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GMIS

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THE CRITICAL ROLE OF INFORMATION SERVICES ©

[© BSCA, Inc.] Jack D. Harris, Ph.D., Barry Strock, and Robert H. Jacobstein

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The evolution from Data Processing to Information Services has not decreased the demands on Directors and technology providers. IS must be a shepherd for user needs and resources, a watchdog for purchasing methods, costs and legal compliance, a clearinghouse for information, a guide to technology futures, a mentor for training, and a visionary of best practice of automated systems. **IS must be a hub that links the spokes of the wheel that comprise other government offices, within and among governments**. IS often must manage disparate systems across its own municipal landscape, interface and exchange data with other governments and even private entities, and manage the vendors who service various government offices and departments. IS must be both responsible and accountable for all information technology plans and decisions.

These evolving changes are bordering on revolution of the new ground-rules associated with technology and the role of government. Four examples may best explain the new phenomenon:

- One government that had a half billion dollar annual budget was processing purchase orders through three clerks using electric typewriters. Management wanted to procure the most sophisticated technology to propel the government into the twenty-first century. Before this government embarks upon re-engineering their technology, they must re-engineer their operations and their mission statements. IS Managers will either have to become business consultants or they will have to become aware to hire outside business consultants.

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- The collision of technology with bureaucracy was evident in a city that required every purchase order to have an additional piece of paper sent to every vendor, in which the vendor had to attest in writing that its invoice was an honest and valid document. The city opted to use modern business computer systems. However, the real processing of purchase orders and subsequent payments to vendors were processed by clerks who manually controlled the flow of information and its concomitant approvals and unnecessary paperwork. IS, though staff vocational specialists we call "business analysts" will have to identify the re-engineering problems and become catalysts to upper management to solve problems.

- Conflict erupted in a city owned water utility that was using the electric utility meter readers to read their meters. The water utility now wanted to become more cost-conscience and more business-oriented, but the cooperative electric utility was arguing that it was more important that their meter readers were able to help their elder customers take out the garbage or for them to sit with Ms. Jones and have cookies and coffee with the lonely customer. When the two entities attempted to procure a single information system to process meter reads, billings, and collections, the conflicting management perspectives made agreement impossible.

  In this example the IS Manager could have become a mediator and guide through the maze of business alternatives. In this case, the IS Manager was of the more antiquated *"legacy" or "data processing"* model. It is the IS Manager who must bring a technology to bear that is sufficiently *people*, *process*, and *end-user oriented*, and who can see the big picture. In this case the IS Manager might have brokered a management meeting-of-the-minds.

With hindsight, it is probable that no one could have brokered these two institutions into a common set of values. Rural Cooperative Electric utilities grew up in the rural areas that no one wanted to serve a electric utility providers and they were truly a non-governmental cooperative family-type of institution. In contrast, the water utility board of directors believed they should operate more on the business model of providing the best service at the lowest price. The cooperative board of directors believed that the personal touch of helping older clients with their trash, or keeping a customer company for a cup of coffee, was sincerely part of the service they were providing. Although the business-model of making more money with less people may sound good, there is a very nice feeling with the more family-type model that many rural electrics provide. In this case, the issue of choice of technology was couched in conflicting life-style and institutional values.

- In a County, users experienced increasing dissatisfaction with what they perceived to be obsolete and constraining software applications. As a result, individual County Offices began to purchase their own software systems. Offices hired their own information technology specialists -- a phenomenon that spawned uncoordinated and unmanageable services. IS staff rarely met for project review or regular planning meetings, and had fallen into a reactive mode, so that it could not get “on top” of all of the issues. This resulted in an enormous amount of redundant activity. For example, while there had been a deliberate attempt to replace terminals with microcomputers, IS was not the initiator, nor was there an official decision point. There was little attention to negotiating aggressive pricing for systems, nor demanding that the systems be set up by the vendor to County specifications. Without an aggressive support methodology, there was no way for the user to be able to count on timely support. As a result, offices outsourced support, and did not want to use IS as they perceived that IS would mire them in delays. Users reported that it was too difficult to deal with IS to make a purchase, get the units installed, get the systems networked and get the system up and running and functional.

The proper role of IS, at the beginning if the 21st century, is to be an **information technology agent**. The modern IS department, through its technical and vocational specialists, does its research on information technology and trends, looks for cost/benefits that not only affect the hard costs of information technology but also the client/user's productivity and experience of technology. In this regard, IS can be a clearinghouse coordinator of information technology planning and development, acquisition, and on-going support. In this role, it can help government to be ***customer service*** and ***customer driven.*** However, this does NOT mean that the department is end-user managed. Under such circumstances, there would never be enough IS staff to satisfy the voracious appetites of department heads, and ironically, the level of satisfaction would be quite low.

Innovation will only come when the administration directs its information system's experts to create an integrated management and information system that is compliant with fundamental and contemporary information architecture and information processing principles. Today's explosion of information technology advancements and changes makes determining the proper direction for the information processing function more challenging than ever. The mission must be to secure a reputation of dependable and effective service and to provide greater function and enhanced productivity tools. These challenges must be met with financial constraints more severe than ever.

IS must manage an acquisition process that ensures a baseline holistic and integrated system, while supporting and pursuing a rational migration path from existing systems. Only if management insists on an integrated and holistic system will it be possible to manage the information systems more efficiently and effectively. The result will be an IS that is more cost-effective, efficient, and a productive service office. Information systems must be the backbone to permitting a progressive government to be more cost-effective, more sensitive to serving the information needs of all of the employees and its citizens.

Standards need to be set, the vision of IS amplified and made consistent, a clear and unambiguous goals and deadlines set. IS needs to be tracking total capital costs and operational costs, and to be run like a business. IS needs to aggressively promote training, both for IS staff and for end users. IS must be perceived as an asset, not just a necessary expense, and is a key office in efforts to contain costs, streamline operations, enhance the quality and level of services, and promote accountability.

The change in the professional role from data processing to MIS is opening the door for greater opportunities within the data processing field. In our experience, the IS Manager must have more expansive abilities as a manager with business savvy than as a technologist. We have found that candidates from the private sector would have found the adjustment to the public sector a challenge with its different values and modes of service, while public sector candidates often did not have the business acumen or vast technical experience across platforms demonstrated by the private sector candidates.