Public Sector Data Management in a Developing Economy

Wai K. Law
University of Guam, Guam

EXECUTIVE SUMMARY
An island state government agency responsible for publishing monthly import/export data had problems meeting the monthly publication schedule. It took the group more than three months to process data from a single month. A new director for the unit was under pressure to publish the import/export data at least quarterly. An initial investigation reviewed problems of inefficiency, poor technical support, downsizing under budget reduction, and confusing data standards. The data processing staffs had minimal technical skill with some approaching retirement. There were increasing expectations for the unit to provide enriched and customized data, which could strain the capability and resources of the unit. A general deficiency in computer and information literacy gave little hope for internal information resource development. On the other hand, concerns for information privacy, shrinking budget, and control over data resources limited potential assistance from outside groups.

BACKGROUND
A small island state has emerged as a prime tourism destination since the eighties. A combination of financial assistance, foreign investments, and bank loans modernized the local facilities, with proud showcases of a modern airport, luxury hotels, amusement parks, and major retail chain stores. The island has attracted over a million tourists annually for luxury goods shopping, relaxation, and for its numerous world-class golf
courses. In the eighties, the local government organized a Commerce Division to compile local economic data to satisfy financial sponsors. The same published data provided critical support for favorable financial credit rating, local infrastructure planning, and for attracting new investor groups. The Import/Export Unit in the Commerce Division was tasked to publish monthly Import/Export Reports. The Commerce Division also compiled other data series such as the Census Report, Consumer Price Index, and had access to all public data to support its data compilation efforts. The director of the Commerce Division was an appointed position that typically changes every four years with each new governor of the island. Staff positions were censored by a Civil Service Commission, which was slow in recognizing emerging technology-related job descriptions. Until recently, a high school diploma was not required for many civil service positions. Once employed, it was rare to dismiss a civil servant even for poor performance. It was especially difficult to enforce performance standards when majorities of the population were blood relatives. The local culture discouraged negative comments towards relatives and close friends. It was a taboo to contradict statements of elders and local leaders, even when the statement was based on incomplete or inaccurate data. A strong sense of pride rejected practices that could not be easily integrated into local culture and traditions.

SETTING THE STAGE

Initially, the Harmonized System for commodity classification was adopted in January 1, 1988, as the direct basis for the collection of import and export data. The Harmonized System represented a global standard for commodity classification codes on invoices, bills of lading, and airway bills. The full implementation of the Harmonized System would simplify data collection, and allow the eventual development of automated data collection through an electronic data interchange system. The standard also would allow easy comparison of economy activities on a global basis. However, local business owners were reluctant to invest in information systems to comply with the Harmonized System coding standards.

The developing island state was struggling with the limited supply of physical resources. Although there was an ample supply of water, the island imported most of its food, fuel, materials, and dry goods. Prices of goods were high and with limited supplies. The local government was eager to provide incentives to attract business investments to lower the cost of goods. Quality information was not considered a high priority, and data collection was mainly for the purpose of compliance rather than as a valuable resource. A decision was made by the local government to relax the information reporting requirements by accepting a simplified Classification System. The new system tracks 233 items instead of 1,500 items in the Harmonized System. Importers and exporters were encouraged to adopt the Harmonized System classification codes in invoices, bills of lading, and airway bills, but few complied. New government leadership adopted a political view to data management, and ceased to enforce the scheduled publication of economic data. At times, the administration allowed directors of divisions to ignore information requests, in contrary to a local Sunshine Law ensuring open access to public information. Under a culture where loyalty was valued over performance, data-driven decision making by the division heads was a rare practice.
Enrichment/Population of Customized CPR (Computer-Based Patient Record) Ontology from Free-Text Reports for CSI (Computer Semantic Interoperability)

Developing an E-Learning Platform: A Reflective Practitioner Perspective
Maria Potes Barbas (2016). *Handbook of Research on Innovations in Information Retrieval, Analysis, and Management* (pp. 288-306). [www.igi-global.com/chapter/developing-an-e-learning-platform/137482?camid=4v1a](www.igi-global.com/chapter/developing-an-e-learning-platform/137482?camid=4v1a)