

**Class Notes Jan vom Brocke, Peyman Badakhshan,
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Agile Business Process Management – Towards an Integrated Framework

Agility is a term that is widely discussed among researchers and practice. Agility is associated with an organization's ability to be adaptive to change and to anticipate new business opportunities. A quick look through previous issues of BPTrends and other BPM-related outlets shows that the concept of agility has been slowly attracting interest in the BPM community. This column is based on two main ideas. First, we emphasize that BPM should be responsive to what is happening around the organization, and we argue that agility can be an important means to achieve this. Second, we reveal first findings of our latest research where we develop an integrative framework for agile BPM. Based on this framework, we will offer some suggestions for how practitioners can integrate agility in their BPM activities.

From stability to agility: A new agenda for BPM research

Agility appears promising to anyone who explores, designs, manages or is simply involved in process work. Traditionally, the focus of BPM has been to increase performance, efficiency and stability, and most of the academic research was concerned with identifying and solving issues that occur along sequences of activities and events (Kohlborn, Mueller, Poepplbuss, & Roeglinger, 2014). However, in light of the ever-increasing business dynamics that organizations are facing today, it is not only important to focus on what is happening *inside* the organization. Rather, it is important to recognize what is happening *outside* the organization in order to find new business opportunities, integrate new technologies or simply adjust the direction in which the organization is heading (Roseman in: Kohlborn, Mueller, Poepplbuss, & Roeglinger, 2014). Paraphrasing Bill Gates who said that "success today requires the agility and drive to constantly rethink, reinvigorate, react, and reinvent", we suggest that the success of BPM depends on the agility to rethink, redesign and innovate processes.

In more general terms, this idea is echoed in other attempts that decouple BPM from the image of a primarily static management discipline. For example, vom Brocke et al. (2014) suggest that one important principle of good BPM is that it is context-dependent. There needs to be contingency between internal processes and the external environment (Rosemann, vom Brocke 2015). In a similar vein, Trkman (2012) claims that an important success factor of BPM is that there is a strong fit between the processes and the business environment.

In light of these claims, it appears promising to create a systematic link between BPM and agility. Rejecting highly formalized work in favor of efficient, dynamic and user-centric work practices, agility ensures continuous changes and reflection. It is associated with improving alignment, fostering communication among customers and employees, and enabling organizations to improve the speed and efficiency in their response to new opportunities (Abrahamsson, Conboy, & Wang, 2009; Conboy, 2009). The resulting challenge is how we can systematically integrate agility into BPM? This is the question we have been addressing in our latest research.

Towards an integrative framework for agile BPM

In our latest research, we draw on a popular agility framework from the information systems field, and connect it with BPM research. In his taxonomy of agility, Conboy (2009) suggests that any agility method or approach should “rapidly or inherently create change, proactively or reactively embrace change, and learn from change while contributing to perceived customer value (economy, quality, and simplicity), through its collective components and relationships with its environment” (p. 340). He defines key principles that make a methodology or approach agile. His taxonomy of agility is depicted in figure 1.

Central to this framework is that agility encompasses flexibility, leanness and continuity. Flexibility (column A) is achieved through a proactive attitude towards change. This, in turn, is described by four properties that are specified below. Leanness (column B) is ensured when agility creates value which is defined in three different respects. Finally, continuity (column C) affords that agile methodologies are in continuous use and ready at hand when needed.

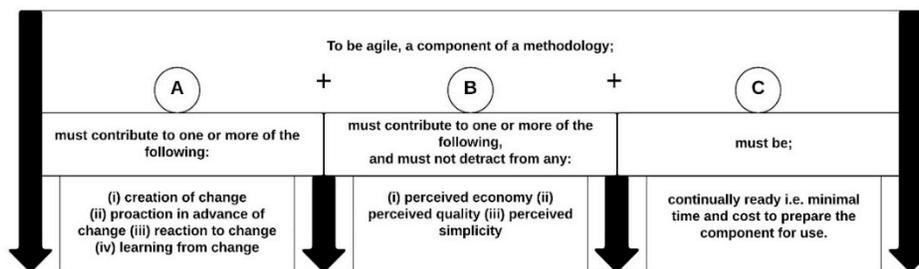


Figure 1. Taxonomy of Agility (Conboy, 2009)

Drawing on Conboy’s taxonomy and the principles of agility, we have been developing an integrated framework that specifies how agility can be achieved in BPM (Badakhshan et al., in progress). As depicted in figure 2, we extend Conboy’s taxonomy. While the upper part shows the principles of agility, the lower part provides specific means to achieve flexibility, leanness and continuity in the context of BPM. Central to this framework is the integration of new and state-of-the-art technology. Process mining or the technology of IoT provide constant feedback about processes, and this is an important feature for all principles of agile BPM.

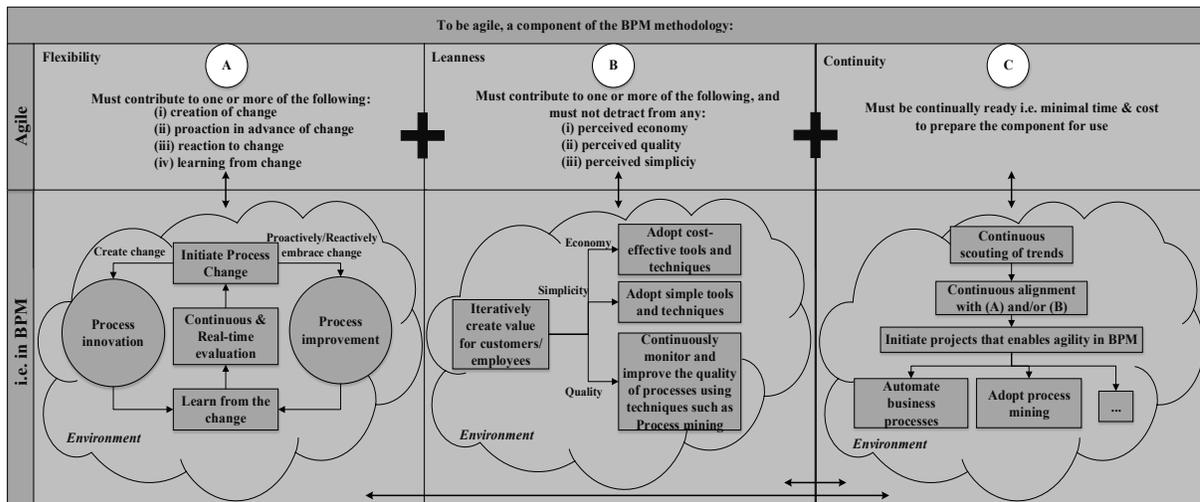


Figure 2. Agile BPM framework

According to our framework, flexibility is achieved when processes are under constant evaluation. Real-time feedback ensures that any deviances or issues are immediately detected and reflected. Important here is that the organization fosters learning and change, and there is a strong commitment to engage in redesign activities.

Leanness is ensured when the process is efficient, simple and provides a high degree of quality. To do so, we suggest that the process is monitored and evaluated on a continuous basis (e.g. through process mining) while any tools and techniques in use are as simple as possible.

Finally, continuity is established when there is an on-going effort to observe what is going on around the organization. This is crucial for organizations to detect new business opportunities or means to simplify the monitoring, evaluation or execution of the process.

Making BPM more agile: Reflection and Recommendations

Agility can ensure that organizations react to changes and identify opportunities for process improvements and innovations. Drawing on Conboy's taxonomy of agility, we presented an integrated framework for agile BPM. It specifies what is needed for BPM to be agile and it suggests how the three principles -flexibility, leanness and continuity- can be brought to life.

Continuous and real-time evaluation, and the commitment to integrate changes is a precondition for agile BPM. Central to our framework is that technology and management act complementarily; new technology enables agile practices and agile practices make use of new technologies. One example for such a new technology is process mining. For its ability to provide real-time feedback about process performance, this technology can offer an important point of leverage to achieve agility.

Based on the framework and the initial findings from our current research, we believe that the following points are important to anyone who is planning to integrate agility into BPM initiatives.

1. See your processes as one-out-of-many possibilities

Business processes may work well but there can always be opportunities to change, adjust or innovate them. Agile BPM means that decision-makers allow for novelty, spontaneity and experimentation. New trends or technologies can provide means to improve business processes, and much in the same way, business process might offer potentials for automation or improvement.

2. Utilize new technologies and real-time data

New technologies offer potentials for managing business processes. Process mining and IoT illustrate that new technologies allow for recording and replaying patterns of activities, which in turn, can be the basis for making adjustments and improvements. Hence, it is important to reflect on how such technologies can be implemented in existing processes. If applied in meaningful ways, such technologies can shed a whole new light on business process execution in the organization.

3. Enable flexible process change and continuous decision making

As much as technology is important for agile BPM, agile process work primarily depends on the people. Being agile means that actors can deal with uncertainty and unclarity. Decisions often lack clear rules, and even if things have worked for long, people need to be ready to unlearn established ways of doing things in order to learn new ones. It is essential that organizations embrace an appropriate corporate culture (Spiegel, Schmiedel & vom Brocke, 2017).

4. Never stop learning

Essentially, being agile means that organizations are always one the move. It implies that business environments change and yield opportunities to improve and innovate business processes. Due to today's highly dynamics business environment, not all changes might be anticipated. Staying open, being willing to change and experiment, and being committed to integrate new opportunities characterize agile BPM.

Stay in Touch

Please feel free to get in touch with us in case you would like to learn more about our latest research on Agile BPM. Contact: jan.vom.brocke@uni.li

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Jan vom Brocke is head of the BPM group in Liechtenstein. He is Professor of Information Systems, the Hilti Endowed Chair of Business Process Management, and Director of the Institute of Information Systems. He is Founder of the award-winning Master Program in Information Systems with Majors in BPM and Data Science and Director of the PhD Program in Information and Process Management at the University of Liechtenstein (see: www.uni.li/mis). Jan has BPM teaching experience from 24 universities including many of the FT 50 top Business Schools such as the University of St.Gallen in Switzerland and the Smurfit School of Business at University College Dublin in Ireland, and he has been awarded e.g. the AIS Innovation in Teaching Award (2015) and the AIS Outstanding Contribution to Information Systems Education Award (2017). Jan has published 34 books, including the BPM Handbook (with Michael Rosemann) and BPM Cases – Digital Innovation and Business Transformation in Practice (with Jan Mendling), and he is author of over 400 papers in, among others MIS Quarterly (MISQ), the Journal of Management Information Systems (JMIS), Communications of the ACM (CACM), and MIT Sloan Management Review (MIT SMR). Jan is an invited speaker and trusted advisor on BPM serving many organizations around the world, and he can be contacted via his website: janvombrocke.com.

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