Agile Behaviors in Organizations

Andrzej Olak
Państwowa Wyższa Szkoła Techniczno - Ekonomiczna w Jarosławiu.

Anna Szopa
University of Central Florida, Jagiellonian University in Krakow

ABSTRACT
Nowadays enterprises by facing a changeable, turbulent and very competitive environment are testing, implementing and developing new strategies. Even though agility has been widely accepted as an effective management concept, the understanding of how to build and maintain agile workforce still remains undervalued. Presented article provides literature review and empirical evidence of agile behaviors to better understand essential elements of agile workforce and their relationship with organizational agility.

Keywords: agile behaviors, agile workforce, proactivity, adaptivity, resiliency

INTRODUCTION
Over the last two decades, companies have been driven by new demands (intensified from a national scale to a global) caused by complex, uncertain and disruptive environment. To respond to this new environment constantly scan it and quickly adjust their capabilities and reconfigure and transform management processes – become agile. Agility in this context it is understood as ability to take opportunities to create innovative solutions. It is related to the changes in the area of the marketing, production, design and organization [1] and can be perceived as a response to the uncertain and changing market’s needs and ability to handle continuous improvements [2]. Agile companies are: smart, flexible, intelligent and sharp [3], react to changes in the market transforming them into opportunities [4]. The original concept agility was popularized by the Iacocca Institute, of Lehigh University that defined it as: “A manufacturing system with capabilities (hard and soft technologies, human re-sources, educated management, information)” and underlined the role of personnel as a determinant of companies’ ability to change their performances in response to organizational change [5]. Our study contributes into the literature on agile work-force and their relationship with organizational agility and its performance. The re-search aims to understand and describe the concept of agile behaviors in organization.

AGILE WORKFORCE
Yusuf, Sarhadi and Gunasekaran inquiring the workforce in agile processes claim that employees are critical resource in organizations. Therefore should be knowledge-able and flexible to be able to handle multiple responsibilities [6]. Agile workforce easily accept changes, new ideas and new responsibilities [7] is proactive, adaptive and generative [8]. Chonko and Jones [9] characterize agile behaviors taking under consideration internal and external environment and divide them into two groups: ability to react on and adjust to changes and ability to transfer changes into benefits to the company. While Manthou and Vlachopoulou [10] emphasize role of empowerment describing importance of distribution and authority. More often researchers analyzing workforce in agile organizations emphasize the significance of the adjustment to the environment [11], [12], [13], [14], [15]. According to Dawis and Lofquist adjustment relates to certain behaviors associated with new situation and is associated with
certain skills, experience and knowledge. In the work: A Psychological Theory of Work Adjustment authors indicate three types of behavior characteristic for agile workforce: activeness, reactivity, and flexibility. Activeness refers to acting toward better organizational operation, reactivity means changes in behavior and flexibility refers to arrangements about working conditions [16]. Comprehensive description if agile workforce is given by Sherehiy, Karwowski, and Layer. Authors made careful analysis that leads them to the conclusion that agile workforce can be grouped (based on the model of Griffin and Hesketh [17] and Dyer and Shafer [18] in three dimensions; proactivity, adaptivity, and resilience given in Table 1.

| Proactivity | Adaptivity | Resiliency |
|-------------|------------|------------|
| Anticipation of problems related to change | Interpersonal and cultural adaptability | Positive attitude to changes, to new ideas, technology |
| Solution of change related problems | Spontaneous collaboration | Tolerance to uncertain and unexpected situation |
| Personal initiative | Learning new tasks and responsibilities | Professional flexibility | Coping with stress |

Source: A review of enterprise agility: Concepts, frameworks, and attributes Sherehiy, B., Karwowski, W., Layer. J., (2007).

Proactivity is associated with the problem's anticipation searching, seeking and solving. Adaptivity refers to individual (learning, professional flexibility, cultural adaptability) and group work (interpersonal relations, collaboration) features. And resiliency represents attitudes toward stress, unexpected situations and innovations [19]. Agile workforce remains important asset of companies mainly due to application of flexibility, knowledge, collaboration, positive attitudes toward novelties, changes adaptation etc. and definitely as a quite recent phenomenon requires further exploration.

**METHODOLOGY**

To better understand agile behaviors in organizations, authors used a mixed-methods approach combining both quantitative and qualitative methodologies [20]. To achieve triangulations and to verify the results, the primary data was sup-ported by industry reports, scientific papers. At the initial stage authors conducted unstructured interviews and observations to identify agile behaviors that were then investigated in more detail using semi-structured interviews in 11 small and medium-size companies in Poland. The size of the companies varied from 10 to 200 employees. Out of the 280 distributed surveys, 202 usable surveys were returned. Each participant read and signed an institutionally approved consent form. After this stage authors were able to identify and classify agile behaviours in companies, they divided behaviours into three groups taken under consideration frequency of behaviours, level of difficulty in adjustment to processes in organizations and quickness of reaction on specific situation. Table 2 presents identified agile behaviours.

URL: http://dx.doi.org/10.14738/abr.64.4345.
| Table 2. Agile behaviors |
|-------------------------|
| **Frequency** | **Difficulty** | **Quickness of reaction** |
| Searching for possible improvements | Adjustment to the new equipment | Work transition from one project to another |
| Ability to propose in the case of unclear instructions | Adjustment to new working methods | Adapting new working methods |
| Non-standard thinking | Adjustment to simultaneous work on several projects | Changing plans your work when it is necessary |
| Using knowledge and skills | Adjustment to new working procedures | |
| Task clarification | |
| Possibility to decide about performed tasks’ order | |
| Working on high speed | |
| Searching for methods of improving the effectiveness of work | |
| Searching for new methods of carrying out tasks | |

**Own source**

At the second stage of research agile behaviors were estimated with the usage of distributed survey forms. Results of estimation are presented below.
More than half of the respondents (56.9%) frequently searches for possible improvements. Every fifth respondent declared that always is looking for such opportunity, 7.9% do it occasionally and 1% never do that. Almost every fifth responder always know how to perform tasks when instructions are not clear. And more than half of them frequently manage such situation, 6.9% have problem performing unclear tasks. More than half of the respondents frequently use non-standard methods of thinking in order to solve problems, for 17.3% such situations happen always, every tenth responder does it occasionally, 2% always think in ordinary way. In reference to possessed knowledge and skills 82.1% responders uses it always or frequently, for 7, 9% it is difficult to say, 8, 9% takes advantage of own competencies occasionally, 1% never uses it. Research shows that 13.4% of responders is always looking for new methods of carrying out tasks, and a very high percentage -57.7 frequently practices such behavior, 14.4% of respondents occasionally deal with the situation when they search for new methods, and only 2.5% never do that. Significant amount of responders- 79.7% always or frequently is searching for new ways of improving their work, for 12.4% it is difficult to say and 7.4% is occasionally refining work system, 0.5% never do that. High-speed working is being declared by 68.3% of responders, for 11, 2% it is difficult to say if they perform work quickly, 17.9% occasionally do that, and 2.5% states that their work speed is unhurried. Almost one quarter of responders always decide about their tasks order, and almost half of them usually is performing duties in the order that they want them to be performed, for 10, 9% it is difficult to say, similar percentage of responders says that they occasionally have such opportunity, 1% never takes such decision. Tasks to be completed are clear and understandable for majority - 82, 7% of employees, only 8.4% of respondents claim that they occasionally understand tasks to be performed, and one person never comprehends what should be done.
Almost seventy percent of responders easily or very easily adapt working methods presented by other co-workers, 16.8% found such collaboration difficult and 3.5% very difficult. Half of the respondents easily adjust to the new working procedures, 15.3% very easily, 14.4% have problems in this area, and for 3% it is very difficult to meet requirements of new working procedures. 47.5% of respondents can easily work on several project at the same time, for 10, 9% it is a very easy task. Difficulties in this area have 17.3% of responders, for 4% simultaneous work is very difficult. More than half of the respondents (53.5%) easily adapts to new working methods, for almost one fifth such adjustment comes very easily, 14.9% of respondents acknowledged that such actions are associated with difficulties, and two people found it very difficult. Nearly half of the respondents easily adapt to the new equipment, 28.2% very easily, difficulties in this area had 12.4% and 2% of respondents stated that they cannot get used to new equipment.

More than half of the respondents (55.9%) quickly change working plans when it is necessary, almost 10% do it very quickly, 8.4% have problems with changes and come to them slowly. Majority (57.4%) of respondents quickly adapts new working methods, almost 10% adopts very quickly, 12.9% acknowledged that they have problem with adopting new working methods and do it slow, 2.5% - very slow. Over half of the respondents (55%) quickly adapts to sudden transition from work on one project to work on another, 13.9% of respondents said that they are very quickly, while 12.9% is slow, for 2.5% such transition is very slow.

Empirical study proved that agile behaviors are observed frequently, workers react quickly on changes in processes and easily adapt to current conditions, that may be difficult. Furthermore employees were willing to work outside their area of expertise.
CONCLUSION

Presented article provided empirical evidence of agile behaviors to better understand essential elements of agile workforce and their relationship with organizational agility and its performance. By identification and estimation of agile behaviors article is shedding some light on the agile workforce, and provides insights for both managers and academics. Maintaining agile behaviors will contribute to the development of agile culture which cannot be considered as a factor but about behaviors and engaging employees at the level of mind and emotion. “Culture is said to be a matter of ideas and values, a collective cast of mind”[21]. Authors presented agile approach which is not only accelerating companies effectiveness but helping to create a new generation of skilled employees who are self-managing, dynamic, empowered and independent.

Authors acknowledge that there are limitations to this study, and to the generalization of the results. In particular, indicated behaviors do not represent agile behaviors in general because are specific to examined organizations and may not be representative of organization behaviors elsewhere. In addition, the analysis did not consider the background of the employees (given roles, performed tasks etc.), which may influence agile behaviors. Future works are encouraged to consider and address these limitations in designing replication studies.

References

Storey J., Emberson C., Reade D.: The barriers to customer responsive supply chain management. International Journal of Operations & Production Management, 2005, 25, 2-11

Narasimhan R., Talluri S., Mahapatra S. K.: Multiproduct, multicriteria model for supplier selection with product life-cycle considerations. Decision Sciences, 2006, 37, 577-603

Trzcieniński S.: Przedsiebiorstwo zwinnie. Wyd. Politechniki Poznańskiej. Poznan, 2011, 10-14

Kidd P. T.: Agile Manufacturing. Foreign New Frontiers. London: Addison – Wesley, 1995, 25–38

Iacocca Institute.: 21st century manufacturing enterprise strategy, Lehigh University, Bethlehem, PA, 1991

Yusuf, Y. Y., Sarhadi, M., Gunasekaran, A.: Agile manufacturing: the drivers, concepts and attributes. International Journal of Production Economics, 1999, 62 (1-2), 33-43, available at: https://ab715ec7-a-b53b66ad-sites.googlegroups.com

Plonka, F.S.: Developing a lean and agile work force. Human Factors and Ergonomics in Manufacturing, 1997, 7 (1), 11-20

Dyer, L., Shafer, R.: Dynamic organizations: achieving market place and organizational agility with people. In: Peterson, R.S., Mannix, E.A. (eds.), Leading and Managing People in the Dynamic Organization. Laurence Erlbaum Associates, Mahwah, NJ, 2003

Chonko, L.B., Jones, E.: The need for speed: Agility selling. J. Person. Sell. Sales Manag., 2005, 25(4): 371-382

Manthou, V., Vlachopoulou, M.: Agile Manufacturing Strategic Options. In: Gunasekaran, A. (eds.), Agile manufacturing: the 21st Century Competitive Strategy. Kidlington, Elsevier, UK, 2001

Sherehiy, B., Karwowski, W., Layer, J.: A review of enterprise agility: concepts, frameworks, and attributes. International Journal of Industrial Ergonomics, 2007, 37 (5), 445-460

Dawis, R.V., Lofquist, L.H.: A Psychological Theory of Work Adjustment. University of Minnesota Press, Minneapolis, 1984

Allworth, E., Hesketh, B.: Construct-oriented biodata: capturing change-related and contextually relevant future performance. International Journal of Selection and Assessment, 1999, 7 (2), 97-111

Pulakos, E. D., Schmitt, N., Dorsey, D. W., Arad, S., Hedige, J. W., Borman, W. C.: Predicting adaptive performance: further tests of a model of adaptability. Human Performance, 2002, 15 (4), 299-323

URL: http://dx.doi.org/10.14738/abr.64.4345.
Griffin, B., Hesketh, B.: Adaptable behaviours for successful work and career adjustment. Australian Journal of Psychology, 2003, 55 (2), 65-73

Dawis, R.V., Lofquist, L.H.: A Psychological Theory of Work Adjustment. University of Minnesota Press, Minneapolis, 1984.

Griffin, B., Hesketh, B.: Adaptable behaviours for successful work and career adjustment. Australian Journal of Psychology, 2003, 55 (2), 65-73

Dyer, L., Shafer, R.: Dynamic organizations: achieving marketplace and organizational agility with people. In: Peterson, R.S., Mannix, E.A. (eds.), Leading and Managing People in the Dynamic Organization. Lawrence Erlbaum Associates, Mahwah, NJ, 2003

Sherehiy, B., Karwowski, W., Layer, J.: A review of enterprise agility: concepts, frameworks, and attributes. International Journal of Industrial Ergonomics, 2007, 37 (5), 445-460

Yin, R. K.: Case study research design and methods. 3rd ed., SAGE Publications, California, 2009

Baskerville, R. F.: Hofstede never studied culture, Accounting, organizations and society, 2003, 28 (1) p. 1-14