



Authentic leadership and knowledge management

Liderança autêntica e a gestão do conhecimento

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Abstract: Leadership plays an important role in creating value, innovation and setting strategies of management and implementation of knowledge. In the context of leadership, there is a discussion about ethics and authenticity, especially after the scandals involving senior leaders of some organizations, mainly the American Enron and Arthur Andersen. The aim of this paper is to present the theory of authentic leadership, based on the assumptions of authenticity and strong ethical/moral values. It is an interesting conduct for knowledge-intensive organizations, since they are concerned with creating a positive organizational environment, focused on real and sustainable performance. Ethics and authenticity in relationships may favor knowledge creation and sharing. There are many possibilities for future (empirical) studies to analyze the authentic leadership and its development in social and organizational environments.

Keywords: Knowledge management; Authenticity; Authentic leadership.

Resumo: A liderança tem um papel importante na criação de valor, inovação e na articulação de estratégias de implantação da gestão do conhecimento. No âmbito da liderança existe uma discussão acerca da ética e autenticidade, principalmente após os escândalos protagonizados por altos dirigentes de algumas organizações, principalmente as norte-americanas Enron e Arthur Andersen. Nesse contexto, o objetivo deste artigo é contextualizar a teoria da liderança autêntica, amparada nos pressupostos da autenticidade e por fortes valores éticos/morais. É uma conduta interessante para as organizações intensivas em conhecimento, visto que se preocupa em criar um ambiente organizacional positivo e com foco no desempenho verdadeiro e sustentável. A ética e autenticidade nas relações podem favorecer a criação e compartilhamento do conhecimento. Existem muitas possibilidades para estudos futuros (empíricos) que analisem a liderança autêntica e o seu desenvolvimento no ambiente social e organizacional.

Palavras-chave: Gestão do conhecimento; Autenticidade; Liderança autêntica.

1 Introduction

Society has been experiencing a period of transformation, which is marked by a process of reorganization and restructuring of its worldview, its basic values and its social and political structures (Castells, 1999). Activities which were the central focus in the organizations cease to be those that aim to produce or distribute objects and become those which produce and distribute information and knowledge (Drucker, 1993). Knowledge has become the main asset of today's global economy (Wong, 2005; Sousa, 2010). This reality forces organizations reformulate their structures and consider knowledge management as crucial to maintaining organizational competitiveness (Wong, 2005; Sun, 2010).

Being an emerging issue, Knowledge Management has, only recently, become part of the organizational and academic discourses (Kebede, 2010) and, because of its newness, is still being developed (Darroch, 2005). However, it is placed as a key component for the organization to get better results and stay competitive (Spender & Grant, 1996; Davenport & Prusak, 1998; Bose, 2004). Knowledge Management sets the standard for interaction among technologies, techniques and people (Bhatt, 2001) and relates to the ability of an organization to create new knowledge, disseminate it in the organization and incorporate it into their products, services and systems (Nonaka & Takeuchi, 1997).

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Knowledge management provides a comprehensive set of processes which are directed to identify relevant sources of data and information in organizations and their possible conversion into knowledge and subsequent dissemination in different parts of the organization where they are needed (Lakshman, 2009). Knowledge management involves the application of knowledge of the entire workforce to achieve the organizational objectives outlined (Servin, 2005), using, for this, the systematization and the collectivization of different types of knowledge present in the organization and in its external environment (Bate & Robert, 2002). Managing knowledge is, therefore, a key factor through which an organization can exploit the full potential of its intellectual assets and use them in decision making and competitive advantage creation (Bose, 2004).

While the success or failure of an organization depends significantly on knowledge management (Kebede, 2010), the success or failure of the organizational Knowledge Management depends on a number of organizational environment factors. In this context, several studies have been developed in order to present barriers and critical success factors of knowledge management (Wong, 2005; Lee & Choi, 2003; Holsapple & Joshi, 2000; Sun, 2010; Ajmal et al., 2010; Ramachandran et al., 2013; Davenport et al., 1997; Chong, 2006; Wong & Aspinwall, 2005).

There is, however, an important element in knowledge management that seems to have received less attention, leadership. In some emerging areas, or areas that are in consolidation process, the case of knowledge management, the importance of leadership seems to have been neglected (Nonaka et al., 2006). There are few studies that relate leadership and knowledge management. Leadership, from the perspective of the relationship between leaders and followers, and faced as a feature or process in the organization, is a critical element to that knowledge can flow and grow. Most leadership studies focus on the ability of the leaders to influence followers within the context of a bureaucratic and hierarchical model of organization. This perspective, although useful in understanding how leaders can organize, plan, allocate resources and generate alignment and compliance in their organizations, falls short in the context of complex and emerging dynamics of knowledge flows (Sousa, 2010).

Leadership, in this context, affects the work environment in how cooperation occurs between individuals, in the knowledge exchange, in the delegation of intra and inter-organizational responsibilities and competences, in short, influences the whole dynamic learning network and organizational knowledge sharing. (Bartlett & Ghoshal, 2002). The initial challenges of leadership direct to two key aspects:

first; to welcome the new emerging paradigm; and, second, to drive organizational change process towards the knowledge society, creating vision and value, innovation and risk-taking (Kaplan & Norton, 2004). Thus, leadership can cooperate in a direct way in the articulation strategies required for proper implementation of the knowledge management process, aligning it to obtain the results expected by the organization and its stakeholders.

In this sense, leadership begins to gain momentum in knowledge management through studies developed by several authors (Holsapple & Joshi, 2000; Plessis & Boon, 2004; Sun, 2010; Sousa, 2010; Nguyen & Mohamed, 2011). However, the aspects involving the theme leadership often make its understanding and its benefits difficult. Leadership as an object of study comprises a complex and multidimensional framework.

The review of academic studies shows that there is a wide variety of theoretical approaches to explain the complexities of leadership process. Over time, several approaches have emerged on the subject. Literature review (Northouse, 2004; Yukl, 2008) refers to several leadership theories: traditional approaches and new theories of leadership, such as transformational leadership, authentic leadership, leadership as adaptive work, ethical leadership and spiritual leadership. However, due to the breadth of the subject and the number of listed theories, this study focuses only on authentic leadership.

Authentic leadership theory is a new approach (Gardner et al., 2005). It permeates a variable range of studies and approaches. However, in general, all suggest that authenticity has its starting point with the leaders themselves, through their self-awareness, self-acceptance, self-knowledge, faith, actions and relationships, promotion of authentic relationships with their followers and associates, supported by transparency, trust, integrity and high moral standards (Avolio & Gardner, 2005).

Therefore, to present notes on the contribution of authentic leadership for the knowledge management is the purpose of this article. To achieve this goal, we performed a search on the Scopus (2013) database to find articles related to the topic and bibliographical material that provides support to the following discussion. The article consists of seven sections. Besides the introduction, section two approaches to knowledge management; three describes what authenticity is; four describes the authentic leadership process, defines authentic leaders and presents the components of authentic leadership development. Section five discusses knowledge management; six is related to authentic leadership with knowledge management. Finally, in section seven, final considerations on the subject are given.

2 Knowledge management

The twenty-first century society central aspect is the characterization of knowledge as the most important production asset, being beyond the traditional assets such as labor, capital and technology (Drucker, 1993; Lakshman, 2009). It became the main asset of the global economy (Wong, 2005; Sousa, 2010) and, also, the great competitive advantage of organizations and countries (Zabot & Silva, 2002; Drucker, 1993; Lakshman, 2009). Despite its importance to the world economy (Drucker, 1993; OCDE, 1997), it is not simple to define what knowledge is. The understanding of what knowledge means depends on the approach taken by each author.

Knowledge can be defined as a dynamic human process of justifying personal belief in relation to the truth (Nonaka & Takeuchi, 1997; Nonaka et al., 2000; Nonaka & Toyama, 2005). Or as a fluid mixture of experience, values, contextual information and insight (Davenport & Prusak, 1998). Or as the capacity (potential or actual) to take effective actions in different and uncertain situations (Bennet & Bennet, 2007, 2008).

Knowledge is dynamic (Stewart, 1998; Nonaka et al., 2000), constantly changing, derived from experience and learning (Stewart, 1998), created in social interactions between individuals (Nonaka et al., 2000) and so that it has usefulness and value, it must be inserted in a context, since it depends on a particular time and space (Nonaka et al., 2000; Davenport & Prusak, 1998), that is, so that knowledge has value and usefulness, it must be available to be used at the time to be used and for those who need to use it.

In this context, knowledge management is a conscious attempt to exploit knowledge as a directly productive force (Scarborough, 2003). For a long time, organizational knowledge was stored in various ways, including human minds, documents, policies and procedures, and shared between individuals through conversations, training, learning programs and reports. It is not a new phenomenon. However, as the emphasis on knowledge has grown considerably in recent times (Sabherwal & Becerra-Fernandez, 2003), knowledge management initiatives usually seek to systematize and collectivize the different types of knowledge that are dispersed between groups and individuals inside and outside the organization (Bate & Robert, 2002).

Table 1 shows that there are a number of definitions for knowledge management. Knowledge management involves applying the knowledge of the entire workforce to achieve specific organizational goals. However, this requires that people have the knowledge they need, where they need and when they need - the right knowledge at the right place at the right time. For this reason, knowledge management essentially involves the facilitation of processes by

which knowledge is created, shared (Servin, 2005), accumulated, internalized (Lee et al., 2005a, b) and used in organizations (Servin, 2005).

Therefore, the process of knowledge management involves creating, sharing, aggregating, internalizing and using/applying knowledge. Each of these factors is influenced by various organizational aspects. People and organizational culture are important factors in the success or failure of knowledge management initiatives. (Rubenstein-Montano et al., 2001). In a certain way, a wide range of organizational aspects can affect positively or negatively the implementation and the conduct of Knowledge Management by organizations. A number of factors can interfere with the process (Ndlela & Du Toit, 2001). In a relatively recent study, Ajmal et al. (2010) argue that culture, technology, knowledge contents and "initiative management" of knowledge management as a project are barriers to knowledge management. Table 2 describes these factors as well as aspects relating to each of them.

In contrast to the barriers to the implementation of knowledge management in organizations, a number of measures can be taken to overcome them. Several authors present a set of factors that can facilitate the implementation of knowledge management and make it successful (Ajmal et al., 2010; Wong & Aspinwall, 2005; Wong, 2005; Davenport et al., 1997). This suggests that organizations need to be aware and conscious of the factors that will influence the success of a knowledge management initiative (Wong, 2005). In short, the implementation of knowledge management in organizations requires a systematic and deliberate evaluation of the factors that influence it, adopting them as crucial to the success of knowledge management.

Table 3 presents several studies and critical success factors defined by each author.

As noted in Table 3, there are a large number of factors that may influence the success of knowledge management, while there are several factors that may be considered barriers (Table 2). A simple analysis of Tables 2 and 3 shows that there are some factors that, while even when considered barriers, are also considered critical success factors. Ajmal et al. (2010) confirm this finding in their study and point out that some factors appear as facilitators (success factors) and as barriers (failure factors). The explanation for this lies in the fact that a particular factor is not exactly an enhancer or barrier itself. Its status (as a factor of success or failure factor or barrier) depends on how it is managed (Ajmal et al., 2010). Practically, the facilitating factors (or barriers) can be seen as activities and practices that must be addressed in order to ensure successful knowledge management implementation (Wong, 2005).

Among the critical success factors presented in Table 3, there is an important element in the

Table 1. Knowledge management concepts.

CONCEPT	AUTHOR
Ability of an organization to create new knowledge, disseminate it in the organization and incorporate it into its products, services and systems.	Nonaka & Takeuchi (1997)
Knowledge management is a process of collection, distribution and efficient use of knowledge resources throughout the organization.	Davenport et al. (1997)
Knowledge management is a process that helps organizations find, select, organize, disseminate and transfer information and knowledge which are important and necessary for problem solving, dynamic learning, planning and decision making.	Gupta et al. (2000)
A process of creation, validation, presentation, distribution and application that enables an organization to learn, reflect, unlearn and relearn, being these five stages considered essential for construction, maintenance and replenishment of core competencies.	Bhatt (2001)
Knowledge management can be defined as any process or practice which aims to create, acquire, capture, aggregate, share and use knowledge to improve learning and organizational performance.	Bate & Robert (2002)
Knowledge management refers to the management processes that manage the creation, dissemination and use of knowledge through the fusion of technologies, organizational structures and people to create a more effective learning, solve problems and make decisions in an organization.	Na Ubon & Kimble (2002)
Knowledge management is the management of activities and processes that leverage knowledge to increase competitiveness through better use and creation of individual and collective knowledge resources.	CEN (2004)
Knowledge management is a process that favors knowledge sharing and establishes learning as a continuous process within an organization.	López et al. (2004)
Knowledge management is to plan, direct and control the knowledge flows that are produced in the organization, as well as actions taken to obtain, appropriate and improve the knowledge organization needs to be competitive.	Herrera (2008)
A comprehensive set of processes that are implemented for the purpose of identification of data sources and relevant information in organizations and its eventual conversion into knowledge for subsequent dissemination in different parts of the organization where they are needed.	Alavi & Leidner (2001)
Knowledge management is an intentional and systematic management of knowledge, processes and associated tools in order to fully utilize the knowledge potential in making effective decisions and achieving competitive advantage at all levels, solving problems and favoring innovation.	Kebede (2010)

Source: Authors.

knowledge management that seems to have less attention, leadership. Leadership, both from the perspective of the relationship between leaders and followers as a characteristic or process in the organization is a critical element to that knowledge can flow and grow. Most leadership studies focus on the ability of leaders to influence their followers within the context of a bureaucratic and hierarchical model of organization. This perspective, although useful in understanding how leaders can organize, plan, allocate resources and generate alignment and compliance in their organizations, is weak in the context of complex and emerging dynamics of knowledge flows (Sousa, 2010).

Knowing how leadership impacts on knowledge management practices is essential to determine how it can be used to improve knowledge management processes. In the context of Knowledge Management, researches focus mainly on factors such as the knowledge creation and sharing, technologies and

processes, leaving aside a phenomenon that is present in any social grouping since the dawn of humanity: the leadership.

Leadership has, undoubtedly, an important role in the success of knowledge management process (Holsapple & Joshi, 2000; Plessis & Boon, 2004; Sun, 2010; Sousa, 2010; Nguyen & Mohamed, 2011), however, it seems to get less attention than the others (Sousa, 2010). In many cases, the lack of top leadership commitment may result in the failure of knowledge management practices. A key reason to organizations that are unable to effectively leverage knowledge is the lack of top leadership's commitment with regard to the organizational knowledge sharing (Holsapple & Joshi, 2000).

In fact, leadership should provide support for knowledge management practices (Sun, 2010). When leaders recognize the need to manage knowledge, and then establish its requirements, they create the right conditions for knowledge management (Sun,

Table 2. Barriers to implementation of knowledge management.

Technology: It is related to infrastructure aspects of knowledge management, tools and technology.	
Connectivity	Lack of a technical infrastructure to support the required number of simultaneous accesses, due to bandwidth limitations.
Usability	Tools or software have low usability. Users see software as a complicated use.
Overconfidence	Overconfidence in knowledge management tools can lead to neglect tacit aspects of knowledge.
Maintenance costs	The cost to maintain the knowledge management tools may be too high, which inhibits initiatives or even intervenes and ends the knowledge management projects.
Culture: it refers to the characteristics or properties of knowledge itself	
Policy	Knowledge management can be used as an object of political maneuvering to gain control and authority within the organization.
Knowledge sharing	Workers do not share knowledge, due to reasons such as lack of confidence and knowledge accumulation mentality.
Understood image	Workers realize access to other's knowledge as something inappropriate.
Organization's management commitment	The administration is anxious to start the knowledge management project, however, when the first problems arise, the commitment to the project quickly disappears.
Knowledge content: refers to knowledge own characteristics or properties.	
Understanding	The content is developed in a fragmented way, dispersed in different user groups. Thus, the intersection of various functions content cannot be captured.
Structure	The content is not structured in a format that is meaningful to the task to be developed.
Relevance and circulation	The content must be contextualized or current to meet the needs of users.
Distillation of knowledge	Lack of an effective mechanism to refine the discussion of knowledge. Thus, valuable knowledge remains hidden.
Initiative management as a project: it regards to the management of knowledge management initiative as a project.	
Users involvement	A lack of user involvement in the project. So in addition to not being able to ensure user acceptance when the project is implemented, knowledge user requirements are poorly understood.
Technical and business knowledge	It is when, during the implementation of the project, there is no staff with the technical and business knowledge needed to sustain the initiative.
Conflict management	Conflicts occur between the team members, but without any attempt to control it.
Implementation strategy	The knowledge management project does not have a proper implementation strategy.
Project costs	The total cost associated with knowledge management project is higher than it was originally planned.

Source: Ajmal et al. (2010).

2010; Holsapple & Joshi, 2000). Leaders create the conditions that allow (or not) the participants exercise and cultivate their knowledge handling skills, to contribute with their own individual knowledge resources and have easy access to relevant knowledge (Nguyen & Mohamed, 2011).

Nonaka & Takeuchi (2011) point out that leaders in the context of Knowledge Management must provide some basic characteristics: they make judgments with "kindness"; they can grasp what is really essential; create shared contexts; they communicate the essence; wield political power; and foster practical wisdom in others. Although authors such as Sun (2010);

Holsapple & Joshi (2000); Nguyen & Mohamed (2011); Plessis & Boon (2004); and Sousa (2010) put it as a critical success factor for Knowledge Management and Nonaka & Takeuchi (2011) list a series of characteristics needed or desirable to the leader in the context of Knowledge Management, it seems that there is a certain detachment or disconnection with the theory of proper leadership.

3 Leadership

The meaning of the term leadership leads to different interpretations. However, it is undeniable its importance for different contexts (social, environmental,

Table 3. Critical success factors of knowledge management.

Critical Success Factors	Authors
Familiarity with knowledge management; coordination between workers and departments; incentive for knowledge efforts; authority to carry out knowledge activities; system to deal with knowledge; culture support.	Ajmal et al. (2010)
Leadership support; culture; information technology; strategy and purpose; measurement; organizational infrastructure; processes and activities; motivational aids; resources; training and education; human resource management.	Wong (2005)
People; leadership.	Ndlela & Du Toit (2001)
Leadership; organizational culture; information technology; performance measurement.	Ramachandran et al. (2013)
Technological infrastructure; organizational infrastructure; balanced flexibility; knowledge sharing; culture as a friend of knowledge; motivated workers; knowledge resources; support and commitment of senior management.	Davenport et al. (1997)
Training for workers; involvement of employees; team work; senior management commitment; infrastructure for information systems; performance measurement; culture as a friend of knowledge; benchmarking; knowledge structure; organizational constraints removing.	Chong (2006)
Leadership and support from senior management; culture; strategy and purpose; resources; processes and activities; training and education; human resource management; information technology; motivational support; organizational infrastructure; measurement.	Wong & Aspinwall (2005)
Strategy and leadership; organizational culture; people; information technology.	Yeh et al. (2006)

Source: Authors.

economic, organizational and others). Currently, there is a growing quest for understanding the leadership phenomenon. Academic centers cast a sharp eye for the phenomenon, given its several implications, especially those related to ethics and moral (Brown & Treviño, 2006) in the organizational, political, economic and social environments. The importance of the subject can be measured, in a way, by the amount of existing studies related to the theme. A search on the Scopus database (all areas of knowledge were considered, and the descriptor (leadership) could be included in the title of the article, in the abstract or in the keywords. Only papers or reviews published since 1964 were considered), in April 2015, with the term leadership, sent to more than 78,000 papers published in the database in the last 50 years. It is observed that it is difficult to establish a consensus on the subject of leadership. There are many approaches, which makes it difficult to find a single concept which comprehends the range of meanings the term implies.

Four decades ago, in a review on the topic, Stogdill (1974) concluded that there were almost as many definitions of leadership as the number of people who have tried to define the concept. It is almost impossible to choose a definition as the most correct, even because there is no widely accepted concept of leadership. In the last two decades there has been a tendency in the literature to consider leadership as a process that involves intentional influence of people on people in order to create conditions and facilitate relationships, so that they can carry out activities that contribute to the achievement of shared goals (Heifetz, 1994; Northouse, 2004; Yukl, 2008). Adopting this procedural perspective, leadership is defined as the

process of influencing others in order to achieve collective goals (Northouse, 2004).

The literature on leadership is vast. There are several theories and leadership styles. These theories are based on a number of assumptions about how leaders should act and what is their role within the organization. In this context, depending on the organization's leadership style or leadership style adopted by the leader, a number of behaviors and actions are triggered, impacting positively or negatively in Knowledge Management.

Challenges posed to the knowledge society, particularly for organizations, changed the focus of the leadership actions, seeking to restore confidence, hope and optimism, facing difficult situations, helping people find meaning and connection in their activities and having good communication with all those involved with the organization's activities (Avolio & Gardner, 2005). The organizational complexity demands new leaders. Leaders with the ability to lead with objectivity, integrity and values, favoring the creation of a reliable and conducive environment for creating, sharing and applying knowledge are needed. (George, 2003).

In recent decades, the ethical and moral crisis in the world led to the development of a leadership approach focused on principles, values and ethics: the authentic leadership (Avolio & Gardner, 2005; Cooper et al., 2005). Authentic leadership is seen as an important factor for organizations (Avolio et al., 2004; Avolio & Gardner, 2005; Cooper et al., 2005; Walumbwa et al., 2008), especially when leadership is seen as a critical success factor in knowledge management. Authentic leadership is directly related to positive organizational

behavior, based on authenticity and trust, providing support for the practice of knowledge management.

4 Authentic leadership

The concept of authentic leadership is a recent construction. It has its origins with Kernis' studies, who put the authenticity as a key to self-esteem (Wong & Cummings, 2009). It arose from the crossing of various aspects of leadership, ethical issues, and positive organizational behavior (Walumbwa et al., 2008). Proponents of authentic leadership point to the desire of training and developing leaders who proactively foster positive environments and conduct business in an ethical and socially responsible way (Avolio & Gardner, 2005; Avolio et al., 2004; Gardner et al., 2005; Luthans & Avolio, 2003; May et al., 2003).

Theories about authentic leadership permeate a variable range of studies and approaches, but, in general, they suggest that authenticity is stimulated by their own leaders through self-awareness, self-acceptance, self-knowledge, actions and relationships. Consequently, there are authentic relationships, supported by transparency, trust, integrity and high moral standards (Avolio & Gardner, 2005). Being authentic means "be true to yourself" (Wong & Cummings, 2009; Walumbwa et al., 2008; Avolio & Gardner, 2005). Derived from positive psychology, authenticity can be defined as personal experiences someone has, such as thoughts, emotions, needs, wills, preferences or beliefs, that is, processes that individuals carry in order to know themselves. Authenticity involves the individual's personal experiences (values, thoughts, emotions and beliefs) and a way of acting in accordance with his/her true "inner self", that is, the person expresses what he/she really thinks and believes and behaves accordingly (Gardner et al., 2005).

Authenticity is built through four main points (Kernis, 2003 apud Wong & Cummings, 2009):

- a) Self-awareness of strengths and weaknesses, emotions and values;
- b) Fair processing of relevant information or objective acceptance of attributes;
- c) Authentic behavior or acting according to your true self;
- d) Relational authenticity: striving to achieve openness and honesty in intimate relationships.

Although the concept of authenticity exists abundantly in the literature and appears to be clear, many people confuse authenticity with sincerity (Erickson, 1995 apud Gardner et al., 2005). Authenticity and sincerity are different. Sincerity is related to the congruence between the feeling and the real confession, that is, sincerity refers to how the very expression of feelings

and thoughts is aligned with the reality experienced by the inner self. Sincerity is judged by the extent to which the "inner self" is represented accurately and honestly to each other while the authenticity refers to how an individual is true to himself (Avolio & Gardner, 2005). Authenticity is a measure of agreement between the true "inner self" and behaviors shown (Gardner et al., 2005). The more a person is faithful to his/her emotions, preferences, identities and values, the more authentic he/she will be (Gardner et al., 2005).

The elements of authenticity are relevant in the face of fluctuations and challenges in the global scenario, that suggest a constant search for a renewed focus. Genuine leadership able to restore confidence, hope and optimism across the critical and challenging situations, and help people in their search for meaning based on authenticity is needed (Avolio & Gardner, 2005).

Initially, the authentic leadership was defined as a process that promotes positive psychological capacities and a highly developed organizational context, resulting in greater self-awareness, self-regulation and positive behavior by leaders and associates (Luthans & Avolio, 2003 cited Avolio & Gardner, 2005). More recently, Walumbwa et al. (2008) conceptualized the authentic leadership as a leader's behavior pattern that supports and promotes positive psychological capacities and a positive ethical climate, to promote greater self-awareness, an internalized moral perspective, balanced information processing and relational transparency in the workplace.

Nevertheless, the concept of authentic leadership, as well as the concept of leadership is not consensual. There are several definitions, but, in general, all emphasize the importance of consistency between words, actions leader's values (Yukl, 2008). There is a consensus regarding the four components of authentic leadership: balanced processing; internalized moral perspective; transparency in relationships and self-knowledge.

Balanced processing refers to the objective analysis of the relevant data before making a decision. The internalized moral perspective refers to internal moral standards that guide a person and are used to auto-regulating his/her behavior. Relational transparency is linked to the demonstration of authenticity through appropriate information and feelings sharing, avoiding inappropriate emotions. Self-awareness refers to the understanding of strengths, weaknesses, and how the individual builds a sense of world (Avolio et al., 2009).

This form of leadership is based on the understanding and interpretation of observed or experienced evaluation processes, as well as on ethics in decision-making. This implies the adequacy of the focus on the perceptions of individuals in leadership roles and how the individuals build their role and the environment (Begley, 2006). It is important to highlight that authentic leadership extends beyond the authenticity

of the leader, covering authentic relationships with followers and other *stakeholders*. These relations are marked by: orientation, transparency, openness and trust; toward worthy goals; and emphasis on the followers' development (Gardner et al., 2005).

The characteristics of those relations derived from the authentic leadership process reveal two important aspects. The first one is about the fundamental role of the authentic leader in the coherence of actions and influence over followers toward proactive, ethical and responsible behavior. The second is about the relevance of authentic leader in building an environment based on trust and integrity that supports the processes of knowledge management as detailed in the following topic.

4.1 Authentic leaders

The scandals involving senior leaders of Enron and Arthur Andersen led the society to face the need for profound changes in the organizational environment. Understanding these events and their reactions, the rescue of authenticity in the corporate world was essential. (George, 2003). Authenticity, and more precisely the presence of authentic leaders, is critical to the recovery of value-based organizations. (Sparrow, 2005). According to George (2003, p. 6),

[...] we need leaders, people of the highest integrity, committed to building enduring organizations. 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.

Authentic leaders are deeply aware of their way of thinking and acting, as well as the context in which they operate. They are perceived to be aware of the moral perspectives, knowledge and own and other forces. They are confident, hopeful, optimistic, resilient and high moral character holders (Avolio et al., 2004), they are honest, unselfish, acting with kindness, justice and responsibility (Yukl, 2008). These leaders genuinely wish to serve others with their leadership. They delegate to that employees make a difference instead of worrying about power, money or prestige for themselves. The true leader leads by the qualities of the heart, passion and compassion and the intellectual qualities. (George, 2003).

Authentic leaders perform their actions according to personal values and beliefs, which creates credibility and makes them conquer the respect and trust of followers. The role of these leaders encourages different points of view and creates networks of collaborative relationships with the team members, which makes them perceived as authentic (Avolio et al., 2004).

By incorporating the example of the leader, teams tend to work with leaders, colleagues and other stakeholders in an authentic way, allowing, over time, the setting of an organizational culture based on these values. Communication between authentic leaders and their followers, as well as with other stakeholders, is fully open, with the sharing of critical information and their perceptions and feelings. Additionally, these leaders are characterized by being an example of honesty, integrity and high moral standards, which create a positive reputation and make the team trust on them (Avolio et al., 2004).

An authentic leader can make the difference in organizations, being important to its success and contributing effectively to the knowledge management. Through its actions, contributes to people to find meaning and connection at work through greater awareness. The role of a leader can promote transparent relationships, decision-making that result in trust and commitment among followers (Avolio & Gardner, 2005), favoring structures for the creation, sharing and application of knowledge in organizations.

5 Authentic leadership and knowledge management

For knowledge management bring the expected organizational results, many factors must converge around it. The process of knowledge management must necessarily encourage or cause the occurrence of creation, sharing, aggregation, internalization and the use/application of knowledge, so that this process will result in competitive advantage. This is where leadership emerges as a critical factor and takes a leading role.

In organizations of knowledge, leadership needs to absorb its responsibility in relation to how cooperation takes place, the exchange of knowledge, the delegation of responsibilities and intra and inter-organizational skills. In short, it has influence across the dynamic network of learning and the sharing of organizational knowledge (Bartlett & Ghoshal, 2002). It is important that senior management establishes the prerequisites for knowledge management based on organizational macro views (Nonaka & Takeuchi, 1997; Leonard-Barton, 1995). From that perspective, we have to understand that leadership, as a process, should serve as a source of inspiration and motivation, proposing and approving new ideas and valuing individual differences (Herrera, 2008). With effective communication, explaining the knowledge management goals and paths to be followed, leadership can act as a change and corporate transformation agent (Singh, 2008).

It is the responsibility of the leader to act as a true "architect of knowledge", training members of the organization through the development of a shared vision, providing resources, delegating authority

Table 4. Authentic leadership implications on knowledge management.

Knowledge management	Authentic Leadership
Process of knowledge creation	Encouragement and promotion of a critical, reflective and participatory environment, conducive to building new knowledge.
Process of knowledge sharing	Building an environment of trust, acting as a facilitator in processes and relations through empowering people and stimulating the knowledge sharing.
Process of knowledge using	Promoting an environment based on authentic relationships that values and encourages self-awareness and the development of followers, facilitating the use of organizational knowledge.

Source: Authors.

and celebrating success (Crawford, 2005). In this scenario, the leader plays numerous roles such as teacher, mentor, guide or facilitator in the complex and dynamic process of sharing knowledge, establishing the necessary alignment between the experienced reality and the established world view, which must be shared by all (Senge, 1997). These challenges require new leaders to act and exert influence in specific areas such as: maximizing the process of receiving messages, creating and sharing knowledge, promoting self-awareness and self-development, increasing self-confidence and allowing navigation through a constantly changing environment (Crawford 2005).

Authentic leadership can contribute in the processes that support knowledge management in organizations such as the creation, sharing and use of knowledge. This happens when it influences people, promoting transparent and authentic relationships simultaneously earning consistency and accuracy to knowledge management initiatives.

Regarding the creation of knowledge, authentic leadership contributes for its ability to stimulate reflection, criticism and questioning about the way the organization operates and thinks. The perspective of the community and the participation of all who dispenses authentic leadership (Avolio & Gardner, 2005) provide open spaces to build the new. Thus, new knowledge can be created in the organizational environment. On the knowledge sharing process, authentic leadership collaborates acting as a facilitator and promoter of processes and relationships. The participative leadership style, based on professional's self-management, requires the group members' empowerment, contributing to an environment of trust among all. The share level is directly related to the degree of trust, recognition of the organization and satisfaction of its actors (Senge, 1990). Personal satisfaction comes from organizational achievement, admiration and recognition (Freitas, 2000). In this context, authentic leaders have an important role to understand people, processes and systems that make up the organization and its business principles (Singh, 2008). The leader needs to recognize, guide and motivate everyone to share

knowledge so that the objectives and expectations are met, in the individual and organizational levels. Thus, satisfaction and confidence feed the successful knowledge management cycle (Crawford 2005).

In the use of knowledge., Authentic leadership strengthens this process through its influence in promoting self-awareness and the development of followers (Avolio et al., 2009). For the success of knowledge management, leadership needs to cultivate an environment conducive to the development of human capital, with awareness of their role to act, change and transform the organizational reality, applying the knowledge that has been created and shared in the interactions between individuals (Nonaka & Takeuchi, 1997). The main implications of authentic leadership on knowledge management are summarized in Table 4.

For the success of knowledge management, it is crucial to develop the organizational capabilities needed for the creation, sharing, accumulation and use of knowledge (Nonaka & Takeuchi, 1997). In the processes of knowledge management, in general, authentic leadership has to contribute to building organizational relationships guided by transparency, openness and trust. It is important that the leadership points to worthy goals and to the development of followers and, crucially, that is based on authenticity.

6 Final considerations

Organizations that are knowledge intensive require new management models. The industrial era management models are limited in relation to the new demands of the competitive environment in which they are inserted, marked mainly by the intensive use of knowledge. Knowledge (Drucker, 1993) has become the main factor of production, leaving in the background the traditional factors - land, capital and labor.

Thus, knowledge must be managed. An efficient knowledge management is needed for organizations to keep up competitive. In this context, leadership takes a leading role. Leadership must permeate all organizational levels and foster knowledge management actions. If there is no direct support of the leadership

at all levels, it is likely that knowledge management actions do not reach the desired level of performance.

Analyzing leadership theory, it appears that there are different styles/types of leadership. Each of these types/styles contributes in some way to that knowledge management is conducted in order to generate better organizational results. Authentic leadership, object of this study, certainly has an important role in building mutual commitments based on authentic relationships, being relevant to that knowledge management becomes something perennial (Singh, 2008). Thus, it contributes to building an enabling culture and knowledge management processes support.

A fact to be considered is that authentic leadership is a new approach and has a long way to go before it is consolidated. Many studies about the subject are developed in countries like the United States and England, unlike what happens in Brazil. In general, these studies are theoretical and aim to build authentic leadership models. They focus on the factors that make up such theory, on the components of its development and relate it to other factors in a search for effectiveness in achieving organizational goals.

Analyzing these studies, some aspects of authentic leadership that can contribute to the knowledge management processes were identified:

- a) Authentic leadership has a strong ethical/moral character;
- b) Authentic leaders have self-awareness and stimulate self-awareness of followers;
- c) Authentic leaders act according to their true self, aligning their actions and behavior to their values;
- d) Authentic leaders develop transparent relationships, building trust environments;
- e) Authentic leaders encourage the development of their followers;

In fact, the characteristics of authentic leadership influence in building an organizational culture based on ethical/moral values, generating a positive organizational environment based on trust and participation. This scenario favors knowledge management, as the ethics and authenticity in relationships collaborate with the processes of knowledge management as well as with organizational performance.

However, the approach of knowledge management with the authentic leadership is starting to reveal a field of research with matters that deserve attention in future research: How does authentic leadership influence the barriers of knowledge management? How is it possible to measure the impact of authentic leadership in the processes of knowledge management? What is the relevance of the components of authentic

leadership in knowledge management? These questions deserve attention, even because the leadership, in general, seems to have been forgotten in the context of knowledge management. The answers to such questions can lead to important conclusions for the conduct of knowledge management and its successful implementation.

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