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# Information **Technology and Organizational** Change in the **Public Sector**

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The adoption of Information and Communication Technology (ICT) to organize, integrate, coordinate and manage various activities has become the catalyst for organizational change. The impact of these changes in the public sector have been to change the type of work being performed, demand new levels of productivity and efficiency from those performing the work, and call for a fundamental restructuring of the public sector to reflect the value systems of an information age. The literature on the organizational impacts of Information and Communication Technology have pointed to mixed findings about the success of information technology enabled organizational change, suggesting that the success of such change efforts depends on the combination of technical and social influences. Despite any potential for organizational change in the private sector, information technologies have not been associated with organizational transformation in the public sector. It is suggested that for the public sector to begin reaping the benefits of Information and Communication Technology, public sector managers are going to need to become change agents and manage the change process by managing the technology.

As with most industrial nations, the United States is witnessing a shift from an industrial-based economy to an information-based economy in which information is intrinsic to organizational functioning. Driven by the need to acquire, manipulate and distribute information, the last two decades have seen an exponential growth in Information and Communication Technology investments by both public and private institutions. Often described as a characteristic of the 'information revolution', this increasing rate of investment in technology has also been fueled by both the decreasing costs and increasing capabilities of technological hardware and software. Given all of these events, there is little doubt that our society has become increasingly dependent on Information and Communication Technology.

The adoption of Information and Communication Technology to organize, integrate, coordinate and manage various activities has also been a catalyst for organizational change. For example, new business processes such as telecommuting and teleconferencing have emerged as a result of advances in Information and Communication Technology. Changes such as these have subsequently impacted individual and organizational behaviors, the outcomes of which are now being scrutinized. The private sector has been trying to manage information technology related changes since the early days of the information revolution. This is evident by the abundance of literature focusing on the subject of information technology and organizational change in private corporations. Unfortunately, not as much attention has been given to managing change in public sector organizations, even though they too have been experiencing organizational stresses due to the adoption of Information and Communication Technology.

In recent years, advances in information technologies such as the Internet and the World Wide Web have led to a growing interest within the public sector toward developing a new and innovative model of service delivery based on information technology. Much of the focus, however, has resided in just the technical merits of using information technologies in creating new mechanisms for service delivery. If cyberspace is going to provide the infrastructure for a public service delivery model of the future, it would behoove those interested in public management to not only treat Information and Communication Technology as the catalyst that is driving change, but to also treat it as the solution base from which to address the public sector managerial challenges of operating in an increasingly electronic environment. This chapter is intended to help public sector managers, and others interested in public management to broaden their understanding of the relationships between information technology and organizational change. In doing so, it is hoped that they will be better prepared to learn how to use the tools associated with Information and Communication Technology not only to initiate organizational change, but to manage the change process and the technology itself.

#### The Information Revolution

A century ago, the United States was beginning to shift from an economy based on agriculture, forestry, and fishing, to an economy based on the transformation of raw materials into manufacturing goods. Today, we are undergoing another major transformation — one that is taking us from the industrially-based economy of the 20th century to a service based economy built around the creation, manipulation and distribution of information. Integral to this 'information revolution' has been the

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