The Leadership Influences in BPM Lifecycle

Completed Research

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Abstract

Organisations adopt Business Process Management (BPM) as a strategy to improve their process efficiency in order to stay competitive. However, a failure rate of 60-80% for BPM initiatives has been reported. Previous research has identified leadership as one critical success factor for BPM. This paper presents findings of a systematic literature review on the role of leadership in BPM. The findings explain the leadership styles and skills within different stages of a BPM lifecycle and show interrelationships between skills and actions.

Keywords

Business Process Management, Leadership, BPM Lifecycle

Background

Technological development poses the greatest challenges in today’s organisations to stay competitive in the market and forces them to rethink their strategies to achieve operational efficiencies and effectiveness. Therefore, it is inevitable that organisations should continuously improve their processes to prepare the organisation for change (Bin Taher et al. 2015). Business Process Management (BPM) is one of the several approaches adopted by organisations to improve their efficiency, performance, and effectiveness.

BPM is a management discipline that provides “a body of principles, methods and tools to design, analyse, execute and monitor business processes” (Dumas 2013, p. 26). The discipline has been proven to enhance the efficiency and effectiveness of operational activities and tasks, with a holistic view of end-to-end processes (Hammer 2015). However, the literature reports a considerably high BPM failure rate of 60-80% (cited in Trkman 2010, p. 126). Leadership has been identified as one of many critical success factors for BPM (Edward and Mbohwa 2013). Rosemann and vom Brocke (2015) also identified leadership as an essential element of an organisation’s BPM maturity. However, according to Syed et al. (2018a), there is little known about the nature of leadership in successful BPM implementations. Even though the importance of leadership in BPM has been widely acknowledged in previous studies, at present, there is a general lack of understanding of the nature and type of leadership needed for successful BPM (Syed et al. 2016). In most BPM studies, leadership is associated with top management support (McAdam and Donaghy 1999; Syed et al. 2018a). Considering the importance of leadership in BPM, Hyötyläinen (2015) calls for future research to explain the nature of leadership needed for BPM initiatives.

This systematic literature review is focussed on exploring the manner in which leadership styles and skills are used in different stages of a BPM implementation. We used the BPM lifecycle stages suggested by Dumas (2013) to frame the scope of our study. We also explored the types of leadership actions that are mentioned in the literature and their interdependencies with leadership skills to answer the following research questions:

RQ1: What are the key leadership styles discussed in BPM literature?

RQ2: What leadership skills and actions are needed to lead a BPM initiative?
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Research Approach

The research for this literature review followed the systematic literature review methodology proposed by Bandara et al. (2015). According to this methodology, the investigation included the identification of high-value literature and an iterative coding and analysis step. The analysis was supported by the reference management tool Endnote, whereas NVivo was used as the primary data analysis tool.

Search Strategy

The literature was searched using the key information systems and management research databases (ABInforms, Springer, Emerald Insight, ProQuest, AISel). The search only focussed on peer-reviewed conference papers and journal articles in English. Articles were searched using ‘keywords, title’ and ‘abstract’ fields. Terms BPM and BPR (Business Process Reengineering) had been used interchangeably within this research. The search delivered 382 papers provided by the databases. Articles related to ERP (Enterprise Resource Planning) with a BPM focus were included in the scope as well. After screening all abstracts, 40 papers were selected for the detailed analysis. Although there had been no restriction to the year for the search, it was noted that 75% of the papers had been published between 2008 and 2018.

Coding and Analysis

The coding followed a grounded approach (Wolfswinkel et al. 2013), that was divided into three stages. First, verbatim statements (codes) were captured from the papers (open coding). In the 2nd stage, open codes were classified in the emerging themes, categories and sub-categories, as illustrated in Figure 1, using axial coding. During the process, interrelationships between the categories had been observed, and higher order categories were defined and structured into themes. In the 3rd stage, data analysis was focussed on the exploration of the interrelationship between the themes. Figure 1 provides an overview of the analysis research approach used:

![Figure 1: Research Model](image)

The literature related to BPM evaluated different attributes of leadership (e.g. Hyötyläinen 2015; Sutcliffe 1999; Syed et al. 2016). This paper is structured to present three different perspectives on leadership in BPM: leadership styles, leadership skills and leadership actions. First, in the context of this review, a leadership style refers to the approach leaders use to provide direction, motivation, guidance and management to their followers. Second, leadership skills represent the abilities and competencies that support decision-making and the guidance of employees, with the primary goal of achieving the organisation’s goals and mission. Third, the literature also gave insight into actions that leaders can take to influence a BPM initiative. Leadership actions had been defined as the practical steps taken by leaders to execute organisational strategy.

We then analysed how the identified leadership styles, skills, and actions are related to different stages of a BPM lifecycle. A BPM initiative is divided into six process phases: identification, discovery, analysis, redesign, implementation, and monitoring and controlling (Dumas 2013). Some authors specify that different stages of a BPM implementation necessitate different leadership styles or skills (e.g. Abdolvand et al. 2008; Mmereki and Kgomoato Gini 2013; Wang et al. 2005). In order to limit the scope, we re-categorised the 6 BPM Lifecycle stages into three groups: pre-implementation, implementation, and post-
implementation. The following sections provide detailed discussion on the findings extracted from the literature on leadership in BPM.

Findings

Bass and Bass (2009) reviewed the development of defining leadership over several decades. The authors explain the essential function of leadership within different industries and defined leadership as “...an interaction between two or more members of a group that often involves a structuring or restructuring of the situation and of the perceptions and expectations of the members. Leaders are agents of change, whose acts affect them... leadership can be conceived as directing the attention of other members to goals and the paths to achieve them.” (Bass & Bass, 2009, p.25)

Leadership Styles in BPM

Seven styles of leadership had been mentioned in the literature. Sutcliffe (1999) investigated the impact of different leadership styles on BPM projects in-depth. Her findings revealed that previous research only focussed on leadership and its influence itself, excluding the stages of a change process. Her findings proposed a shift to an indirect leading of change; in particular, adapting an appropriate behaviour to the situation—a style-situation fit (Sutcliffe 1999). In leadership literature, shared leadership gained importance with the occurrence of working in teams (Bass & Bass, 2009). Bruccoleri et al. (2019) had a closer look at the decision-making process within the development and execution teams of BPM initiatives, and found that the concept of shared leadership within those groups positively impacted the project. Therefore, this style is allocated to the implementation phase. The egalitarian leader attribute overlaps with shared leadership (cited in Flood et al. 2000)—egalitarian leaders delegate decision-making rights to their followers and only intervene when necessary. Abdolvand et al. (2008) determined that an organisation is prepared for a change process when egalitarian leadership is established (implementation phase). The top-down approach only refers to promoting the initiative as a starting point (Tucek and Hrabal 2014), but to continue this style would hinder success. Tucek and Hrabal (2014) emphasised in this context the leader as a key enabler of change. In similar lines, Syed et al. (2018b) concurred that a continued push using a top-down leadership approach negatively affects the innovation and BPM adoption in organisations in general. The visionary leader inspires others about a promising future state and guides the way to achieve it (Bass, 1990). Selladurai (2002, p. 119) identified visionary leadership as one of the “major factors” and emphasised the focus on creating a vision “at all levels” of management. Syed et al. (2017) discovered in their study that leaders adapted visionary leadership aspects to develop a shared BPM vision in the organisation (pre-implementation stage). Bass (1999, p. 11) described transformational leadership as “the leader moving the follower beyond immediate self-interests through idealized influence (charisma), inspiration, intellectual stimulation, or individualized consideration”. Transactional leadership, in contrast, is performance-focussed and “may take the active form of management-by-exception” (Bass 1999, p. 11). According to Syed et al. (2016), transactional and transformational leadership is the most referred leadership style in BPM literature. BPM initiatives usually reform the execution of process activities, as well as necessitate a shift in the mindset of process participants. Therefore, transformational leadership can be seen as an essential component during the change process of an organisation (Bin Taher et al. 2015). The transformational leadership approach had also been identified as promising by Goekke and Antonucci (2013) and Spangenberg and Theron (2013). The next leadership style mentioned in the literature was related to a charismatic leadership. Charismatic leaders can act as an authority due to a strong emotional connection and influence on the followers (Bass, 1985). A study on ERP implementation in Taiwan revealed the positive impact of charismatic leadership style on group cohesion, which led to the increased efficiency of the team during the implementation phase (Wang et al. 2005). To conclude, the concept of transformational leadership had been highlighted the most by scholars, and offers a holistic approach for BPM initiatives. The following table gives an overview of leadership styles according to different stages of the BPM initiative:
Leadership Styles in BPM

<table>
<thead>
<tr>
<th>Leadership Styles in BPM</th>
<th>BPM Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Implementation</strong></td>
<td><strong>Implementation</strong></td>
</tr>
<tr>
<td>Planning</td>
<td>Identification</td>
</tr>
<tr>
<td>Transformational</td>
<td>(Indulska et al. 2006)</td>
</tr>
<tr>
<td>Style-situation fit</td>
<td>(Indulska 1992)</td>
</tr>
<tr>
<td>Top down</td>
<td>(Teoh 2014)</td>
</tr>
<tr>
<td>Charismatic</td>
<td>(Wang et al. 2017)</td>
</tr>
<tr>
<td>Egalitarian</td>
<td>(Abdolvand et al. 2013)</td>
</tr>
<tr>
<td>Shared</td>
<td>(Drewler et al. 2013)</td>
</tr>
</tbody>
</table>

**Table 1: Leadership Styles according to different Stages of a BPM Initiative (adopted from Dumas (2013))**

**Leadership Skills in BPM**

The literature refers to seven leadership skills within the context of BPM. However, most of them were not attributed to a particular stage of the BPM lifecycle. Communication skills refer to the ability to correspond with others in an effective and efficient way to convey information. Communication had been mentioned as crucial for BPM in nine articles. Leading managers can build trust among staff (Sarker & Lee 1999) by continuously providing information and offering opportunities for exchanging ideas (Dell’Aquila 2017). In this context, it is essential to assess the quality of the delivered information. BPM initiatives can only be a success if all involved levels clearly understand the advantages of the change and are convinced of these advantages (Sikdar and Payyazhi 2014; Taher and Krotov 2016). Baumöl (2015) stated that it is important to clearly explain the expectations for the shift. Regular communication between different parties during the implementation has also been identified as crucial for BPM initiatives. Leyh and Sander (2015) mentioned communication among executives, project team and staff in order to proactively keep everybody up-to-date about the progress and recent decisions. This has a positive effect on the execution of the project because it fosters the willingness of involved people to contribute to the initiative (Syed et al. 2017). Continuing communication and “sharing the vision” is what makes the difference in the long-term (Bashein et al. 1994, p. 9). Bandara et al. (2018) mentioned several aspects that influence the success of a project. The skills the authors refer to were related to ‘IT expertise’ and ‘people orientation’, which emphasises the importance of the combination of technical (BPM and IT) and people-oriented skills (Bandara et al. 2018, p. 140). Syed et al. (2018a, p. 13) specified necessary expertise for team members as: “robust project management, interpersonal, planning, financial, communication, negotiation and change management skills”. Syed et al. (2017) also emphasised the importance of BPM expertise for leaders, in order to deepen the respect and trust among the involved staff. Therefore, the authors supported the approach to regularly offer BPM training to leaders to sustain goal-oriented decision-making. Furthermore, the ability to make clear decisions for BPM planning and implementation was self-evident. This ability includes employee engagement and collaboration skills (Syed et al. 2017). BPM skills are not only essential for managers (Indulska et al. 2006); they are also important for the implementing project team (Bashein, Markus, & Riley, 1994; Sarker & Lee, 1999). Trkman (2010) did not distinguish between different management levels or staff, since he recommended that BPM expertise should be established with a holistic view of the organisation. Motivational skills are the ability to motivate others. Calvert (2006) developed a framework for successful ERP implementation with the emphasis on employee’s motivation. According to Syed et al. (2017), employee motivation has a positive impact on the outcomes of BPM initiatives. They also referred to the role of leadership and the ability to increase the involvement and enthusiasm of the staff (Syed et al. 2017). According to Cheng et al. (2008) change management skills count as an enabler for communication aspects. Mmerek & Kgomotso Gini (2013) reported a failed BPM initiative because of the lack of project management expertise within the project team. Furthermore, the advantage of technically skilled leaders had also been claimed by Wang et al. (2005) and Balanescu (2012) because of the need to recognise their
team’s need for technical training (Balansucu 2012). The following table shows leadership skills according to different stages of the BPM initiative:

<table>
<thead>
<tr>
<th>Leadership Skills in BPM</th>
<th>BPM Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Implementation</td>
</tr>
<tr>
<td>Communication / Interpersonal Skills</td>
<td>Planning</td>
</tr>
<tr>
<td>(Bashein et al. 1994, Sarker et al. 1999, Kgomotso Gini 2013)</td>
<td></td>
</tr>
<tr>
<td>BPM Expertise</td>
<td></td>
</tr>
<tr>
<td>(Tucek and Hrabal 2014)</td>
<td></td>
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<tr>
<td>Technological Skills</td>
<td></td>
</tr>
<tr>
<td>Project Management Expertise</td>
<td></td>
</tr>
<tr>
<td>(Mmereki et al. 2013, Syed et al. 2018)</td>
<td></td>
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<tr>
<td>Motivational Skills</td>
<td></td>
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<tr>
<td>(Bruccoleri et al. 2019)</td>
<td></td>
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<tr>
<td>Strong Decision-Making Skills</td>
<td></td>
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<tr>
<td>(Syed et al. 2017)</td>
<td></td>
</tr>
<tr>
<td>Change Management Expertise</td>
<td></td>
</tr>
<tr>
<td>(Cheng et al. 2008)</td>
<td></td>
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</tbody>
</table>

Table 2: Leadership Skills according to different Stages of a BPM Initiative (adopted from Dumas (2013))

Leadership Actions in BPM

The literature does not provide a clear definition on leadership actions in BPM. However, some conditions had been reported as enablers of a BPM initiative. We referred to Aristotle (Poetics VI) to define ‘leadership action’. Aristotle highly emphasised actions compared to thoughts and characteristics, since it is an action that ultimately confirms the characteristics and validity of thoughts. In other words, leaders’ effectiveness of their characteristics and thoughts is determined by their actual actions that have positive influence(s) on BPM.

Provide Training

One factor for BPM project success is the purposeful investment in BPM education (Taher and Krotov 2016). Training can be divided into three categories: training for process participants, training for the project team and training for management. Process participants should be provided with BPM training (Tucek and Hrabal 2014). As a manager, it is essential to recognise the need for training within a team and organise appropriately (Sikdar and Payyazhi 2014). This applies especially when changes are made in automation and technology (Balansucu 2012; Strauss and Lang 2011). Furthermore, the more people are involved in training, the shorter the duration of the adaption to the changes will be (Balansucu 2012). Bulander and Dietel (2015) distinguished between training the “how” (abilities and competencies) and teaching the “why” (comprehension for a task) that can be addressed by training. Trkman (2010) critically explored the quality of training and suggested a holistic integration of BPM-related education in the HR department. Training for the project team is needed to increase project management knowledge (Mmereki and Kgomotso Gini 2013), “frequently specialised training in reengineering and design principles” (Bashein et al. 1994, p. 10) and BPM expertise (Sarker & Lee, 1999). A BPM initiative introduces a process-centric view on the organisation. For that reason, BPM expertise is essential for managers who are involved in the initiative. Since they are used to thinking in functional subdivisions, insufficient BPM knowledge could negatively impact the project (Indulska et al. 2006). Qualified leaders will enhance the achievement of the project (Wang et al. 2005). Furthermore, success in BPM is reliant on having competency in technology. Therefore, Syed et al. (2017) claimed this capability-building as essential for leaders, in order to strengthen respect among staff and to facilitate decision-making.
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Provide Incentives (Reward)

Motivating by introducing an appropriate reward system had been addressed by several authors (e.g. Calvert 2006; Sikdar and Payyazhi 2014). Sikdar and Payyazhi (2014) pointed out that the lack of an appropriate reward system negatively impacts BPM initiatives in the long-term. A reward system can be the base BPM managers can build on to promote collaboration among employees (Bashein et al. 1994). Mmereki and Kgomoets Gini (2013) suggested reward systems be introduced for good implementation results, to keep the achieved level after an initiative. A study about project failure also led to the recommendation of incentives which could prevent employee resistance (Taher and Krotov 2016). The same applied to a study undertaken by Syed et al. (2017).

Involvement and Empowerment

Due to a certain level of complexity, many employees and different management levels are involved in BPM initiatives. Recently, Syed et al. (2017) stated that empowerment supported by strong leadership affects those projects in a positive way. Sarker and Lee (2003, p. 814) confirmed that “strong and committed leadership” is a vital component for ERP implementations. Their study about BPR failure in 1999 revealed that the exclusion of affected participants led to distrust and resistance. Bashein et al. (1994) distinguished between different stages of the initiative for employee involvement. They emphasised the need for empowerment during the early stages and during the BPR implementation process itself (Bashein et al. 1994). After those phases, they proposed to foster collaboration to sustain success (Bashein et al. 1994). In addition, they recommended this cooperative environment be rooted before the project starts (Bashein et al. 1994). It has also been found that each authority level can be negatively affected by poor involvement, which hinders further project success (Sikdar and Payyazhi 2014).

Discussion

Several leadership styles had been mentioned by the authors of the reviewed literature, most of which indicated transformational leadership as appropriate for BPM (e.g. Geoeke and Antonucci 2013; Spangenberg and Theron 2013). Some of the styles were recommended for different stages of the BPM lifecycle (e.g. Abdolvand et al. 2008; Bruccoleri et al. 2019). In terms of BPM leadership skills, most articles referred to only one or two skills. Only the recent studies of Bandara et al. (2018) and Syed et al. (2018a) discussed the skills aspect in more detail. These articles mentioned a combination of several skills which are characteristic for a good leader. For instance, skills in leadership, such as strong decision-making, are needed from the beginning of the initiative to the end; also, project management expertise is crucial at the beginning, during the pre-implementation phase (Mmereki and Kgomoets Gini 2013; Syed et al. 2018a). BPM is a holistic management discipline, and styles and skills are related to a range of different roles. For instance, shared leadership relates to the deployment team itself (Bruccoleri et al. 2019) while charismatic leadership refers to a leading project champion (Wang et al. 2005). Therefore, a BPM initiative can be seen as a team-based approach. However, most of the scholars do not specify the roles within their research.

To identify which leadership skills are required to take the right leadership actions, the interrelationship has been investigated further. Besides technological and strong decision-making skills, the literature showed that skills and actions are strongly connected. For instance, it is essential that managers recognise which skills their teams need and organise appropriate training in a timely manner. Kokkonen and Bandara (2015), who investigated elements of BPM expertise, emphasised enhanced training quality. One action that leaders can take is to introduce a reward system. This can be an enabler to encourage process participants that hesitate or refuse the change. If process participants contribute to the initiative, recognition and appreciation positively influence the motivation. Furthermore, there can be seen a relationship between project management skills and involvement. Cheng et al. (2005, p. 32) specified actions that lead to “impact and influence (proficiency in coordinating, inspiring and directing the team)” and pointed out that involvement is one attribute of project management (Cheng et al. 2005). Higgs and Rowland (2000) stated that a change manager with a neutral position fosters empowerment. As aforementioned, Leyh and Sander (2015) emphasised that communication positively impacts a BPM initiative. It is not only essential to communicate among all levels of management, but also to involve all staff (Leyh and Sander 2015). Bass and Riggio (2005) linked the connection between motivation and incentives by introducing a reward system. The following chart shows the interrelationship between leadership skills and leadership actions:
Hence, the connection between skills and actions cannot be denied. Therefore, to intervene in the right way depends on the right skills. If leaders do not have the required competency, they are not able to take the right actions to successfully lead a BPM initiative. However, BPM specific skills are not discussed in leadership literature. Furthermore, there has not been sufficient research in order to determine which skills are needed in order to take the right actions within the BPM context. Therefore, we confirm the call for further exploration of the nature and skills of leadership needed for BPM initiatives (Hyötyläinen 2015; Kokkonen and Bandara 2015). It can be emphasised that the role of leadership can be seen as one “gearwheel” positively influencing the whole complex BPM initiative. It would be worthwhile to clearly specify the part and investigate the impact of leadership skills and actions.

Conclusion

In contemporary times, change is inevitable and organisations have to learn how to manage change effectively. The concept of BPM is widely accepted since it promises improvement of the effectiveness and efficiency of an organisation, with a view of end-to-end processes. However, BPM initiatives are highly complex, and the failure rate still dominates the statistics. Many factors have been identified that can lead either to success or failure. A shift to people-oriented leadership styles has emerged, especially transformational leadership, considering how changes influencing people has been emphasised in the literature. This research also showed which skills and actions are essential for leading a BPM initiative and how they are interrelated. However, the review is limited to a few sources and the literature lacks a comprehensive assessment of skills and actions related to BPM. Further research which links both aspects would give more insight into successful strategies to lead a BPM initiative. If BPM leaders are equipped with the right skills, they are more likely to take the right actions to achieve success.

REFERENCES


