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Models Of Governance And The Importance Of KM For Public Administration

Cristiano Trindade De Angelis, Skema Business School, Lille, France

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ABSTRACT:

From an historical perspective, the shifts from the y generation to x generation and from the Industrial Society to Knowledge Society have been influenced by the social, demographic, organizational, technological revolutions and the development of collaboration networks (Web 2.0), underlining the changes about the role of the state and its leading role towards Web 3.0, the era of connected Intelligence. In particular, the passage from a management model (New Public Management), that concentrates knowledge in the higher levels of the organisation, towards a networking model, that transfers and creates "knowledge" without limits, but mainly without an accurate Knowledge Management -KM and organizational Intelligence. Because it was a passage based mainly on technology, the KM based on human resources and OI were left in the background, creating an overload of information. This study presents a model of Knowledge Management and organizational Intelligence for Public Administration (KM-OI) that draws on the works of Angelis (2013). The goal of this KM-OI framework is to identify influential environmental factors that can be used to guide a KM plan and development efforts of public administrations worldwide.

Keywords: *Knowledge Management, Gen X, Gen Y, Web 2.0, Networking, Public Administration*

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1. Introduction

In the 1980s, a new management philosophy to modernize the public sector arose, called the New Public Management - NPM paradigm, which has the main following elements: competition, performance standards, monitoring, measurement, flexibility, emphasis on results, customer focus and social control. One of the main criticisms on the NPM is that this model ignores the difference between private and public sectors (Boston *et al.*, 1996) such as Constitutions, the public interest, the market and sovereignty (Rosenbloom, 1993). This model of Public Administration has led to a concentration of power and knowledge within governments, resulting in the exclusion of other stakeholders in the policy formulation process. Critics argue that NPM has led to falling ethical standards in public life with increasing incidence of greed, favouritism and conflicting interests (Larbi,1999). In particular, according to Samaratunge *et al.* (2008), in countries that did not have a bureaucratic model established, privatization (characteristic of NPM) has become a popular source of income for the distribution of corruption and patronage.

The shift from Web 1.0 (the invention of the internet) to Web 2.0 (the era of networks) has boosted the change from a managerial approach as NPM to participatory-based networks,

which is determined by the substitution of technical efficiency and market purposes with the practice of co-production of policies.

Despite the fact that collaboration through networks have raised efficiency in the form of reduced transaction costs and speeding up the process of innovation, it also produced an avalanche of information that brought to the fore new forms of uncertainty, complexity and loss of focus and credibility, as presented in table 1 (types of governance and their characteristics).

Table 1: Three "Ideal" Models Of Applied Administrative Governance (Wart et al., 2012)

	Hierarchically-oriented governance	Market-oriented Governance	Network-oriented Governance
Theoretical basis	Weberian or neo-weberian model	New Public Management	Whole-of-Government
Organizing principle	Laws and rules taylorism	Market forces Open system	Functional networks and shared power
Guiding purpose	Compliance	Cost	Inclusion
Mindset	Regulatory	Competitive	Collaboration and coordination
Ethical thrust based on	Following the law and rules	Providing least-cost and least government alternatives	Using social values and norms, and thereby allowing personal interpretation of "the good"
Relationship of government to citizens	Subjects of regulation Authorized recipients Taxpaying citizens	Customers of services and policies Citizens as shareholders	Stakeholders Involved citizens
Related leadership model	Hierarchical leadership	Market leadership	Network leadership
Common leadership styles	Directive and delegative styles	Strategic and achievement oriented styles	Collaborative and participative styles
Some features when working at its best	Technical effectiveness (does exactly what it is supposed to); technical accountability (clear lines of authority); clear and well-defined roles	Efficiency (cost); market accountability; organizational learning from the private sector; focus on creativity and entrepreneurism	Inclusiveness; social accountability; organizational learning from the policy stakeholders; strong relationships and social bonds
Some features when not working well	Rigidity, rule mongering, impersonalism, lack of commitment; focus on inputs over outputs	Loss of public values, corruption, disenfranchisement of less well-connected groups, focus on outcomes over due process and democratic values	Loss of focus, chaotic and dysfunctional bickering, lack of results, focus on inclusion and responsiveness over results

The changes in the models of governance (bureaucratic, managerial, networks) follows, though in a slower way, the changes in the society (x, y and the future z generation) and

the change in technology (Web 1.0, Web 2.0 and the future Web 3.0). While the y generation (the social networks: the generation of smart) seeks to acquire and produce exponential volumes of information without worrying about meaning, context or credibility the challenge that presents itself to z generation is to learn to select, analyse, integrate, interpret the information before using it (generation of intelligent).

The shift from Web 1.0 to Web 2.0 has been characterized by the evolution of the use of the web from passive consumption of content to a more active process of sharing of information. In the future, the analysis, synthesis, interpretation and use of the collective knowledge are what will lead us to Web 3.0 (combination of intelligence and semantics).

In fact, the technological, social, demographic and organizational revolutions, highlighted by Tapscott et al. (2008), brought new problems that require new knowledge from different stakeholders, which, in turn, produce new forms of complexity and uncertainty, signalling the importance of KM to create, collect, organize, transfer and share information and strategic knowledge that can be used to make decisions.

2. Knowledge Management And Organizational Intelligence

The high administration must firstly recognize that land, labour, and capital – the classical factors of production – had been largely replaced by knowledge and that knowledge has become the resource, rather than a resource, it what makes our society post-capitalist (Ducker, 1993).

As Knowledge has been widely recognised as the most important factor of production in a "new economy", it needs tools and methodologies to be created and shared. Then comes the concept of Knowledge Management. However, scholars have been concerned by, and practitioners have struggled with, the lack of clear, comprehensive concepts that define the field of Knowledge Management (Despres & Chauvel, 1999). Sutton (2007) finds that academics and practitioners have not yet been able to stabilize the phenomenon of KM enough to make sense of what it is and what it comprises. Despres (2011) finds that there are no technologies, applications, practices, prescriptions, as well as theory of economics, organization, systems or human interaction specific to KM. There are, however, theories and practices from various perspectives. Nonaka and Takeuchi (1995) consider KM to be the capability of an organization to create new knowledge, disseminate it throughout the organization and embody it in products, services and systems.

Jennex (2009) holds that Knowledge Management is really about leveraging what the organisation "knows" so that it can better utilise its knowledge assets, and connecting knowledge generators, holders, and users to facilitate the flow of knowledge through the organisation.

Given this plethora of perspective and the concepts presented in table 2 below, I will consider that KM is a set of practices aimed at the interaction between tacit and explicit knowledge to acquire and create new competences, which allow an organization to act intelligently in complex environments.

Table 2 shows the "evolution" of the KM concept since 1998.

Table 2: KM Evolution (Personal Elaboration)

World Bank (1998)	KM is "a more organic and holistic way of understanding and exploiting the role of knowledge in the processes of managing and doing work, and an authentic guide for individuals and organizations in coping with the increasingly complex and shifting environment of the modern economy."
Gurteen (1998)	The collection of processes that govern the creation, dissemination, and leveraging of knowledge to fulfil organizational objectives.
Svieby (2001)	It is the art of creating value from intangible assets.
Bukowitz and Ruth L. Williams (2002)	It is the process by which the organization generates wealth from its knowledge or intellectual capital
OECD (2003)	A broad collection of organizational practices related to generating, capturing, disseminating know-how and promoting knowledge sharing within an organization, and with the outside world
McElroy (2003)	It is a management activity that seeks to enhance knowledge processing
Rothberg and Erickson (2004)	KM is an attempt by organizations to capture, codify, organize, and redistribute the organizational's tacit forms of knowing and make them explicit.
CT-GCIE (2006)	Systematic set of processes, articulated and intentional, capable of increasing the ability of public managers to create, collect, organize, transfer and share information and strategic knowledge that can be used to make decisions for the management of public policies and to include the citizen as a producer of collective knowledge.
Rosenheck (2009)	KM can simply be stated as the capturing of knowledge, storing of Knowledge, and transfer of knowledge to others.
Bali *et al.* (2009)	Knowledge Management is a comprised a set of tools, techniques, tactics and technologies aimed at maximising an organisation's intangible assets through the extraction of relevant data, pertinent information and germane knowledge, to facilitate superior decision-making so that an organisation attains and maintains sustainable competitive advantage.

Based on these 10 definitions of KM it is possible to conclude that KM has the goal to govern the creation, collection, organization, sharing, dissemination, storing knowledge that can be used to solve problems and make decisions.

While it is possible to find various concepts of organizational intelligence in scientific literatures, all are bounded by one feature: the organization's capability to adapt to its environment and apply its knowledge.

McMaster (1998) holds that OI is the capacity to think at the organisational level, to make sense, to act in a flexible, creative, adaptive way. In line with this, Tarapanoff (2002) states that OI results from the need of the organisation to maintain a continuous

improvement of environmental changes, with its opportunities and threats, in order to adapt quickly and enhancing their ability to innovate. Thus, organizational intelligence refers to a process of turning data into knowledge and knowledge into action for organizational gain (Cronquist, 2010). For the purposes of this research, OI is defined as the ability of an organization to adapt, learn and change in response to environmental conditions through the use of relevant knowledge. It is possible thus conclude that KM is given over to the creation of new knowledge through interactions among organizational members, and that OI analyses this knowledge in order to interpret environmental signals and respond effectively.

The concepts of KM and OI are complementary and interdependent. Despite its intuitive appeal, this juxtaposition has received relatively little attention in the literature. Liebowitz (2001) has written that the active management of knowledge is critical to enabling organizational performance enhancement, problem solving and decision-making. Cruz and Dominguez (2007) have positioned KM as an enabler of OI that serves to obtain external and internal information, and facilitate perception, knowledge creation and decision-making. Lefter et al. (2008) state that the intelligent organization uses knowledge management as an adaptive tool for coping with the continuously-changing an environment by identifying opportunities and avoiding risks early.

From these perspectives KM provides methods for identifying, storing, sharing and creating knowledge, while OI integrates and interprets these inputs to accomplish complex, organizational-level decision making. It is important to note that knowledge is socially constructed with collaborative activities (Knowledge Management Practices), but access to that knowledge does not mean success in decision making (Rothberg and Erickson, 2004). In this regard, Zheng et al. (2010) hold that in an ambiguous and uncertain world, the most important part of decision making is to digest the information from the environment to structure the unknown.

3. Benefits And Limitations In Applying KM Practice

The benefits of a knowledge management function to the organization are many. These include (Bawany, 2000):

- knowledge to compete successfully in the changing business environment,
- ability to create and maintain competitive advantage at all times,
- ascertain its long term competitive position,
- achieve meaningful and required performance results,
- understand the contemporary knowledge to remain competitive and innovative,
- maintain a knowledgeable and skilled workforce,
- and have the appropriate business organization and people who can make it happen.

Knowledge management has raised high expectations. In the OECD survey (2003) the following widely perceived expectations have been cited:

- Releasing information more rapidly and making it available more widely to the public
- Improving transparency
- Improving working relations and sharing of knowledge with other ministries
- Improving work efficiency and/or productivity by producing and sharing knowledge and information more rapidly within your organisation
- Improving working relations and trust within your organisation
- Increasing horizontality and decentralisation of authority
- Making organisations more attractive to job seekers
- Minimising or eliminating duplication of efforts between divisions and directorates
- Making up for loss of knowledge (due to shorter staff turn over, future retirement,
- departure in the private sector, etc.)
- Promoting life-long learning
- Integrating knowledge from outside for the creation of new knowledge (i.e. linkage
- between the front office and the back office)
- Betterment of all citizens and the nation from the standpoint of knowledge.

Furthermore, KM assists in identifying, developing and retaining those employees with critical expertise. Nevertheless, there are several facts already known that represent a barrier the capacity in applying KM Policies and Practices.

According to the literature, the top down control, lack of recognition of individuals and the nature of public organizations driven by legislation (bureaucratic procedures) are the major obstacles for applying KM practices in the public sector.

Yuen (2007) holds that barriers to successful KM adoption are largely from lack of awareness and lack of time. For him, the lack of time can be interpreted as lack of awareness of KM importance and employee resistance to change is still the biggest barrier to successful change.

In another study Angelis (2011), conducted in the same Ministry in Brazil, found that the top management is not very influential on the organizational culture, the degree of

openness of the organization in relation to suggestions from the civil servants is low and the awareness about the importance of KM is not uniform. I then conclude that the Planning Ministry should provide training in concepts and tools of KM.

In line with this, the OECD (2003) found that: (i) KM strategies have often not been well disseminated; (ii) difficulties of implementation of KM strategies have arisen from staff resistance (and in particular middle management); (iii) the difficulty in capturing employees' undocumented knowledge, and (iv) the organizational focus on ICTs.

Furthermore, there are more barriers in the Public Sector, such as: 1. Little structured interaction between the agencies, limiting the sharing of knowledge; 2. Embryonic efforts at disseminating learning, practices and improvements; 3. Lack of directives and clear responsibilities in applying practices of KM; 4. A prevailing culture which does not privilege knowledge sharing, initiatives to make improvements or collaboration through networks; 5. Lack of metrics allowing evaluation of the creation, sharing, and application knowledge to verify efficacy and innovation (Knight, 2007).

Finally, improved KM practices come with an added cost in terms of information overload and wasted time in consultation for a majority of organizations and a dilution of responsibilities for a large minority of organizations (OECD, 2003). The consequence of this is the difficulty to promote collective learning, the development of competences and create collaborative work environments in the Public Administration. This shows that KM policies have to be well designed taking into account these important side effects on productivity and on the internal governance.

4. The Importance Of KM And Culture Change For The Public Administration

As in the NPM, the public sector tries to imitate the private sector in terms of KM. Snowden (2002) asks why the public sector desire to copy the private sector in the area of KM and the OECD (2000) raises the question: why should the public sector copy the new knowledge management practices of major private sector companies? Cong and Pandya (2003) suggest that one of appropriate solutions to address this dependency is taking a proactive attitude front KM practices more prevalent in the private sector and adapt them to the setting of public administration.

Although it is known that changes in management are more difficult to implement in the public sector and the competitive pressure and incentives to reduce costs have traditionally been less important in comparison with the Private Sector, the lack of studies on KM in the Public Sector is a paradox, since KM can contribute to the reform of public administration to make governments more efficient, transparent, responsive to citizen needs, and effective in achieving their objectives.

Brun(2005) holds that if we think about the many interactions within and between several stakeholders, and their impact on policy and service provision, then we begin to see the scope for knowledge management in the public sector. KM had the potential to greatly influence and improve the public sector renewal processes. KM is especially important in the public sector as staff have long been identified as the key knowedge depository (McAdam and Reid, 2001; cited by Edge, 2005). According to Abdullah and Date (2009) because of this nonpareil strength the public sector has a unique role in promoting the sharing, creating, integrating, and dissemination of knowledge resources available in its

context. Denner and Diaz (2011) conclude that KM in the public sector is not only plausible but necessary for the effective functioning of the public sector, in order to achieve sustainable development goals.

Despite the fact that KM has been extensively discussed by many theorists and practitioners, a very few literature and/or information on KM (Cong and Pandya, 2003; Edge, 2005; Riege and Lindsay, 2006; Rowland and Syed, 2004) have been found in the public sector. Edge (2005) states that current examples of public sector knowledge management are often narrowly focused and do not provide rich data on the strategies and experiences of those engaged in the process at the organizational level. These research often focuses on the role of technology or e-government services (Ling, 2002; cited by Edge, 2005). In fact, most governments have invested in e-government to improve internal and external communication as well as the quality and speed of service.

Nevertheless, in the current social media environment, these on-way conversations fail to build credibility and trust in government, and perhaps more importantly, they fail to harness the knowledge, skills and resources that could be tapped by government using more collaborative approach to service delivery and policy-making (Tapscott et al., 2008). This signalled the importance of implementation of KM practices in the public sector. Governments must move beyond e-gov (openness, accontability, efficiency and effectiveness), creating a circle of policy innovation and adaptation through integration of knowledge and experience of a large number of stakeholders, which have a capacity infinitely superior to create knowledge.

The environment of popular participation "Eu quero participar" (I want to participate) , which it will be released soon by the Brazilian government and it will be integrated into social networks, involving society in the elaboration and improvement of the public policies, is a good example of the shift from a “Gov-to-You” mindset to a “Gov-With-You” mindset to incentivate co-creation knowledge.

However, it is important to emphasize three big challenges:

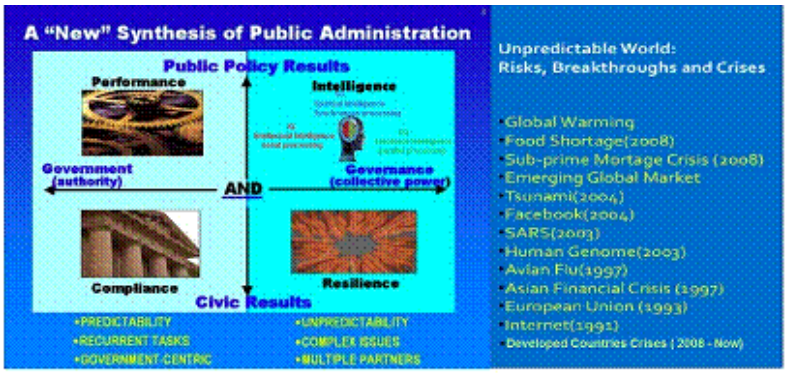
1. Creation of a sharing culture inside and outside of the public administration

2. facilitation of a concise expression by citizens through public websites and portals

3. The use of intelligent tools/systems and experts to transform the information in knowledge (contextualization) and then in intelligence (utilization).

Governments do not have sufficient resources, internal skills and intelligence to effectively answer the needs of citizens in a rapidly changing environment. Therefore, the public value is not more provided only by the government but by collaboration. Sharing power, opening up the decision-making process, forging new relationships and partnering on service delivery are the foundations of 21st-century government. It involves dealing with complex issues, many of whom, according to Ho (2008; cited by Bourgon, 2009), have the characteristics of "wicked problems" in an unpredictable context of a modern global economy and corporate network, where several players are acting simultaneously.

As can be seen in Figure 1, in the "new synthesis of public administration", intelligence and resilience are the foundation for meeting the challenges of the 21st century.



ırgon, 2009)

In a world increasingly unpredictable and complex (risks, breakthroughs and crises), it is necessary a profound cultural change in the public sector from people-to-documents to people-to-person approach, taking advantage of personal competences. This cultural change is the basis for creating a strategic KM plan. In line with this, Riege and Lindsay (2006) highlight that the main driver for the adoption of diverse KM initiatives in public services is the change of organizational culture.

Nevertheless, changing a culture in a public organization where people are permanent employees, where there is a strict organizational structure, and directives come from numerous sources is a formidable challenge. The biggest challenge to the public administration is to change from a prevailing culture of "Knowledge is power" to "Knowledge sharing is power".

The process of culture change encompasses the following requirements:

- people need to be willing to cooperate (right incentives and rewards need to be in place).
- basic understanding how KM can improve the government processes, its integration with the broader goals of e-Gov implementation.
- create of a network of Chief Information Officers to engender cultural change.
- measurement (achievements of KM and whether productivity and public service delivery have been enhanced).
- deeper studies on KM initiatives and how policies can impact KM implementations should be carried out.
- collaboration models between local, regional and national levels, as well as between public and private organizations.
- new programs and policies of selection, recruitment, training, learning, promotion (meritocracy), and assessment of the contribution and collaboration of civil servants.

- transcend specific job training and prepares for long-term career and life success (Development of human capital and life long learning)
- develop creative thinking, broad-minded, fair-minded and open-minded attitude, capacity for conceptual grasp, risk taking.
- address problems from an integrated, holistic perspective
- technical and legislative changes.
- transform managers (transactional leaders) in transformational leaders.

5. KM-OI Model And KM Plan For The Public Administration

The KM-OI model draws on a number of existing theoretical treatments (e.g., Scott Morton, 1991; Nonaka & Takeuchi, 1995; Davenport & Prusak, 1998; Choo, 1998), but more heavily on that of Scott Morton (1991) and Halal (1998) due to their currency, grounding in theory and applicability in practical settings.

5.1. The MIT90s Framework (Scott Morton, 1991)

The MIT90s framework illustrates the complexity arises from the systematic or holistic nature of organizational change. As soon as the organisation moves beyond very simple changes, it needs to take account of a variety of inter-related factors which can make the management of change a complex requirement.

MIT90s framework (Scott Morton, 1991) demonstrates that an organisation can be thought of as comprising five sets of dimensions – strategy, structure, management process, individuals and roles, and technology (see Figure 2).

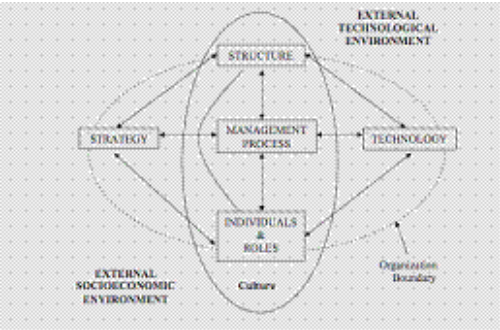


Figure 2: MIT90s Framework

This framework also identifies the influences that an organisation is subjected to from its external environment and to which it must respond. Both the internal forces in the organisation and the external environment change through time and the changes in any one area will have implications for the other areas (Scott Morton, 1991).

5.2. The Halal Model (1998)

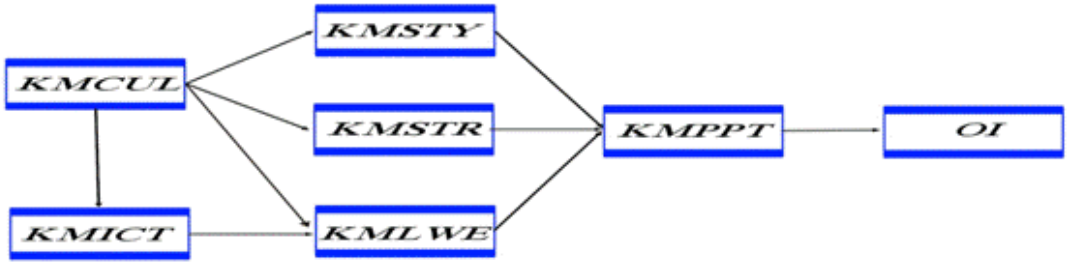
Halal (1998) considers that the five subsystems of OI can be thought of as the intellectual power of an organisation, the engine that drives problem-solving and adaptation to environment, and the higher the level of OI, the greater the intellectual power. He defines organisations which are composed of educated individuals making use of complex information technology in order to adapt to the complex world as intelligent learning organisations.

According to Halal (1998) it is the fit between OI and environment that determines performance. For him, OI is a problem-solving capacity of an organisation created by five cognitive subsystems. These subsystems include organizational structure, culture, stakeholder relationships, knowledge assets and strategic processes, all of which are affected by IT in various ways. As shown in figure 3, each subsystem contributes to OI because it serves an essential purpose in the organisation's cognitive functioning. The Halal model (1998) is one that really adapts to what the OI proposes, namely to help the organisation decide with more assertiveness.

Figure 3: Halal Model (1998)

5.3. KM-OI Model

This study explores the development of a KM-OI model that draws on the works of MIT90s Framework (Scott Morton, 1991) and Halal model (1998). The KM-OI model acts as a guidance mechanism for public administrations that seek to manage and use their knowledge more effectively, in order to achieve their goals in complex environments. Figure 4 presents the KM-OI model and the dimensions and their concepts are presented in Table 3.



Legend	
KMCUL	Organizational Culture
KMICT	Information Technologies
KMSTY	Organizational Strategy
KMSTR	Organizational Structure
KMLWE	Learning with the environment
KMPPT	Policies and Practices of KM
OI	Organizational Intelligence

Figure 4: KM-OI Model

Table 3: Concepts Of The Dimensions Involved In KM-OI Model (Personal Elaboration)

Dimensions	**Concepts**
Organizational Culture (KMCUL)	Organizational Culture is a set of values, beliefs, norms, meanings and procedures shared by organizational members (Robbins, 2004).
Organizational Strategy (KMSTY)	Organizational strategy can be perceived as the organization's plan of creating and deploying knowledge assets. (Zheng,Yang & McLean, 2010)
organizational Structure (KMSTR)	Organizational structure indicates an enduring configuration of tasks and activities (Skivington & Daft, 1991).
Information technologies (KMIT)	Information technology refers to any artifact whose underlying technological base is comprised of computer or communications hardware and software (Cooper & Zmud, 1990)
Learning with the environment (KMLWE)	The term implies a multiplicity of players, forces, and systems interacting. Environment is dynamic—changing in response to influences from outside or arising inside. It recognizes complexity in causes and effects (Warger & Dobbin, 2009).
Policies and Practices of KM (KMPPT)	KM is the explicit and systematic management of the activities, practices, programs and policies related to knowledge in the organization (Wiig, 2000)
Organizational Intelligence (OI)	Organizational Intelligence is a continuous cycle of activities that include sensing the environment, developing perceptions, generating meaning through interpretation, using memories of past experience to support perception, and taking action based on the interpretations thereby developed (Choo, 2002)

Without a doubt it can be said that, at large, a supporting learning culture is of paramount in order to successfully and effectively introduce and implement changes within an organisation, in any level, strategic, structural or technological.

Davenport & Prusak (1998) point out that organizational culture is the not only a critical success factor for KM, but also the most difficult and important factor to address, particularly if the appropriate culture does not already exist. In the KM-OI model the organizational culture:

- impacts strategy, structure, learning with environment, and information technology
- impacts strategy enabling the creation and implementation of a KM Plan, and ensuring that the mission of the organisation is aligned with the missions of various departments, as well as the KM strategy is aligned with organizational goals.
- influences the structure, facilitating the flow of information, the creation of multidisciplinary teams and the development and use of competences
- influences the learning environment while demonstrating openness to the ideas of citizens, improves the services according to the demands of the environment and identifies partners.

In the KM-OI model the information technology impacts learning with environment. In fact, the information technologies can be used to support and promote a learning environment to then facilitate the knowledge management processes.

In the KM-OI model the strategy, structure, and learning with environment impact the policies and practices of KM.

Deductions based on previous research suggest a positive association between organizational strategy and KM practices (Zheng et al., 2010; Chang & Chuang, 2010). The structure within an organisation may encourage or inhibit knowledge creation, sharing, and application (Nonaka & Takeuchi, 1995).

Knowledge management looks at the external environment as a source of knowledge and as a testing ground for its understanding and interpretation of itself and the outside world (Bennet & Bennet, 2003).

Angelis (2013) found that almost 65% of changes in OI are resulting of KM Practices. It means that the availability of the collective knowledge corresponds to almost 2/3 of making-decision process, the rest is the capacity to analyse the knowledge before applying it.

KM can play a key role in supporting the policy-making process. Being KM an attempt by organisations to capture, codify, organize, and redistribute the organizational's tacit forms of knowing and make them explicit (Rothberg and Erickson,2004), their policies and practices are very useful to create knowledge. However, the practices of KM also produce too much information (OECD, 2003). In fact, the volume of information available to

decision-makers has increased greatly. The challenge is now to analyse, interpret, integrate the key information needed to decision-making and solving-problems. For example, the ability to analyse the knowledge of particular Communities of Practice - COPs, one of the most important KM practices, is at the core of OI.

The public sector must be aware that knowledge only affects organizational performance when it is applied (intelligence). In other words, available knowledge (KM) will have a positive effect on organizational performance only when knowledge is strongly applied to whole organisation (Al-Hawari, 2004). An intelligent organisation must ultimately exist in an environment that encourages and supports the development and management of Knowledge (Stonehouse & Pemberton, 1999). Organizational Intelligence combines a mix of socio-technical elements such that (a) the subjective evaluations of the online discussion, led by hosts, facilitators and subject matter experts, is combined with (b) real-time feedback from text mining and semantic analysis of the online discussion.

To sum up, in the KM-OI model the organizational culture (input) impacts firstly on the construction of the Plan of KM (strategy) and on the structure to implement it, as well as the learning with environment and the information technologies (means). On a secondary stage the organisation structure, the organizational strategy and the learning with environment impact the KM practices and policies.

5.3. KM Plan For Public Administration

A KM Plan for PA encompasses the following steps:

1. To identify how knowledge flows, i.e., understand how individuals and teams share information, norms, meanings, procedures, beliefs, and values (culture). It is also important to identify how people interact with the external environment, for example, the community, private sector and other levels of government. The analysis also includes the ICT infrastructure, and the strategy and structure of the organisation.

Regarding to strategy and structure, four questions should be answer : (I) Has the organization experienced successful pilot projects of knowledge management (KM), highlighting the contribution of KM to business? (ii) Has the organization a KM strategy aligned with organizational goals?(iii) Has the information flows quickly and efficiently in the organization? (iv) Has the organizational structure promotes the use of the civil servants' competences?

2. Understand how the staff access knowledge and document it

3. Understand relationships and therefore 'who knows whom' and 'who shares with whom' is essential.

4. Develop a strategic vision and communication strategy

5. Establish a knowledge management awareness session to inform employees

6. Implement mentoring to enable employees to pass on their tacit knowledge.

7. Appoint a knowledge leader and rotate the role for shared responsibility.

Conclusions

The KM plan is the second step to improve the transfer and creation of knowledge in the Public Administration. The first is a radical culture change in the public sector toward a person-to-person approach, taking advantage of personal competences. Nevertheless, changing a culture in a public organisation where people are permanent employees, where there is a strict organizational structure and directives come from numerous sources is a formidable challenge.

The evolution of the society and technologies will force, in the very slow way, the public sector to shift from the era of networks to the future era of intelligence. KM can help the public administrations worldwide in this hard task of changing from Gov 2.0 (open government + social media + open data) to Gov 3.0 (Collaborative Innovation + Public Engagement + Customized intelligent service).

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About the Author:

Cristiano Trindade De Angelis is a Lecture of Economics and a Planning Analyst in the Planning Ministry in Brazil. He is under license for doing a PhD on knowledge Management and Organizational Intelligence at Skema Business School, Lille, France where he will defend his PhD Thesis on 10th April 2013.

Contact: Rue Jemmapes 181, Lille, France, 59800; Tel. 0033 – 0628938244; Email: angelis.cristiano@gmail.com; cristiano.deangelis@skema.edu

CV: http://lattes.cnpq.br/6131315973253089
