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NEW APPROACHES IN IMPROUVING PUBLIC SERVICES BY USING KNOWLEDGE MANAGEMENT

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Abstract. Knowledge Management (KM) plays important roles in Public Service and Administration. Each role serves specific constituencies and purposes and is implemented differently. Jointly, they build society's intellectual capital (IC) to improve the effectiveness of public and private decision making and situation handling.

In Public Administration KM are considered four areas: Enhance decision making within public services; Aid the public to participate effectively in public decision making; Build competitive societal IC capabilities; and Develop knowledge competitive work force. Numerous KM approaches are adopted to serve these purposes. Only few pursue broad, deliberate, and systematic KM. The premise for KM is that among many factors, effective and intelligent behavior depends on having appropriate understanding in addition to being informed.

Public Administration shares responsibility to assure that its society provides the quality of life intended for its citizens. From the IC perspective, this implies participation in building and leveraging society's IC to obtain the necessary economic foundation. It also implies long-term responsibilities to foster development of a competitive work force that can compete in regional and global economies. These issues are well known to public managers. However, the past has not offered opportunities to address them with powerful and systematic approaches. This is changing. The broad field of KM introduces new options, capabilities, and practices to assist Public Administration to great advantage. It becomes a new responsibility to manage knowledge to strengthen public service effectiveness and improve the society it serves.

E-government, by definition, is simply the use of information and communications technology, such as the Internet, to improve the processes of government. That is why e-government is in principle nothing new. Governments were among the first users of computers. But the global proliferation of the Internet, which effectively integrates information and communications technology on the basis of open standards, combined with the movement to reform public administration known as New Public Management, has for good reason generated a new wave of interest in the topic. E-government promises to make Public Service and Administration more efficient, responsive, transparent and legitimate and is also creating a rapidly growing market of goods and services, with a variety of new business opportunities.

New Public Management is a kind of management theory about how to reform government by replacing rigid hierarchical organisational structures with more dynamic networks of small organisational units; replacing authoritarian, topdown decision and policy making practices with a more consensual, bottom-up approach which facilitates the participation of as many stakeholders as possible, especially ordinary citizens; adopting a

more 'customer'-oriented attitude to public services; and applying market principles to enhance efficiency and productivity.

E-government gives New Public Management a new role. Not only does information and communications technology provide the infrastructure and software tools needed for a loosely coupled network of governmental units to collaborate effectively, the infiltration of this technology into government agencies tends to lead naturally to institutional reform, since it is difficult to maintain strictly hierarchical channels of communication and control when every civil servant can collaborate efficiently and directly with anyone else via the Internet. Orthogonal to the division of power among the branches of government is the hierarchical organisation of supranational (eg, European), national, regional and local governments bounded by geographical territory. Information and communication technology creates a 'new accessibility', overcoming temporal, geographical and organisational boundaries. Thus e-government can facilitate new forms of collaboration among governments which cut across and diminish such boundaries. The EuroCities project is an example. Perhaps in the long term e-government will help to strengthen the identification of citizens with Europe.

Another role of eGovernment is of enabling public administrations to better cope with these challenges and to implement good governance. Enabling a public sector refers to: open and transparent – accountability; inclusive - at the service of all; and productive – maximum value for taxpayers money.

Knowledge-enhanced *e*Government aims at improving public services, democratic processes and support to public policies through *Knowledge enhanced ICT* based solutions and *Knowledge management* supported by organisational change and organisational learning.

Knowledge Enhanced eGovernment by:

- Dealing with organisational structures:
    - New organisational models and organisation modelling;
    - New models of co-operation (within and beyond administrations);
    - Dynamic Knowledge value constellation in *e*Government processes;
    - Re-engineering, complaints management.
- Dealing with the complex environment, providing flexibility and adaptation capacity:
    - Heterogeneous and fragmented sources of Knowledge;
    - Interactive, networked, collaborative organisations;
    - Dealing with non predictable requests and conflicting situations;
- Dealing with intelligence and ubiquity:
    - Self enriching and evolving environments and services;
    - User profiling and comfort;
    - Mediation and advice giving systems;
- Some relevant technologies (non-exhaustive) are the following:
    - Current technologies: document management systems, collaboration applications, web technologies, search engines, enterprise information portals, workflow, data mining, SW agents, grid, etc.
    - Advances technologies: semantic-based technologies, ontologies, complex interactive and adaptive agents, neural nets, genetic algorithm.
- It's part of technological research:
    - To model, generate, design, enrich ontologies and have interoperating ontologies;
    - To integrate advances technologies to allow ubiquity and intelligence such as semantic web technologies with ontologies;

- To design cognitive interfaces.

E-government is not only or even primarily about reforming the work processes within and among governmental institutions, but is rather about improving its services to and collaboration with citizens, the business and professional community, and nonprofit and nongovernmental organisations such as associations, trade unions, political parties, churches, and public interest groups.

Using World Wide Web portals to create one-stop shops is one currently popular e-government approach to improving the delivery of public services to citizens. The basic idea of these portals is to provide a single, convenient place to take care of all the steps of a complex administrative process involving multiple government offices, bringing the services of these offices to the citizen instead of requiring the citizen to run from office to office.

Web portals can deliver government services with various levels of interaction. Three levels are usually identified: information, communication, and transactions. Information services deliver government information via static web pages and pages generated from databases to citizens, tourists, businesses, associations, public administration, and other government users. Communication services use groupware technology such as e-mail, discussion forums and chat to facilitate dialogue, participation and feedback in planning and policy-making procedures. Transaction services use online forms, workflow and payment systems to allow citizens and business partners to take care of their business with government online. Typical applications of transaction services for citizens include applying for social benefits, registering automobiles, filing changes of address or applying for building permits. For businesses, perhaps the application of greatest current interest is the online procurement of government contracts.

Public Administration functions in the modern, democratic society are complex. Ideally, but unrealistically, civil servants should possess the best expertise and collaborate with experts with the most advanced state-of-the-art understanding. While at times being experts, they should also be lead facilitators and KM moderators. However, communication difficulties in societal KM may make it difficult to walk the narrow line between: (a) having deep and special insights into how to proceed and (b) involving the public and special needs groups in a collaborating process. Public managers must provide initiatives, leadership, and coordination to implement the most effective approaches and to ascertain that society as a whole is served appropriately.

The role of guiding and governing society's agendas for public IC falls to public managers. The conceptual leadership for KM must in part reside with Public Administration but must also be shared with all stakeholders. Broad KM practice must ultimately be the responsibility of each public agency and each civil servant. Without broad agreement on concepts KM will not be effective. A separate, but small Public Administration entity or office should be created to support the KM practice. Its function must be supportive, innovative, and collaborative. It must avoid being prescriptive and needs to operate on several levels. Part of its work needs to be on the policy level with responsibility to coordinate KM activities in accordance with society goals and objectives. It must also communicate with legislatures and public agencies to secure resources required to pursue the knowledge agenda. It must collaborate with citizen groups and the business community to facilitate joint programs, determine capabilities, opportunities, needs, and constraints (CONC) analysis[1]. The office must maintain the broad vision for comprehensive KM and facilitate its adoption across all society's entities. It must secure shared resources that individual agencies cannot justify and provide methodological

[1] Capabilities, Opportunities, Needs, and Constraints (CONC) analysis is similar to Threats, Opportunities, Weaknesses, Strengths (TOWS) analysis but includes knowledge that provides a perspectives difference.

leadership with ensure common standards to allow interoperability, uniform access, collaboration, and knowledge sharing. These demands lead to needs for specialized expertise in several areas and the KM office staff should have considerable expertise in areas like public policy. In addition they should have – or have access to – KM expertise such as Knowledge Engineering, Management Sciences, Cognitive Sciences, Social Sciences, Library Sciences, Philology or Linguistics, Artificial Intelligence, and Advanced Computer Sciences.

Public Administration entities have broad responsibilities in pursuit of societal objectives. Public Administration governs and facilitates public aspects of operations and life of public and private organizations and individual citizens. When considering knowledge-related issues, such responsibilities cover not only knowledge-related functions within Public Administration. Responsibilities extends to govern and facilitate other knowledge-related and affected areas, particularly preparing effective policy partners, building and leveraging societal IC, and building and maintaining a capable and competitive workforce. As the KM vision is built, it is important to keep a clear overview of which activities need to be undertaken for which purpose and which ones may serve many purposes as indicated in this figure. Beyond the general KM activities, IT-related support activities and infrastructures are important. They serve vital functions, are complex, costly, and often take time to design and implement. Therefore, they require separate considerations and some may be illustrated as in Figure 1 where the joint infrastructure activities are separated from activities that serve particular purposes.

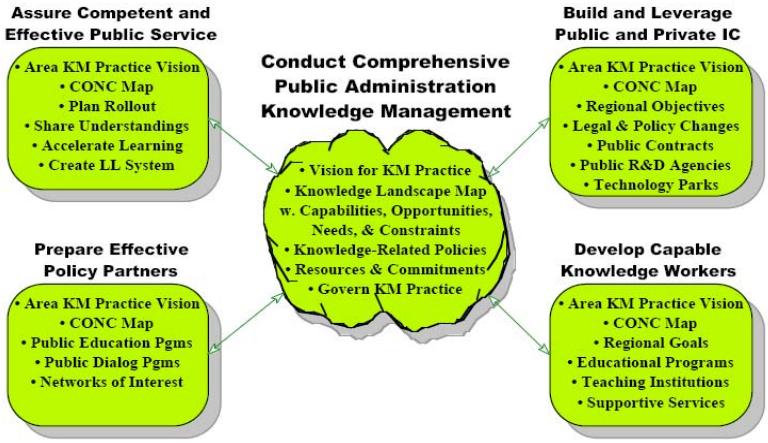

Figure 1. Elements of Public Administration Knowledge Management Practice

The success and viability of any society depend upon how well its public services are provided. Quality and effectiveness of Public Administration services are influenced by many factors. Organizational structures, responsibilities, capacities, information, civil servant personal expertise, and otherwise available IC are factors that affect the performance desired from the institution. Among these, IC assets are primary enablers. They are the basic resources that govern nature and directions of actions. Without adequate ICs, even when given the best information, actions will be based on ignorance – lack of understanding – and will be arbitrary and ineffective. Consequently, it is importante to manage knowledge to make public services act knowledgeably. However, IC alone is not sufficient. Other primary factors are indicated in order to support the deliver of the desired resulting effects.

In concluzion, creating and maintaining competent public services is not simple. As for other organizations the overall effectiveness of public organisations depends on individual effectiveness based on intelligent behavior by its people, their motivation, and freedom to act appropriately. It also depends on the suitability of policies, support systems

and infrastructure, and organization of work, to name some aspects. Again, the enabling factor is IC. That includes the expertise and understanding that individuals can command to perform immediate work. It also includes knowledge embedded in policies, procedures, organization of work, work aids, and infrastructure. Comprehensive KM provides approaches to improve and leverage most of these aspects. For example, KM methods are used to build expertise in people and to influence their motivation through increased understanding of the value of their own roles to society – and to themselves. In general, KM approaches developed for private organizations are highly relevant for public service organizations.

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