	,692	
NFCQ1	3,72	1,245	,684	
NFCQ2	3,22	1,196	,624	
NFCQ3	3,84	1,214	,685	0,70
NFCQ4	3,60	1,191	,742	
NFCQ5	3,02	1,282	,602	
SelfefficacyQ1	3,71	1,094	,523	
SelfefficacyQ2	3,32	1,159	,470	
SelfefficacyQ3	3,80	1,009	,747	0,79
SelfefficacyQ4	3,88	,933	,771	
SelfefficacyQ5	4,21	,884	,745	
SelfefficacyQ6	4,19	,937	,782	

Construct	Mean	Std. deviation	Loadings	Composite Reliability
ManSupQ1	3,15	1,101	,678	
ManSupQ2	3,32	1,120	,692	
ManSupQ3	3,57	,988	,649	0,72
ManSupQ4	3,40	1,098	,748	
ManSupQ5	3,38	1,090	,716	
OrgBenQ1	3,85	,958	,760	
OrgBenQ2	3,96	,922	,759	0,71
OrgBenQ3	3,58	,971	,635	
OrgBenQ4	3,90	,992	,653	
OrgBenQ5	3,93	,988	,609	

*All loadings were significant based on t-values.

Afterwards, a confirmatory factor analysis (CFA) was carried out by using Lisrel. The chi-square degree of freedom in determining the goodness of fit of the measurement model, as well as multiple fit indexes of the Goodness of Fit Index (GFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), Standardized Root Mean Square Residue (SRMR) and Root Mean Square Error of Approximation (RMSEA) fit indices were used. The criteria of GFI, NFI, CFI being above 0.90 and SRMR below 0.08 and RMSEA below 0.10 were used to evaluate compliance (Bentler & Bonnet, 1980; Hoelter, 1983; Hooper, Coughlan, & Mullen, 2008).

Table 3

Goodness of Fit Index for SEM

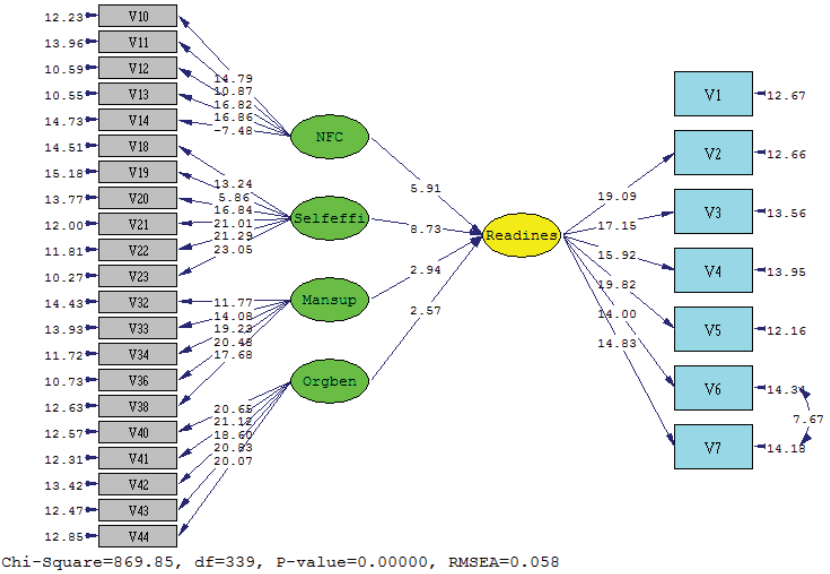
Goodness of Fit Index	Measurement Mode Values	Recommended Value
c2	869.85	p>0.05
c2 /df	2.56	≤ 3
RMR	0.06	< .05
RMSEA	0.058	< .10
GFI	0.88	> .90
AGFI	0.86	> .90
CFI	0.98	> .90
NFI	0.96	> .90
NNFI	0.98	> .90
CN	208.12	> 200

Overall, the model exhibited a good fit. Assessing all measures, the model provides satisfying evidence that ensures the structural model fits the data adequately, as the indices are shown above in table 3.

The Structural Model

The structural model was examined whether the parameter values are abnormal. The value of $\chi 2$ ($\chi 2 = 869.85$; df: 339; $p = 0.0$) was found to be significant. Added to this, $\chi 2 / df = 2.56$

is interpreted as being very close to a perfect fit and thus representing a good model. RMSEA value (0.058) and RMR value (0.064) show good agreement. GFI (0.88), AGFI (0.86), NNFI (0,98) and CFI (0,98) values also show acceptable fit values.



All dimensions need for change, self-efficacy, management support and organizational benefit had significantly influenced an individual's readiness for digital transformation and explained 67% of the variance in Readiness. Table 4 presents the estimation results for the structural model.

Table 4

Estimation Results of Structural Model

Structural Relations	Standardized Path Coefficients	T-Values*	Results of Hypotheses
Variables affecting the perception of readiness for digital transformation (R2= 0,67)			
H$_{1}$: Need for Change Perceived Readiness	0,26	5,91	Supported
H$_{2}$: Self-Efficacy Perceived Readiness	0,43	8,73	Supported
H$_{3}$:ManagementSupport Perceived Readiness	0,18	2,94	Supported
H$_{4}$: Organizational Benefit Perceived Readiness	0,19	2,57	Supported

In order to determine whether the implicit variables of the model predict each other in a meaningful way, t-values should be examined. The T-values provide information about whether the predicted relationships are as expected and are meaningful (Hair et al., 2010). Thus, all the hypotheses were supported.

Conclusion

The purpose of the study was to investigate some factors that have a direct association with readiness during the change process. This study introduced a model of perceived individual readiness for digital transformation that is affected by four dimensions. Overall, the findings supported that individuals' readiness for digital transformation is related to perceived self-efficacy, the need for change, management support and organizational benefits in support of H_1, H_2, H_3 and H_4. The contribution of this study is that the results obtained from the quantitative analysis underline the significance of 3 levels of change namely, organizational elements, individual elements and managerial aspects.

From the perspective of organizational elements, the perceived need for change and organizational benefits came to prominence. The results of the study demonstrated that a perceived need for change has an important role in explaining the readiness for digital change. The urgency of the change as perceived and placed as a need of the organization plays a crucial role in the digital transformation. Therefore, it is necessary for companies to put more emphasis on explaining and creating awareness of digital solutions to attract employees to give support for transformation. If employees recognize the need for digital transformation in business processes and believe in change, it would be easier to manage the attitudes of employees towards the change process. The communication of the change and its perceived need has to be managed in a way to ensure acceptance rather than be protected from resistance. Senior management needs to walk through with all levels both at strategic level and functional level for employees to internalize the transformation and accept being a part of it. These findings support the previous studies that confirmed the relationship between a perceived need for change and readiness (Eby et al., 2000; Oreg et al., 2011; Vakola, 2012).

The findings also lend support to the view that having a perceived organizational benefit has an effect on the readiness for change. The perceived organizational benefit can be considered to be the employees positioning of the organization within the competitive context. These aspects came to light specifically during the training as the majority of the participants expressed the objective of the firm-thus the benefit- to be superior to the competitors so that the economical and societal paybacks of the organization can be felt at all levels. One possible explanation for this could be an employee's commitment to organization may lead them to consider the benefits of the organization as transferable to individual benefits and have also valance on it.

Once the structural flow of the transformation is obtained, then individual level variables can be managed properly to be successful in the change process. For instance, in the light of the findings of the study, it is found that self-efficacy was associated with the readiness for change. Self-efficacy is an important indicator that provides self-motivation to cope with

digitalization and adapt to changing competencies. As Bandura (1994) stated in Social Motivational Theory, the higher level of self-efficacy provides an active learning process during change. Therefore, individuals may feel confident in learning and adapting to changes. For that reason, self-competency assessments of the employees supported the theory of self-motivation which further led to the results of readiness for digital transformation. Besides, previous research has also demonstrated that if employees are confident about their abilities, they would be able to cope with the unexpected part of changes (Vakola, 2012).

Last but not least, as predicted, the results showed that perceived senior management support is connected to individual readiness for digital change. It is important for corporate executives to be guiding and sharing in the digitalization process in order to ensure employee participation. It is recommended to take action with the motto of creating value together in the whole transformation process from strategy determination to implementation. It is considered that increasing the participation of the workers in the decision processes with their suggestions, especially in the creation of a technology road map, will create positive results. The employees' role as a practitioner in digitalization will lead to a narrow vision of the technologies they will need in the future. Therefore, the technology roadmap or digital transformation strategies of companies should be shared with the whole organization. In this way, both employees will be able to follow future technologies and increase their awareness in their fields of activity. Added to this, individuals may feel responsible for following new trends and perceiving a greater need for the integration of new technologies. In order for the intellectual capital of the companies to create value in digital transformation, it is necessary to establish a culture of digital transformation spread across all units of the institution.

Digital transformation is seen to be new era fact and organizations by their will or on-demand of the market will adapt themselves to this new verity sooner or later. Results of the present research led to the conclusion that digital transformation is more than just the digital component and change needs to be considered from both the technical aspects and the soft sides of the organization. The inclusive part of the digital transformation with a humanistic approach can also accomplish the technical objectives intended in the first place. Employees need to be transformed with new digital competencies and should be transformed along with the organizations. It is essential to consider human-technical interface more than an efficiency related phenomenon but rather than total machine wheels.

The study has a number of limitations. An important limitation of this study is even the construct was derived from a literature review and the research was conducted with limited participants. At least, the findings of the study present a starting point to explore individuals' feelings towards and perceptions of digitalization.

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