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The research on the critical success factors of knowledge management and classification framework project in the Executive Yuan of Taiwan Government

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ABSTRACT

This study investigates the key factors for knowledge management in the national government of Taiwan. The achievements of the government KM initiatives demonstrate two distinctive dimensions: core KM processes (organizational missions and values, IT applications, documentation, process management, and human resource) and KM performance (knowledge capture and transformation, business performance, and knowledge sharing and value addition). In terms of modern public administration, issues of paradigm shift and disruptive changes have arisen with the introduction of Information Technology (IT) service delivery and operation in organizations [Hori, K. (2000). An ontology of strategic knowledge: Key concepts and applications. *Knowledge-Based Systems*, 13, 369–374.]. The strategic roles of IT have emerged in modern organizations from the government, business and non-profit sectors. The initiatives created by the e-government include enormous capacity in processing information, reengineering government, empowering citizens as well as the potential in reframing the context of governance. These initiatives are seen as more than technological phenomena: they are also a key element in the strategies of government modernization [Ault, J. T., & Gleason, J. M. (2003). US Government decision makers' expectations and patterns of use of emerging and existing information technologies. *Government Information Quarterly*, 20(1), 63–76.].

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1. Introduction

It is undeniable that knowledge has been increasingly regarded as an important asset and increasingly managed in several private sectors in order to maintain a competitive advantage (Davenport & De Long, et al., 1998; Kaldor, 1939; Machlup, 1962, 1984; Wiig, 1997). Whether the government should initiate knowledge management (KM) projects or how governments should put these KM initiatives into practice are still unclear. In recent years, some scholars have noticed that governments may transform themselves by knowledge management initiatives to improve administrative efficiency, provide more accurate and timely information to the people, and raise administrative satisfaction levels (Misra & Hariharan, 2003; Prokopiadou & Papatheodorou, et al., 2004; Saussois, 2003). Unfortunately, these studies are mostly conceptual and

the knowledge of implementing KM projects into the workplace is still limited.

Organizational knowledge management has changed routine habits and operations, just like the process of education in thought and culture. By designing and arranging the process of knowledge management, we can transform tacit knowledge, know-how, and workflow into procedures, standardization, and context analysis of documentations, and lay the base for creating competence, competitive advantage and sustainable development. The purpose of this study attempts to fill the gap and investigate the ongoing KM project in the national government of Taiwan, and empirically examine the key dimensions of a KM initiative in the government.

1.1. Empirical study

Fast finding and quick retrieval of information has become the imperative of the information-overloading and fast-changing technology landscape, as widespread adoption of the internet makes available the production and delivery of vast amount of information. To effectively address the information architecture problem and thus to make government information more accessible to the public, leading countries in e-Government initiatives such as the

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UK, the USA and Canada have implemented in their government portals subject indexing browsing via category lists. Two mechanisms are commonly available in these government portals: search and subject browsing by category. Search refers to users entering keywords to find relevant information in a search engine, and thus is helpful for users with well-defined information requirements. By meta-tagging categories to information resources, subject browsing on the other hand helps users navigating well-structured hierarchies of government information, allowing users to explore and drill down to their specific information demand. Therefore subject indexing and browsing is well suited to users who have ill-defined demand and fail to come up with the right keywords.

The program aims to address the information architecture problem in the MyEGov portal by reorganizing the subject browsing of the portal with three standardized category lists, namely theme, categorized administrative knowledge framework for the Executive Yuan (CAKE) and services, as well as with target audience such as the general public and government employees in mind. In addition, the subject indexing and browsing services will be implemented in all government agencies so that a consistent categorization and search of government information can be offered to make government services more transparent and readily accessible (Gruber, 1995). The first stage is empirical study. This study investigated the key factors for knowledge management in the national government of Taiwan. The achievements of the government KM initiatives demonstrated two distinctive dimensions: core KM processes (organizational missions and values, IT application, documentation, process management, and human resource asset) and KM performance (knowledge capture and transformation, business performance, and knowledge sharing and value addition). In the second stage, it focuses on promoting the standardization of administrative information classification and categorization, accelerating the integration and circulation of government information, and access to disclosed government information convenient for the general public. The secretariat of the Executive Yuan (EY), serving as the cabinet of the national Government of Taiwan, has been working with its subordinate agencies to develop the categorized administrative knowledge framework and thesaurus for the Executive Yuan (CAKE). Although the study is exploratory, the results may lay a foundation for further research.

1.2. The current status of Taiwan of KM initiatives

In the second stage, the Secretariat of the Executive Yuan (EY), which serves as the Cabinet of the national Government of Taiwan, has been working with its subordinate agencies to initiate the CAKE (categorized administrative knowledge framework and thesaurus for the Executive Yuan) project.⁴ Based on the six-step of KM model above the empirical results, the EY launched a project and organized a working group with five functional sub-units to analyze, collect and establish the related terms of thesaurus; promote the standardization of administrative information categories and classification; accelerate government information integration, circulation and exchange; and make it convenient for the general public to access government-disclosed information.

1.2.1. Transparent and accessible government information

Through categorization of government information resources by theme, CAKE and Services, the public can access government services by business function, topics and services. In addition, the results returned by the MyEGov portal will provide disclosure

items required by the freedom of government information law (FOGIL), which can help facilitate accessibility to government information and the transparency of the government operation.

In addition, proactive disclosure of government information stipulated by the freedom of government information law can be searched by the category code and thus be easily audited to check the compliance of each agency. Accessibility of government information can help tailor government service to the public demand.

1.2.2. Consistent and systematic organization of inter-agency information categorization

By consistently meta-tagging categories on agency information, agency information can be aggregated by common classification and displayed by function or services. The adoption of common category codes facilitates inter-agency interoperability, establishes the baseline for agency performance evaluation, lays down the foundation for agency knowledge management, and as a result, the process and quality of policy-making can be greatly enhanced.

1.2.3. Integrated and accessible MyEGov portal to the public

With the adoption of the three category lists and subject browsing service, the MyEGov portal offers users the ability to search information by themes, business functions and services and thus meets the users' right to access government information. A case in point is e-form download. With the meta-tagging of Services category, the public can friendly look up the e-form on the MyEGov portal, which offers one stop download for e-forms from all agencies, and thus gain timely access to government services.

1.2.4. Systematic development and implementation of supporting measures

To ensure the progress on implementation of subject indexing and browsing as well as streamlining inter-agency electronic data exchange, the working group has systematically developed relevant supporting measures for compliance, such as category list coding and maintenance principles, SOPs, metadata standards, and electronic data dissemination exchange guidelines etc.

With inputs from the MyEGov category list working group, the RDEC revised the government agency electronic data dissemination guidelines to reflect the change in data exchange technology and to ensure compliance of disclosure of government information stipulated by the Freedom of Information Act. In addition, the accompanying metadata standards and category lists were laid down in the government agency electronic data dissemination metadata and category list standards. As for implementation, the RDEC developed MyEGov category list implementation plan which specifies the schedule for agency implementation.

1.2.5. Incentive for categorization of government information - government service quality award

Quality is one of the key components to the success of government services in democratic societies. As the government is the sole greatest public service provider, it must address the demands of the public in a fast, right and effective manner, carry out the policy with excellent performance, and make its services reliable. To ensure the compliance of meta-tagging categories on government information, the RDEC mandates inter-agency data exchange as one of the indispensable facets in government service quality. The practice of meta-tagging categories on government information will be evaluated and audited by the government service innovation and enhancement measures and the government service quality award implementation plan, so that agencies will make categorization of government information their standard operation procedure and operate on a daily basis. Motivated by the service quality award, agencies will embrace the practices of meta-tagging, and as a result quality of agency websites can be

⁴ CAKE: The categorized administrative knowledge framework of Executive Yuan (<http://cake.ey.gov.tw>).

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