

WORKFORCE AGILITY: A REVIEW ON AGILITY DRIVERS AND ORGANIZATIONAL PRACTICES

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Abstract

The rapid changes in the business environment compel organizations to find new strategies for operations. The notion of agility became the most predominant and popular strategy to deal with an unpredictable environment. Despite the importance of workforce agility, literature has principally focused on manufacturing and organizational agility, although it stresses to require an agile workforce. The shortage of study brought limited knowledge and practice in the discipline affect the behaviour of enterprises. We aim to provide significant research insights by exploring an extensive survey of the available literature on workforce agility. We identify various workforce agility drivers and organizational practices. Based on this, we argue that an agile workforce simultaneously possesses multiple interdependent capabilities benefiting organizations operating in highly uncertain environments.

Keywords: Agility; workforce agility; agility drivers; organizational practices

1. INTRODUCTION

The past few decades have witnessed the constant need for organizations to adjust to changing and unpredictable environments. It is required to have competitive and differential advantages over others to embrace and adapt to the ever-changing organizational environments (Nijssen & Paauwe, 2012). Out of the many solutions proposed, flexible organization and an agile workforce have gained predominant importance. With the high technology boom and restructuring of the organization, the need for agile organizations aroused. The agility provides a competitive advantage in service quality, speed, and customer-centric behaviour (Harraf, Wanasika, Tate, & Talbott, 2015). Hence, the workforce should be equally flexible and agile as the technological processes to cope with the changing needs. Thus, agility has become exponentially crucial for organizations (Wageeh, 2016).

The agile workforce consists of creative employees with a positive mindset who believe in self-development through teamwork. The crew becomes compatible with dynamic problem solving and comes up with feasible solutions. The agility should exhibit in the top management and the entire workforce. There are five ways an organization can help the employees gain courage and skills to handle crises: (1) Retention of knowledge force by providing better development opportunities and catering to the individual requirements. (2) Empowering human resources by giving them opportunities to develop skills and gain autonomy. (3) Human values as a priority, It is of prime importance to have a workspace where there are cordial relationships and respect between all the communities and cultures. (4) Collaboration between different functional entities of the organizations helps generate understanding and cooperation between various entities. (5) Experimentation in terms of practices to promote flexibility and agility, brainstorming sessions to generate new ideas and alternate solutions and techniques to improve work-life balance and well-being of the employees.

This paper aims to provide insights into the agile workforce by analyzing the existing literature on agility. We discuss the need for an agile workforce, agility drivers and enablers, and organizational practices to promote workforce agility.

2. CONCEPTUALIZATION OF AGILITY IN THE WORKPLACE

The term agile manufacturing was coined in the year 1991. The Agility Forum defined it as the ability to thrive and prosper in a competitive environment of continuous change and respond quickly to a market-driven by customer preferences and customer-based valuing of products (Gunasekaran et al., 2019; Kumar, Singh, & Jain, 2019; Murray, 1996). From the definition that the speed and flexibility of the organization to adapt to its changing environment are emphasized as the primary attributes of agility (Abdelilah, El Korchi, & Balambo, 2018; Sherehiy, Ā, & Layer, 2007). Other aspects are responsiveness to change (Gren & Lenberg, 2019) and quality and customization of products (Boubaker, Jemaï, Sahin, & Dallery, 2019; Eltawy & Galliar, 2017; Perera, Soosay, & Sandhu, 2019). The requirements of manufacturing entities to respond to the unique pressures, cost, and quality constraints have led to the adoption of agility (Dahmardeh & Banihashemi, 2010).

As agility linked to manufacturing, technology utilization and process improvements got more comprehensive attention. Recently, the role of human resources realized as a factor that aids organizations to adapt to the changing environment (Alavi & Wahab, 2017). Thus, the success of organizational agility depends on the speedy implementation and utilization of new technologies. Information systems, business process integration, adoption of flexible organizational structures, external and internal cooperation and most importantly, a flexible and adequately trained workforce plays a significant role in the success (Breu, Hemingway, Strathern, & Bridger, 2001; Dubey & Gunasekaran, 2015). The agile workforce accomplishes the organizational goals by proactively utilizing their creative skillset (Breu et al., 2001). Organizations need to continuously remain updated about their environment to anticipate their future skill requirements. The developments in information technology and its utilization in organizations have changed how the workforce performs. Agile forces are more flexible in space and time and can easily fit into any internal, external or cross-sectional collaborative environment (Dubey & Gunasekaran, 2015; Sumukadas & Sawhney, 2010). Workforce agility offers more incredible benefits to the organization in terms of increased productivity, profits, market shares, speedy adaptation to change and competitive advantage over others in the market (Breu et al., 2001).

The disruption and economic crisis brought a flexible and adaptable workforce to organizations. The recent research in human resource management state the importance of dealing with the dynamic and unpredictable environment by becoming more agile in their day to day operations (Muduli, 2016; Muduli & Pandya, 2018; Nijssen & Paauwe, 2012; Sherehiy et al., 2007).

3. RESEARCH METHODOLOGY

The term “workforce agility” is used to collect research articles for conducting the literature review. After an initial check with the abstracts, 57 studies were found helpful for this study. We followed the most widely used (Tranfield, Denyer, & Smart, 2003)model, including three stages of planning, conducting and reporting. All the efforts aimed to fulfil our objectives to understand and find out the needs and drivers of workforce agility and organizational practices.

4. FINDINGS AND DISCUSSIONS

4.1 NEED FOR AN AGILE WORKFORCE

From the literature, it is clear that workforce agility is the ability of the knowledge force to find an optimal way to react to the turbulence in the environment at the optimal time and look for opportunities in the challenges. It caters to the need of the whole organization (which includes the different functional entities, practices and procedures, organizational culture and infrastructure). It makes it adaptable and responsive to the competition, changing market and customer preferences, technological advancements and human resource insufficiencies. The literature on agile workforce emphasis theoretically consistent factors that enhance the need forelegant people to remain competitive in the environment.

The external environmental drivers can provide opportunities and threats; it depends on the organization’s workforce to forecast and analyze the enterprise’s success changes(Vázquez-Bustelo, Avella, & Fernández, 2007). Therefore, it becomes essential to study the drivers for workforce agility.A driving force can be changes in the environment or preferred changes within the organization. Thus, the drivers of workforce agility can be elaborated in two headings: changes in the external environment and the organization’s changes.

4.1.1 External environment

Dealing with unpredictable and uncertain situations: According to (Chonko & Jones, 2005) cross-trained agile workforce shows two essential behaviours; the ability to react and adapt to changes efficiently and timely and the capability to exploit opportunities and turn them into benefits for the firm (Patil & Suresh, 2019). Workers need to acquire new skill sets and knowledge to stay abreast of new conditions in an unpredictable environment (Qin & Nembhard, 2015). (Griffin & Hesketh, 2005) studied tolerance behaviour explains the tolerance towards the stress out of the uncertainty of work, environment and the future.

Fierce competition in a market environment: With the high market competition, especially online and compressed product life cycles, it has become necessary for the organizations to go agile in not only their manufacturing processes but also train and maintain a proactive workforce (Gottfredson, 2018; Perera et al., 2019).

Change in customer preference: The foremost goal of any organization is to provide quality products and services to the customers. Nowadays, customers compare and choose the products from multiple sources, and thus competitive advantage and innovations boost sales. An efficient and agile knowledge force predicts market changes and keeps up with customer preferences, thus retaining existing customers and generating new market space (Chonko & Jones, 2005; Gren & Lenberg, 2019).

Technology: The velocity of technological developments are creating stress on the organizations to pace up and leverage the most out of it. The path to greater productivity and differentiation is possible through innovation, and it is the summation of human ingenuity and technology. The organizations must first look at their objectives and then use technology as a predictive tool to understand the skill requirements and possible market changes. The technological development makes the job rotation much more comfortable, and thus a multi-skilled workforce is obtained (Lyons, Biltz, & Whittall, 2017; Patil & Suresh, 2019).

Demographic and social factors: Demographic characteristics are essential factors of workforce agility, influencing workforce preferences and expectations. The social aspects, environmental protection acts and legal pressures from the authorities also lead to workforce agility (Richter, Reibenspiess, & Eckhardt, 2018).

4.1.2 Internal environment

Creative and prompt problem solving: Agile enterprise exists only when the workforce has an excellent problem-solving ability, capacity to embrace new change and the willingness to accept challenges (Patil & Suresh, 2019). The proactive behaviour noted by (Griffin & Hesketh, 2005) describes the workforce's ability to handle the crisis and find solutions for organizations under uncertainty.

Reconfiguring work tasks and procedures: Developing new skills, whether managerial and technical and updating self about the functions and techniques to be performed within a short period is necessary to achieve agility (Sherehiy, 2008). The predictive behaviour of the workforce about the market as well as the internal organizational process helps them develop multiple competencies and adapt quickly to new projects and tasks (Muduli, 2013, 2016; Patil & Suresh, 2019).

Coping with work stress: The tolerance behaviour is the ability to thrive in stressful situations, adjust to uncertainty, and profit from it. In these ambiguous situations, employees need to be innovative, self-motivated, have efficient problem-solving skills, open to change, accept new ideas, adapt to recent technological advances and take challenges (Patil & Suresh, 2019; Plonka.

Organizational flexibility: The flexible workforce handle change and ambiguity within and outside the organization. The agile workforce can dynamically deal with any turbulence, from supply change disturbances or conflicts to sudden customer orders or preferences. Thus for agility to be established, the organization should become flexible. The flexibility can be in terms of (i) Functional flexibility helps develop cross-sectional skills through job rotation and intensive training and thus a willingness to take up new challenges. (ii) Numerical flexibility wherein the adjustment is on the number of hours an employee works for the organization: includes overtime, flextime, job sharing, annualized working (iii) External numerical flexibility is required skillset sourced by supplying temporary workforce from external sources. It includes contract workers, freelancers (Gottfredson, 2019; Williams, Ph, & Connor, 2017)

The mindset of the workforce: Many organizations to promote agility offer incentives to the employees and implement agility through organizational policies, but in this process, they tend to overlook the most critical driver of an agile workforce, i.e., the mindset of the employees. Three

types of mindset are required: (i) Growth mindset identifies the potential and intelligence of oneself and others and sees the change in the environment as an attribute to grow, develop, and flourish. (ii) The open mindset opens oneself to the ideas of others and accepts collaboration. (iii) Promotion mindset keeps advancement and accomplishment in mind while dealing with change. (iv) The outward mindset observes others and utilizes all learning opportunities (Gottfredson, 2018, 2019).

Recruitment policies: With the changing face of organizational structure and how they function, recruiting potential talent with the right mindset is imperative. Technological innovations help in the recruitment, screening and selection process. Organizations hire a workforce with the required skillset, creativity and openness to change; they also have talent development centres to help broaden the skill spectrum of their employees (wemploy, n.d.).

4.2 DRIVERS OF WORKFORCE AGILITY

The agile workforce is characterized by its ability to adapt to the ever-changing market needs and customer preferences. It shows the ability to forecast and predict the possibilities of the future market trends, generate innovative ideas and accomplish goals with the optimal use of resources (Alavi & Wahab, 2017; Patil & Suresh, 2019; Vázquez-Bustelo et al., 2007). In the previous section, we have discussed the factors that drive workforce agility. This section deals with the personal characteristics which induce workforce agility.

- a) **Interpersonal adaptability:** Reactive behaviour (interpersonal adaptable, cross-culture adaptable) means working on multiple assignments or across different groups, engaging with teams and fostering a collaborative environment with a singular focus on task accomplishment (Griffin & Hesketh, 2005). Interpersonal adaptability enhances the person to work quickly with different teams within and outside of the organization based on the project requirements. Dynamic organizations rapidly develop new solutions and acquire marketplace agility through an adaptive workforce, grab most market shares, and get much profit (Dyer & Shafer, 1998; Shafer, Dyer, Kilty, Amos, & Ericksen, 2001).
- b) **Professional flexibility:** Rapid technological advancement, networks, and new manufacturing tools require flexible work and organization to achieve agility. Reconfiguration of the various organizational process captures emerging opportunities to

address unanticipated issues (Qin & Nembhard, 2015). Flexibility can be explained as planned responses to predictable contingencies to quickly change strategies/tasks/jobs to others to create stakeholder values. A flexible workforce allows organizations to reframe and restructure various assignments and realign the vital force to critical customer problems (Patil & Suresh, 2019). (Sherehiy, 2008) have identified workforce flexibility as one of the essential characteristics of enterprise agility. Flexible working arrangements, virtual work, knowledge management measures play a vital role in the Organisation (Richter et al., 2018). The flexible employee works under minimum or no supervision, has good interpersonal skills and accepts different cultures (Muduli, 2017; Sherehiy et al., 2007).

- c) **Proactivity** involves employees taking charge of the situation and taking self-initiated, future-oriented decisions. Proactivity consists of five parts: (i) Prediction, which helps the organization, have foresight about the market and environmental changes. (ii) Prevent, the prediction of the fore coming helps employees prevent potential threats from happening. (iii) Plan, the prediction data helps employees plan the strategy for future growth and thus help in market expansion, product differentiation and talent retention policies. (iv) Participate, the proactive workforce uses all development opportunities and accepts the challenging roles put forward to them. (v) Perform, the proactivity enables to act optimally, and increased awareness avoids procrastination (Bindl & Parker, 2010).
- d) **Resiliency:** With increased stress and risk of burnout in today organizations, resiliency is a quality attribute to cope with the turbulence and take calculated risks. There are many ways in which resiliency in the workplace can cultivate, some of which are: use of mindfulness practices, division and distribution of cognitive load, taking detachment breaks, practising mental agility, fostering compassion (Fernandez, 2016; Trifoglio, 2018)
- e) **Self-motivation:** It is a drive that pushes the employee forward towards the achievement of personal as well as organizational goals. The motivation can be from different parameters like rewards, recognition, supervisor support, teamwork, responsibility, autonomy. The employees are motivated when they have the required skills to handle multiple responsibilities with confidence (Aloysius, 2012; Robescu & Iancu, 2016)

- f) **Competency** is the skill set that the employees require to perform a job. As the employees handle multiple roles, they must develop various skillsets and abilities to function efficiently (Muduli, 2017).
- g) **Business orientation** is the attribute that makes employees align individual goals alongside organizational goals. Many factors foster business orientation: job satisfaction, interpersonal relations, rewards and incentives, employee supportive management practices. (Shafer et al., 2001).
- h) **Quick responsiveness:** The foremost aim of the agile workforce is to achieve the goals quickly using optimal resources. Thus, prompt responsiveness to changes from the plan or schedule due to unforeseen circumstances helps maintain output products and services (Qin & Nembhard, 2015).
- i) **Collaboration:** As the organizations adopt flat structures, collaboration and project team formations occur between different functional groups. The association can happen within and outside the organizations (Sherehiy et al., 2007).
- j) **Openness to information:** It is the eagerness to gain new knowledge and new skills. In this era of information technology, every data is available at a click, but it takes skill, interest, and patience to gather and collect the required information. The agile workforce comprises employees who are open to data from any source; they analyze it and store it for future reference (Muduli, 2009, 2016, 2017).

As knowledge and skills, many authors identified intrapersonal attributes as critical features. The multi-skilled workforce that can adapt to changes determines the organization's success (Alavi & Wahab, 2017).

4.3 ORGANIZATIONAL PRACTICES TO PROMOTE WORKFORCE AGILITY

The literature provides evidence that the organizations promoting workforce agility are proactive to change compared to other observatory and reactive organizations about the changing scenarios. Human resource professionals face challenges in implementing organizational practices in a dynamic environment. It thus becomes vital for the HR professionals to foster leadership that facilitates knowledge sharing, trust, the delegation of authority, teamwork and citizenship behaviour which in turn promotes agility in the workforce, thereby making the crew more compatible with changing (Alavi & Wahab, 2017; Heilmann, 2018; Sumukadas & Sawhney,

2010). There are two kinds of organizational practices that promote agility, one is strategy-based, and the other is growth-based. The strategy-based HRM practice is strictly related to the organization's business strategy (Alavi & Wahab, 2017). The growth-oriented practices are development based and focus on learning and building workforce competence. Thus when properly implemented, the organizational practices promote the enrichment of work-life, personal growth, job satisfaction and improve organizational performance (Nolan & Garavan, 2016).

Some of the organizational practices that implemented to promote workforce agility are:

Learning, training and development of a knowledge workforce: Organizations continuously improve processes and practices in this dynamic environment. Organizations realize that constant improvement means a commitment to learning. Thus training is provided to the employees to make them compatible and multi-skilled. Training and development centres prepare modules and materials and conduct training programs for the employees (Garvin, 2015).

Employee empowerment: Psychological empowerment mediated employee involvement in organizational practices and facilitated agility. Empowerment has four cognitions, meaning, competence, self-determination and impact. It generates a sense of autonomy in the employee, who is an essential predictor of workforce agility (Sherehiy et al., 2007).

Rewards and compensation are the most tangible drivers for promoting workforce agility. Literature shows that non-traditional rewards such as skill-based pay and improvement incentives are more effective than traditional rewards like profit sharing and gain sharing. Non-monetary rewards are equally effective in promoting agility in the workforce (Modgil, 2018).

Knowledge sharing and growth: Knowledge is an intangible resource that creates a sustainable competitive advantage. There are different types of knowledge sharing: explicit knowledge, where knowledge is made available to be shared between various entities, tacit knowledge shared with socialization, and embedded learning transmitted through clear procedures, policies, and processes (Janus, 2016).

Organizational structure: With the changes in the market and the boom in information technology, the organizational structure has gone drastic changes. The tall structures are

replaced by more flat structures, which provide autonomy to the employees. Increased virtual workspaces and co-working spaces enable organizations to be more decentralized, which aids agility and flexibility.

Recruitment: Information technology is used in the recruitment and selection process to select candidates suitable to join an agile workforce. Responsiveness, competence, and adaptability are the criteria analyzed through the employees' attitude, motivation, personality, and skills during selection and promotion.

Teamwork and collaboration: With the increase in the use of technology and improvement in learning and training, most employees are multi-skilled and thus comfortable working in teams to achieve goals and the organization's overall development. As the organizations operate in a dynamic environment, the organization's functional structure has given way to a more collaborative organization wherein for a project, different departments or functional units collaborate and form teams to work on the project (Dizari & Garoosi, 2015; Trehan, 2017). With collaboration, expert opinions of matters are available, and improved knowledge sharing occurs, which helps in efficient decision making. Agility is the collaboration between the organization's employees and between the organization and its stakeholders. The stakeholders are suppliers, customers, employees, shareholders.

Work-life balance: with the increase in work pressure on the employees and with the increased usage of technology, the mode and nature of work has undergone a drastic change; now work can be done anywhere anytime. Thus, the employees need the hour in work-life balance, and organizations are finding new HR practices to be implemented. Flexible working, flextime and flex-place, are the most crucial measure to ensure work-life balance.

5. FUTURE RESEARCH DIRECTIONS

With the growing attention of research and development in digitalization, artificial intelligence (AI) and the Internet of Things (IoT), more research is required to find the enablers and management practices to promote workforce agility. The enablers, such as proactivity, innovation, resilience, self-motivation and collaboration, are identified, but further study is required to find the extent to which these enable agility in the workforce. Also, workforce agility as a management strategy to cope with rapid changes is further studied in alternative work

arrangements; gig economy. Earlier, the employees used to have a psychological contract with a firm for a more extended period, but nowadays, they showcase psychological contracts with the employer until they work for them; it can even be for a short contract period. So, the psychological contract of the agile workforce in the gig economy is emerging to conduct research. Innovation is the product of individual characteristics and results of management practices. Hence, further studying how the agile workforce or organizational practices designed to develop agility impacts innovation can be studied. The overall structure of the organizations are changing; now is the age of flexibility and autonomy for the employees. With this comes specific problems of the psychological contract, information overload, security and self-management. The future requires a self-driven workforce. So, the impact of employees' personalities on participation, decision-making, competency development, and change management can be further studied.

6. CONCLUSION

Workforce agility is the ability of the employees to quickly and optimally react to the changes in the workplace and business environment. The agile workforce is proactive concerning the changes in the environments and problem solving; adaptive to the organizational structural and functional changes. With the boom of information technology and its utilization in every spear of work-life, it has become a requirement to have employees with IT knowledge. Cross-cultural organizations have boosted the need of having multilingual employees and a workforce, which can adapt to the multicultural organizational environment. This paper identified and discussed needs, drivers and organizational practices to promote workforce agility.

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