

ORGANIZATIONAL NEEDS AND MANAGEMENT ISSUES FOR ESTABLISHMENT SURVEY PROGRAMS

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Introduction

Management of private corporations has taken on a new direction in the eighties. The National Performance Review has recommended that federal government organizations follow their lead. Implementation of these recommendations will present many challenges for federal government organizations. The federal deficit and budgetary constraints will force agencies to investigate all potential cost efficiencies for the conduct of their programs. Rapid changes in computer technology will continue to challenge information organizations to stay abreast. In particular, this environment will require that statistical organizations and their program managers examine how they conduct their business, manage their resources, and organize their employees.

New organization structures may be required to implement new procedures in establishment surveys, utilize new technology, capitalize on customer focused service, and direct teams in the management of projects. Knowledge of business management will be as important a component of preparation for establishment program managers as knowledge of economic concepts, survey procedures, statistics, and automation of information technology. Managers will need to have the courage and conviction to make breaks with past ways of structuring, managing, and directing their organizations. This paper will discuss the challenges and issues awaiting organization and management of establishment survey and information programs.

What Factors are affecting how Establishment Survey Programs are Conducted?

The new direction in management of corporations, businesses, and organizations has occurred also for organizations conducting establishment surveys. Organizations have established a shared vision, explicitly stated mission, strategic plan, and business strategy. Management philosophies such as total quality management and meeting customer

expectations have become an integral part of the organizational focus. Constraints such as budgets, costs, and human resources have shaped the plans and strategies. The feasibility of technological implementation has influenced the plans.

The statement of organizational mission in today's climate is being directed to the business product and the way in which it is provided. This entails a reexamination of the business of the organization. In general, survey organizations are now focusing more on their information product than on their means to obtain the product (surveys) and on the way in which they provide that product to their customer base. The process also requires an examination of the relationship of suppliers to the success of the process. In particular, survey respondents become a critical supplier whose expectations and needs must be met.

The information age has affected how all organizations conduct their business. Continuing development and implementation of new computer and communication procedures such as laptop computers, networks, portable and pen based computers, geographic information systems e-mail, Internet, voice mail, touch-tone data entry, voice recognition, video and telecommunications, facsimile, scanning of bar codes and forms, etc. has forced many types of businesses to adopt new technologies to stay competitive. The information superhighway has had an impact on the information industry.

The timeliness with which the results of network polls are provided has raised the expectation that establishment data can be provided as quickly. Timeliness in providing survey data is often achieved through implementation of information technology. This implementation generally requires investment in technologies often before achieving any cost reduction in other resource usage. In fact, it is often necessary to simultaneously use both old and new technologies during testing and phasing in.

For most survey organizations information technology has strategic value in that it is both necessary for maintaining existing operations and for gaining a competitive edge. The current business

¹The opinions and conclusions expressed herein are solely those of the author and should not be construed as representing the opinions or policy of any agency of the United States.

environment has forced organizations to develop and follow business strategies to optimize their use of technologies and their competitive edge in the market place. Michael Porter² has described three possible strategies for an organization whose use of information technology is strategic: 1) be a low cost producer, 2) differentiate your products or services from those of your competition, and 3) identify and cover a market niche. Identifying a business strategy can help an organization to optimize its use of resources.

Once the strategic value of information technology for survey organizations is recognized, many questions arise on how such an organization gains competitive advantage. What technology provides the most potential advantage? What level of resources should be committed to new system development? What are the resource development and maintenance trade-offs?

Porter proposes a concept he calls the "value chain"³ to assist in analyzing the role of information technology in corporate strategy. The chain is composed of all the economic, technological, and administrative activities that an organization performs that add value and incur cost. Primary activities are those directly involved in the creation of the product. For survey organizations these include data collection, preparation, analysis, delivery, product marketing, and services. Support activities are those that provide an infrastructure in which the primary activities occur, including such activities as corporate infrastructure, human resource management, technology development and support, and statistical support for survey organizations. The linkages are the place where the cost or effectiveness of one activity is influenced by another. Managing the linkages between value activities is often the most critical point in the value chain as it may require trade-offs between resources.

The other presenters on our panel have focused on some of the specific issues that establishment survey organizations must address in order to foster excellence in their products. Hidiriglou has focused on the need to keep abreast of new developments in statistical theory and making appropriate applications to surveys. This is a fertile area as much less has been done to apply sound statistical and survey methodology to establishment surveys than to demographic surveys. Carlson has focused on conceptual issues and complexities in the measurement of many economic indicators. Carlson has also discussed the need for economists to continually learn about technological advances in industries currently surveyed as well as the need to gain new expertise in areas where economic statistics are sought such as in services and service products (Census Bureau), customer service information

collection (throughout the private and public sector), and rural communities (Department of Agriculture).

Establishment survey organizations need executives who are informed about new directions in survey methodology, economic concepts, and uses of technology in the information sector to lead their organizations in meeting the information needs of our society. They need to understand the emerging issues and the relevant business factors affecting those issues. They also need to adapt to new ways of managing their organizations. Often, leaders and managers need to learn more about different management approaches through executive leadership training.

Additionally, the demographics of today's workforce are having an impact on all organizations. This population has a different work ethic than their parents. The multiethnic characteristics of the population will bring a diversity into organizational staffing. It will change work relationships and effect the ways in which an organization functions. Changing educational backgrounds in employees will affect skill levels and abilities to manage and complete tasks.

How is Management of Resources Changing for Establishment Survey Organizations?

The National Performance Review has recommended that federal government organizations follow the lead of private corporations⁴. The charge is to "invent a government that puts people first by cutting unnecessary spending, serving its customers, empowering its employees, helping communities solve their own problems, and fostering excellence." To do this, the federal government will: "create a clear sense of mission; steer more, row less; delegate authority and responsibility; replace regulations with incentives; develop budgets based on outcomes; inject competition into everything we do; search for market, not administrative, solutions; and measure our success by customer satisfaction." The focus is on serving the public first, rather than focusing on various constituents and stakeholders as in the past. Agency management are told to provide direction and leadership, to empower and trust their staff, and to determine agency effectiveness by customer satisfaction.

The prognosis for government budgets overall is not good as there are increasing pressures to reduce the federal deficit. Cutting unnecessary spending will be difficult for most federal government survey organizations. Government establishment survey budgets in the 80's and 90's have either been held constant or have declined while costs increased. Yet needs for new data items and data products have escalated. Efficiencies needed in staff and resource

savings will require re-engineering of survey processes and consolidation of redundant or alternative operations. Better corporate planning, including prioritization of data needs and reallocation of program funds will be required to maintain core programs and serve emerging data needs. Similar budgetary constraints face private sector organizations.

Implementation of information technology to establishment surveys has the potential for providing cost efficiencies as clerical processes are automated and telecommunications replace personal enumeration. However, often technology offers the possibility of doing tasks previously not done, thus, transferring resources to new tasks rather than eliminating resources for outdated functions. As the cost of information technologies that are applicable to surveys reaches the point where cost efficiencies occur, establishment survey managers need to examine all components of the survey process for cost-effectiveness.

As a specific example, the National Agricultural Statistics Service is developing the survey application and technology to introduce interactive editing of its major quarterly agricultural survey into its data processing system. Approximately 75 percent of the survey data will be collected by CATI; the remaining data will be key entered into the CATI instrument. Ultimately, all data will be collected by centralized CATI, CAPI, or CATI. This technological implementation will eliminate the extensive clerical edit and the mainframe edit, freeing up staff resources during the busy survey processing. Most likely these resources will be redirected towards resolving critical data issues, rather than be eliminated.

The private sector has led organizations to focus on their customers and what they expect from the products and services that the organization provides. As organizations have implemented this focus, they have found that being more customer focused has required that employees know more about their service or product. They have found that they functioned more effectively by reducing the number of separate steps in processes (tasks). Survey organizations have found that the focus on customer service and the increase in automation of the survey process has forced them to combine responsibilities for different aspects of the process in units.

Providing quality service and products requires organizations to also work with their suppliers. Good relationships with survey respondents (data suppliers) resulting in good quality data are critical for a survey organization to provide a quality data product. The respondent universe for establishment surveys often has different needs than respondents to demographic surveys. It often becomes desirable to provide different

reporting technologies for different sizes or types of establishments to meet their reporting needs. Additionally, respondent incentives or automated procedures may be useful in obtaining cooperation or giving the supplier an added value or reason to voluntarily report. This approach may provide better payoff than obtaining mandatory reporting requirements.

What Structure best facilitates the Needs of Establishment Survey Organizations?

The structure of an organization facilitates the assignment of tasks and the communication between people in the organization, establishing key contact points. It enables an organization to establish direction for programs and projects. It also provides responsibility for administrative, personnel, and budgetary coordination. The structure of an establishment survey organization should maximize the communication across survey functions and linked processes, facilitate the implementation of new procedures, enable appropriate utilization of technology, capitalize on customer focused service, enhance the value chain, and reduce administrative and management inefficiencies.

Government establishment survey organizations have historically been structured hierarchically, like most other government organizations. Hierarchical structures operate on the theory that each layer adds value and a different dimension to the function, product, or service. Some of that value should come from different time frames from which the individual staff, supervisor, manager, or executive operate. However, government organizations are discovering that hierarchical structures may not effectively empower employees nor provide customer oriented service. In customer focused organizations, staff are given more authority to do their job (and others' job).

Customer focused organizations often operate more effectively with cross-functional teams than with many groups with distinct tasks. This leads to individuals doing more different tasks. Less time and resources may then be required to check on specific aspects of each job. This may lead to reductions in both staff and supervisors. Cross-functional teams have been used within many survey organizations to ensure that survey processes appropriately implement the survey design. The customer focus may result in some combining of related functions across team members, resulting in teams with fewer members.

Many survey organizations are organized by function -- either within a subject matter area (e.g. construction, business, agriculture for establishment

survey organizations) or cutting across several areas, with the appropriate hierarchy. The functional organization facilitates the development of appropriate expertise levels within staffs rather than relying on generalists. Often crosscutting teams are used with a functional structure to facilitate the communication and coordination required in the survey process. Because establishment survey programs are not as contained as demographic programs, the communication needs may cut across more units in an organization. Such crosscutting teams may facilitate organizational communication that otherwise goes up and down through a hierarchical structure.

Some organizations have effectively used a matrix structure with both specialized areas and survey functions and crosscutting teams. This approach requires establishing a reporting authority for both structures. It also requires a feedback mechanism for incorporating information on work performance from several sources into performance and rating systems. A matrix structure does provide a structural alternative to several levels of management and may enable employees, if properly empowered, to provide more responsive service.

As the structure often facilitates how an organization manages, I'd like to discuss three examples of recent structural changes in establishment survey organizations -- the Economic Fields of the U.S. Bureau of the Census, Statistics Netherlands, and the Data Collection Branch at the National Agricultural Statistics Service. These organizations changed their structure to enable their organization to more effectively address issues presented in this paper.

The restructure of the economic area at the Census Bureau was developed to facilitate a re-engineering of the core business processes; to improve corporate planning and coordination; to establish a single point of contact for economic initiatives; to encourage the development of new data products and respond proactively to emerging data needs; and to consolidate operations, reduce redundancy, and improve efficiency. The Economic Planning and Coordination Division became the focus of survey procedures that overlap economic areas. Staff in this division was structured into five areas: classification operations, register, collection processes, post-collection processes, and systems and methodology. An Economic Statistical Methods and Programming Division provides computer and applied statistical research support to all economic divisions. The other divisions in the economic area have expertise in particular economic fields: manufacturing and construction, agriculture and finance, governments, business and services, and foreign trade.

Statistics Netherlands decentralized its responsibilities associated with integral statistical processes by establishing fewer functional groups. It introduced results management with fewer rules and procedures. It is placing an emphasis on information suppliers (respondents) and information users by providing subject matter coherence with the particular client system. It has established wider spans of control. It uses sections and teams within divisions to assign responsibility for individual surveys.

The Data Collection Branch at the National Agricultural Statistics Service was recently restructured to eliminate three sections of 7 to 10 people, each with a supervisor. The branch of 28 people now has a chief and a deputy who lead and direct the staff whose assignments are in forms and questionnaire development, question design, computer assisted interviewing and editing, survey training, and survey methodology. Work is done in teams where group effort is required. Several points of contact for expertise in specific areas have been established to facilitate information requests from other units. The structure has cut the number of layers and the number of supervisors in half. Staff work load is more flexible because work assignments can more easily be distributed to staff within the branch.

Conclusion

Establishment survey organizations in both the public and private sectors are facing many challenges. Many of these are common with other organizations, particularly those providing various information products. Leaders in these organizations can gain much through sharing of ideas and approaches across organizations with similar products or processes. Within an organization, leaders may find that forming teams will facilitate breakthroughs to create successful and responsive organizations. As establishment survey organization leaders with a shared vision join hands to more fully utilize their varied expertise in survey procedures, economic concepts and data, statistics, automation and technology, and data analysis they will find the strength to make breaks with the past. These teams can build the synergism needed to change structures, management styles, and direction and effect a customer focused organization. They will lead us into the future.

Footnotes

2.Porter, Michael E. and Victor E. Millar, "How Information Gives You Competitive Advantage," Harvard Business Review, 63, July-August 1985, 149-160.

3.Porter, Michael E., Competitive Advantage, Free Press, New York, 1985.

4.Gore, Al, Creating a Government that Works Better and Costs Less, Penguin Books, New York, 1993.