# New Ways of Working on a Collaboration Platform in the Government Statistical Service of Hong Kong, China

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#### **Abstract**

We are in the era of Internet of Things which has enabled many new ways of working. People, processes, data and things are all connected to each other on network like never before. We have taken the opportunities to transform our business through the provision of a collaboration platform in the Government Statistical Service (GSS)<sup>1</sup>, which can connect people to knowledge, share work experiences, relate people to people, build better relationships, enhance operational efficiency and improve productivity.

On the collaboration platform, knowledge portal, workspaces, collaboration, connectivity and learning are the core design themes. With the adoption of new technologies, colleagues can now work, collaborate, communicate, discuss, share and learn conveniently in workspaces without worrying about issues of the management of content, knowledge and tasks. Self-learning on the platform is strongly supported and promoted for capacity building of colleagues. In sum, a virtual environment is established to support new ways of working, with the ultimate goal of enhancing and rejuvenating the collective capability of the GSS.

Key words: Knowledge workers, portal, virtual workspaces, connectivity, transformation, organisational learning

## 1. New Ways of Working

The world of work has changed. We are in the era of Internet of Things which has created a world of new opportunities. People, processes, data and things are all connected to each other on network like never before. We, the Census and Statistics Department in Hong Kong, have taken the opportunities to transform our service through the provision of a collaborative platform to support our knowledge workers not only to perform their roles and tasks but also to learn and share.

<sup>&</sup>lt;sup>1</sup> The Government Statistical Service (GSS) in Hong Kong consists of the Census and Statistics Department (C&SD) together with statistical units established in various government bureaux and departments, representing a network for the provision of government statistical services.

All along, our operation is orientated around paper files, emails, meetings, and telephone discussions in functional silos, similar to many government departments and agencies around the world. Hence, convenient collaboration, knowledge retention and experience sharing are challenging as files/media are loosely connected and dispersed in different storage devices. Speedy retrieval and easy referencing of records and knowledge are in many occasions not well facilitated.

The emergence of collaboration tools and web-based technologies soften the perimeter and hierarchies of organisational structure. They are reshaping ways of working, workplaces and work organisation. We are evolving towards virtual presence with more flexible connectivity to organisational information and resources. New technologies have taken our **knowledge work** to a new level of productivity. Moving along this direction, a Knowledge Management (KM) project was implemented a few years ago to forge the GSS to become not only a KM empowered organisation, but also a dynamic, collaborative, connected and learning organisation.

#### 2. KM as the Foundation

To anticipate and adapt to changes, organisations must learn. Organisational knowledge has to be managed so that the collective experience of an organisation is available to individual **knowledge workers** for convenient deployment. In other words, KM is critical to the maintenance of collective capability of an organisation.

Our project was anchored on KM, with focus on providing means to work across functional silos - the major obstacle to knowledge sharing. There are of course other barriers including the reluctance to share. We took the opportunity to engender **transformation** of our ways of working, sharing and learning in a holistic framework. The project had not only implemented a KM system, but also endeavoured the aforementioned transformation through major procedural and cultural changes, forging the GSS to become a learning organisation.

The project has three strategic goals: First, we shall improve our knowledge base and facilitate the leverage of knowledge assets in our work. Second, we shall create a collaborative working, sharing and learning environment where information, content, knowledge, business processes and tasks will be centrally organised and managed in workspaces. Third, we shall foster a culture embracing collaboration, knowledge sharing, open communication and self-learning through change management.

Through these strategies and the related initiatives, we hope to bring forth stronger

work coherence, higher operational efficiency, greater transparency and better service quality in the course of work, with the ultimate goal of reinforcing and rejuvenating our collective capability.

#### 3. System Design

The system is structured around **KM**, **collaboration**, **connectivity and learning**. The system implementation has two phases, viz. system implementation and change management. Change management has started some time before system launch and is still in progress.

The system was developed using a combination of commercial off-the-shelf software and selected Web 2.0 tools. They are all market-proven technologies which provide a trusted system infrastructure with a full range of collaboration functions. The following major design principles were adopted in implementing the system: (i) KM processes for acquiring, capturing, sharing, applying and storing knowledge must be embedded in business processes; (ii) connectivity to people and knowledge assets are equally important; (iii) learning and sharing are equally important; and (iv) technology is an enabler and the right technology must be used to fit our work.

## 4. Knowledge Portal

The portal

The knowledge portal is not simply a KM tool. It also transforms the operation of the GSS by centralising all corporate information for daily operation, planning and development onto one single access point. The portal consolidates announcements, departmental news and relevant statistics, which were previously delivered through emails, for quick reference on a single page. It also provides connections to knowledge repositories and other frequently referred information hubs. Except the front page, the portal is customisable. Colleagues in the GSS can select a collection of tools (such as calendar, bookmarks, task lists) to support their work and create their "My Page" and "My Task" pages. In the near future, other IT applications will be integrated into the portal as portlets where colleagues can gain access to other IT applications from the portal. This surely enhances the connectivity of colleagues to content, knowledge, resources and applications anytime anywhere. In sum, the portal is a single access point for colleagues across the GSS to collaborate, work, share and learn.

Knowledge repository, search engine and tagging

A centralised knowledge repository and shared folders are available in the portal for consolidating our knowledge assets into different knowledge domains. Knowledge

assets are classified and mapped into a taxonomy. This allows colleagues to deposit and search for work knowledge in a structured way. A powerful search engine is installed in the portal to facilitate fast and accurate search of information in the system space and workspaces. To tackle unstructured contents and information such as emails, minutes and business processes, tagging by users is allowed where they are free to attach keywords to describe contents and processes. Tags provide a very effective way of searching where information items under the same tag would be displayed on a single view for easy reference. Altogether these functions enhance the connectivity of users to the right set of content and knowledge for quick deployment in work.

#### Wiki technology

Using the Wiki technology, a Wikipedia-like reference, called Statpedia, is set up to provide easy information retrieval and sharing of professional knowledge in the course of work. It also serves as a convenient hub for colleagues to co-author, deposit, search and browse concepts, definitions and glossary of terms on various statistical themes.

#### 5. Collaboration Workspaces

#### Virtual workspaces

The system helps transform our physical workplaces into virtual workspaces which connect various functional units in the GSS together on a virtual work platform. Virtual workspaces are central to the design of the system, since most if not all corporate contents will be deposited into different workspaces eventually. Collaborative workspaces are formed for all business units of C&SD (i.e. by division, branch and section) and also work units which span across the hierarchies for specific tasks and ad hoc projects. Collaboration tools, such as shared folders, discussion forums, group calendar, workflow management and co-authoring functions, are available within each workspace. The use of virtual workspaces avoids the problem of work knowledge hidden behind email archives and local drives which are not accessible by others for reference later. This substantially leverages the GSS's ability to break the silo barriers, preserve knowledge assets and foster collaboration and connectivity.

### Workflow management

The workflow management function supports knowledge delivery and capture in the business processes. Work knowledge, previous returns and important references will be embedded in business processes and delivered alongside with tasks requiring action to facilitate "learn before". Completed tasks, related deliverables and relevant work

experience will be harvested and retained as work knowledge within workspaces for future reference and review to facilitate "learn after". Workflow applications can be created and configured directly by end-users upon changes in business rules or conditions. Generic workflows and those customised ones are available for colleagues to replicate and duplicate.

#### 6. Transformation

From workplaces to workspace

The introduction of the KM portal and virtual workspaces refines the operation and processes in the GSS. Rather than relying on the traditional ways of working in workplaces such as meetings, emails and file circulation which involves physical presence, the system supports such business activities in workspaces with virtual presence, through on-line communication and connection to content and resources. The new platform of work is more flexible and efficient. It also enables such flexible office arrangements as "desk-sharing" and "work-from-home".

#### Continuous learning

The collective capability of the GSS is enhanced through the deployment of appropriate technologies conducive to organisational learning. In the "Learning Corner", virtual libraries of training marterials are stored to support self-learning. Experts and coaches are also attending some specialty discussion forums to solve work-related questions and offer advice on-line. A "We Share" workspace will be introduced where colleagues can store and share links to business-related references and materials identified in the Internet world for easy connection.

#### Generation next and knowledge transfer

The new platform will contribute to the sustainable development of the GSS in the future years where "Generation Next" will predominate in our workforce in succession. While open communication and social network are the prevailing trends, youngsters of this generation are used to the practices of sharing, collaborating and messaging. Providing a collaboration platform of work and connectivity will greatly facilitate this generation of staff to work, share and learn. It is envisioned that the system will not only be a platform for existing colleagues to work, share and learn, but also become a convenient venue for both the young and older generations of staff to get connected in the course of knowledge transfer.

## 7. Change Management

In the course of system implementation, we focused on promoting a knowledge sharing and self-learning culture within the GSS. Colleagues are encouraged to embrace KM, sharing and self-learning towards a common goal of enhancing organisational benefits and collective capability. The success of the change from workplaces to workspaces very much depends on the support of colleagues and their dedicated participation in the transition. During the system customisation stage, colleagues concerned have been engaged to review and refine various functions in the system. A large number of colleagues have been designated with specific responsibilities such as KM Coordinators, Content Managers and Process Managers in supporting and adopting KM and collaboration in their daily work. To guide the smooth implementation of the project for general users, hands-on trainings were conducted, protocols defined and manuals prepared to stipulate standards, procedures and practices for the proper use of the system. A sand-box area was provided early for colleagues to build and test their workspaces and accustom with the various tools. Continuous training to assist adoption of the new system is organised and end-user support is provided through hotline and help desk.

#### 8. Challenges and Prospects

While the benefits of the new system and transformative opportunities are apparent, the ensuing journey to accomplish them is incremental. The challenge is more related to the need for colleagues to invest time and effort to sustain the change and handle the extra workload in the transformation. The convenience offered, efficiency gained and productivity unleashed in the new system and through new work practices will help engender continuous commitment of colleagues to continue with the change and transformation.

We must not forget that sooner or later we have to hand over our responsibilities to the newer generations. Adopting a virtual platform of work, connectivity and learning will greatly facilitate the future generations of staff to work, share and learn in their "new normal" way.

In a complex and dynamic world, statistical agencies, like many other organisations, have to continuously reinforce and rejuvenate their collective capability in order to maintain effective and efficient delivery of services and performance. Organisational learning is the key and KM plays a pivotal role. The new ways of working driven by the new technologies greatly facilitate KM activities, collaboration, sharing and organisational learning in such efficient and versatile ways never seen before. This development is widely embraced in the private sector. If anything, the question left is, why, when the potential benefits of these new ways of working are so apparent, has the uptake in the public domain been so moderate?