



Chamber of
Deputies

Formulating a Knowledge Management Policy Federal Public Administration The Brazilian Experience

Paulo Sérgio Vilches Fresneda, D. Sc.
Sonia Maria Goulart Gonçalves, M. Sc.



Brasília | 2008

Chamber of Deputies
Directing Board
53rd Congress - 2nd Session
2008

President **Arlindo Chinaglia**
First Vice-President **Narcio Rodrigues**
Second Vice-President **Inocêncio Oliveira**
First Secretary **Osmar Serraglio**
Second Secretary **Ciro Nogueira**
Third Secretary **Waldemir Moka**
Fourth Secretary **José Carlos Machado**

Substitute Secretaries

First Substitute **Manato**
Second Substitute **Arnon Bezerra**
Third Substitute **Alexandre Silveira**
Fourth Substitute **Deley**

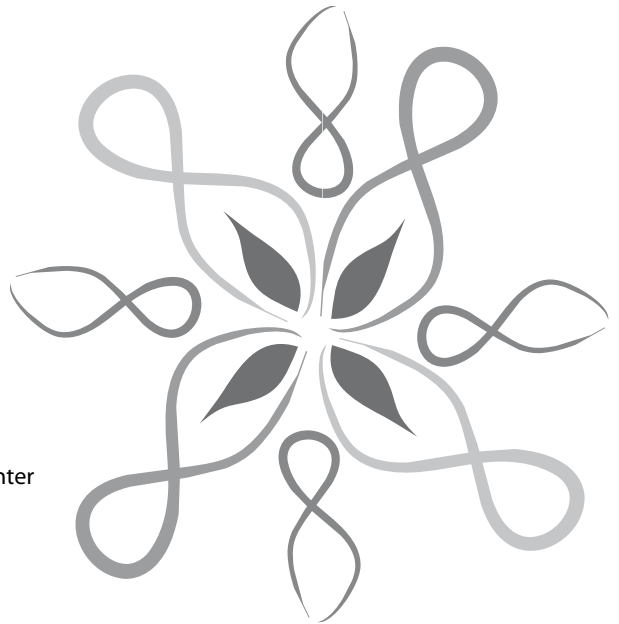
General-Director **Sérgio Sampaio Contreiras de Almeida**
General-Secretary to the Directing Board (Clerk) **Mozart Vianna de Paiva**



Chamber of
Deputies

***Formulating a Knowledge
Management Policy
Federal Public Administration
The Brazilian Experience***

By
Paulo Sérgio Vilches Fresneda, D. Sc.
Sonia Maria Goulart Gonçalves, M. Sc.



Documentation and Information Center
Publishing Coordination
Brasília – 2008

CHAMBER OF DEPUTIES

LEGISLATIVE DIVISION

Head **Afrísio Vieira Lima Filho**

DOCUMENTATION AND INFORMATION CENTER

Head **Adolfo C. A. R. Furtado**

PUBLISHING COORDINATION

Head **Maria Clara Bicudo Cesar**

SPECIAL PROJECTS OFFICE

Head **Cássia Regina O. M. Botelho**

KNOWLEDGE MANAGEMENT COMMITTEE

Chamber of Deputies

Documentation and Information Center – CEDI

Publishing Coordination – CODEP

Anexo II – Térreo – Praça dos Três Poderes

Brasília (DF) – CEP 70160-900

Phone: +55 +61 3216-5802; fax: +55 +61 3216-5810

publicacoes.cedi@camara.gov.br

This report was written with support from the World Bank Institute.

Published in Portuguese in 2007. Title: A Experiência Brasileira na Formulação de uma Proposta de Política de Gestão do Conhecimento para a Administração Pública Federal

Cover and desktop publishing **Paula Scherre**

SERIE

Temas de interesse do legislativo

n. 14

Dados Internacionais de Catalogação-na-publicação (CIP)

Coordenação de Biblioteca. Seção de Catalogação.

Fresneda, Paulo Sérgio Vilches.

Formulating a knowledge management policy : federal public administration : the Brazilian experience / by Paulo Sérgio Vilches Fresneda, Sonia Maria Goulart Gonçalves. – Brasília : Chamber of Deputies, Publishing Coordination , 2008.

81 p. – (Série temas de interesse do legislativo ; n. 13)

1. Gestão do conhecimento, Brasil. 2. Administração pública, Brasil 3. Gonçalves, Sonia Maria Goulart I. Título. II. Série.

CDU 658.3:001(81)

Summary

- Abstract 5
- Preface..... 7
- 1. Introduction 11
- 2. Why Implement Knowledge Management in The Public Sector? 15
- 3. Scenario of Knowledge Management in The Brazilian Federal Public Administration..... 21
 - 3.1. IPEA Research - 2004..... 21
 - 3.2. IPEA Research - 2005..... 22
 - 3.2.1. Final Considerations on The IPEA Research - 2005 30
- 4. Institutional Establishment of Knowledge Management in The Brazilian Public Sector 33
 - 4.1. Electronic Government Executive Committee (CEGE)..... 36
 - 4.2. Technical Committee For Knowledge Management And Strategic Information (CT-GCIE)..... 38
 - 4.3. The Concept of Knowledge Management in The Brazilian Federal Public Administration 39
- 5. Basic Premises and Procedures Towards a Policy of Knowledge Management..... 41
- 6. Participative Formulation Method of KM Policy Proposal to The Federal Public Administration..... 45
 - 6.1. Identified Elements In Phase 2 – Problem Formulation..... 50
 - 6.1.1. Knowledge Management in Public Administration Forums..... 51
 - 6.1.2. Knowledge Management in Public Administration Forum Debates..... 57
 - 6.1.3. Virtual Debate In The Brazilian Knowledge Management Society (Sociedade Brasileira de Gestão do Conhecimento – SBGC) 60

7. The KM Policy Proposal for Federal Public Administration - PGC/APF 63

8. Final Comments..... 73

9. References 75

10. Attachment 1 – Authors’ Brief Resumé..... 79

Abstract

Using Knowledge Management in public administration is a new strategic path to perfect performance and to improve internal and external relationships between government organizations. According to Wiig (1999) the viability of any society depends on the quality in supplying public services, and that quality is influenced by many factors: governmental structure, public servants' responsibilities, specialization and capacities, information, and available knowledge. Among these, the author considers knowledge to be the chief promoter; the one fundamental resource that oversees the nature of practical measures and governs their direction. Without adequate knowledge, all practical undertakings will dwell in ignorance and are bound to become arbitrary and fruitless.

In face of those challenges, the, governmental and non-government international community and its private institutions should aim its actions to target three initiatives which, according to UNESCO, are the very pillars that support the creation of a knowledge society for all. They are:

- (a) To evaluate existing forms of knowledge in order to improve the sharing of that knowledge;
- (b) a more participative approach towards knowledge access; and
- (c) an effective integration of knowledge-related policies; (UNESCO, 2005).

The importance of a Knowledge Management policy for the public sector was indicated by a study conducted by the Institute for Applied Economic Research (IPEA) which states that "... the isolated initiatives; the dispersed efforts, often at the same ministry; the inexistence of communication and information sharing, both internally and between organizations, about KM practices; and the unfamiliarity with the subject among members of high administration, middle management and government employees in general, reveal that **for the dissemination of Knowledge Management in Direct Administration will only take place is a KM policy is implemented.** (BATISTA et al. 2005, *our bold type*).

This report provides the diagnosis of Knowledge Management needs and demand in organizations of the Brazilian Federal Public Administration and proposes a KM policy for these organs so that the social sharing of knowledge generated in this experience may be used as a foundation for the elaboration of similar Knowledge Management public policies at other governmental instances in Brazil and globally.

Preface

Public Administrations produce knowledge through their countless policies, projects, norms and expert opinions, but relevant as this might be, information is often either lost in the meanders of the Brazilian State bureaucracy or kept in the tacit possession of its servants. A number of initiatives are implemented to counteract this drain of knowledge; many processes and models are perfected and many success cases are consolidated along the years. To preserve this knowledge base is a fundamental necessity lest we run into an eternal cycle of new beginnings and remain forever in the need of consolidating best practices. To avoid this, mechanisms have to be generated and instituted permitting new initiatives to become the support to new proposals so that experience can produce shortcuts and render effectiveness to governmental actions.

Present methods for information storage have made this a rather simple task; personal computers are now capable of storing more and more terabytes. Still, for this process to generate effective results it is necessary to provide it with tools that can allow information to be used as a research base and a reference for governmental actions, as well as a foundation for the production of shared collaborative knowledge.

Digital society, to which the entire populations are progressively arriving, is governed through two of its own self-determinant factors: the speed at which communication happens and its information storage capacity. Federal Public Administration cannot dwell on the fringes of such a scenario. This work

consolidates initiatives which will allow for due construction of a Knowledge Management Policy to usher the Administration into this process.

A 2005 research on Knowledge Management by Instituto de Pesquisa Econômica Aplicada (IPEA) made it very clear that some State-owned enterprises had taken significant strides towards Knowledge Management, as compared to Direct Public Administration. This survey focusing 25 Ministries and six important Brazilian state companies demonstrated that the latter have advanced in a more solid way to transform the KM-conveyed administrative approach into coordinated institution-based action, yielding clear objective-marking, and concrete results and indicators.

The same research points out that around 40% of the Ministries consider Knowledge management to be a key strategic issue and among these 40%, 28% have enrolled KM into their strategic priority points. Much in the same way, the majority (92%) of Ministerial initiatives are, in one way or another, already being analyze, planned or executed within KM precepts. Nevertheless, the degree of formal embodiment of Knowledge Management is less ubiquitous, only 28% of the subjects indicating little if any structural implementations such as dedicated personnel and specific work areas or tasks. Only 4% of the Ministries have formal KM objectives with clear identification and action-priority.

This work welds the discussion on KM to a structure that is collaborative in its construction and considers the scenario of Knowledge Management within the realm of Federal Public Administration. It proposes coordinated implementation strategies. This very pertinent initiative is the result of the efforts of the Comitê Técnico de Gestão do Conhecimento e Informação Estratégica (CT-GCIE) in the scope of the Comitê Executivo do Governo Eletrônico (CEGE). Its effective implementation and perfecting will not only increase the efficiency and memory of Public Administration, but it

will also render work processes to be more agreeable and collaborative. Nowadays, knowledge is the most important asset of any public or private organization. Let us go fetch it where it dwells: in the minds of all those who dedicate their work capacity to the Brazilian Public Administration.

Rogério Santanna dos Santos

Executive Secretary of The Comitê Executivo do Governo Eletrônico
Secretary of Logistics And Information Technology of The Ministry of Planning

1. Introduction

Using Knowledge Management in public administration is a new strategic path to perfect performance and to improve internal and external relationships between government organizations. According to Wiig (1999) the viability of any society depends on the quality in supplying public services, and that quality is influenced by many factors: governmental structure, public servants' responsibilities, specialization and capacities, information, and available knowledge. Among these, the author considers knowledge to be the chief promoter; the one fundamental resource that oversees the nature of practical measures and governs their direction. Without adequate knowledge, all practical undertakings will dwell in ignorance and are bound to become arbitrary and fruitless.

According with the United Nations Educational, Scientific and Cultural Organization – UNESCO, the governments of the 21st century will only be capable “to anticipate a new age of sustainable human development if they ensure not only access to universal knowledge, but also everyone’s participation in a society of knowledge”. (UNESCO, 2005)

Confronted by these challenges, the international community, including governments and non-governmental organizations, the United Nations Educational, Scientific and Cultural Organization – UNESCO advise governments to sustain the creation of a knowledge society for

everyone through the directing of their actions towards three cornerstone initiatives:

- ◆ Evaluating current forms of knowledge to improve its sharing;
- ◆ Conducting a more participative approach to knowledge access; and
- ◆ Promoting effective integration of knowledge policies. (UNESCO, 2005).

Several of these are long-term policies, and their definitions depend on the establishing of objectives and on devising a societal project that can take up current and future global challenges, and base itself on knowledge to heed to development requirements. This demands thorough research on the social impact of knowledge-related policies to be adopted in countries, including educational policies, improved access and use of scientific information by a comprehensive group of stakeholders, and a forecast on how the unfolding of knowledge society affects democratic progress. (UNESCO, 2005).

Corroborating the initiatives indicated presented above for the Brazilian public administration the Instituto de Pesquisa Econômica Aplicada published a 2005 report on the implementation of Knowledge Management practices in twenty eight Direct Administration institutions and in six government enterprises of the Brazilian federal executive power. This report - based on research and comparative analyses with public organizations from member-countries of the Organisation for Economic Co-operation and Development (OECD) - brought forth, as one of its main conclusions, that:

Along the stages of data and information collection and result analyses, it became even clearer that a the establishment of a policy of Knowledge Management is fundamental for its effective institutionalization (...) in Direct Administration organizations. The isolated initiatives; the dispersed efforts, many times within the same ministry, the absence of communication about KM practices and information sharing, both internally and among organizations; and the unfamiliarity of the subject among members of

high administration, middle management and government employees in general, this all demonstrates that **a KM policy is indispensable for the dissemination of Direct Administration Knowledge Management to occur.** (BATISTA et al. 2005, *our bold type*).

Because of the evidence of the necessity to address knowledge in the public sector and to formulate a policy for it, the members of the Technical Committee of Knowledge Management and Strategic Information (CT-GCIE) integrating the Electronic Government Executive Committee (CEGE), from the Brazilian Federal Government, have formulated a proposal of a Knowledge Management Policy for the Brazilian Federal Public Administration (PGC/APF).

This report outlines the formulating process of the PGC/APF proposal, bringing forth the updated experience of the CT-GCIE. The authors point out that the content of this document, includes Sonia M. G. Gonçalves' M.Sc. dissertation summary "Basic Elements for Formulation of a Knowledge Management Policy for the Brazilian Federal Public Administration" (GONÇALVES, 2006), an output of the Catholic University of Brasilia Program for Knowledge Management and Information Technology.

This report provides the diagnosis of Knowledge Management needs and demand in organizations of the Brazilian Federal Public Administration and proposes a KM policy for these organs so that the social sharing of knowledge generated in this experience may be used as a foundation for the elaboration of similar Knowledge Management public policies at other governmental instances in Brazil and globally.

2. Why Implement Knowledge Management in The Public Sector?

The Information and Communication Technology (ICT) revolution brought up new ways of creating, collecting, storing, combining and using knowledge. These characterize what is known as Knowledge Economy, defined by the *United Nations Department of Economic and Social Affairs* (UNDESA) as “an Economy that makes effective use of knowledge for its economic and social development. This includes the opening to foreign knowledge, as well as adapting and creating knowledge for its own needs.” (UNDESA, 2005).

In knowledge economy, the intellect and creative or innovative ideas become a source of advantages and wealth for individuals, organizations and nations. These factors also propitiate increased human development and improved quality of life. Thus, a nation’s capacity to develop systems supporting knowledge generation and its application in government areas, viewing social benefits, is to be greatly considered. This is particularly pertinent for the public sector

Implementing Knowledge Management in public administration does not translate into simply rendering on-line public services and improving citizen-access formats but implementing a set of technology-mediated processes that can, in a larger scale, modify interactions between citizens and government and among federal, state and county government spheres:

The European Commission (2006) understands that new technologies can help public administrations face the new challenges, but, not through

focusing merely on Information and Communication Technology. The combined use of the latter, with organizational change and new practices aimed at improving public services, democratic processes and public policies is what should be embraced in this practice. According to Rodal (2003) “the technologies, in themselves, are not sufficient to generate growth in the new knowledge economy; on the contrary: their potential lays on how society decides to integrate these new capacities into their economic and social strategies”.

The institution of the electronic government (E-Gov) is one of the initiatives of the public sector that allow for knowledge society to fortify and maintain governance through administrations that are:

- ◆ Open and transparent, i.e. a government that is citizen-accountable and receptive to democratic participation and scrutiny;
- ◆ To the service of all, i.e. citizen-focused and inclusive;
- ◆ Productive, i.e yields maximum value for tax money, which implies that less time will be spent in queues, mistakes be drastically reduced, more time destined for one-on-one assistance and public servant’s labour more rewarding. (EUROPEAN COMISSION, 2006).

According to Batista (2005), in a democratic society Knowledge Management involves much broader purposes than simply improving organizational performance and services offered to the citizens.

Besides increasing the effectiveness of public action in addressing relevant issues in a competent manner, with minimum resources and timeliness, organizations must also manage knowledge so as to:

- (a) Adequately address unexpected challenges and disaster;
- (b) Prepare citizens, non governmental organizations and other social stakeholders to act in partnership with the State partners in the development and implementation of public policies;

- (c) Promote inclusion and reduce inequity to an acceptable level enhancing quality of life for the population by building, maintaining and increasing the size of social and intellectual assets of enterprises; and
- (d) Generate an economically competitive society, locally and globally, by means of educating citizens so that they become knowledge wise, and also by means of promoting organization development, viewing their competitiveness in all knowledge areas. (BATISTA, 2004)

Great part of the efforts for the creation of a competitive society and the insertion of the Country into the age of knowledge must be carried out the government. UNDESA's "*Understanding Knowledge Societies*" 2005 report tries to establish how governments can lead the transformation towards a Knowledge Society, and is based on four fundamental concepts:

- a) In the process of knowledge development, there are two main assets that can be augmented *ad infinitum*: Implicit knowledge born by people as creative beings (all people in all places, even "the others" such as poor people, whom are addressed differently, albeit modernity); and explicit information and knowledge which promotes creative thinking, leading to the emergence of innovative meanings and knowledge;
- b) The ability to mass-produce knowledge brought advantages in a world that is predominantly organized in market democracies. The social institutions in current democracies and markets have to allow (or be transformed in order to allow) unlimited development and insertion of people and information in the process of knowledge development;
- c) To be an intelligent Knowledge Society, it does not suffice to be rich in knowledge assets and to foster their development. It is necessary to have a new sense of direction for this development and commitments to this new direction. These will ensure high levels of security and quality of life. This new direction in development can be formulated through

the use of techniques and means of knowledge mass-production, so as to produce and apply knowledge to “be”, to “live together”¹ and to maintain development balance;

- d) Nowadays, it is the employment of ICTs for knowledge development what has attached the prefix “mass -” onto words like -production, -diffusion and -use of knowledge. However, in the future, the impact of ICT as a means for increased knowledge production will decelerate and become a stable constant. People are the only factor which is not finite and does not become obsolete for accelerating the production of knowledge. (UNDESA, 2005).

Government actions can critically influence this transition, by establishing a global strategy and action plan for to the Country’s knowledge, innovation and technology systems. The government can propel the development of these by formulating concepts and by leading, articulating and promoting. It can assume a main role by establishing priorities and fundamental goals, and by coordinating the development of an ample conceptual framework. For this, the government can initiate a participative process with the diverse stakeholders to foster a strategy of knowledge, innovation and technology integrated with the population and centered on people. (UNPAN, 2002).

When promoting knowledge needed for development, the Government has some alternatives of action:

- ◆ Fostering diversity and pluralism, thus bringing into society some clear and valuable knowledge systems; among them, local and traditional knowledge systems, which contain invaluable experiences and observations about the several aspects of development that should be protected and put to use;

¹ This refers to two of the “Four Pillars of Education for the XXI Century”: learning to know, learning to do, learning to be and learning to live together. UNESCO International Commission Report on Education for the XXI Century, Paris, 2000.

- ◆ Facilitating the development of national industry of media content, including radio, television, movie, publishing, computer and information systems;
- ◆ Stimulating and supporting the active role of universities and libraries, displaying many sources of knowledge for use, and developing educational policies that are essential for the improvement of the intellectual and creative capacities of society.
- ◆ Promoting training for public sector agents so that the latter can be qualified to, use and integrate new knowledge, and to convert information into knowledge. (UNPAN, 2002).

When these actions are adopted, the government leads society to a new consensus around development goals. If this consensus conveys the idea of a society focused in knowledge, high quality of life and security, then the government must act accordingly to this directive, in other words, legislate, support the new legislation within the State of Law, change the focus of its activities and restructure the public administration to reach new goals. (UNDESA/DPADM, 2005).

3. Scenario of Knowledge Management in The Brazilian Federal Public Administration

The following information has been extracted from two studies (BATISTA, 2004 and 2005) elaborated by the Instituto de Pesquisa Econômica Aplicada (IPEA), the public research organization on economic and social issues, linked to the Long Term Planning Secretary of Presidency of the Republic (SPLP), presented here to provide an overview of Knowledge Management current status in Brazilian federal public administration.

3.1. IPEA Research - 2004

In 2004, IPEA published Text for Discussion 1022, presenting the results of the *A Government that learns: Knowledge Management in organizations of the Federal Executive research* (BATISTA, 2004).

The study used the *American Productivity and Quality Center* (APQC) method, "*Road Map to Knowledge Management Results*" to analyze the implementation experiences of Knowledge Management practices² in

² The study presents a distinction between *Practices* and *System* of Knowledge Management, based on the Criteria of Excellence 2003 of the National Award Foundation of Quality (FPQN): Knowledge Management practices are organizational management practices geared towards production, retention, dissemination, sharing and application of knowledge within organizations, as well as in their relations with the outside world. In its turn, Knowledge Management System is the set of distinctive and interlinked practices aimed at improving organizational performance by means of production, retention, dissemination, sharing and application of knowledge inside organizations and in their relation to the outside world. What therefore differentiates the practices of a knowledge management system is that, when there is a system, the organization manages the practices in an interlinked manner

six State-owned companies: Serviço Federal de Processamento de Dados (Serpro), Caixa Econômica Federal (CAIXA), Empresa Brasileira de Pesquisa Agropecuária (Embrapa), Banco do Brasil (BB), Banco Central do Brasil (BCB) and Petróleo Brasileiro (Petrobras).

The results of the IPEA research demonstrated a growth trend in the number of Knowledge Management practices to be implemented in the next few years in the target institutions, leading to the notion that such trend will also involve the federal government as a whole, given the number of institutional participants in the CT-GCIE. (BATISTA, 2004)

According to Batista (2004), for this dissemination of practices to be effective a gap has to be breached: “the directors of Direct and Indirect Administration entities and the managers of State-owned companies must discern the real importance of Knowledge Management for public institutions and for society as a whole”.

3.2. IPEA Research - 2005

In 2005, IPEA published the Text for Discussion 1095 - *Knowledge Management in Public Administration*, (BATISTA et al., 2005) with the results of a research done in a partnership with Pontificia Universidade Católica do Paraná and TerraForum Consultores, which fulfilled the strategic planning directive of the CT-GCIE: “to systematically identify, follow and share the best Knowledge Management practices among Electronic Government actors.” (BRASIL, 2004).

with a clear purpose: to improve organizational performance. For this to take place, the practices must be aligned with the mission, the future outlook and the organizational strategies. (BATISTA, 2004).

The research included 24 participating institutions of the Direct Administration³ and six state-owned companies from the Federal Executive power⁴, and set out to analyze the situation of Knowledge Management practices in the Brazilian federal government, in comparison with the results of the 2002 research by the Organization for Economic Co-operation and Development (OCDE), made with the latter's member-country governments.

One of the mentioned objectives of the research was to "Present recommendations to the Management Secretary of the Ministry of Planning, Budgeting and Management (SEGES/MP) to elaborate and implement a Knowledge Management policy for the public sector." (BATISTA et al., 2005).

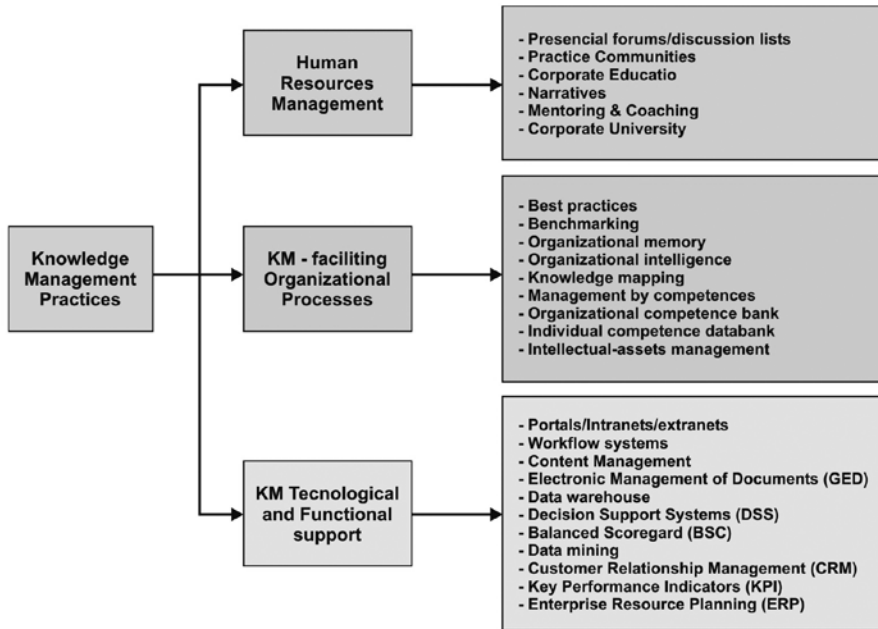
The study classified KM practices in three categories, represented in Figure 1:

- ◆ Practices primarily related to aspects of *human resources management* which facilitate the transfer, dissemination and sharing of information and knowledge.
- ◆ Practices linked primarily to the structuring of organizational processes that work as facilitators in the creation, retention, organization and dissemination of organizational knowledge.
- ◆ Practices of which the central focus is the *technological and functional foundation* for organizational knowledge management, including information management automation, applications and tools for Information Technology (IT) for collection, dissemination and collaboration. (BATISTA et al., 2005).

³ The organizations of Direct Administration were: 20 Ministries, the General Controller of the Union (CGU), the Military Commands (Aeronautical, Army and Navy) and the Civil House of the Presidency of the Republic.

⁴ State companies: Serpro, Banco do Brasil, CAIXA, Petrobrás, Eletrosul Centrais Elétricas S/A and Empresa Brasileira de Correios.

Figure 1 – Categories of Knowledge Management practices



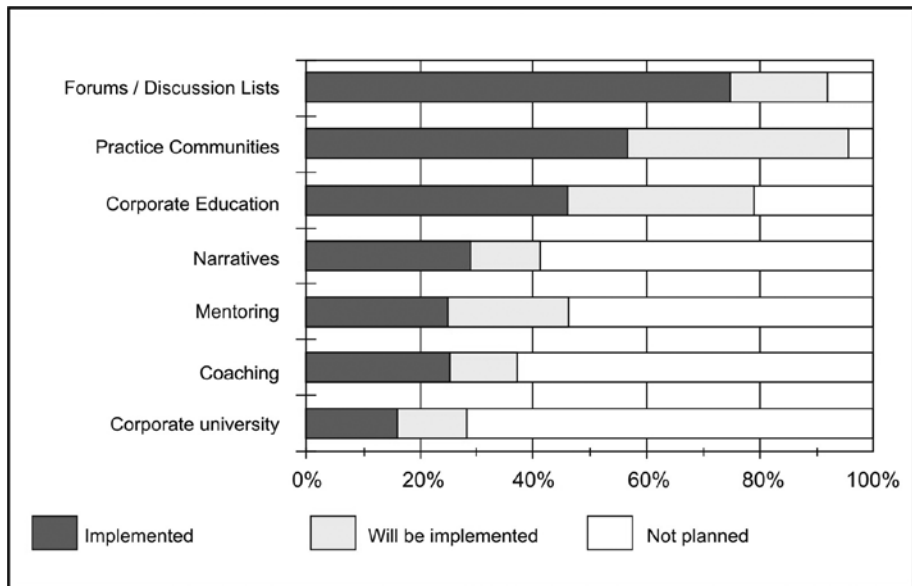
Source: “Gestão do Conhecimento na Administração Pública” (Knowledge Management in Public Administration). Batista et al., 2005

In this report, only the results from direct administration institutions will be shown, given that Knowledge Management already is a priority for most state owned companies that have established strategies and policies and, as such, exercise more explicit and formatted KM practices. (BATISTA et al., 2005).

Among Human Resources practice-format, the highest degree of implementation (Graph 1) that can be found is the informal configuration one (Forums/Discussion Lists). It is also the one that demands more participation on the employees regarding voluntary knowledge-sharing. The two most implemented practice formats are viable only because of the presence of available information technology-based tools to support knowledge and information transfers in almost all researched organizations.

Internet accesses is in 21 out of 24 direct administration organizations surveyed and between 76% and 100% of the employees have a personal e-mail address and access to the Internet, and the Intranet is present in 20 of the 24 surveyed organizations. (BATISTA, 2005).

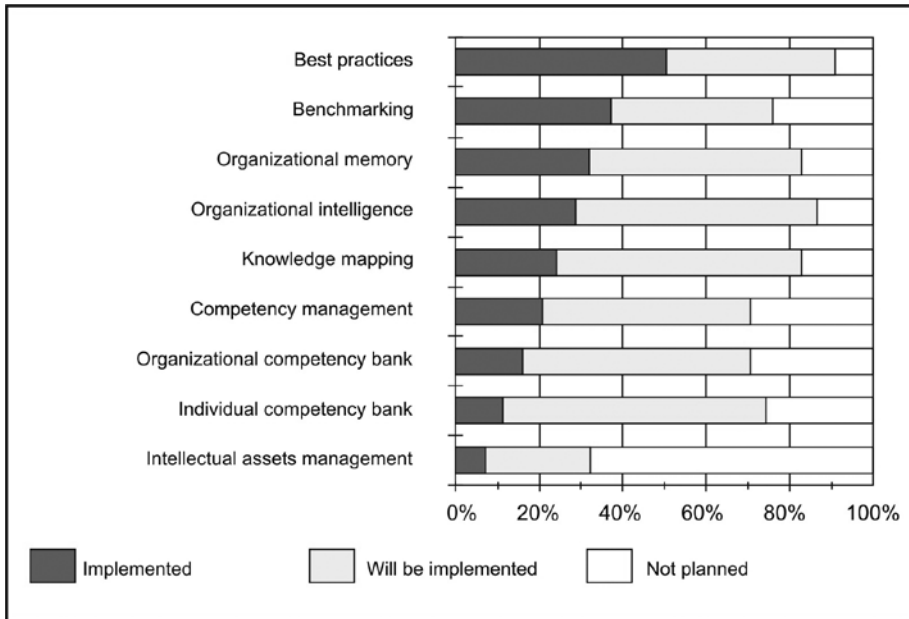
Graph 1 – Practices in the area of Human Resources – Implementation Stage



Source: “Gestão do Conhecimento na Administração Pública”. Batista et al., 2005. (Knowledge Management in Public Administration).

Clearly influencing the results of practices of Knowledge Management-facilitating processes (Graph 2), there is the acknowledged need, from respondent organizations, to adopt knowledge sharing and dissemination actions. These are factors that identify the two practices with the highest degree of implementation: Better Practices and Benchmarking.

**Graph 2 – Practices of Knowledge Management-facilitating processes
– Implementation Stage**



Source: “Gestão do Conhecimento na Administração Pública”. Batista et al., 2005. (Knowledge Management in Public Administration).

Although the “Competency Management” practice and “A databank of organizational and individual competencies” practice present a degree of implementation of approximately only 20%, these practices are bound to have a significant increase through compliance of Decree 5.707 of the Presidency of the Republic, of February 23rd ,2006, which instituted a National Policy of Personnel Development, to be implemented by the organizations and entities of the direct, autarchical and foundational federal public administration, of which the instruments are: the annual qualification plan, the implementation report on the annual qualification plan and the management system by competencies (Article V).

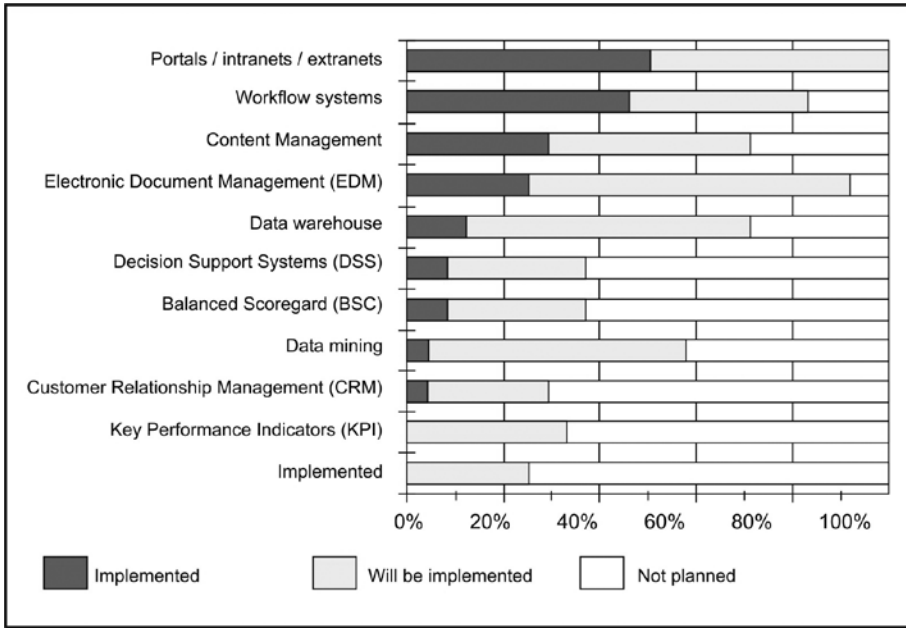
The mentioned decree brings an official government definition to the term *Management by competence*: “Management of qualification directed at the development of the set of knowledge items, abilities and attitudes necessary for the public servants to attend their duties, viewing the fulfillment of Institution objectives.” (Art. II, item III) and determines a priority for the “courses offered by government schools, favoring the articulation among them and aiming at the construction of the government school system of the Union, to be coordinated by the National Public Administration School (ENAP). (Art. III, item XIII).

Such determinations are compatible with Batista et al. (2005) in their research report final considerations: “It is also important to consider the role of government schools that must take up actions to develop qualification programs aligned with strategic public policies such as Knowledge Management.”

Decree 5.707’s most significant advance is the directive to “promote the managerial competency of public servants and their qualification to exercise managerial and advisory activities.” (Article III, item III) because, as proposed by Batista et al. (2005), Direct Administration managers are mainly responsible for the upkeep of processes and of organizational culture, which includes KM processes.

In the category of practices of technological and functional support for Knowledge Management, the highest degree of implementation (Portals/Intranets/extranets) is also linked to a need- made evident in the research- to share and disseminate knowledge. The three practices that follow (Workflow Systems, Media Content Management and Electronic Documents Management) denounce a need to organize and to speed up internal federal government processes.

Graph 3 – Practices related to technological and functional support for Knowledge Management – Implementation Stage

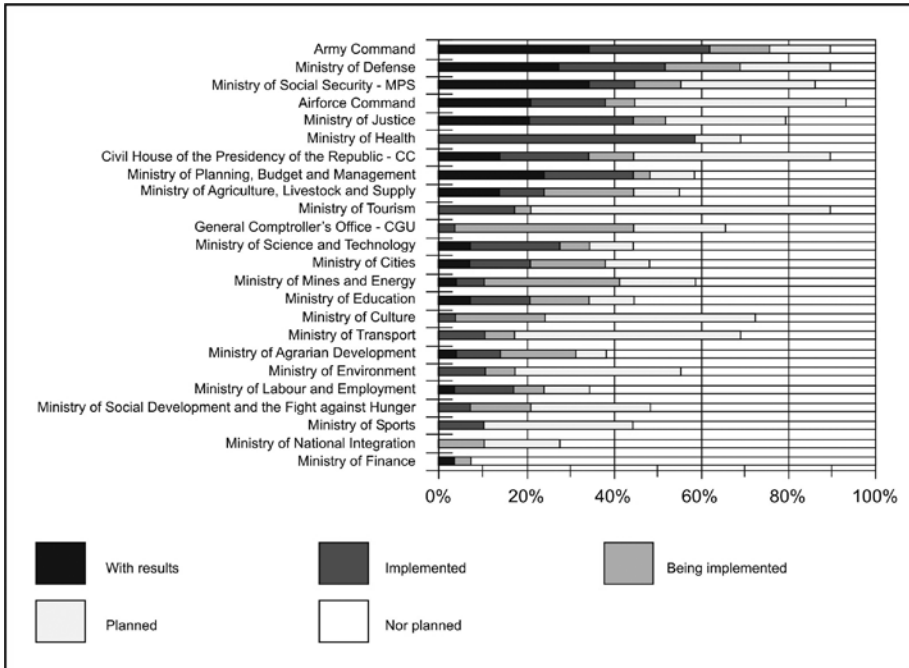


Source: “Gestão do Conhecimento na Administração Pública”. Batista et al., 2005. (Knowledge Management in Public Administration).

The high degree of implementation of Intranet and Extranet portals can be attributed to Electronic Government directives and incentives to universal access to on-line citizen services and federal government websites.

According to Batista et al. (2005) in the Ministries that already have concrete KM practices, initiatives are mainly aimed at two main trends: content & documents management and the creation of external collaboration networks. Such initiatives foster better sharing among different organizations with similar activities and an improvement the decision making process.

Graph 4 – Implementation stages by Direct Administration Organization (all Knowledge Management practices)



Source: “Gestão do Conhecimento na Administração Pública”. Batista et al., 2005. (Knowledge Management in Public Administration).

The research identified that among the most advanced Ministries in the described processes, there is a confluence of factors that contribute to the success of KM in those organizations. Such factors can be described in three general groups:

1. Organizational alignment and knowledge strategy:

- ◆ High priority to initiatives at the organization’s highest level; and
- ◆ Clear identification of relevant organizational knowledge base.

2. Access to external knowledge:

- ◆ Access to specialized consultants;
- ◆ External search of best practices & benchmarking; and
- ◆ Access to electronic and printed bibliographic resources about the issue.

3. Computational Infra-structure:

- ◆ Computer systems that support Knowledge Management processes. (BATISTA et al.,2005).

3.2.1. Final considerations on the IPEA Research - 2005

The study presents, in its final considerations, 17 directives to be considered by the Ministério do Planejamento, Orçamento e Gestão (Ministry of Planning, Budget and Management), specifically by the Secretaria de Gestão - SEGES (Secretary of Management) and Secretaria de Logística e Tecnologia da Informação – SLTI (Secretary of Logistics and Information Technology), and by CT-GCIE. Batista points out to the ten of the most relevant directives (BATISTA, 2005):

1. Instituting KM-specific units or formal KM committees in the Ministries in the capacity of proposing and implementing strategies, coordinating actions, and disseminating and consolidating practices.
2. Creating the positions of Knowledge Manager and Knowledge Director in the Ministries.
3. Define Government strategy for KM (Inter-ministerial Committee).
4. Implementing awareness & qualification continuous programs on KM-related issues for managers and civil servants.

5. Establishing an observatory to evaluate government actions in the area.
6. Securing financial resources for the proposed actions, through the implementation of a program in the Pluriannual Plan (PPA)⁵.
7. Ensuring the alignment among KM policies & practices and the strategic orientations of organizations.
8. Promoting cooperation between state-owned companies and organizations and entities of Direct Administration.
9. Fostering practice communities, websites, forums, etc. sorted into thematic areas to increase agile articulation among Ministries.
10. Implementing an evaluation system to probe the impact of KM practices on processes, products and services.

The first directive pointed out by the IPEA research echoes in the statement by Wiig (1999), according to whom the role of public managers is to guide and manage the agendas for organizational knowledge & intelligence. A small separate administrative unit should be created with the task to supporting, innovating and collaborating in Knowledge Management practices.

This document, in its final considerations, emphasizes the importance of the establishment of a Knowledge Management policy for its effective institutionalization in public direct administration organizations, one of the points of the study. (BATISTA et al., 2005).

⁵ PPA Brazilian Federal Government Planning System

4. Institutional Establishment Of Knowledge Management In The Brazilian Public Sector

A new public management model is being developed in the world today, alongside a productive paradigm structural change supported by the knowledge factor. Castells (2005) calls this development mode based on information technology, “informational society” and states that, in this new society,

...the source of productivity lies in the technology of the generation of knowledge, information processing and symbol communication. Actually, knowledge and information are crucial in all modes of development, given that the production process is based on some degree of knowledge and information processing. (CASTELLS, 2005).

If we consider information processing and knowledge generation as sources of today’s social productive process and go back to the concept for the field of Public Administration, we may assume, as did Castells, that:

(...) the role of the state, by either stalling, fostering, or leading technological innovation, is a critical factor in the overall process, as it expresses and organizes social and cultural forces that dominate in a given space and time. To a large extent, technology expresses the ability of a society to propel its technological mastery by means of the social institutions, including the state.” (CASTELLS, 2005).

To insert Brazil in this new development model, the Federal Government needs to strategically manage its most valuable asset: knowledge that is present in the capacities of learning, innovation and adaptation to change of millions of government servants, and also present in organizational processes, and mainly in intra- and inter-organizational relationship networks.

A great part of that knowledge is disassembled upon each time the government changes hands, be it by the substitution of the people that have it, or by the discontinuity of plans and projects, which many times are not explicitly recorded and are withheld only in the minds of the people that become disperse with political changes. Systemizing public knowledge and transforming it in a valuable asset for the country becomes the great challenge of the Brazilian government, in all its spheres.

Since some years ago, concern with Knowledge Management (KM) has taken a significant role in discussions and documents of the Brazilian Federal Government. In September 2003, during the Seminar "*Saber Global: Centro e Periferia na Sociedade do Conhecimento*" (Global Wisdom: Center and Periphery in Knowledge Society), at the Ministry of Foreign Affairs in Brasília, the Special Secretary of Economic and Social Development Council (SEDES) - Presidency of the Republic, divulged a document under the title of "*Carta pela Democratização Universal do Saber – do trabalho-ferramenta ao trabalho-conhecimento*" (Charter for the Universal Democratization of Knowledge – from tool work towards knowledge work). This document pointed out to the importance of managing and distributing the bounty of knowledge and greeted telematic networks of distribution as being the tool that "can achieve and materialize the age old ideal of a participative and democratic public sphere". (BRASIL, 2003a).

This document laid the foundation for a new project for the democratic access to information and knowledge "to incorporate those masses (of excluded people) into the new production conditions and into democratic life". In stating that Knowledge Society "only accepts workers that are prepared to think", the government document declares that for this reason, "public policies and investments (...) must also allow the majority of society to insert them into this new creative and innovative work condition." (BRASIL, 2003a).

Aware that Knowledge Management can contribute to raise work processes efficiency in public administration and its decision making capacity to quickly react to changes in society, the federal government made formal, in October 29, 2003, through a Presidential decree, the creation of the *Comitê Técnico de Gestão do Conhecimento e Informação Estratégica* - CT-GCIE (Technical Committee of Knowledge Management and Strategic Information), in the scope of the *Comitê Executivo do Governo Eletrônico* – CEGE (Electronic Government Executive Committee), assigned to promote Knowledge Management in the Federal Public Administration. In formally assuming that KM is a strategic instrument of the government, CEGE defined, as one of its directives that KM should be subject to a specific policy in the domain of the federal government's policies. (BRASIL, 2004).

The solution to the multidimensional and multicultural problems of the federal public administration demands a new management paradigm. It must acknowledge the needs to create and use intensive knowledge, to establish continuous learning through an analysis of its internal processes and the value of the experience of professionals who make up the staff of government areas; and mainly, to generate an adequate work culture, that makes knowledge creation and sharing possible, and also stimulates it.

This new paradigm could be fostered by the implementation of an integrated and inter-organizational Knowledge Management policy to articulate the many organizations of Direct Administration. This would create networks of co-responsibility in creating processes of, dissemination and sharing of the knowledge needed to increase efficiency in the services provided to society by government areas.

With the institution of a policy for that purpose, it is expected that organizations of federal public administration will have a master document, with directives to log their internal knowledge management implementation

plans. This will viabilize uniform actions, diminish redundancy or waste of public resources; and foster an exchange of knowledge among these organizations, in the implementation of their Knowledge Management plans.

4.1. Electronic Government Executive Committee (CEGE)

The management of the Brazilian electronic government (E-Gov) is attributed to the Electronic Government Executive Committee, (CEGE), presided by the Presidency's Civil House chief. The CEGE was created by a decree, on October 18th, 2000, and its members are:

- ◆ The Executive Secretaries of all Ministries;
- ◆ The Secretary-General of the Ministry of Foreign Affairs;
- ◆ The Sub-chief of Institutional Security Staff of the Presidency;
- ◆ The Secretary for Institutional Organization from the Ministry of Defence;
- ◆ The General Sub-secretary of the Secretary-General of the Presidency;
- ◆ The Secretary for Evaluation, Norms and Promotion of the Secretary of Communications of the Presidency;
- ◆ The Attorney-General of the Union;
- ◆ The Sub-Corregidor-General of the Union; and
- ◆ The President-Director of the National Institute for Information Technology.

The Ministry of Planning, Budget and Management, through the Secretary for Logistics and Information Technology (SLTI), performs as the Executive Secretary of CEGE and provides its administrative technical support. Additional information about CEGE and the Electronic Government can be found in www.governoeletronico.gov.br.

The main competencies of the Electronic Government Executive Committee are:

- ◆ Coordinating and articulating the implementation of programs and projects to rationalize the acquisition and use of Information and Communications Technology infra-structure, services and applications at the sphere of the Public Federal Administration.
- ◆ Establishing directives for the Ministries' formulation of an information & communication technology annual plan ;
- ◆ Establishing of directives and strategies for planning the provision of information services by electronic means, through the entities and organization of Federal Public Administration;
- ◆ Defining quality patterns for modes of electronic interaction. (BRASIL, 2004)

Through a decree in October 28th, 2003, eight Technical Committees were created within the Electronic Government Executive Committee to coordinate and articulate the planning and implementation of projects and actions in the following capacities:

- ◆ Implementation of free software
- ◆ Digital inclusion
- ◆ Systems integration
- ◆ Legal systems and software licenses
- ◆ Site Management and on- line services
- ◆ Network Infra-structure
- ◆ Government-to-government
- ◆ Knowledge management and strategic information

The Executive Secretary of the Electronic Government Executive Committee supervises the work of Technical Committees by interacting with their coordinators. (BRASIL, 2004).

4.2. Technical Committee for Knowledge Management and Strategic Information (CT-GCIE).

CT-GCIE was created with the mission of:

Promoting Knowledge Management in Public Administration, considering that the experience gradually accumulated by public managers represents a strategic asset State and should be actively shared and exploited by government institutions and by Brazilian society. (FRESNEDA, 2005).

Upon creating the CT-GCIE, the Electronic Government Executive Committee took off from some basic points:

- ◆ Knowledge is known by the CEGE as a factor of wealth in modern society;
- ◆ A public manager is considered to be a strategic asset of the State;
- ◆ Knowledge interaction and sharing among Federal Public Administration organizations is a priority;
- ◆ The discontinuity of knowledge in public administration should be minimized;
- ◆ Mapping and spreading knowledge management practices in Brazilian federal government should be a non-stop routine;
- ◆ The employment of collaborative technological tools based on free software should be preferential. (FRESNEDA, 2005).

CT-GCIE is composed by 11 Strategic Thematic Groups related to Knowledge Management:

- (1) Prospects and Strategic Information

- (2) Organizational Learning
- (3) Corporate Learning
- (4) Intellectual Property
- (5) Competence- Management of people
- (6) Information Technology
- (7) Best Practices
- (8) Individual and Corporate websites
- (9) Virtual Communities
- (10) Concepts and Methodologies
- (11) Intangible-asset indicators

4.3. The Concept of Knowledge Management in the Brazilian Federal Public Administration

The Electronic Government Executive Committee (CEGE) defines KM as public knowledge management and acknowledges it to be an essential strategic instrument for the development of the Nation, particularly contributing to the “creation of a new profile of the public administration performance as an ethics-based function, viewing the cooperative and shared production of information and knowledge and the clear distinction between the public and the individual interests”. (BRASIL, 2004).

The Electronic Government Executive Committee understands Knowledge Management to be:

A group of systemized, articulated and intentional processes capable of developing the abilities of public managers to create, collect, organize,

transfer and share information and strategic information that can serve for decision making, for the management of public policies and to include the citizen as a producer of collective knowledge. (BRASIL, 2004).

The definition mentioned conveys the social viewpoint of knowledge recommended by UNESCO to Brazilian circumstances when it states that social knowledge is constituted by “the potentialities to identify, produce, process, change, disseminate and use information to construct and apply knowledge to human behavior”. (UNESCO, 2005).

In the context of the CEGE definition, according to Batista et al. (2005, p.68), an approach to public administration based on the definition of Knowledge Management, aims at results such as:

- ◆ More swiftly disseminating information, making way for a wider public access.
- ◆ Increasing transparency of governmental institutions.
- ◆ Improving work relations and inter-organizational and intra-organizational knowledge sharing.
- ◆ Increasing efficiency and/or productivity through sharing knowledge and information
- ◆ Minimizing knowledge loss due to retirement, departure of servants and migration of employees to the private sector.
- ◆ Promoting continuous learning of public organizations.

Such results will only be attained through transparency and interaction between citizenry and State, the two central stakeholders of public administration-restructuring process.

5. Basic Premises And Procedures Towards a Policy of Knowledge Management.

The Executive Committee for Electronic Government formally defined basic procedures for a Knowledge Management a policy (BRASIL, 2004):

- (a) Knowledge Management institutionalized to be a strategic government instrument.

Knowledge Management, acknowledged as public management of knowledge becomes a fundamental strategic instrument for the development of the Nation particularly for the creation of a new profile of the public performance based on ethic values, viewing the collaborated and shared production of information and knowledge, and viewing the clear distinction between public and individual interests. (BRASIL, 2004).

- (b) Contributions for the strategy to insert Brazil in the Society of Knowledge.
- (c) Integration of Government sectors
- (d) Inclusion of Society and its organizations as producers of knowledge.

This innovative view of labour in the public sector, (...) constitutes a new capacity of articulation of the decision making process, of management of its strategic policies and of the inclusion of an often forgotten and new producer of knowledge: Society and social organizations. Furthermore, the models and practices of knowledge management are the essential initiatives for the integration of the three government instances (BRASIL, 2004).

- (e) Increase in the body of mediators.

It is not admissible that the construction and implementation of the federal policy for the electronic government count on as few mediators as their own government agents and suppliers. The current change in mediation seeks not only to introduce new stakeholders at the discussion (namely, organized

sectors of civil society, State and Municipal governments, and universities), but also, to deepen and widen the publicity of the debates. (BRASIL, 2004).

- (f) Assumptions of integrated, efficient and transparent government action through intensive use of new forms of electronic interaction.
- (g) Implementation and evaluation of the Knowledge Management policy as related to the Presidency of the Republic.

For CEGE, the electronic government policy design and that of the correlated policies (such as GC/APF) should contemplate a number of Knowledge Management-related initiatives such as:

- ◆ Work in inter-institutional learning networks.
- ◆ Strategic addressing of information produced in Brazilian public administration, as well as those produced by companies and citizens and their organizations as they relate with the government.
- ◆ Intensive use of information technology Knowledge Management practice- related applications.

The policy should make an integrated effort to direct implementation strategies, in the field of Federal public Administration, of initiatives of Knowledge Management for the public sector. The directives, as defined by CEGE and aligned to these strategies, are:

- a) Clear and objective definition of reference concepts on the principles of Knowledge Management application in the public sector, to be done through the following actions:
 - ◆ Mapping the competences in knowledge management practices in the public sector;
 - ◆ Disseminating a conceptual reference chart on the practices and methodologies for knowledge management use in the public sector.

- ◆ Elaborating and promoting a wide program for Knowledge Management awareness-building and qualification for public managers, by video conferences and through web-mediated courses.
 - ◆ Instituting learner certification in Knowledge Management-related areas.
- b) Identification, follow-up and systematic sharing of best practices in Knowledge Management among government stakeholders, citizens and civil society, performing specific practice diagnosis on:
- ◆ corporate education,
 - ◆ corporate websites,
 - ◆ competence-management of people,
 - ◆ virtual practice-communities, and
 - ◆ intangible-asset indicators, among others.
- c) Formulations of a specific Knowledge Management policy within the Electronic Government Policy, through:
- ◆ proposal of rules, recommendations and procedures for the Electronic Government Policy in Knowledge Management.
 - ◆ identification, dissemination and distribution of Knowledge Management applications and tools to the stakeholders of Electronic Government. (BRASIL, 2004).

6. Participative Formulation Method of KM Policy Proposal to The Federal Public Administration

A policy becomes public when it affects not only a specific individual or a certain collective stakeholder, but when it also affects Society as a whole. In this sense, a policy can be considered to be public “when it involves a group of issues and activities that do not belong exclusively to the private sphere and will demand the regulation or intervention of Government or Society. (CALMON, 1999).

Such policy should deliver an innovation to respond to the demands of Society. It is the result of a process that involves negotiations which relates various social instances and stakeholders along its course; actors that are expected to be positively affected by the change proposed by government action. These changes greatly depend on the policy-makers’ capacity to promote inter-organizational network relations that will support the implementation of the proposed policy. The process of implementation of a policy occurs in multi-organization networks that have been established by government and civil society stakeholders.

The concept of public policy used in this report given by Oszlak and O’Donnell, who put forth in their definition an important point of alignment with two CEGE assumptions for the formulation of KM policy: the increase in number of mediators and the inclusion of Society and its organizations as producers of knowledge, both of which are pointed out by the authors as “the mobilization of other stakeholders in Civil Society”:

A group of actions and omissions that manifest in a modality of State intervention in relation to a point that calls the attention, the interest and the mobilization of other actors in the civil society. A certain direction, a determined normative orientation can be inferred from this intervention, all of which will presumably affect the future course of the social process that has developed around the referred issue. (OSZLAK and O'DONNELL, 1976).

The problems that demand policies appear from basically, two factors: crises or indicators of need of action, the latter being related to the formulation of PG/APF. The political agenda is made of issues that call government and citizenry attention and that can be classified into three types: (a) "non-governmental" (matters that are relevant for public opinion but don't call the government's attention); (b) governmental (issues that call the governmental authorities' attention); and (c) the decision agenda (list of issues to be decided). (SILVA, 2000). PGC/APF is related to type (b) above.

Lindblom (1995), in a fundamental work about the incrementalism, proposes comparison elaboration for policies of the same category and states that through this method, the policy maker it can use all available theory on the class of researched policies. He thus formulates his approach of "successive limited comparisons": departing from an existing situation, one aims at incrementally modifying it, and this means building on the past, incorporating experience to theory and adjusting step by step, in small degrees. This way, the elaboration of public policies is made by adjusting policy to reality (continuous feedback):

The policy is not made in a definite way; it is continuously made and re-made. The elaboration of a policy is a process of successive approach of some desired objectives, where what it is desired continues to change under reconsideration. To make policies is, at best, a painstaking process. (LINDBLOM, 1995).

Due to the absence of implemented Knowledge Management public policies in Brazil, Lindblom' method was considered to be the most adequate for the formulation of the KM policy to be proposed, given that the identified

information and studies will be able, albeit some limitations, to contribute in an extensive analysis on characteristics and consequences of policies already established in other countries and to reveal conditions of adaptability of the model to be elaborated for the Brazilian federal government.

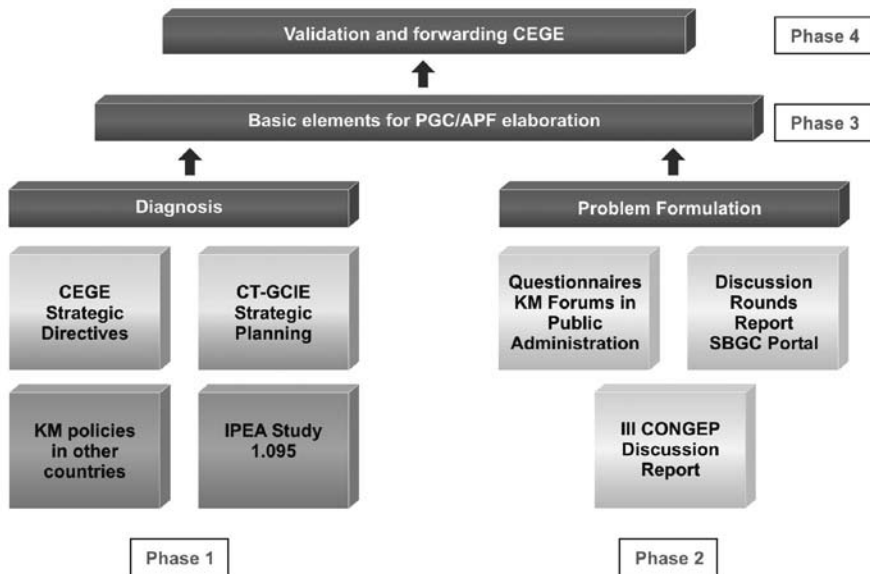
According to Bullock et al. (2001), the effective process for elaborating public policies must:

- ◆ contain clear result definitions and lead to a long-term evaluation of policy effects and impacts, for 5 to 10 years ahead, or longer.
- ◆ consider a complete description of national and international situations.
- ◆ have a systemic perspective of the participating institutions in the government's strategic objectives.
- ◆ be flexible and innovating, proposing established questions and encouraging new and creative ideas.
- ◆ consider all those directly or indirectly affected by these policies.

These characteristics confirm the choice by CT-GCIE of the participative method that consisted of performing a diagnosis and identifying, with policy elaboration stakeholders (CEGE, CT-GCIE, public servants and members of the Brazilian Society of Knowledge Management - SBGC), the basic elements to be considered in the elaboration of a public policy for Knowledge Management, as these people are directly affected by the a policy's impact. It is important to remember that the Electronic Government Executive Committee (CEGE) has delegated to CT-CGIE the task of proposing norms, recommendations and directives for the Knowledge Management policy of the Federal Government. (BRAZIL, 2004).

The diagnosis and the identification of problems generated by the absence of Knowledge Management practices in the federal government have joined the elements presented in Figure 2, into four phases.

Figure 2 – The Structure of the Elaboration Process for Policy Proposal



Source: GONÇALVES, 2006.

The above indicated phases can be summarized as follows:

Phase 1: Data-collection for the diagnosis on the current situation of Knowledge Management in Brazil, and the existing KM policies and directives in other countries.

Phase 2: Data-collection on Knowledge Management problems at the Federal Government.

Phase 3: Identification of basic elements to be considered in the elaboration of PGC/APF.

Phase 4: Presencial and virtual validation of identified elements with the CT-GCIE Community and forwarding to the CEGE for appraisal and approval.

The CT-GCIE assumed, as a foundation for the KM policy elaboration, the democratic principle of proposition featured in the plan of the Management Secretary (SEGES) of the Ministry of Planning, Budgeting and Management, elaborated and published in 2003 under the title “Public Management for Everyone’s Brazil”, that suggests a “participative formulating process, with a previous diagnosis, a formulation of innovating solutions and arrangements for network implementation”. (BRASIL, 2003b).

Yielding to this participative point of view, CT-GCIE has engaged in many initiatives since its creation, so that the various stakeholders in the PGC/APF elaboration proposal can participate in the initial phases, which are:

- ◆ the use of a virtual community that congregates all the participants indicated by federal government organizations (more than 600 public servants), to be active in the committee, of which the electronic address is <http://catir.softwarepublico.gov.br>.
- ◆ promotion, together with the Brazilian Society for Knowledge Management (SBGC), of six “Public Administration Knowledge Management Forums” which took place from November to December 2005 in Belo Horizonte (MG), Salvador (BA), Recife (PE), Fortaleza (CE), Curitiba (PR) and Florianopolis (SC). In the forums, the actions taken up to then by the CT-GCIE were shown the necessity and convenience of the elaboration of PG/APF was debated and a research was done with public servants present in the debates, about the elements that should be used as basis for the elaboration of a policy.

- ◆ promotion, in July 2006, of the Debating Virtual Table, in the SBGC website (www.portalsbgc.org.br) with the theme: Knowledge Management Policy for Federal Public Administration.
- ◆ promotion, in August 2006, together with SBGC in a partnership with the Ministry of Technology and Science, the Ministry of Planning, Budget and Management, the Ministry of Education and the Ministry of Development, Industry and Foreign Trade, of the III National Congress of Knowledge Management in the Public Sphere (CONGEP) that had 607 participants, where there was the presentation, for public discussion, of a preliminary document about the basic elements for the formulation of a policy and a formulating agenda for the PGC/APF.

These initiatives attest the formalization of the participation processes of different stakeholders in the elaboration of the policy and give the CT-GCIE the necessary accountability to insert the demands of public employees and the civil society into the policy elaboration.

In this process, due observance of transparency and interaction was held among the CT-GCIE and federal government organs, as much as with the civil society interested in issues of Knowledge Management, all of whom constitute the central axis of public management and governance.

6.1. Identified Elements in Phase 2 – Problem Formulation

In this section the following data were diagnosed in:

- (a) forums for Knowledge Management in Public Administration, carried through in one-day presencial events in six Brazilian State capital cities: Belo Horizonte (MG), Salvador (BA), Recife (PE), Fortaleza (CE), Curitiba (PR) and Florianópolis (SC); and

(b) a specific session discussing elements for PGC/APF elaboration, in the III National Congress of Knowledge Management in the Public Sphere (III CONGEP) which took place in Brasilia in August, 2006.

6.1.1. Knowledge Management in Public Administration Forums

During the Knowledge Management in Public Administration Forums, a research with participants was carried out to make a preliminary survey to confirm the directives pointed out by the IPEA/2005 research-“Knowledge Management in Public Administration”.

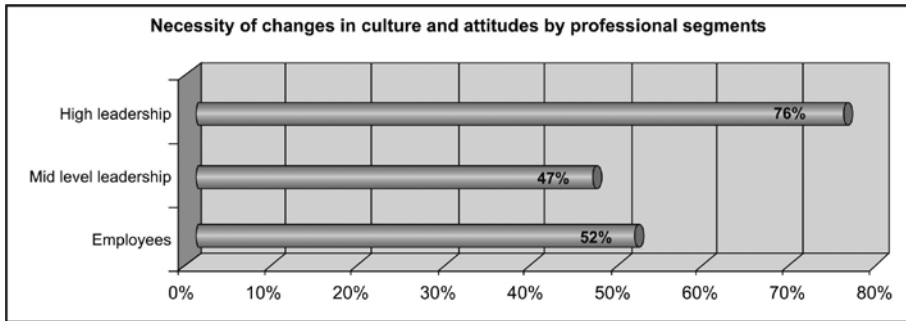
As to the overall view of Knowledge Management and the goal of a policy about the issue, those surveyed presented a high level of total agreement:

- ◆ 94% totally agreed that knowledge Management is a strategic theme for the government and should bear elaborated and implemented policies, with clear directives towards knowledge sharing.
- ◆ 83% totally agreed that a Knowledge Management policy should contribute to create a Knowledge Management outlook as a factor for the strengthening and effectiveness of public service.
- ◆ 71% totally agreed that the Knowledge Management policy should contribute to increase the value of services provided by the government to the citizenry.
- ◆ 71% totally agreed that the Knowledge Management policy should contemplate indicators and an impact evaluation system of KM Practices in the results of government actions (GONÇALVES, 2006).

In the Cultural aspect involving governmental Knowledge Management, 76% of those surveyed noted that the implementation of KM policies strongly depends on a change of culture and attitudes by top leadership positions (Graph 5). The introduction of new practices in the government strongly

depends on the sponsorship of strategic managers who are often the ones to bring forth innovations to the public sector. (GONÇALVES, 2006).

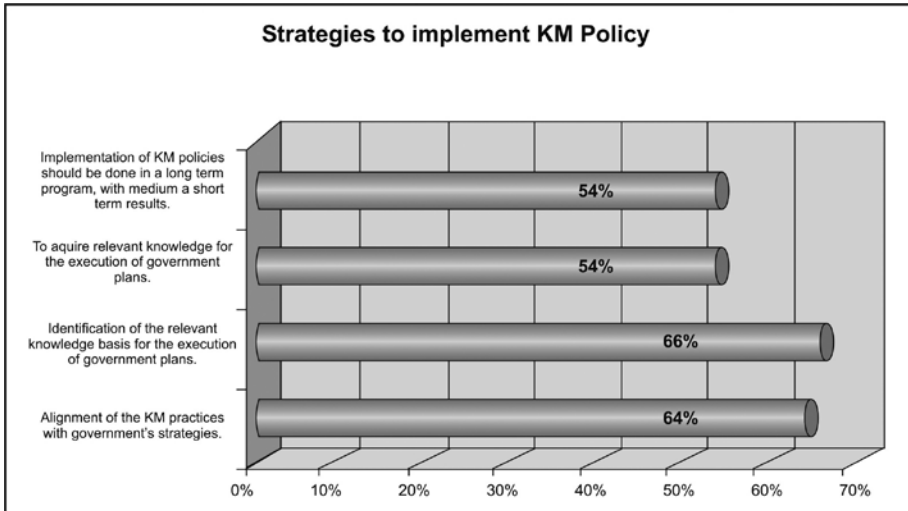
Graph 5 - Cultural aspect of the KM policy on the government.



Source: GONÇALVES, 2006.

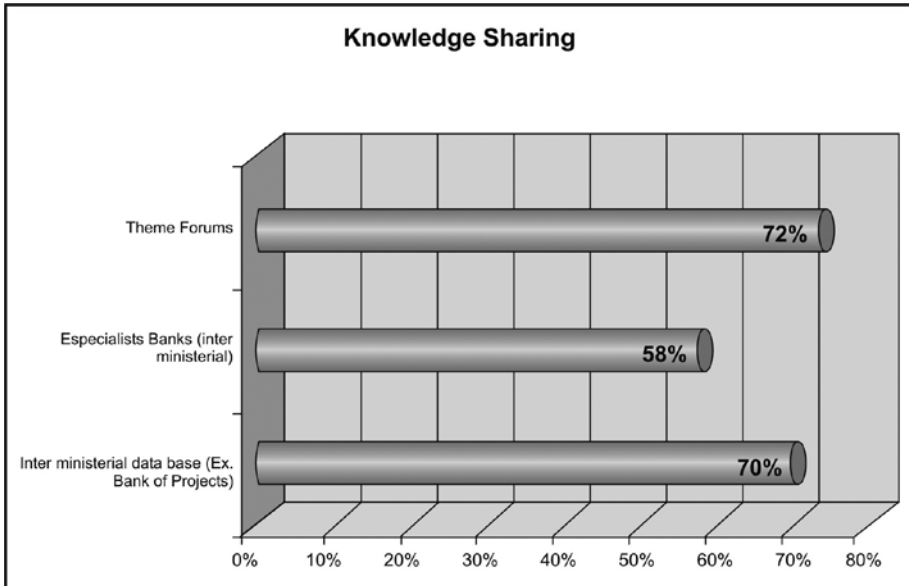
In the perception of the strategies to be adopted for KM policy implementation (Graph 6), the highest degree of total agreement mentions the identification of the considerable knowledge base for the execution of the government plans (Pluriannual Plan - PPA), followed by the alignment of KM practices with the government strategies. It is important to note that more than half of those surveyed totally agree that the of the KM policy implementation must be be carried out at long term, but yield results in medium and short term. (GONÇALVES, 2006).

Graph 6 - Strategic aspects of the KM Policy in the government.



Source: GONÇALVES, 2006.

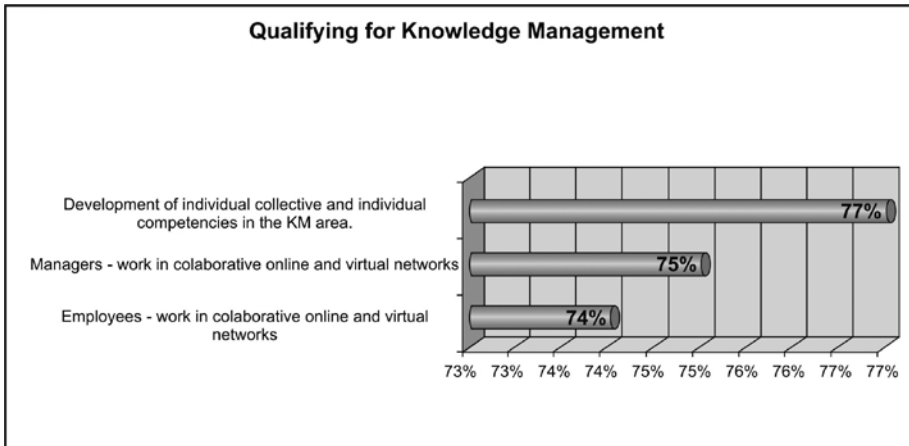
As for knowledge sharing the research confirms a preference for little-structured informal practice - 72% totally agree that KM policies must stimulate the appearance of inter-ministerial forums to dynamize the articulation among government areas (Graph 7). The creation of an inter-ministerial database, following the example of a government-project central bank, got 70% of total agreement, which shows the acknowledged necessity, for civil servers participating in the research, to get reliable information in centralized and integrated data bases (GONÇALVES, 2006).

Graph 7 - Aspects of knowledge sharing in the KM policy.

Source: GONÇALVES, 2006.

As for the qualification for execution of directives and proposed actions for KM policy (Graph 8), 77% totally agree that the policies must contemplate the development of personal and collective civil servant skills necessary for the success in the practices at this area, qualifying managers and servants to act in collaborative presencial and virtual networks (GONÇALVES, 2006).

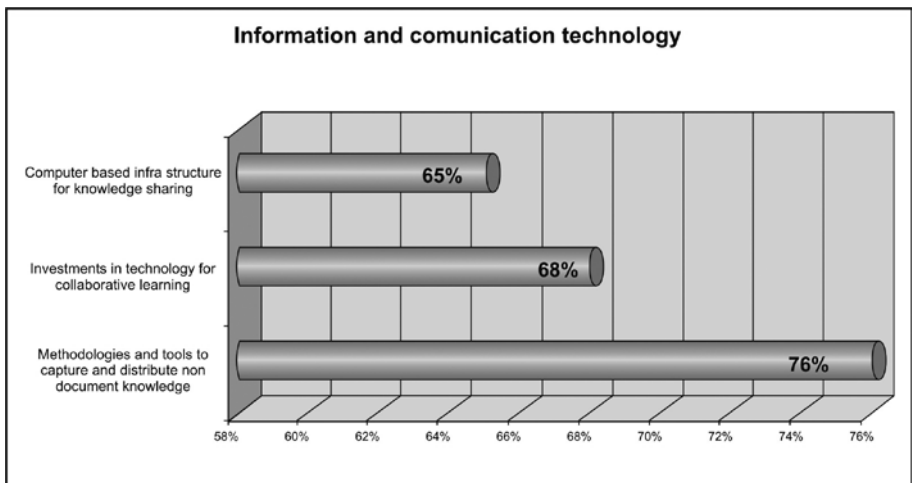
Graph 8 - Aspects of the qualifying in KM policy.



Source: GONÇALVES, 2006.

In the technological aspect (Graph 9) it a high degree of total agreement is perceived (76%) in the necessity of methodologies and tools to capture and distribute non-documented knowledge in government areas (GONÇALVES, 2006).

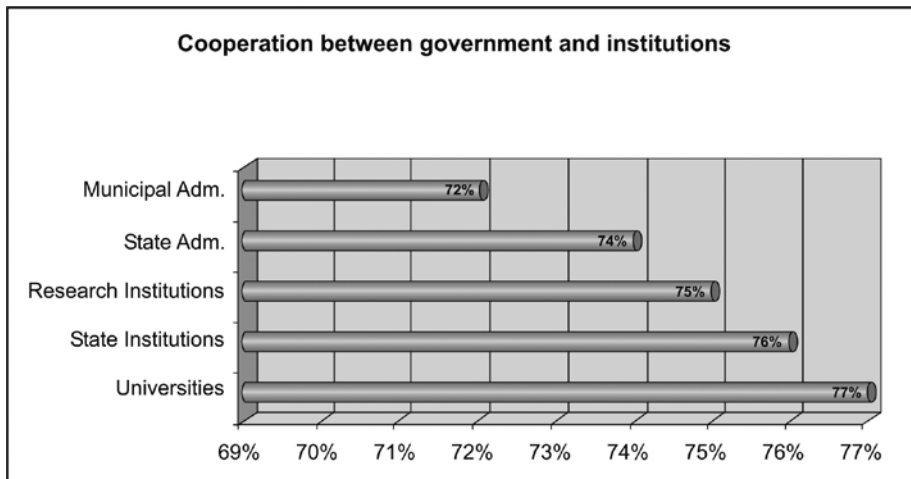
Graph 9 - Aspects of technology in the KM policy.



Source: GONÇALVES, 2006.

As to the promotion of cooperation among government and the various areas it relates to (Graph 10), the highest degree of total agreement (77%) lays on perceptions that KM policy contributes to promote cooperation between government and universities, showing the necessity, on the part of the government, of tightening current relations, in order to bring the knowledge produced by those institutions to servants and to society (GONÇALVES, 2006).

Graph 10 - Aspects of cooperation in the KM policy



Source: GONÇALVES, 2006.

This high level of agreement perceived in the research is the acknowledgement of the need, as expressed by Terra (2004), of a “wide articulation among university training, public research and industrial sectors to establish a collaborative agenda and collaborative research policies (...) for the formation of competencies and the dissemination of competitive knowledge.”

6.1.2. Knowledge Management in Public Administration Forum Debates

The debates that occurred among the public present at the six KM in Public Administration Forums, attended by public employees and managers, lecturers, representatives of the CT-GCIE and SBGC, attested some relevant issues for the formulation of KM policy, and these may be divided in three sections, as follows (CT-GCIE, 2006):

1. Culture, awareness-building and training for Knowledge Management

There is no clear understanding by government servants of what the concept or practices of Knowledge Management are , and this fact has been demonstrated by the IPEA 2005 research, which brings forth that 64% of those surveyed stated that KM is still an abstract concept discussed only by small informal groups. (Batista, 2005).

Albeit this high rate of unfamiliarity, a perception exists, amongst government employees, of the clear necessity to strategically prepare public organizations to use knowledge in favor of collective social instances, mainly focusing on developing qualified government employees towards a new work reality, where knowledge is an essential resource, and on securing the presence of experts in the government staff.

Some measures suggested by the participants were:

- ◆ training/educational assistance to government employees, providing access to knowledge (in partnership with government schools);
- ◆ inserting knowledge management and information management content in public summons for public jobs exams;

- ◆ promoting widespread awareness of knowledge management practices amongst government employees, viewing the necessary cultural change;
- ◆ transforming talent retention within the government into result directives.

Wiig (1999) points out to the necessity of building educational capacities for public administration, i.e. educating government employees in KM topics, with the development of abilities and critical thinking necessary to use communications and information technologies, by way of learning system lessons, transfer of specialized knowledge from highly qualified employees to others, through qualifying and the formation of educational collaboration links.

During the debates it was noticed that public servants resent the small amount of KM research and diagnosis in the public sector as compared to the private sector, which can be explained by the short time the subject has been cared for by the government agenda. Such studies could contribute to another request made at the debates: the definition of indicators of degree of institutionalized Knowledge Management practices within government organizations.

2. Focus on knowledge sharing

The focus on knowledge sharing was a relevant topic in all debates, given that it is one of the biggest obstacles to the implementation of KM, as appointed by 55% of respondents in the IPEA 2005 research: difficulty to capture and distribute non-documented knowledge (tacit knowledge). (BATISTA, 2005).

The use of currently available government computer infrastructure (networks and equipment) is indicated as a facilitator, although qualification to fully use its tools and relationship potential is not effectual as yet.

In this way, Wiig (1999) points out to the construction of practice communities among government units, and between these and other institutions of society as a whole, as a facilitator to strengthen collaboration, knowledge sharing, learning and innovation.

Some suggestions made by the participants:

- ◆ to work in inter-institutional networks. To increase the reach of public networks, include society, third sector;
- ◆ to define instruments and methodologies to capture and distribute informal, popular and tactical knowledge;
- ◆ to eliminate the overlapping of strategic planning projects, with result follow-ups, implementing a single government Project Office.
- ◆ to fundamentally value knowledge acquired by government employees along their working time.

3. Technology

There is ample acknowledgement amongst the government employees that took part in the debates that information must be available in a centralized manner, so that all employees may know where and how to find it. Many suggestions converged to a government Knowledge Portal, with matricial organization of information for government employees and citizens.

Other suggested actions:

- ◆ build a government (three interlinked spheres) information search engine in a text database format;

- ◆ establish, through KM policies, rules of accord to organize the knowledge bases, aimed at the inter-operation between government stakeholders;
- ◆ award the public institutions the responsibility for managing the content that becomes available;
- ◆ establish that all technological products made to support Knowledge Management processes must be freely available and shared, among all levels of government.

6.1.3. Virtual debate in the Brazilian Knowledge Management Society (*Sociedade Brasileira de Gestão do Conhecimento – SBGC*)

The virtual debate on Knowledge Management policies for the Federal Public Administration, carried out through SBGC's website (www.portalsbgc.org.br), in August 2006, with the participation of KM specialists⁶, brought important contributions to the discussion on the need of a KM policy for public administration:

- ◆ the need for a formal structure to direct the implementation of policies and the inclusion of GC action in the PPA, such as securing budget resources;
- ◆ the policy's peculiarity, because of its extensive reach within the Public Administration, in regards to its integration and expansiveness;
- ◆ the necessity of public management excellence and modernization as a whole, augmenting its capacity to generate long term strategies, planning and structuring actions;

⁶ The following specialists participated in the debate: Dr. Alberto Sulaiman (RJ), Dr. Eduardo Moresi (DF), Dr. Elisabeth Gomes (RJ), Dr. José Ângelo Rodrigues Gregolin (SP), Dr. Maria de Fátima Torres (PE), Dr. Paulo Fresneda (DF) and Dr. Sérgio Storch (SP).

- ◆ the statement that KM policy must be hitched to a Country strategy:
- ◆ for the greater competitiveness of our productive chains, more social justice, more development and more rights;
- ◆ the importance of identification and divulgence of practices that demonstrate the benefits of KM insertion in the public sector: generating transparency and optimization of administrative tasks, bettering the interaction between citizenry and government institutions, better organization of governmental information and easier access for citizens and government employees;
- ◆ necessity to prioritize Knowledge Management in the political agenda, by promoting awareness in parliamentarians, ministers and even the President of the Republic, of the intangible and delayed advantages of a KM public policy, holding globalization itself as a stimulating factor which demands a more efficient administration of the country, with the primary necessity of international competitiveness;
- ◆ necessity to clearly identify the contribution of KM for our country's insertion in a globalized world which demands from our government a maximum of internal efficiency, and a maximum of external outlook for opportunities and threats. Those combined with a clearly defined strategy, so that public actions allow the country to develop economically and socially in a more accelerated rhythm than the current one.

7. The KM Policy Proposal For Federal Public Administration – PGC/APF

The proposal of Knowledge Management for Federal Public Administration, following below, was constructed by the members of the CT-GCIE community, in presential and virtual forms, using the informations gotten in the survey of KM situation in the country's public area and abroad as base, and in data gotten with several interested public instances.

This PGC/APF proposal was forwarded to the Electronic Government Executive Committee (CEGE) in June 2007, where can be found being analyzed. It is due to be approved and published by the December 2007.

GOVERNMENT COUNCIL

Electronic Government Executive Committee

Decree #, 2007.

THE PRESIDENT OF THE ELECTRONIC GOVERNMENT EXECUTIVE COMMITTEE, in the use of his capacity and having in view the inserts III and IV of Art. III of the Decree of 18th of October, 2000, which creates the Electronic Government Executive Committee in the sphere of the Electronic Government.

DECREES:

The establishment the Policy and Directives for Knowledge Management at the Federal Public Administration – (PGF/APF), comprising:

I – The Direct Administration which is composed by the integrated services in the administrative structure of the Presidency of the Republic and the Ministries.

II – The Indirect Administration which constitutes the following categories of entities, each endowed with its own juridical personality:

- a) Autarchies;
- b) Public Enterprises;
- c) Mixed Capital Societies;
- d) Public Foundations.

OBJECT AND SCOPE OF APPLICATION

Article 1 – Creates the **Knowledge Management Public Policy** – KMPP, to be implemented by the agencies and organizations of the Direct and Indirect Federal Public Administration, with the following purposes:

I – Improving of the efficiency, efficacy, effectiveness and quality of the formulation and implementation of the public policies and services rendered to the citizen and to Brazilian society;

II – Promoting of transparency in the public administration by means of the provisioning of governmental information to the citizenry, fostering their growing capacity to take part

and to influence the political-administrative decisions related to them;

- III – Fostering the creation of a culture oriented towards the importance and utility of information and of knowledge in the public administration, among the governmental leaders;
- IV – Developing a culture of collaboration among the Governmental areas and the creation and sharing of knowledge between Government and Society;
- V – Fostering the development of the cognitive, pragmatism and behavioral competencies of public servants and employees, oriented to the creation, sharing, use and preservation of knowledge;
- VI – Disclosing the results and benefits of the implementation of the Knowledge Management in the Federal Public Administration.

Article 2 – To the effect of this Decree it is understood that:

I – Knowledge Management

To be the set of systematized, articulated and intentional processes, capable of increasing the ability of the public managers and servants to create, collect, organize, transfer and share information and knowledge that may serve the decision making, the management of public policies and the inclusion of the citizenry as producers of collective knowledge. *(Based on the concept expressed in the Electronic Government Guidelines – Planning Workshops, 2004).*

II – Knowledge Management Plan for the Federal Public Administration

To be the document summarizing the knowledge management strategies and the initiatives for the Federal Public Administration organizations. It embraces elements that contribute to the use of methods, techniques and tools for the development of organizational culture and of an environment that is favorable for the creation, sharing and use of knowledge, aiming at the formulation and implementation of policies and the effective rendering of public services. It serves as a charter for the preparation and implementation of a policy on this specific theme in each area of the Federal Public Administration.

III – Knowledge Activist

To be the public servant or employee that stimulates, facilitates and foments activities related to knowledge management in his or her organization. He or she is also to be known as an active sharer of knowledge in his or her own area of activity.

DIRECTIVES

Article 3 – The Directives of the Knowledge Management Public Policies for the Federal Public Administration are:

- I – To foster and support the organizations of the Federal Public Administration in the planning and in the execution of initiatives of Knowledge Management;
- II – To promote the awareness of the leaders for the strategic use of knowledge and information in the organizations of the Federal Public Administration;

- III – To endow the professionals in the Federal Public Administration with competencies (knowledge, skills, attitudes and values) for the planning and execution of Knowledge Management activities;
- IV – To measure the results and benefits of the use of Knowledge Management in the Federal Public Administration;
- V – To widely publicize the activities, results and benefits of Knowledge Management in the Federal Public Administration;
- VI – To support the execution of technical events in the area of Knowledge Management;
- VII – To support actions that aim at the development of a culture of knowledge sharing in and among the organizations of the Federal Public Administration and with the other Governmental Powers and Levels, and with Society;
- VIII – To ensure the access of the public servants and of citizens to information and to knowledge available in the Federal Public Administration;
- IX – To ensure the structure, the legislation and the capacity needed to sponsor, mobilize and orient the elaboration and implementation of the Knowledge Management Plan by the organizations of the Federal Public Administration;
- X – To promote the creation and the sharing of knowledge as a necessary condition for innovation in the Federal Public Administration;

- XI – To foster the incorporation of knowledge in an innovative way in the processes and products, i.e. policies and services, of the Federal Public Administration;
- XII – To facilitate the emergence of innovative ways of organization and management for the public service aiming at the better uses and circulation of knowledge;
- XIII – To promote the intensive use of information technologies with applications related to the knowledge management practices.

STEERING COMMITTEE

Article 4 – The Steering Committee of the Knowledge Management Policy for the Federal Public Administration is created with the role to be performed by the Technical Committee on Knowledge Management and Strategic Information – CT-GCIE, a component of the Executive Committee on Electronic Government – CEGE, in the following capacities:

- I – To identify the needs of the Knowledge Management at the sphere of the Federal Public Administration;
- II – To define and prioritize actions to respond to the identified needs;
- III – To guide the organizations of the Federal Public Administration in the definition of their Knowledge Management Plans;
- IV – To promote the dissemination of the Knowledge Management Policy at the Federal Public Administration.

Article 5 – The Steering Committee for the Knowledge Management Policy at the the Federal Public Administration will convene, at least, with the following frequency:

- I – Bi-annually, for meetings viewing the implementation tracking of KMPP;
- II – Bi-annually, for meetings viewing the analysis and adequacy of the KMPP to the reality of the Federal Public Administration.

INSTRUMENTS

Article 6 – The instruments of the Knowledge Management Policy of the FPA are:

- I – Knowledge Management Strategic Plan for the Federal Public Administration;
- II – Knowledge Management Plan from the organizations of the Federal Public Administration;
- III – Annual results reports generated by the execution of the Knowledge Management Plan from the organizations of the Federal Public Administration;
- IV – Bi-annual result reports of the KM Strategic Plan for the Federal Public Administration.

Paragraph 1 – It is due to the Steering Committee of the KMPP to develop and implement the Knowledge Management Strategic Plan for the Federal Public Administration, and to prepare and disseminate the Bi-annual Results Report of this Plan.

Paragraph 2 – It is due to the Executive Committee on Electronic Government – CEGE to discipline on the instruments of the KMPP.

Paragraph 3 – It is due to the organizations of the FPA to elaborate and implement the Knowledge Management Plan, in accordance to the guidelines of this KMPP and according to the Knowledge Management Strategic Plan for the Federal Public Administration, as well as elaborate and disseminate the Annual Report with the results of the organization plan.

RESOURCE RESERVES

Article 7 – The organizations of the Federal Public Administration must observe in their programs and actions of the Pluriannual Plan (PPA), activities and budget resources oriented to the planning, execution, monitoring/tracking and evaluation of the actions of its Knowledge Management Plan.

Single Paragraph – The Executive Committee on Electronic Government – CEGE must assign resources for the adequate work of the Steering Committee of the KMP.

TRAINING

Article 8 – The organizations of the Federal Public Administration must award a priority status, in the three first years of enforcement of this Decree, to actions of training as reported in the Training Annual Plan of the institution, in accordance with the Article 5 of the Decree 5.707, from February, 23rd 2006, observing the training of the functional body for the following areas:

- I – Awareness of the high-administration of the organizations of the Federal Public Administration as to the importance of the knowledge resource and of its management;
- II – Development of the “knowledge activists” in the federal public organizations;
- III – Training for the elaboration and implementation of the Knowledge Management Plan of the organizations of the Federal Public Administration.

Single Paragraph – It is due to the National School of Public Administration, ENAP, to promote, elaborate and execute the actions of training for the purpose stated in the *caput*, as well as to coordinate and supervise the actions of training executed by the other direct, autarchic and foundational governmental schools from the federal public administration.

Article 9 – Membership in the Steering Committee of the Knowledge Management Policy is to be considered a relevant public service, and shall not be compensated, financially.

VALIDITY

Article 10 – This Decree becomes fully enforceable by the Law upon the date of its publication.

Brasília, of 2007.

DILMA ROUSSEF
President of the Electronic Government Executive Committee

8. Final Comments

This document has in view to summarize, the CT-GCIE members' developments in the elaboration of a proposal for the Knowledge Management policy for the Brazilian Federal Public Administration.

At this time, August 2007 this proposal is being analyzed by the Electronic Government Executive Committee - CEGE and it is due for publication and to become officially valid by December 31st, 2007.

As a consequence of the formalization of this policy in the public federal administration the following facts and benefits are due:

- (a) The knowledge activists, as defined in Article 2, item III of the PGC/APF proposal, will have a legal instrument to induce and to lead their organization to formalize the KM activities, including the elaboration of a KM Plan for the organization;
- (b) With a formalized PGC/APF, the knowledge activists or those made responsible for the KM initiatives will have facilitated access to the high administration of their organization, thus, expecting that these executives will be able to reach a bigger agreement around the importance and benefits of KM for the organization and a bigger commitment to the executed KM actions;
- (c) With the occurrence of the two previous events, it is expected that KM will be institutionalized in the Brazilian federal public organizations,

bringing a combination of benefits that will become more and more efficient, effective and transparent to Society.

The proposal of the PGC/APF proclaims, in Article 7, item II, the elaboration of a Knowledge Management Plan made by the federal public organizations. This Plan will be an important instrument to formalize and to institutionalize KM in the FPA, giving coherence and coordination to the several actions that today are separately planned and executed.

Given that the organizations of the federal public administration, in their majority, do not possess a KM Plan and that there is a lack of instruments for its elaboration, the authors understand that using, as a base, the tests applied to Brazilian public organizations, the Organizational Knowledge Assessment – OKA method, elaborated by the World Bank Institute - WBI, of the World Bank, is a useful adjusted instrument, to create an initial diagnosis of KM in an organization of the FPA and, from the analysis of the collected data by the application of OKA method, to establish the strategies and the actions to execute them, i.e., to elaborate the KM Plan for the organization.

Lastly, it is expected that this document becomes useful to other spheres of government in Brazil and also in other countries that can turn to it as base for the establishment of KM policies in at their performance scopes, so that they are able to allow, in the future, that practices and knowledge of KM implantation in public organizations can be shared and created together, with significant savings in scale and synergy.

9. References

- BATISTA, F. et al. **Gestão do Conhecimento na Administração Pública**. Texto para discussão n. 1095. Brasília: IPEA, 2005.
- BATISTA, F. **Governo que aprende Gestão do Conhecimento em Organizações do Executivo Federal**. Texto para discussão n. 1022. Brasília: IPEA, 2004.
- BATISTA, F. **Gestão do Conhecimento na Administração Pública – relato completo da pesquisa**. Apresentação realizada nos Fóruns de Gestão do Conhecimento na Administração Pública, em Salvador e Recife, 2005.
- BRASIL. Presidência da República. Secretaria Especial do Conselho de Desenvolvimento Econômico e Social – SEDES. **Carta pela Democratização Universal do Saber – do trabalho-ferramenta ao trabalho-conhecimento**. Brasília: set.2003a.
- BRASIL. Ministério do Planejamento, Orçamento e Gestão. Secretaria de Gestão – SEGES. **Gestão Pública para um Brasil de todos**. Brasília: 2003b.
- BRASIL. Comitê Executivo do Governo Eletrônico. **Diretrizes do Governo Eletrônico – Oficinas de Planejamento**. Brasília: 2004.
- BULLOCK, Helen, MOUNTFORD, Juliet, STANLEY, Rebecca. **Better Policy-Making**. Centre for Management and Policy Studies. England: 2001.
- CALMON, Paulo du Pin. **Análise de Políticas Públicas – um texto introdutório**. Universidade de Brasília. Núcleo de Pesquisa em Políticas Públicas. Brasília: 1999.
- CASTELLS, Manuel. **A Sociedade em Rede**. São Paulo: Editora Paz e Terra, 8.ed., vol.I, 2005.

CT-GCIE. **Proposta de Política de Gestão do Conhecimento para a Administração Pública Federal**. Documento preliminar apresentado no III Congresso Nacional de Gestão do Conhecimento na Esfera Pública. Brasília, 2006.

EUROPEAN COMMISSION. Directorate General For Information Society and Media. A reorganização das retaguardas administrativas de governo para a melhoria dos serviços públicos eletrônicos. **Revista do Serviço Público**. ENAP, Brasília, DF, v. 57, n. 1, p.87-112, Jan/Mar 2006.

FRESNEDA, Paulo S. V. **Comitê Técnico de Gestão do Conhecimento e Informação Estratégica**. Brasília, 2005. Apresentação disponível em <http://catir.softwarepublico.gov.br>. Acesso em 04.dez.2006.

GONÇALVES, Sonia M. G. **Elementos básicos para a formulação de uma política de gestão do conhecimento para a administração pública federal brasileira**. Dissertação (Mestrado). Universidade Católica de Brasília, Distrito Federal. 2006.

LINDBLOM, Charles E. The Science of Muddling Through. In: THEODOULOU, Stella Z.; CAHAN, Matthew A. **Public Policy: the essential readings**. EUA: 1995, Prentice Hall, p. 113-127.

OCDE. **Projet de Conclusions enquete sur les pratiques de Gestion du Savoir et des Connaissances mises en ouvre dans les Ministeres et Organes du Gouvernement Central des Pays Membres de l'OCDE**. Paris: 2003.

OCDE. **Competencies for the Knowledge Economy**. Paris: 2001.

OSZLAK, Oscar; O'DONNELL, Guillermo. **Estado y Políticas Estatales en America Latina: hacia una Estrategia de Investigación**. Doc. CEDES GE, Clacso, nº 4, 1976.

RODAL, Eduardo. **Programa para el establecimiento del gobierno electrónico en America Latina y el Caribe: conceptos, estrategias y aplicaciones que el Banco Interamericano de Desarrollo viene desarrollando en la región**. VIII Congresso Internacional del CLAD sobre la Reforma del Estado y de la Administración Publica. Panamá, 28-31 out. 2003.

SILVA, Ionara Ferreira da. **O processo decisório nas instâncias colegiadas do SUS no Estado do Rio de Janeiro**. Tese (Mestrado) Fundação Oswaldo

Cruz, Escola Nacional de Saúde Pública; 2000. 100 p. Disponível em: <http://portalteses.cict.fiocruz.br>. Acesso em 24/03/2006.

TERRA, José Cláudio C. Gestão do Conhecimento: reflexões sobre sua aplicação no setor público e seus aspectos multidimensionais. In: **Gestão Estratégica da Informação e do Conhecimento na Câmara dos Deputados**. Câmara dos Deputados. Ciclo de Palestras. Brasília, 2004, p. 11-17.

UNDESA/DPADM. **Understanding Knowledge Societies In twenty questions and answers with the Index of Knowledge Societies**. New York, 2005

UNESCO. **Towards Knowledge Societies**. Unesco World Report. Paris:2005.

UNPAN United Nations Online Network in Public Administration and Finance. **Understanding Knowledge Societies in twenty questions and answers with the Index of Knowledge Societies**. New York, 2002.

WIIG, Karl M. **Application of Knowledge Management in Public Administration**. USA, 1999.

10. Attachment 1 – Authors' Brief Resumé

Paulo Sérgio Vilches Fresneda

Researcher of the Brazilian Corporation for Agricultural Research (Embrapa), is presently in charge of the Institutional Coordination Unit of the Strategic Management Office, Department of Agriculture, Livestock and Food Supply. Professor at the Catholic University of Brasilia, *strictu-sensu* Masters' Degree Program in Knowledge Management and Information Technology. He is a Ph.D. in Information Management and a post-Doctor with a focus of large organizations through information technology, both at the George Washington University, Washington, USA.

Between May 2003 and April 2004, he was on a sabbatical leave at the Escuela Superior de Administración y Dirección de Empresas (ESADE), Barcelona, working on a research project on issues of Knowledge Management, on virtual communities and on network collaborative learning and working

His main research, teaching and professional activity areas in the past few years are: strategic administration (use of the Balanced Scorecard method); knowledge management with emphasis in virtual communities and collaborative learning and working; organizational learning and use of information technology to support the transformation of organizations.

He is the Coordinator of the Technical Committee for Knowledge Management and Strategic Information (CT-GCIE) of the Electronic

Government Executive Committee (CEGE) of the Brazilian Federal Government. He was the Director for Government Affairs of the Brazilian Society of Knowledge Management (SBGC) in the 2005-2007 biennium, having held other positions in the Management of SBGC since its foundation. He coordinated the Organizing Committee of the National Congress for Knowledge Management in the Public Sphere, CONGEP in 2006, and is a member of the Organizing Committee of CONGEP 2007.

Contact e-mails:

paulofresneda@agricultura.gov.br e fresneda@pos.ucb.br

Sonia Maria Goulart Gonçalves

Master in Knowledge Management and Information Technology by the Catholic University of Brasília and a specialist in Knowledge Management and Business Intelligence by COPPE/ Federal University of Rio de Janeiro. She teaches at the National School of Public Administration (ENAP), at the Fundação Universa - Catholic University of Brasília and at the International Association for Continuous Education (AIEC), in Brasília.

She was the national vice-president of the Brazilian Society for Knowledge Management (SBGC) in the 2005-2007 biennium. She is a member of the Technical Committee for Knowledge Management and Strategic Information (CT-GCIE) of the Electronic Government Executive Committee (CEGE) of the Brazilian Federal Government and of the Organizing Committee of the National Congress for Knowledge Management in the Public Sphere, CONGEP in the 2006-2007 biennium.

Her main research areas, teaching and professional activities in public and private organizations in the last few years have been: planning and strategic administration in government organizations; knowledge management with an emphasis on organizational learning in collaborative environments; competitive sector-intelligence and administration competence-management of people.

Contact e-mails:

sonia.goulart@uol.com.br e goulartsonia@gmail.com

