

**SECTION 7: MAKING MANAGEMENT MORE EFFECTIVE**

- 7.1 A particular initiative: The National Computer Board experience

## **7.1 A particular initiative in improving MIS: The National Computer Board experience**

The National Computer Board was set up to help the public service and Singapore develop a strong computerisation and IT initiative. This was part of the drive for increased productivity in the public sector and to help Singapore sharpen its competitive edge.

### **The context for change**

The Civil Service Computerisation Programme (or CSCP) was launched in 1981 as a strategic component of Singapore's national computerisation effort. The launch of the National IT Plan in 1986 led to the creation of a strategic framework and conducive environment for the private and public sectors to collaborate in the exploitation of IT for Singapore's competitive advantage.

In April 1992, Singapore's Vision of an Intelligent Island was launched....."the IT2000 plan reaffirmed the strategic role IT will play in the next lap of Singapore's development, and showed that because the country dared to dream, it will become a reality." - Prime Minister Goh Chok Tong.

### **Implementing change**

For the CSCP to be effective, it has to respond effectively to the increasing demand for information services, and meet the need for co-ordination in the growth of application networks and electronic information services within the public service. Put simply, it means exploiting IT to improve the quality of public service.

Within this context, the National Computer Board (NCB), in consultation with the Ministry of Finance, set up the Government Information Services Department (GISD) in May 1989 to perform the co-ordination role in the implementation of government electronic information services through the various delivery channels or media.

The co-ordination role is aimed at:

- co-ordinating the growth of application networks and electronic information services;

- facilitating the implementation of integrated information services across government departments and service operators;
- overseeing the integration and promotion of government information services;
- assisting the government ministries, departments and statutory boards in the development and introduction of government information services;
- overseeing the migration and expansion of information services through existing and new delivery channels (e.g. SingaTOUCH multimedia interactive kiosks, Teleview videotex service);
- assuring data integrity and confidentiality of government information;
- enhancing the government's public image and quality of service through the exploitation of IT.

### ***The need for co-ordination***

The rapid growth in the delivery of government services through electronic means required an authority to centrally co-ordinate implementation to achieve an integrated government effort. Some of the considerations were:

#### ***(i) Integration***

The information had to be packaged and integrated across the government departments according to the needs and interests of the public. This 'one-stop' orientation would improve the level of service to the public, and reduce duplication of effort and inconsistencies across the various departments.

#### ***(ii) Co-ordination***

The various government departments were at varying stages of introducing electronic information services. To ensure that the government was responsive in meeting the needs of the business community and public for government information services, there was a need for a concerted effort to promote, co-ordinate and assist all ministries and departments in the introduction of such services.

(iii) *Enhancement of government's public image*

Government electronic information services had increasingly become a key public service offered by the government. Therefore, the government would have to ensure that the service was delivered in a timely, reliable, cost-effective and secure manner to the users.

(iv) *Integrity and confidentiality*

The government had to exercise due care in protecting the confidentiality of information supplied by the public to the government as the flow of information became more widespread.

(v) *Avoidance of lock-in by information service operators*

In accepting service offers from service operators or vendors, the government must maintain the ability to manage the price and quality of government information services over the long-term. This was to avoid technical and operation link-ups that lower effectiveness in managing the implemented government electronic information service.

(vi) *Migration and expansion through new delivery channels*

With the rapid changes in IT technology, new and better information delivery channels might become available. This meant that the implemented government electronic information service should be as independent of existing delivery channels as possible so that the migration to new delivery channels was not limited.

### ***Roles and responsibilities***

The implementation of the government electronic information service involved four key stakeholders. They were:

(i) *Information policy*

The overall direction and policies on the development and implementation of the government electronic information service came from the *relevant steering committees or ministries*. Policy issues relating to the confidentiality and use of government information were decided at that level to ensure that the introduction of the government electronic information service was in line with government objectives.

(ii) *Information content*

The role of the *ministries and departments* as the custodians of government information did not change with the introduction of a government electronic information service. As custodians of the information, the ministries continued to have the responsibilities of collecting, updating and protecting the information, and the authority to specify, control and monitor the use of the information.

(iii) *Information integration and packaging*

The central co-ordinating body played an important role in co-ordinating across the ministries the integration and packaging of information services to meet public needs. As the co-ordinator, *NCB (GISD)* had to:

- (a) provide the technical consultancy and services necessary to package the information contents across the ministries;
- (b) ensure that the product complies with the policies of the ministries;
- (c) integrate electronic services across the ministries;
- (d) select the appropriate delivery channels;
- (e) negotiate the terms and conditions;
- (f) monitor the performance of the product to ensure that the quality, reliability, security and cost-effectiveness of the information services are maintained.

(iv) *Information delivery*

The delivery channels were operated by the *service operators* who provided the physical distribution channel, carried out product marketing, collected the charges and operated the infrastructure. The base charge for information provided was decided by the respective ministries which owned the information, with technical inputs provided by the NCB. The information service operators levied added value to the information packaged by NCB, and levied charges on top of the base charge. The operator's additional charge was agreed to by the ministries concerned. The arrangement ensured that the information was priced consistently, and also provided flexibility to the service operators to compete according to the open market mechanism.

### ***The benefits of central co-ordination***

Centrally co-ordinating the implementation of government electronic information services and applications has:

- (a) facilitated and improved co-ordination amongst the government departments in the packaging and integration of the information service, and thus enabled a synergistic approach towards improving public service;
- (b) enabled the identification and initiation of useful strategic applications that will improve the government's service offerings;
- (c) enabled the government to collectively bargain with the information delivery service operators for favourable terms and conditions, and competitive service charges;
- (d) assured the quality of the products and services offered;
- (e) enhanced and developed the existing products and services;
- (f) provided advice to the government departments in the selection of the most appropriate delivery channels for their products and services;
- (g) allowed public acceptance and market need for the products and services to be monitored more accurately;
- (h) allowed technology monitoring, and developed technical competence on the new technology offerings;
- (i) provided technical expertise and advice to the government departments, and facilitated technology transfer;
- (j) Centrally pooled the common resources and thus avoided duplicate set-up costs.

NCB has co-ordinated with more than 75 government organisations to implement over 100 products and services. Examples include:

- Some government products and services need a central body to co-ordinate the implementation so that a total product can be delivered to the public. An example of such a service is the Government Tender Service (GTS), which was centrally co-ordinated, developed and maintained by NCB. This product involves about 75 government organisations.

- The SingaTOUCH network, introduced in October 1990, a multimedia interactive information kiosk network that is a new channel for the government to disseminate its policies and to deliver services to the public.