

MAIN ARTICLES

INTRODUCING E-GOVERNMENT IN PUBLIC ADMINISTRATION IN GHANA

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Abstract

This paper discusses the development of e-government or the introduction of computer-based information systems into public administration in a developing country like Ghana.

The writer argues that the most significant part of the effort to develop and utilize the computer-based information systems or e-government is not the acquisition of the hardware and software tools, but rather the management of the resultant socio-organizational changes, a process which necessarily requires radical changes. These amount to transformation, most often beyond the abilities of only information systems specialists to plan and control. In certain instances, these are even beyond the capacity of the public administration institutions themselves.

Introduction

At the UN 2002 General Assembly, Kofi Annan, the then UN Secretary General, said, "Over the last few years, a wide consensus has emerged on the potential of information and communication technology (ICT) to promote economic growth, combat poverty, and facilitate the integration of developing countries into the global economy. Seizing the opportunities of the digital revolution is one of the most pressing challenges we face." His speech goes to confirm the widely held belief that the effective use of IT services in government administration can greatly enhance existing efficiencies, lower communication costs, and increase transparency in the functioning of various departments in developing countries, such as Ghana.

According to Harindranath (1984) while the use of IT has assumed increasing significance, the operational effectiveness in many public sector organizations has been far below initial expectations, if not disappointing. This may be due to the fact that the deployment and utilization of IT present entirely new sets of organizational and social challenges yet to be recognized by decision-makers, public sector professionals and citizens.

Information Systems in Organisations

The lack of current and relevant information or data continue to be the frequent complaint expressed by planners and the citizens alike in most developing countries. Their information systems are still ineffective and inadequate in providing the needed information support for public sector management. Hurtubise (1984) describes an information system as a system that provides specific information support to the decision making process at each level of an organization. Therefore, the role of an information system is to identify, assemble, store, process, and deliver information relevant to an organisation, in such a way that the information is accessible and useful to those who wish to use it. Information is not an end in itself, but a means to better decisions in policy design, planning, management, monitoring and evaluation. The ultimate objective of an information system therefore, is not to "gain" information but to "improve" action.

Computer Based Information Systems

Computerization comprises the acquisition of hardware, software, and telecommunications; the development of technical skills and an infrastructure for technical services; and the development of an organisational capacity to manage projects for the application of IT in the tasks of the organisation. A computer-based information system is always complemented by manual procedures as well as informal ways of

communication and action developed by the personnel.

Over the years, computers have been applied in the public sector in Ghana in such areas as the population census, trade statistics, industrial census, motor vehicle registration, revenue collection, expenditure monitoring, payroll and accounting, office automation, financial applications, market surveys, research applications relating to child mortality, education statistics, forecasting and modeling, customs and excise services, etc. However, most of these applications have involved 'automation' of manual rule-based procedures usually referred to as transaction processing systems.

Over the years, Ghana has committed and continues to commit sizeable amounts of economic resources to technology and communication. This is apparent in the massive deployment of microcomputers, computer-based applications, and internet connectivity in the various sectors of the public sector over the years. Examples that readily come to mind, include the GCNet by the Custom and Excise, Integrated Payroll and Personnel Database at the Controller and Accountant General's Department, Medium Term Expenditure Framework, Registrar General Computerization Project, Parliamentary Service, Judiciary Service, the Court Computerization Project, etc..

Attributes of Public Administration Organisations

According to models that relate to organizations in developed economies, public administration institutions in developing countries often appear only as inefficient or irrational. Without a thorough understanding of their functioning, dynamics and the causes of their inefficiencies, any modernization attempt at introducing computer-based information systems becomes formidable and complex. Designing and implementing "technically sound" systems involve not only technical expertise but also in-depth understanding of political, sociocultural, and administrative factors.

The public administration in Ghana, like in other developing countries, after independence took over the significant but highly political role of

planning and implementation of the development process. These institutions that were originally designed to serve colonial administrative purposes have had to transform to undertake many diverse tasks such as the pursuit of socio-economic development. While public sector planning involves some elements of rational decision making, it is heavily shaped by political influences. It is therefore not surprising that public administration in these countries is highly political. One of the reasons why introducing administrative rationality by means of computer-based information systems in public administration may be unrealistic is the fact that despite the "seemingly" extensive formalization of administrative procedures and regulations, they are often in practice bypassed or circumvented. There is an urge to make things appear as they presumably ought to be rather than what they really are.

There is also the shortage of trained administrators with sound management capacity, developmental skills, and technical competence who understand the technology and its implication and who have the authority and willingness to see these changes through. In many instances, status is based on ascription rather than achievement; recruitment and promotion are based according to loyalty rather than merit.

In theory, the bureaucracy should have a strictly instrumental role, uninvolved in politics; however, civil and public servants have considerable prestige and play highly political roles. Hence, the common phrase: "this position is highly political."

Where political behaviour takes place under the cover of a formal bureaucracy or where gross dysfunctions, like corruption, exist, the necessary investigation of organizational affairs to determine the needs for change is a task beyond the capacity of most systems analysts. Information systems are arguably one of the key areas for political action in contemporary public organizations. Computer-based information systems development will be attractive to some organizational participants because they provide leverage such as increasing control, speed, and discretion over work, or in increasing their bargaining capabilities. Fear of losing control or bargaining leverage will lead

some participants to oppose particular new arrangements, and to propose alternatives that better serve their interests.

Computer-based information systems are often considered as means for increasing the productivity by the application of science. The discipline of information systems and administrative rationality share the same philosophical and scientific roots. It is common in designing information systems to incorporate techniques for problem solving, controlling, optimizing, predicting, and planning which originated in Operational Research, Management Science, and Formal logic.

However, the basic aspects of the information systems development process are incompatible with the prevailing culture of public administration in developing countries like Ghana. The design and implementation of a new information system such as the computerization of the court system will involve both the computer-based component and the necessary socio-organizational changes. This will require the ability to search for solutions to perceived problems and steer change in the organization. This ability is too limited or scarce in our public administration institutions in Ghana. As noted by Auxila and Rohde (1988), in implementing a newly designed computerized information system in Haiti: "Resistance to any change in the information system was predictable and high. For some employees, there was simply the fear that the computer would take their jobs, or the inherent laziness at learning new tasks. For others, there was the clear desire to retain the existing system as the lack of knowledge and readily retrievable data was in itself a power base for various people in the Ministry bureaucracy".

Effective use of information technology in public administration institutions require self reliant problem-solving capability. If the administrators do not appreciate the need for taking decisions by applying scientific models and techniques on collected data, and if they do not attach real value to the use of the scientific techniques incorporated in a new information system, most probably, the computer-based information system will most likely be misused.

It is obvious that information technology can support the activities of public administration, especially where it involves massive transaction processing and analyzing large amounts of data quickly because manual systems are, by their nature, paper driven or dependent. However, too often, IT has been introduced rather arbitrarily and even hastily in a top-down manner that does not facilitate a genuine and lasting acceptance of technological change. Policy makers have tended to trivialize or even ignore the sociological issues of context and culture as well as the appropriateness of IT for a given situation. They have often assumed that the mere presence of IT will bring about the desired changes in organizational climate, culture work ethics, environment, and productivity.

The main benefits of introducing computer-based information systems are not expected to accrue from the efficiency of technology only but from re-organizing effectively work and decision processes with the support of information technology. Therefore, the effectiveness of a computer-based information system can only be considered within its broader organizational context. In general, information technology offers a powerful means for increasing further the effectiveness of organizations which already have effective work practices and management. However, as Strassman notes (19), "A bad strategic situation cannot be corrected by automating it." Technology enthusiasts need to perceive IT as a useful tool for specific problems and not as a universal remedy for all the ills that plague our public sector institutions.

Apart from the usual documented problems of the lack of computer skills, lack of technical infrastructure, and inadequate maintenance support, in the development of computer-based information systems, managing the attendant organisational change seems to be the most problematic.

The trial and error methods of implementation that characterize most IT applications in developing nations can only succeed in the wastage of scarce

resource. IT requires all the supplementary investments that go with its introduction: a reliable communications infrastructure, human resources development, including training in IT and the relevant organizational mechanisms or coordinate IT activities in the country. Developing computer-based information systems in public administrations, according to Avgerou is not merely a technical task but an intervention which introduces many socio-organizational changes. Therefore, the resulting effects depend on the social realities which sustain the particular public administration system as well as the potential for information technology.

Information systems are implicated in major changes in work, work roles, and relationships between different groups within organizations. Divergent interests and perspectives are normally present. Information technology experts are convinced that computerized information systems will liberate the workers from "the drudgery of paper work", but other influential groups would not necessarily share this goal of maximizing equity, efficiency, or cost effectiveness. Managers who often base their decisions on power relations and value judgements, rather than on rational information and improved information systems, may be threatened by modern information systems. Others will show little interest in information systems reform simply because it is not part of their "professional culture." The lack of information culture is probably the biggest constraint to any information system development and utilization in the public sector.

Where computerization is perceived as being imposed from the higher echelons of power, with no regard whatsoever for its implications for the organizational context, the overt and covert resistance that emerge can only forecast certain failure for the project.

Computerisation of land use, that is, the effective utilization of a Geographical Information System (GIS) to effectively plan and manage land use in Ghana, will necessarily involve stronger inter-sectoral linkages. This will cover would institutions such as the Ministry of Land, Forestry and Mines, Town and Country Planning, Lands Department,

Survey Department, and Municipal and District Assemblies; however, the organizational relation, between the various sectors are very weak. The consequences of the development of independent GIS systems within the various governmental agencies will lead to duplications, high costs, and inefficiencies. Changes in land use cannot be centrally updated and this will lead to redundant and out-dated information within the various agencies. Computer systems will be under-utilized, misused, or stay idle most of the time.

Conclusion

If e-government or computer-based information systems projects are to contribute to the elimination of dysfunctional characteristics of public administration, then they should be part of a long term programme of far-reaching reforms. In order to fulfill objectives of organizational effectiveness, it has been recognized that the design of new technology systems has to be accompanied by extensive re-organisation. In the case of public administration in a country like Ghana, the socio-organizational changes required for the effective use of information technology will have to be radical. Steps to be taken would include making changes in the legal framework governing the institutions with the aim of simplifying inter and intra-institutional bureaucracy to make decision making less complicated.

There will be the need for an extensive education programme to legitimise the new rationality and produce the skills required to introduce and support the computerization programme. It is important that employees familiarise themselves with the new organizational behaviour that provides incentives for increased productivity.

This may necessitate changes in key positions, so that their holders become facilitators rather than barriers to the desirable reforms. Such deep administrative changes are mostly political. Such processes are beyond the capacity of systems analysts or other information systems experts to steer.

Where the information systems project does not take place as part of a total transformation programme, the information systems project may

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Abstract

This is a two-part article on critical evaluation of the role of business schools (B-Schools) in training and developing competent and effective managers. There are theoretical and applied aspects of the issues involved. This first part of the article deals with the conceptual issues on the role of B-schools in the education and development of efficient managers and management skills. The second part would critically review Ghana's experience of management skills development by the B-schools. It would propose a model for consideration for our young B-schools in Ghana.

This first part surveys the literature on the conceptual issues of efficient management skills and the role of the B-schools. It lays the foundation for the subsequent critical evaluation of Ghana's business education and training of our managers. The first part details the worldwide utter dissatisfaction with the products of the B-schools. It reviews the reactions, opinions and research findings of management gurus, employers, CEOs, B-schools, graduates, practitioners of management, and accreditation institutions of B-schools with the products of the B-schools. It critically analyses what is meant by "effective management". In the end, it reviews a six-step programme for management skills development and training in general.

The basic conclusion of this conceptual overview article is summarised in Mintzberg's insightful observation that: "Management schools will only begin the serious training of management when skill training in the business schools takes place next to cognitive learning."

Part two will deal with the need for collaboration between the educational institutions, students, and employers in providing relevant management education by our B-schools. The role of critical thinking, team work, questioning, case studies,

be cancelled through frustration or lack of support and resources. Alternatively, the new system may be assimilated into the institution's established ways of functioning. The operations of the new information system may well continue to be driven by political rather than rational behaviour. ■

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