Abstract

Purpose: The aim of the paper is to identify and explore the leading topics in research on relationship between leadership and knowledge management in order to contribute to mapping the research field. The study makes an attempt to provide response to the following research questions: (1) what are the leading topics of scientific research on relationship between leadership and knowledge management; (2) what is the status of research within the identified thematic areas?

Design/methodology/approach: Systematic literature review is the research methodology applied to achieve the aim of the study. The study is based on the data retrieved from the Scopus database.

Findings: The study has identified the three following lines of research focused on intersections between leadership and knowledge management: (1) the impact of knowledge management and leadership on employee behaviours, (2) impact of knowledge management and leadership on innovations, (3) the relationship between leadership and knowledge management.

Research and practical implications: Identifying and exploring the aforementioned lines of research contributes to mapping the research landscape and may be useful for researchers planning further studies combining leadership and knowledge management as variables.
1. Introduction

‘Knowledge is the power’ is a settled archetype that is considered to be an asset for every company. However, the term ‘knowledge management’ began to be described in the literature only in the early 1990s. It has been recognized that three phases of knowledge management can be distinguished (Sadeghi and Rad, 2018). At the beginning, this issue included the definition of knowledge management and the potential results that its implementation can bring to the organisation. The next stage was the creation of positions in organisations for employees dealing with knowledge management. Various organisations have implemented this quickly (Yew Wong, 2005). The result of these activities was the transition to the third phase of knowledge management. New methods and results defining the business and systems operating in it have been implemented. Over time, knowledge management has become something indispensable in contemporary organisations. It focuses on the relationship between knowledge and action (Lakshman and Parente, 2008; Paraponaris, 2003).

Knowledge management is a process that makes sharing knowledge easier and makes learning in the organisation a continuous process. The result is simultaneous knowledge management and learning in various types of organisations (Perez Lopez et al., 2004). Knowledge management has been defined as management strategies and processes that could be helpful to organisations in sharing, organising and updating knowledge, creating the true value of the organisation and its employees (Dulebohn et al., 2012). Moreover, it has been noticed that activities that can increase the value of organisational resources are related to knowledge management, with tasks such as planning, integration, innovation, evaluation and learning identified (Kim,
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Additionally, knowledge management is the systematic and purposeful use of knowledge in order to make effective decisions and achieve competitive advantage as well as solve problems and create innovations (Kebede, 2010). The fulfilment of knowledge management processes and projects is a difficult task for the managers. The potency and performance depend mainly on the effective adjustment of factors in the organisation (Bierly and Daly, 2002).

Another factor that influences the effectiveness and direction of knowledge management is leadership behaviour. In each organisation, leaders give an example to their employees. With their behaviours they show how they would like this organisation to function and what values it should perceive. The definition of leadership refers to people recognized as leaders and to the function they perform in the organization (Berson et al., 2006). In general, two types of leadership can be distinguished: transactional and transformational (Elenkov et al., 2005). Transactional leadership concerns practicing exchanges with employees based on their performance. On the other hand, transformational leaders are able to influence employees and direct their goals. In addition, transformational leadership directs employees to sometimes transfer the good of the organisation over their own (Kuhnert and Lewis, 1987). The role of leaders in the organisation is important, as their position is significant enough to influence the organisation (Sadeghi and Rad, 2018). The relevant literature sources describe examples of situations where a lack of leadership support resulted in failures in various knowledge management tasks (Taherparvar et al., 2014).

The concepts of leadership as well as knowledge management are widely described in the literature. There are many publications on leadership in the organisation and many research works on knowledge management. It is not surprising, as nowadays knowledge is treated as one of the most suitable resources to build organisation’s competitiveness (Adams and Lamont, 2003; Rhodes et al., 2008). However, the idea of leadership and management combined in one, as something coherent, is a ‘modern’ approach to the subject. Because of its complexity, the subject of combined leadership and management can be interpreted and defined in many different ways. Even though there are already many publications concerning this idea, there is still a room for a new study to develop. Therefore, the aim of this paper is to identify and explore the leading topics in research on relationship
between leadership and knowledge management in order to contribute to mapping the research field. The study makes an attempt to provide response to the following research questions: (1) what are the leading topics of scientific research on relationship between leadership and knowledge management; (2) what is the status of research within the identified thematic areas? The remainder of the study consists of the following parts: firstly, the research sampling for the systematic literature review is explained; secondly, leading research topics within the research field are identified and explored; thirdly, the findings from the review are discussed.

2. Research sampling

To achieve the aim of the paper, the systematic literature review methodology (Czakon, 2011) was applied. The works employing systematic literature reviews (Lis, 2017; Lis et al., 2018) were used as benchmarks in the process of the study design. The research sampling process consisted of three steps:

(1) the conjunction of phrases ‘leadership’ and ‘knowledge management’ was searched in the titles of publications indexed in the Scopus database. As of 26 January 2020, 96 records were retrieved;

(2) among 96 publications subject to abstract analysis, 56 records were selected for further full-text analysis due to the following criteria:
   – the articles were selected in which leadership was associated with knowledge management;
   – the articles describing both transactional and transformational leadership were selected;
   – the articles were selected that were written or fully translated in English;
   – only journal articles were selected, while book chapters were excluded;

(3) employing the snow-ball sampling, the number of records subject to full-text analysis was increased up to 114.
3. Results

3.1. Leading topics identified

The publications combining the research on the issues of leadership and knowledge management included in the sample deal with and focus their attention the three following thematic areas (the order of these areas is random):

- the impact of knowledge management and leadership on employee behaviours;
- the impact of knowledge management and leadership on innovations;
- the relationship between leadership and knowledge management.

The publications categorized to each of the three aforementioned thematic areas are enumerated in Table 1.

Table 1. Thematic areas in research on intersections between leadership and knowledge management

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>Publications</th>
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<tbody>
<tr>
<td>impact of knowledge management and leadership on employee</td>
<td>Atapattu and Ranawake (2017); Bartlett and Ghoshal (2002);</td>
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<tr>
<td>behaviours</td>
<td>Bierly and Daly (2002); Bock et al. (2005); Brailsford (2001);</td>
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<td></td>
<td>Chen and Huang (2009); Drucker (1993); Brousseau et al. (2006); Harris et</td>
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<td></td>
<td>al. (2014); Herrera (2008); Katz and Kahn (1966); Kebede (2010); Kim (</td>
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<td></td>
<td>2012); Kuhnert and Lewis (1987); Paraponaris (2003); Politis (2002);</td>
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<td></td>
<td>Rhodes et al. (2008); Sadeghi and Rad (2018); Shamim et al. (2017);</td>
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<td></td>
<td>Scharmer (2001); Senge (1990); Sussan (2012); Yang and Wan (2004);</td>
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<td></td>
<td>Yukl (1981)</td>
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<tr>
<td>impact of knowledge management and leadership on</td>
<td>Adams and Lamont (2003); Baregheh et al. (2009); Brown and Ulijn (2004);</td>
</tr>
<tr>
<td>innovations</td>
<td>Damanpour (1996); Darroch (2005); Drah-Zahavy and Somech (2013); Elenkov et</td>
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<td></td>
<td>al. (2005); Fageberg et al. (2004); Lakshman and Parente (2008); Nonaka</td>
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<td></td>
<td>and Takeuchi (1997); Taherparvar et al. (2014)</td>
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<tr>
<td>leadership as an antecedent of knowledge management</td>
<td>AMA/HRI (2005); Baines (1997); Berson et al. (2006); Besen et al. (2017);</td>
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<td></td>
<td>Bhatti et al. (2013); Choi and Lee (2002); Connelly et al. (2012);</td>
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<td></td>
<td>Crawford (2005); Crawford et al. (2003); DeTienne et al. (2004); Dirks</td>
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<td></td>
<td>and Ferrin (2002); Dulebohn et al. (2012); George (2003); John and Niyogi</td>
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<td>(2019); Lis (2017); Perez Lopez et al. (2004); Nguyen and Mohamed (2011);</td>
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<td></td>
<td>Porter (1996); Singh (2008); Nguyen and Mohamed (2011); Porter (1996);</td>
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<td></td>
<td>Singh (2008); Yew Wong (2005)</td>
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Source: own study.
3.2. Leading topics explored

3.2.1. Impact of knowledge management and leadership on employee behaviours

The success of good knowledge management and leadership is difficult to define. There are many alternative factors that can define this success in the context of measuring the performance of an organisation. These factors include employee satisfaction levels, increased intellectual capital, employee productivity levels, and services or adaptability (Anantatmula and Kanungo, 2006).

While employees change their departments or leave their organisations, they take their knowledge with them. If this knowledge has not been translated into organisational knowledge, it may become lost for the organisation (Shamim et al., 2017). That is why employees’ knowledge should be saved and implemented into the organisation as its assets (Yang and Wan, 2004). Employees often think that by sharing their knowledge they may lose the chance for further development in the institution, that someone can use their knowledge (Bock et al., 2005). If knowledge management does not work on all the levels of the hierarchy in the organisation, it is unlikely that employees will comply to guideline and they will be effective if they do not have the example shown from the top of the hierarchy (DeTienne et al., 2004). However, organisations have no influence on how employees will use their intellectual knowledge (Connelly et al., 2012). Therefore, leaders and the system should motivate employees to share knowledge and experience. Leaders can play a crucial role in supporting knowledge management-oriented behaviours among their employees (Nguyen and Mohamed, 2011). One of these roles may be to provide a psychological environment to encourage sharing knowledge by showing one’s behaviours (Crawford et al., 2003).

3.2.2. Impact of knowledge management and leadership on innovations

Leadership and knowledge management are seen as key drivers for innovation. Innovations, that might be new or modified products, new or modified technologies, organisational, market or social innovations etc., nowadays are recognized as the foundation for organisation’s sustainable competitive advantage (Chen and Huang, 2009). However, it has been noticed that it is difficult to establish one definition of
innovation. As highlighted by several authors, innovation is any change in different areas of the organisation’s activity, that introduces progress compared to the existing state, developed in or outside the organisation (Damanpour, 1996; Brown and Ulijn, 2004). Innovation is also described as a multi-stage process in which organisations extend the existing knowledge to advance, solve new tasks or problems and differentiate themselves successfully in the market (Fageberg et al., 2004; Baregheh et al., 2009). It has been noticed that innovation depends very much on the field in which it occurs (Choi and Lee, 2002). Therefore, it has been established that innovation is a broad concept and may have different meanings depending on the theoretical field (Sadeghi and Rad, 2018) as well as different impact on various areas of the industry, life, growth or productivity and organisational performance (Sadeghi and Rad, 2018). Taking such a perspective, it is worth noticing that coordination of knowledge management through good leadership aims to transform knowledge and experience into the innovative capacity of an organisation (Darroch, 2005).

It has been already pointed out that knowledge management helps to discover knowledge resources in the institution. What is more, knowledge management transforms and remembers them so all the members of the organisation can use them to innovate to develop competitive advantage (Harris et al., 2014). Sussan (2012) emphasizes that one of the significant conditions for creating innovations in an organisation is to establish a corporate culture and a conducive environment within an organisation. If members of the organisation were automatically involved in knowledge activities, this would mean that an efficient and effective environment was created for employees including leaders.

3.2.3. Leadership as an antecedent of knowledge management

The relationship between leadership and knowledge is complex. Leadership behaviour has been recognized as a precondition for effective knowledge management (Politis, 2002). Managing staff is directly referred to as having influence on processes, observing these processes and choosing goals for a group or an organisation (Yukl, 1981). One of the most important leadership qualities in this context is the creation of an appropriate supportive environment that will encourage and demand results from knowledge management (Atapattu and Ranawake, 2017). In knowledge management, leaders are equally responsible for learning
and acquiring knowledge of both employees (i.e. individuals) and organisations (Baines, 1997). Scharmer (2001) admits that leaders must detect incoming trends before they appear on the market. They are also responsible for building and maintaining an organisational culture of continuous learning. They should encourage employees to experiment and empower all members of the institution. Therefore, they should inspire employees to develop a shared vision, provide resources for it, celebrate successes, delegate tasks / authorities, and most importantly encourage learning.

In other words, management has an impact on dynamic learning and knowledge sharing within an organisation (Bartlett and Ghoshal, 2002). Leadership should understand their position in the service process as a source of inspiration and motivation. It should approve new ideas and appreciate individual differences between employees (Herrera, 2008). This shall result in explaining the goals of knowledge management and the path it should take to create corporate changes and transformations (Singh, 2008). In this scheme, executives play many roles such as the mentor, the guide, the facilitator or the tutor in the process of sharing knowledge, thus, establish a correspondence between experienced reality and a worldview that everyone must share (Senge, 1997). These tasks require leaders to influence and act on the following activities: creating and sharing knowledge, increasing confidence, maximizing the process of receiving messages and navigating in an environment that is constantly changing (Crawford, 2005). When it comes to sharing knowledge, leadership facilitates and promotes processes and relationships. It is of significant importance to create trust among employees. It is so crucial as the level of participation of group members is related to the level of trust and satisfaction and recognition of individuals and the group as a whole (Senge, 1990). Several researchers prove that the high level of trust within an organisation has many beneficial effects, such as: increase of organisational flexibility, enabling transfer of knowledge and expertise, enabling creativity and innovation (Dirks and Ferrin, 2002; Drah-Zahavy and Somech, 2013).

The issue of leadership and the ability to build trust within an organisation as well as outside it directly refers to the scandal that took place at Enron and finally led to profound changes in the environment and organisational culture. The dedicated events that took place required reflection on how to save the authenticity in the corporate world. The
result of this situation was a focus on the authenticity of corporate leaders (George, 2003). According to George (2003, p. 6):

[...] we need leaders, people of the highest integrity, committed to building enduring organisations. We need leaders with a deep sense of purpose and true to its most inherent values. We need leaders with the courage to build their businesses to meet the needs of all stakeholders, and to recognize the importance of their role for society.

Success in knowledge management can be achieved if management will cultivate an environment that is conducive to human capital. Such an environment is a specific combination of elements connected with incentive systems, manners of communication within the organisation, organisational integration, the employees’ sense of safety, co-participation and co-operation of the workers, support for creative ideas, openness as well as trust existent in the organisation (Loewe and Dominiquini, 2006; Isaken and Ekval, 2010). Leaders should be aware of their role in this task of changing and transforming organisational reality using the knowledge that is available (Nonaka and Takeuchi, 1997). Hence, contemporary organisations need the authentic leadership. According to Besen et al. (2017), authentic leadership implications on knowledge management can be categorized into three groups:

– knowledge creation – encouragement and promotion of a critical, reflective and participatory environment, conducive to building new knowledge;
– knowledge sharing – building an environment of trust, acting as a facilitator in processes and relations through empowering people and stimulating knowledge sharing;
– knowledge using – promoting an environment based on authentic relationships that values and encourages self-awareness and the development of followers, facilitating the use of organisational knowledge.

The main factor for successful knowledge management is the development of the organisational skills needed to create, share, form and use knowledge (Nonaka and Takeuchi, 1997). Authentic leadership in knowledge management must build organisational relationships based on transparency, authenticity, trust and openness.
4. Discussion

Sharing knowledge within an organisation is very important, but many organisations fail to implement it (Brailsford, 2001). Knowledge sharing is crucial in knowledge management (Drucker, 1993). The process of knowledge sharing depends on the innovation and performance of employees (Jacques, 2000). Knowledge sharing, as a process, depends on organisation’s leaders and leadership. (Jacques, 2000). Knowledge is understood as a resource that cannot be consumed, it has no expiry date (Eisenhardt, 1989). It is important, however, that knowledge becomes more important with the moment it is shared in the organisation (Eisenhardt, 1989). Leaders should motivate employees to share their knowledge, because it is up to them to determine how knowledge in their organization will be transferred (Drucker, 1993). Knowledge management consists of three components i.e. human, process and technology (Katz and Kahn, 1966). In a situation when the integration of knowledge management is not appropriate, it will not bring the intended results (Porter, 1996). In practice, leaders of lower and middle management have contact with employees. They delegate goals and tasks to lower-level employees. It is those leaders who promote innovation among employees that creates a good atmosphere for sharing knowledge among employees (Bhatti et al., 2013). Suddenly, changes in technology and the environment make problems in knowledge sharing inevitable. Changes in the global market and increased competition are forcing organisations to constantly acquire knowledge, thus constantly update it to keep up with the competition and outperform it (Bhatti et al., 2013). According to the authors, the essence of the organisational structure is leadership. When leaders motivate employees to share knowledge, they positively influence their innovation, which results in effective organisation achievements.

John and Niyogi (2019) point out that partnership depends on the nature of human contacts. They show that emotional intelligence extended by leadership concepts increases the generation and transfer of knowledge (John and Niyogi, 2019). It has been concluded from the research that for leadership to be successful, the most important thing is to understand the most critical leadership behaviours in organisation (Brousseau et al., 2006). Flat management structures, self-management and slow-functioning teams have changed the behaviour of managers and leaders (AMA/HRI, 2005). The new way of leadership
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Leadership and management needs to be properly studied to start implementing new ideas for leadership development (John and Niyogi, 2019). New leadership programs sometimes fail due to their implementation to solve current problems in the organisation. These plans have not been properly studied and analysed (John and Niyogi, 2019). In the 21st century one good leadership development model is no longer established. Development programs are constantly improved to solve organisational problems such as information management, development of social networks and flat structures (John and Niyogi, 2019). The authors conclude that effective leadership is not enough when adopting a rational planning model. It is clear that effective leadership includes intellectual and emotional intelligence, and both must be taken into account when training the leaders for their management to be effective (John and Niyogi, 2019).

5. Conclusions

Authors from around the world conduct research about implementing innovations, among others, in the area of knowledge management. Leadership supports knowledge management processes in an organisation by influencing people by promoting authentic and transparent relationships, while gaining coherence and truthfulness of knowledge management initiatives (Besen et al., 2017). Leadership focused on knowledge management indicates that soft elements as well as human and social processes are important. Therefore, they must be integrated with the institution’s practices in order for knowledge management to be successful (Anantatmula and Kanungo, 2006).

Nowadays, leadership and management in organisations are very important factors affecting the efficiency of the organisation. The management staff not only manages individual humans, i.e. employees. Additionally, leaders also manage knowledge and leadership measures to provide appropriate conditions and an environment for creating knowledge and circulating it. Leadership is the key factor in the functioning of various types of organisations and plays a key role in the success of knowledge management. Based on solid knowledge, leadership and properly tailored knowledge management in an organization can improve efficiency and effectiveness at all levels of the organisation. It is a well-known fact that knowledge must be
managed. Effective leadership develops competitiveness. That is why leadership plays a significant role in the functioning of companies/organisations. The qualities of an authentic leader have a positive impact on organisational culture and create a positive environment based on trust and the desire to develop and share knowledge.

The study has identified the three following lines of research focused on intersections between leadership and knowledge management: (1) the impact of knowledge management and leadership on employee behaviours, (2) impact of knowledge management and leadership on innovations, (3) the relationship between leadership and knowledge management. Due to the theoretical character of the study, it generates added value mainly for development of theory. Identifying and exploring the aforementioned lines of research contributes to mapping the research landscape and may be useful for researchers planning further studies combining leadership and knowledge management as variables.

The findings of the study should be considered in the context of its research limitations. Firstly, only one research method, i.e. systematic literature review, was employed. This results in a lack of triangulation of research methods, which may be considered a factor hampering the objectivity of research. Secondly, in the research sampling process only Scopus database was used. Relying on one database, which is very biased towards publications written in English, brings the risk of excluding valuable publications written in languages other than English. Thirdly, subjectivity of excluding/including publications based on the abstract analysis during the research sampling process should be mentioned among the study limitations.

Taking into account the research findings and the aforementioned limitations the following avenues for further research are recommended: firstly, expanding the number of articles subject to literature review by including other bibliometric databases into the research sampling process; employing bibliometric mapping methods (e.g. co-word analysis) to identify and explore thematic areas within the research field as it was conducted in the studies on the concepts of sustainable enterprise and sustainable organization (Lis, 2018) published in *Journal of Corporate Responsibility and Leadership*. 
References


