

Why link knowledge management, organizational culture and ethics: analysing empirical inquiry

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Abstract

This contribution is a result of an ongoing PhD research project, which intends to approach personal versus organizational ethical issues and social dilemmas in organizational knowledge management. Therefore, the key purpose is to illustrate the conceptual frameworks that explain these trends, as well as to expose the empirical results concerning data collection first stage (pre-tests and pilot studies). For that, the paper is divided into three main sections: knowledge management (levels and dimensions); framework design (levels); empirical findings (research design, data collection methods and diagnosis); and, results comparison: a new “light”!

Introduction

The technical progress enabled by modern science brought a development from industrialization to the knowledge-economy. Nevertheless, Manuel Castells (2004) suggested labelling this society as the “network society”, because the economic and informational global networks are a critical novel circumstance.

Due to explained scenario, research in knowledge management (KM) has gained an incredible swiftness since its origin as evidenced by extensive existing literature (Ponzi and Koenig, 2002). A great deal of this literature refers to the discussion how knowledge it is changed and streams throughout the organization, or whether relies on individuals or organizations (Von Krogh *et al.*, 2000); or else, it argues the technologies that sustain it (Markus *et al.*, 2002). Nevertheless, the *status quo* of knowledge society, leads to a necessary discussion concerning the ethical issues and social dilemmas (Costa *et al.*, 2008a; 2009; [1]).

Likewise, the network society consents that individual’s become sources of social power, even in new organizational realities. In conclusion, this contribution aims to highlight and summarize the empirical results concerning data collection first stage, which is typical of ongoing PhD research projects, in order to answer to the following research hypothesis: why link KM, organizational culture and ethics?

Knowledge management

Literature is rich concerning KM definitions; nonetheless, in order to present an indulgent argument the authors acknowledge Brelade and Harman (2003): KM is the acquisition and use of resources to create an environment in which information is accessible to individuals and in which individuals acquire, share and use that information to develop their own knowledge, as well as are encouraged and enabled to apply their knowledge for their benefit and the organization.

Levels

Personal knowledge management (PKM) is not an original proposal; although, its endeavour is to symbolize how individuals manage their personal knowledge. The gap regarding “common” KM perception is that, it is potentially better suitable to clarify individual stimulus and behaviour, even within organizational environments. In addition, it has being acknowledged by numerous experts (Sinclair, 2008), despite Polanyi’s (1958) previous use. Higgison (2005) defines it as managing and supporting personal knowledge and information that is available, significant and valuable to the individual; networks preservation, contacts

and communities; making life easier and more enjoyable; and exploiting personal capital. As a result, it can be bounded to the topic of personal information management (PIM), specifically the work of Jones and Bruce (2005) concerning personal space of information. This notion implies all informational objects that are, at least ostensibly, beneath that person's control (although not inevitably exclusive) (Efimova, 2005). Concluding, PIM focuses on supervising all the information surrounding an individual, i.e. merely encoded knowledge. PKM refers to embrained, personified and encoded knowledge, i.e. simply tacit knowledge. On the other hand, organizational KM is concerned with the exploitation and development of knowledge assets about organizational objectives (Abell and Oxbrow, 2001), as well as knowledge transfer within and between institutions (Peters, 2001). Therefore, it intends to connect four critical analytical arguments: knowledge acquisition, information distribution, information interpretation and organizational memory (Cram and Sayers, 2001). Hence, according to Carroll *et al.* (2001) organizational KM involves original roles and responsibilities, organizational policies, and supervising a new workplace culture accomplished by implementing the following strategies: communities of practice, knowledge repositories, expertise directories, peer assistance and best practice replication.

Organizational dimensions

Culture

Despite culture's multidimensional nature and complexity, the authors agree at some extent with the definition of Okunoye (2003), because it synthesizes culture as: heritage, social learning, behavioural patterns, a belief, information, and physical environment. Beyond this assumption, the author evolves Hofstede's (2001) work, promoting the following definition: culture is a set of basic assumptions formed from a collective programming of the mind, resulting from the social interaction of people and groups in society. Moreover, his definition incorporates global and local diversity that characterizes contemporary society.

Yet, regardless the refreshing contribution the authors believe that some important critics are in order: is a "spherical" concept (metaphorical symbolism for perfect and constant), and therefore does not reproduces the existing challenges that KM enables; does not recognize that organizational variables have a fundamental impact in KM (Holsapple and Joshi, 2000), in which collective versus individual behaviour generate tensions; does not assign the technological dimension which characterizes the network society (multiple triangular overlaps'). Organizational solutions like communities of practices and virtual communities imply complexity and trust in order to promote knowledge sharing (LaBelle, 2008).

Technology

Knowledge management systems (KMS) are technologies that support KM in organizations, being a significant element of organizational procedures. Despite this argument, the Reader ought to comprehend that unlike organizational initiatives may highlight diverse effects; and naturally, the bond of KM to technology is claimed by Alavi and Leidner (2001) as a priority. Nevertheless, KMS main stream literature has been approaching: specific technical features and functionalities, as well as design; empirical studies as regards to knowledge transfer between users and systems; decision support systems for KM; or, still their generational evolution. Additionally, the existing perspectives of KMS simply emphasize technical issues or else, cost/benefit analysis, which ethical guidelines for design are under scrutiny by the Association for Computing Machinery (ACM) code of ethics, or the auditing system SODIS (Gotterbarn *et al.*, 2008). However, ethical issues concerning the relationship of users with the technology remain purely neglected, becoming a vital sense of ethics to minimize the risks associated with the implementation of KMS.

Ethics

According to the authors of this contribution it is possible to conclude that ethics is simultaneously transverse and a unifying element. Regarding the concept itself, some philosophers use the term “morality” and “ethics” interchangeably, and others formulate a distinction (Pojman, 1994). Hence, it is reasonable to underline both perceptions: the non-unitary pleads that ethics embraces “common good”, and moral regulates our actions in order to achieve it (Stahl, 2002); and, the unitary acknowledges an equal meaning for both concepts (Rossouw, 2002). Even so, a conceptual inference is not sufficient to discern on a latent issue, because our first ideas must be considered moral abstract intuitions and need ethical legitimacy, which moral convictions will accept or not (Stahl, 2008). Despite this argument, the author points out that an ethical justification is considered acceptable under the general principles of reflection. Moving forward, the authors agree with the non-unitary perception which is further supported by the work of Rachels and Rachels (2007). For these authors the minimum conception of morality is, at the very least, the effort of a person’s conduct by reason, in spite of giving equal weight to the interests of each individual who will be affected by his decision (individual ethics).

Framework design

To approach personal versus collective tensions within organizational KM and its influence regarding strategy, it is reasonable that the framework engages two analytical levels: individual behaviour within these organizational contexts; and an organizational, in which managers observe the strategic consequences of organizational ethical or unethical behaviour.

Levels

Level 1

Literature reports several studies concerning ethical decision making in organizational contexts (Kelley and Elm, 2003), and two core concepts seem to arise: moral intensity (MI), and moral sensibility (MS). According to Jones (1991) MI refers to the degree of issue-related moral imperative within a circumstance. This author still argues that MI encompasses six components: magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect. Thus, when MI is high, the individual introduces ethical principles in its decision; nonetheless, when it is lower the opposite outcome occurs. Furthermore, Jones (1991) defines MS as the individual cognitive process, which is related to moral intent (Frey, 2000). So, this level will enable behavioural criterion regarding decision making which were initially developed by Smith and Kendall (1963), and subsequently applied to organizational realities (Cardy and Selvarajan, 2004). In addition, in an inferential sense will be used geometry, and trigonometry.

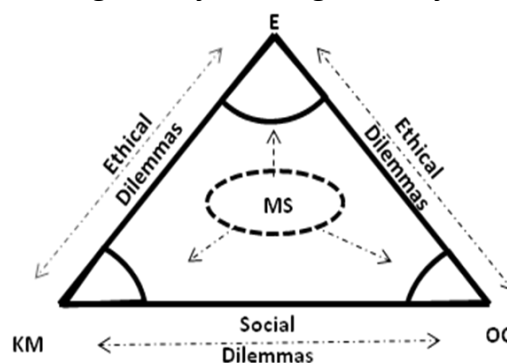


Figure 1. Individual decision making framework

As figure 1 illustrates, the equilateral triangle is the initial form in order to reflect an individual that values equally ethics, knowledge management (knowledge sharing) and organizational culture (trust). If, an individual values differently the three variables the triangle will become scalene; and, a right triangle for an individual that values most one variable (90 degrees angle), and equally the other two. Therefore, higher value for two equivalent variables and less weight on the remaining one indicates an acute triangle. As a final remark, the authors point out two important arguments: figure 1 acknowledges an individual that defines his organizational role as neutral. To represent individuals that are influencers or followers, the triangle becomes greater or slighter with the purpose to demonstrate their possible influence; despite Tales corollary, the aim is not to measure the angles value but to interpret individual's behavioural complexity.

Level 2

Instead, this level will be not intensely explored due to paper format limits, as well as a result of continuous scrutiny in other publications (Costa *et al.*, 2007; [2]). Yet, is a novel contribution for learning organization literature because it gathers methodological instruments of four research fields: business strategy; maintenance management; e-learning; and ethics.

Empirical findings

Research design

This research project unites descriptive and explanatory assumptions, because descriptive investigation is utilized when the research problem is notorious, although the researcher is not entirely conscious of the circumstances (Zikmund and Zikmund, 2000), as well as explanatory research can be applied when a study aspires to describe certain facts from dissimilar perceptions (Yin, 1994).

The epistemological option that permits subjectivity and questioning in its end results is a mishmash of interpretative and critical theory. Interpretive study looks for significance in context- the theme ought to be set in its social and historical background, so the Reader can notice how the existing situation emerged (Klein and Myers, 1999); although Sandberg (2005) enquiries about the output of this approach. The awareness of social reality is an imperative "building block" of critical research that can be encountered in several narratives of critical research (Hirschheim and Klein, 1994).

An embedded multiple-case study (Yin, 1994) was assumed, as well as Myers (1997) procedures as regards to case study method. In addition, grounded theory has its roots in social sciences (Chenitz and Swanson, 1986), specifically in interpretative tradition of symbolic interactionism (Benoliel, 1996). Grounded Theory or as it was initially titled "The discovery of grounded theory" (Glaser and Strauss, 1967) recognizes that a conceptual framework theory is engendered from data rather than preceding investigations, as well as the researcher can adjust data collection during the research development, that is, the researcher drops artificial leads or asks additional incisive questions as required.

Data collection methods

Burns (2000) argues that interviews are an oral exchange, in which an interviewer strives to extract information, values or opinions from a further individual, namely semi-structured interviews. Furthermore, questionnaires may assume multiple forms as for instance: web questionnaires, which implies filled in by whom is questioned, and mixing multiple choice and ask for agreement questions (Macionis and Plummer, 1998). Therefore, data collection methods entail a combination of interviews (five key members within each organization) and questionnaires (workers). Despite this argument, Yin (1994) suggests that interviews and

questionnaires acknowledge various perils, leading to a necessary pilot study with pre-testing, which is consistent with the sensitive nature of the research project.

Diagnosis

Pre-tests

The pre-test procedure (questionnaires only) happened through February 2009, and included the subsequent sampling conditions: 50 individuals from diverse professional and educational settings. The expectations concerning integer and influence of each focus faction was: top management (30%), middle management (30%), and operational management (40%), in order to promote a high level of reliability; and, at least five years of professional experience, and working in learning organizations (constraints). Subsequently, the objective was to draw pre-tests questionnaires, and for that each enquiry presented a box for remarks and suggestions, with the purpose to assure reactions about question content, generated feelings (comfortable or uncomfortable), and if their reply was truthful and genuine. The following step is to report the existing questions, its category, as well as its aim of analysis (see table 1):

Table 1. Pre-tests characteristics

Nr	Question	Class	Aim of Analysis
1	Organizational position: top manager, middle manager or worker?	MC	To understand which organizational perception is being covered
2	What you value most? (order from 1 to 3 your options)	MC	To perceive individual behaviour of managers and workers
3	How you mainly define your organizational role?	MC	To recognize the level of influence of managers and workers inside organizational culture
4	Do you consider that workers may express themselves and have free access concerning the organizational body of knowledge?	MC	To identify possible ethical dilemmas concerning organizational knowledge processes
5	Do you consider that worker's autonomy, dignity and privacy are recognized into the organizational body of knowledge?	MC	To identify ethical dilemmas concerning personal knowledge management
6	Do you consider that your personal experience is organizational intellectual property?	MC	To understand ethical dilemmas concerning personal knowledge management
7	Do you consider that knowledge creation, management and sharing into the organizational environment are fairly rewarded?	MC	A not faire compensation may undermine cooperation, therefore knowledge sharing can be seriously affected
8	Do you consider that workers who do not proceed to knowledge creation, management and sharing are fairly sanctioned?	MC	To perceive the relationship between behaviour and knowledge sharing
9	State what is meant to be a fair compensation or a fair sanction regarding knowledge creation, management and sharing in an organizational environment?	AfA	Allows the perception of possible contradictory answers regarding the two previous questions
10	In your opinion, does the organizational code of ethics or conduct clearly demonstrate the possible dilemmas concerning the process of knowledge creation, management and	AfA	Allows a personal perception concerning existing organizational codes

	sharing, particularly at an individual level?		
11	Do you consider that employees feel that exists a culture of trust in the organizational environment?	MC	To comprehend the level of confidence concerning organizational culture is a key issue
12	Do you consider that a culture of trust is vital to allow knowledge creation, management and sharing into the organizational environment?	MC	Given the learning organization dimensions it is vital to realize this relationship
13	Do you consider that top management and workers feel confident in their mutually organizational relationship?	MC	To be aware of possible tensions concerning managers and workers
14	Do you consider that organizational values represent a culture of trust in the organizational environment?	MC	To grasp how organizational codes generate trust
15	In your opinion, in which ways can a culture of trust be promoted in the organizational environment? And, how could you individually generate trust in the organizational environment?	AfA	To understand how each focus group values trust
16	Refer if you consider that ethical decisions may change according to the role and the context of knowledge creation, management and sharing. And, in which way such decisions affect organizational trust?	AfA	A key question to understand individual decision making, as well as ethical intensity
17	In your opinion, does the organizational code of ethics or conduct allow a transparent relationship regarding all the stakeholders?	AfA	To realize how the framework responds
18	Practical examples (for managers only)	MC and AfA	Two practical examples in order to allow managers present and justify their personal beliefs

Legend: MC- multiple choice; AfA- Ask for agreement

In order to grasp the methodical actions as regards to pre-tests outcomes, it is compulsory to refer three milestones: comments and suggestions content analysis (expressed individual's observations, as well as assembled and categorized them in broader categories through grounded theory); answers content analysis (highlighted a qualitative analysis for all queries, although each set of questions had a divergent mishmash of methods. Multiple choice questions were revised through a statistical/numerical inference regarding a generic and group analysis; and, ask for agreement questions were legitimated through a blend of grounded theory and hermeneutics); and, frameworks versus results (detailed the interface among pre-tests results and the frameworks).

As a result it is possible to acknowledge four primary conclusions:

- sampling settings- objectives complied, although a minor topic was noticed: two respondents had minus than two years of professional experience, which was deemed as inconsequential given the sample features, as well as the fact that pre-tests do not act as *modus operandi*;
- remarks and suggestions content scrutiny- the queries engaged a high level of trustworthiness, which was expressed by trivial corrections in questions 2, 5 (which give origin two separate queries), 6, 8, 10 and 15;

- queries content analysis- the results pointed out that the ethical issues and social dilemmas referred in Costa *et al.* (2008a) exist;
- framework versus end results- justified the need for new frameworks, which involved a highly optimistic retort.

Pilot studies

Pilot studies analysis (questionnaires and interviews) have happened during June 2009, and also encompassed sampling conditions: 25 per cent of the population inside a single learning organization (A). The intention about sample reliability was to get an equivalent weight regarding pre-tests focus groups (top management: 30%; middle management: 30%; operational management: 40%); at least five years of professional experience, and working in the learning organization (constraints).

Beyond the previous conditions, the authors had performed two interviews outside company A in order to fine-tune the interview protocol: one to a former human resources manager within a different learning organization (B); and, to a middle manager inside a non-learning organization (C). Afterwards, the interview to top manager of A endorsed a comparison with the questionnaires results in order to achieve a higher level of confidence and reliability. In addition, the systematic actions concerning their analysis were again analogous to pre-tests. Subsequent to the pilot studies analysis, four main issues were emphasized:

- sampling conditions- sample size and restrictions were fully accomplished. Even so, the authors report that the population of A were around 100 workers, being produced 28 questionnaires from which 25 were legitimated;
- comments and suggestions content analysis- no revisions were introduced;
- answers content analysis- once more the responses reported the existence of ethical issues and social dilemmas;
- frameworks versus results- parallel conclusions were obtained.

At the present time, a deeper analysis is being done and more results will be presented.

Rigor and liability

The mixed decision is defensible throughout the following argument: if the researcher asserts to acknowledge in-depth insight into an event, it might choose a diminutive however informative example. Otherwise, the researcher might also utilize a mere inferential numerical analysis to enumerate the results (Creswell, 2003), which justifies the authors choice. Nonetheless, the statement “numerical analysis” naturally leads to a philosophical, cultural and even psychological concern (Alaranta, 2006) due to practical problems that multiple methods impose. Therefore, the authors have decided to shed some light regarding the motives that justify their belief: questionnaire “design”, answers reliability verification, answers content analysis, and philosophical argument.

The questionnaires “design”, its sections (participant profiling, KM and organizational culture) and queries characteristics (multiple choice and ask for agreement), aimed to comprehend individual ethical behaviour and its impact within a system, which is similar to qualitative and numerical approach of Šuc *et al.* (2004). To verify answers reliability, the authors have drawn a table that compares respondent’s data profiling (organizational position, what you value most and organizational role) with their answers (close or open) of each section, as well as simultaneously both sections to observe possible contradictory opinions and beliefs (interpretative flexibility) (Doherty *et al.*, 2006). For queries content analysis, the authors followed the claim of Strauss and Corbin (1998: 178) that: “the adaptation of grounded theory will include its combination with other methodologies including phenomenology and hermeneutics”, meaning that grounded theory can interact as the missing

link in interpretative research (Goulding, 1998). Concerning the philosophical argument, the authors acknowledge abduction (equal to inference of a cause in order to explain a consequence), which admits several explanations along with some incorrect results (Zait and Zait, 2009). Despite all these arguments, the authors are aware that “non-main stream” data analysis is a challenge regarding rigor within a PhD research as pointed out by Bowen (2005).

Results comparison: a new “light”!

Despite the outstanding results, the authors decided to highlight simply the queries that demonstrated major dilemmas, due to paper format limitations. For that, the line of reasoning to justify a plausible comparison between pre-tests and pilot studies is the following one: comparative numerical analysis (multiple choice questions); comparative answers content analysis (ask for agreement queries); and, pilot interview content analysis.

Table 2. Inferential analysis

Nr.	Pre-tests	
	Managers	Workers
5	87% (usually, often and always) stated that workers autonomy, dignity and privacy were recognized	74% declared rarely
6	over 60% (usually, often and always) claimed that personal experiences were organizational intellectual property	75% argued never and rarely
7	for 80% (usually, often and always) workers were well compensated	combining never or rarely, it represented 85%
8	50% stated usually or often for a fair sanction	70% (never or rarely) referred the inexistence of a fair sanction
13	around 75% (usually, often and always) were mutually confident	60% claimed rarely
Nr.	Pilot Studies	
	Managers	Workers
5	100% (usually, often and always) argued that workers autonomy and dignity were acknowledged	39% claimed rarely
6	100% (usually, often and always) assured that workers privacy was recognized	24% argued rarely
7	100% (usually and often) claimed that personal experiences were organizational property	61% stated never and rarely
8	100% acknowledged usually a fair compensation for workers	62% of the workers referred unfair reward
9	50% (usually and often) referred that existed a fair sanction	100% (never and rarely) of workers pointed out a non-fair sanction
14	75% (usually, often and always) were mutually confident	60% stated rarely

Following the data analysis method the authors present an example with reference to answers content analysis (table 3). Translation was not executed to avoid lost of sensitive meanings.

Table 3. Answers content analysis

Nr.	Pre-tests		
	Position	Remark	Analysis
9	Managers	<i>“justa compensação não assenta em princípios meramente economicistas,</i>	the recognition of compensation dimensions; faire sanction as

		<i>mas também de reconhecimento (...) A justa sanção é algo de difícil definição</i>	something intangible
9	Workers	<i>“quando alguém recebe algo em troca do seu trabalho por ter conseguido um feito com relevância para a organização (...) Justa sanção quando alguém é penalizado”</i>	Acknowledged reward dimensions, and once again demonstrated how intangible is faire sanction

Pilot Studies			
Nr.	Position	Remark	Analysis
10	Managers	<i>“Justa recompensa surge através de factores monetários e não monetários. Justa penalização corresponde a não ter direito”</i>	demonstrates again the recognition of reward dimensions; however the absence of sanction, entails workers perception
10	Workers	<i>“(…) objecto de trabalho raramente é recompensado seja por estímulo oral seja por valores compensatórios (...)”</i>	the confirmation of numerical analysis, leading to a dilemma

Plus, it was observable in both analyses (inferential and content) that middle managers balanced their answers: about autonomy, privacy, or personal experiences had similar responses to managers; however, as regards to fair compensation and sanction, or mutual trust tended to reply workers perception. Going further, it is time to emphasize the organizational pilot interview, as well as to expose the authors’ perception pertaining to some key remarks.

Table 4. Pilot interview content analysis

Issue	Quote	Analysis
Autonomy	<i>“pessoas que entraram muito jovens (...) estabeleceram muitas relações pessoais para além das profissionais (...) há uma mistura da autonomia com a privacidade (...) dizer que é um perigo”</i>	the thin bond between autonomy and privacy and its identification
Privacy (social network)	<i>“a curto/médio prazo a empresa tem intenções de monitorizar”</i>	organizational technologies can enhance privacy issues
Personal experiences	<i>“projecto piloto (...), banco de ideias, em que estimula as ideias (...) mas cede a propriedade à organização”</i>	personal versus organizational knowledge management engages a difficult trend, and is bounded to autonomy, dignity, privacy, and even fair compensation
Fair compensation	<i>“tudo depende do impacto e das próprias pessoas em causa”</i>	it illustrates individuality, raising several ethical issues, like equity
Mutually confident	<i>“não esperaria um número muito elevado de mútua confiança, (...) da parte dos colaboradores para a gestão”</i>	managers recognition that organizational trust is extremely difficult to cope, leading to a serious social dilemma
Ethical decisions (organizational role)	<i>“tem que haver coerência (...) pela comunicação”</i>	interesting that ethical decision making is bounded to communication; however, and behaviour?

As a final remark, the authors claim that pre-tests and pilot results exposed fundamental key findings, and their purpose (to fine-tune the research protocol) was completely achieved.

Conclusion

Despite the nature of this contribution, ongoing research project, it is feasible to identify several remarkable findings. For that, the authors will acknowledge a parallel argument between the research question versus: literature; research design structure, data collection methods, and framework response; empirical findings; and, authors' perception concerning future case studies. The pressure between individual and collective possibly hinders knowledge creation, managing and sharing in organizations, and also enables ethical issues and social dilemmas, contradicting laboratory testing and observations of everyday life. On the other hand, research design structure appears to reply positively, specifically the mixed option concerning data collection and analysis, as well as the framework. Moreover, the empirical outcomes reveal a considerable amount of ethical issues and social dilemmas within organizations which managers do not comprehend or disregard, leading to an important belief by the authors: these "old" and "novel" dilemmas will be confirmed into the case studies. In conclusion, comments as regards to these topics will be welcome during the presentation.

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Endnotes

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