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KM and Innovation in Government

> *When [public] organizations innovate, they do not simply process information, from the outside in, in order to solve existing problems and adapt to a changing environment. They actually create new knowledge and information, from the inside out, in order to redefine both problems and solutions and, in the process, to re-create their environment.*
> (Nonaka and Takeuchi 1995, 47)

> *The essence of the IT revolution is not in the IT itself; rather, it is in the substantial changes of traditional boundaries in tasks and activities.*
> (Kusunoki 2004, 310)

Innovation is the process of creating something different; it occurs with the conversion of existing knowledge and ideas into a new benefit, such as new or improved processes or services. A related tern is *invention*, which implies something entirely new, while innovation can also mean new uses for old or existing tools, materials, and/or processes. A primary goal of knowledge management in the public sector is to induce innovation and invention in government agencies.

The innovation process in the public sector includes the search for and application of new technologies within organizations, new and improved ways of delivering government services, and new or untried management processes and systems (Edvinsson et al. 2004). This chapter examines a variety of different public-service organizations in order to identify exemplary models of innovation management.

Chapter Objectives

Objectives for this chapter are both general and specific. General objectives refer to information about the constructs and influencers of innovation and

creativity in organizations. Specific objectives relate to the illustrative public-sector cases included. The cases describe the experiences of government administrators in introducing innovative approaches and new technology as tools to improve managing and decision making. The key objectives for this chapter include the following:

- To help readers develop an understanding of the scope and processes of innovation in organizations—and particularly in public-sector departments, agencies, and units—by showing how information, knowledge, and innovation work together to produce learning organizations in which innovation and creativity are the norm, rather than the exception.
- To help readers learn how to identify the issues and problems associated with managing innovation and creativity in public organizations.
- To help readers understand how innovation in procedures, processes, and delivery systems is introduced and managed in government.
- To help readers begin to think about how they might enhance innovative thinking and actions in their organizations.
- To help readers, by reading about how other government entities have introduced innovative ways of accomplishing their mission, to see that innovation can take place in every agency, regardless of what it is, what it does, or who it serves.

Innovation in Organizations

Until the late 1980s and early 1990s, most of the emphasis on managing innovation in organizations focused on changing and improving processes in the manufacturing sector. Manufacturers produce tangible products—"things" that can be touched, carried, consumed, or held. The development, manufacture, and distribution of manufactured goods normally follow a readily definable process. The steps in this process—often referred to as either the *supply chain* or the *value chain*—help make the manufacturing process open to innovation at every link in the chain.

As a group, manufacturers are able to identify and quantify the payoffs they can expect from a specific innovation adoption. Manufacturers of technology products particularly recognize the absolute need for maintaining a healthy flow of new products.

These private-sector managers often use cost-benefit analysis to weigh the expected payoffs against the projected cost of the innovation over its lifetime. They then make their decisions to innovate on the basis of the expected value of the benefit to accrue from that innovation. Peter Senge explained why innovation is more likely to take place in the private sector:

> Gradually, I came to realize why business is the locus of innovation in an open society. Despite whatever hold past thinking may have on the business mind, business has a freedom to experiment missing in the public sector and, often, in nonprofit organizations. It also has a clear "bottom line," so that experiments can be evaluated, at least in principle, by objective criteria. (Senge 1990, 15)

Fewer opportunities for implementing innovation in products or processes have surfaced in government and in the service sector in general. Governments provide intangible "products" and services that are typically produced as they are provided to citizens/consumers; this restricts the number of available opportunities for innovation in the delivery chain. As a result, much of the innovation in government has focused on introducing relatively minor, low-cost, and low-risk adjustments or gradual upgrades to existing services or processes (Altshuler and Behn 1997). Far less attention has been devoted to planning and implementing innovation in processes on the more far-reaching, jurisdiction-wide, strategic level. Holley, Dufner, and Reed (2002), for example, found that only two of the fifty states—Utah and Washington—were engaging in statewide need evaluation for strategic information systems planning.

With the advent of the "reinventing government" program under President Clinton and Vice President Gore, innovation was accelerated in government, albeit still at a somewhat slower pace than in industry. Public services are not fabricated from raw materials or parts; they are, as the name implies, *services* rather than products. Government services are intangible, and are typically not "created" until provided. And, although citizens could and did complain when the services failed to meet their expectations, there was no one to listen to and act upon those complaints. Thus, there was little internal need seen for innovation in delivery of the services because there was no external force—such as the market for businesses—driving change.

Until the global government reform movement of the 1990s, government managers and administrators had little opportunity—let alone incentive—to innovate. Today, however, government agencies, departments, and units find themselves in the position of either innovating or being forced to explain "why not" to an active and knowledgeable electorate and legislative oversight bodies. In the first decade of the twenty-first century, a culture that rewards innovation in the way governments work and public-sector managers think became common throughout the world, at all levels of government, from federal departments to the smallest local special service district.

However, it should also be noted that, just as is the case with business and industry, many government innovations do not always achieve the high ob-

jectives that are set out for them. Missing the objective target is what happened in Tacoma, Washington, for example, when city leaders and department employees decided to take on a major reorganization of the city's information technology and knowledge management systems. A city-sponsored survey of what can be expected in the way of returns from the costly investment in innovation reported that full returns on the investment may not appear for at least eight to ten years. Meanwhile, the cost of implementing the new system continues to rise.

What Is "Innovation"?

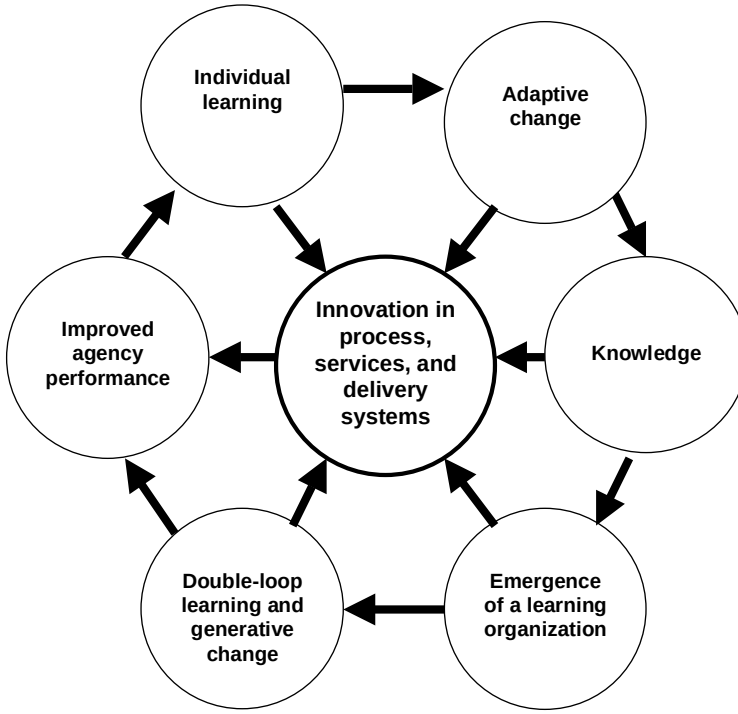
Innovation is creating and applying new or distinctive ways of producing, distributing, and/or delivering products, services, or ideas from producers to users. It is also the design and implementation of new and distinctive organizational structures and processes. It may mean creating or inventing entirely new products or services, developing new components, or creatively experimenting with new combinations of components or materials. Innovation can occur at any step in the value chain: production, delivery, maintenance, and resupply of goods and services.

Because innovation requires the application of both new and existing knowledge as well as implicit and explicit knowledge, organizations have learned that if they wish to be innovative, they must manage knowledge as a critical resource. It may, in fact, be the most important resource an organization has. However, knowledge is stored in the minds of the members of the organization, not in computers or databases.

Managers and administrators of government departments, agencies, and units are responsible for promoting more than one kind of innovation. Sundbo (2001, 17–18) has identified a taxonomy that includes six distinctive forms of innovation:

1. Product innovation: developing or inventing a new public service or product.
2. Process innovation: new management approaches, production methods, or processes.
3. Organizational innovation: designing new forms of public organizations, structures, or management models, including collaborations, networks, or virtual organizations, to name a few.
4. Distribution innovation: a new way of delivering or distributing public services or products.
5. Market innovation: new forms of promoting or marketing public services, initiatives, or programs; it may also include different

Figure 8.1 **How Learning and Knowledge Shape an Organizational Learning System**



relationships with other public organizations or public/private combinations.

6. Raw material and/or components innovation: use of new raw materials and other resources in the production or delivery of public services, including alternative fuels and sustainable resources.

Figure 8.1 illustrates the connections of learning, knowledge, change, and innovation in an organizational learning system.

Public-sector innovation may also focus on several different aspects of the public-sector value chain, although most public administrators today overwhelmingly equate innovation with technology. However, an innovation need not result in a change in technology. Rather, it may instead involve different combinations or processes using existing technology. From public management's point of view, however, behavioral innovation may be far more important in the long run. Behavioral innovation may mean new strategies,

new ways of learning and sharing, and new ways of reacting to such environmental changes as increased diversity in the workplace.

Why Governments Innovate

Governments, like manufacturing, service, and distribution organizations, have been forced to move away from the long history of Industrial-Age management thinking that characterized the traditional, hierarchical bureaucracies that existed in the public sector. Government has found that it must change in order to cope with an Information-Age environment. City, county, state, and federal government agencies and departments have been forced to morph into networked organizations that collaborate with other agencies to take advantage of and learn from all the information and expertise available inside and outside of their organizations. And managers and administrators have had to change they way they function as well.

When similar shifts in management focus have occurred in other organizations, staff workers and administrators have found themselves working in an organizational culture that was suddenly more open to new ideas and demanded improvements to their performance, including the acceptance of new ideas and new ways of functioning (Senge 1990). This improvement in productivity is a big part of the rationale behind the determination of governments to purchase, install, and train all staff members in how to use the new information technology and enterprise management information systems that have become the chief technological tools of knowledge management. Organizations that do not forge organizational cultures that foster and value organization-wide identification and sharing of knowledge, and that do not employ the appropriate technology for establishing systems for knowledge management, will not develop the well-informed staff needed to succeed in the twenty-first century (Alberts and Hayes 2003).

How Agencies Transform

An important question for government managers and administrators, then, is how to develop a method for turning their old, bureaucratic organizations into learning organizations that are open to change and ready to accept, and preferably embrace, new ways of doing things. The methods organizations seek must be right for their people, their time, and the environment in which they serve.

The process includes adopting innovative ways to collect, distribute, and store information. But more importantly, it requires helping all of the organization's people learn to use the organization's knowledge to invent,

innovate, and improve. They must be brought to recognize that only when information is shared, combined, reframed, and put to use does it becomes knowledge—and knowledge is the critical ingredient for designing and implementing new processes and new and improved public services. Finding an appropriate answer to this question is made difficult for some government agencies because, as a rule, they do not have a history of searching out and adopting innovation and creativity.

Managers in the public sector are today employing whatever methods they can in order to turn their once-bureaucratic organizations into learning organizations that are open to change and ready to accept new ways of doing things. This wave can be called "innovation in progress." When they achieve their goals, staff workers and other administrators will be open to new ideas and not be satisfied until they have improved their performance on their own.

Public services typically require close interaction with clients/customers/citizens. Therefore, innovation in service organizations is often not only about *what* is being offered, but also about *how* and *by whom* it is being offered. The following description of knowledge management and its role in innovation helps to make this connection clear:

> Knowledge management caters to the critical issues of organizational adaptation, survival, and competence in the face of increasingly discontinuous environmental change. Essentially, it embodies organizational processes that seek a synergistic combination of data and information-processing capacity of information technologies, and the creative and innovative capacity of human beings. (Malhotra 2000)

Organizational learning influences innovation in two key ways. First, when the people in the organization learn new information that they can then turn into useful knowledge, it makes the organization a better innovator. And second, learning and innovating bring about many, often small and incremental, changes in performance, outlook, and morale in the organization. Ideally, organizational learning becomes a never-ending social process that influences, shapes, and improves the behaviors of the organization's personnel. This social process is a mix of knowledge, behavior, habits, experiences, standards, and values—all of which are also the ingredients that form an organization's culture (Sundbo 2001).

Innovation in Technology

Government administrators are generally eager to adopt new technology when it promises to improve public service and reduce department operating costs.

Clearly, the published evidence indicates that the processes of innovation and creativity are alive and well in all levels of government, albeit perhaps not to the degree that they are in the private sector. For example, at the federal level the enterprise architecture program is aiding in the replacement of older, specific-purpose, legacy information systems—some of which date back to the 1970s or even earlier.

Agencies are implementing new comprehensive enterprise management systems, including new computers and software, and coordinating and improving the management of it all by making it subject to the needs of the people who will use the technology. To control these developments, they have adopted the leadership position of knowledge manager, or chief knowledge officer (CKO). By developing a single agency-wide database accessible to all municipal personnel in all departments (but excluding personnel records), the systems approach promises to reduce operating costs and improve staff productivity. In 2005, however, the jury was still out on the return on the investment. Possibly because of their later start, many government innovations have not always achieved the objectives set out for them.

Public services typically require close interaction with clients/customers/citizens. Innovation in information and communication technologies are driving change in governments everywhere (Kiel 1994). To achieve change in public organizations, government leaders must embrace innovation in all its manifestations. Information-Age needs further dictate that governments adopt innovative, jurisdiction-wide information-sharing capabilities.

Problems with Technology and Innovation

Counter to much common perception, governments do innovate; they have done so for a long time, and in many cases they have done it well. In describing twenty-five successful innovative state and local government programs, Wheeler (1993) reported:

> Despite public opinion, which holds a contrary view, government is capable of tremendous innovation and effective management. State and local government programs are in place, which are effectively addressing some of the most thorny issues of our time.

This does not mean that governments have not often stumbled in their attempts to innovate. One study of 365 public- and private-sector information and communications technology managers found that one-third of all IT projects were canceled before completion (Brown 2001). Only 16 percent of the projects were completed on time and on budget, and more than half of

the projects exceeded their original cost estimates by almost 200 percent; one-third of the projects took from twice to three times as long to finish as estimated. In another study reported by Brown, the researchers claimed that 20 percent of all IT projects are cancelled before they are completed, and 80 percent of those that are completed finish behind schedule, over budget, and with lower performance than was projected. Reporting on experiences at the federal level, Brown quoted the U.S. General Accounting Office, which has for years pointed out the high failure rate of IT initiatives. Other studies point to similar failures at the state and local levels.

Not all the blame for these difficulties can be placed entirely on problems with the technology aspect of knowledge management systems. Successful management of innovation and change in government requires that equal consideration be given financial, administrative, cultural, social, and personal dimensions related to the use of technology in the organization. Failing to consider any of these factors increases the risk of not receiving all the potential benefits that such systems offer (Gagnon 2001). The behavior and mind-set of managers is often cited as one of the most important factors.

A Case of the Muddled Innovation

An often-heard criticism of public management is that government administrators do not embrace innovation and technology with the same ardor as managers in the private sector do. In response, apologists aver that business management and public management are different. Moreover, traditional bureaucratic management practices have been equated with program stagnation and leaderships' unwillingness to accept the risks associated with new actions and innovative ways of addressing old problems. Government workers and administrators, both elected and appointed, are often reviled for incompetence whenever they try something new that doesn't work as well as planned. Increasingly, public managers are being held accountable for program performance failures (Bhatta 2001).

What is forgotten when the press adopts the role of vigilante is that problems with implementing new programs and practices will almost always surface. Not all innovations succeed; failures invariably occur in both the public and the private sectors. But in government, when innovative programs, processes, and projects fail, results can be catastrophic (Altshuler and Zegans 1997; Bennett 1997; Entman 1997; Robson 2003).

In 2002 in the City of Tacoma, Washington, what only a year or so earlier had been seen as an innovative city council, mayor, and team of city administrators were subjected to charges of failure and malfeasance. The city thought they were buying new technology in the form of a new city department-wide

enterprise management system (EMS). The public's perception was that all that the city succeeded in doing was to create more problems and waste more of the taxpayers' money. The officials' efforts to bring the city into the twenty-first century with the latest in knowledge and information technology ran into a series of unexpected problems and glitches. The criticism that surfaced in the later stages of the program installation and implementation resulted in calls for a retreat to the older, safer-but-inefficient way of running the city's business.

When government innovations stumble or fail, elected and appointed leaders are subjected to public abuse that includes public charges of incompetence. Administrators and managers quickly become the target of criticism and sanctions that can include loss of employment, recall, or failure to win reelection. Senior administrative employees can lose their jobs. And the public can lose out on the full benefits the innovation was designed to provide.

After such high hopes and seemingly adequate planning, why did installation of the citywide system run into difficulties? The argument selected by press reporting of the program seemed to be based in a failure of leadership at all levels, from the mayor to the city council, director of utilities, and program "czar" appointed specifically to manage the installation. Success in carrying through with change in an organization requires strong leadership by someone who is capable of asserting that leadership against resistance that can be expected within the organization.

For innovation to be successful, these four factors must be in place: growth, change, strong leadership, and a culture of success (Probst and Raisch 2005). In the public sector, one or more of these "essential factors" are often missing. For example, since the late 1990s, governments have been constricting rather than growing; budget reductions and/or spending caps are far more common than growth in resources. Agencies are told to "do more with less."

Typically, change is not desired in bureaucratic organizations; it has not been a common objective of public leaders. Strong, charismatic personalities, men and women capable of exerting strong leadership and who understand the complex relationships between the rules that govern systems behavior and the processes involved in managing complex systems, are not often attracted to careers in public service. It has been a long time since anyone has been willing to describe public service as a "culture of success." Citizens no longer trust government at any level, or the people who labor in government to serve the public.

KM Innovation in Public Safety

Police departments are incorporating many of the same information and communications technology tools and knowledge management systems used in

business and industry, and which are increasingly common in large public-sector organizations (Brown 2001). In the last eight years of the Clinton administration, the Department of Justice distributed more than $6 billion in information technology grants, spread across nearly 11,300 local law enforcement agencies. In 1998, Congress enacted additional legislation authorizing spending $250 million in each of the following five years to promote integration of justice system information technology.

Studies have suggested that police officers spend something like 92 percent of their time collecting, coding, combining, and distributing information. As they perform their tasks, they rely on timely, readily available information. Such is information is a critical component in developing an officer's storehouse of tacit knowledge. Another name for such knowledge is "street smarts."

In 1997, the Charlotte-Mecklenburg Police Department (CMPD) of the City of Charlotte, North Carolina, received roughly $11 million in federal funds and added another $8 million in local funds to develop a comprehensive enterprise management system: the Knowledge-Based Community Oriented Problem Solving System (K-COPS). Implementing the City of Charlotte system was to take place in three distinct phases: First, an in-depth analysis of the potential users' needs was conducted; second, as much of the system architecture as possible—laptops, servers, networks, etc.—and several software applications (e-mail, word processors, etc.) was installed. The third step was similar to the plan in the City of Tacoma, in that it involved upgrading and combining wherever possible the CMPD's most-used databases. As in most public-safety organizations, crime statistics and other data—criminal records, arrest history, mug shots, fingerprints, etc.—were located in separate, unconnected databases. Phase three would involve replacing the legacy "information silos" approach with a single, easily searchable database.

Results of the first-phase needs analysis were highly critical of the department's information-sharing practices. Most respondents reported that crime-related information simply was not available to officers on patrol. Officers were also critical of the sufficiency of the information that was available. They were particularly dissatisfied with the way that information was shared among department units. Only 10 percent reported that case and suspect status information was available to them.

To address these and other problems, the master plan authorized by the city established an information infrastructure and implied knowledge management system based on the following four requirements:

1. The IT architecture adopted had to be geared toward improving the community policing efforts, specifically addressing the needs of the officer on the street.

2. All parts of the system had to deliver as much information as possible to the officers in the field; the police vehicle was to be considered the officer's office.
3. Officers were no longer to be simply "note takers." Rather, they were to "own" the cases in their neighborhoods, and were to receive all the information available about the case, thus vastly improving their knowledge base.
4. Finally, the program was to empower members of the community, helping them to become participants in community problem-solving efforts.

Initial Results

Although the early results of the program did indicate a number of positive results, Brown also noted that achieving these results was not easy (2001, 363–64):

> Transitioning from a minimalist approach to technology (a single mainframe, 200 dumb terminals, and 6 support staff) to a 19-server, 2000-client operation requiring 26 support staff members demanded a tremendous amount of resources in time, energy, and capital. Whereas the annual IT operating budget for the CMPD more than tripled from less than $1.8 million to more than $6 million, support requirements increased by a factor of 10 (from 200 dumb terminals to 2,000 client server devices).

Reading about the problems associated with implementing the program is a déjà vu experience. For example, many of the project's component tasks experienced cost overruns and schedule delays. The full extent of the efforts that would be required was underestimated. Cost overruns occurred primarily from changes in user requirements, which in turn led to project expansion. Equipment malfunctions and incompatibilities, lack of technical expertise, and high personnel turnover further exacerbated the problems.

On the positive side, most neighborhood officers report the project has improved their performance by making it possible for them to receive and put to immediate use knowledge they need to be more productive in their jobs—productivity and efficiency gains by a factor of three were reported by some officers. However, no improvements were reported on case feedback or perceptions of problems in the neighborhoods.

It is important to note that all the facts relating to the story of the experiences of the City of Charlotte police department's knowledge-based information system installation were not yet in; phase 3—improvements to the department's databases—had yet to be completed. Brown (2001, 365) offered this caveat in her conclusion to the case:

Coordination, communication and leadership commitment requirements placed heavy burdens on the organization. The extent to which public agencies are prepared for both the tangible and intangible costs that result from technology innovations is an important finding worth noting.

Government Innovation in Korea

Mr. Yang-sik Choi, assistant minister at the Korean Headquarters of Government Innovation, Ministry of Government Administration and Home Affairs (MOGAHA), prepared the following discussion on government innovation for a larger government report, *General Information on Innovation in Korea* (Choi 2004). The minister described a number of innovative government programs currently under way in Korea, including knowledge management and e-government. Significant portions of the minister's report are included here as a model of what government innovation can accomplish. The report has been modified somewhat, but is essentially as it was released.

Introduction

After the inauguration of the Roh Moo-hyun administration in February of 2003, the issue of government innovation became one of the top priorities of the new government, alongside eliminating corruption. The administration, named *participatory government*, stressed the paramount importance of government innovation in the process of improving the practice, perception, and implementation of governance: improvements that would contribute to stronger national competitiveness toward meeting the global standard. In the first eighteen months of the administration, an *Innovation Road-Map for the Five Main Sectors of Society* was developed. In 2005, the government designated *change management* as the key objective of government innovation.

Although it is still early to make a final evaluation of the outcomes in government reform, changes are becoming increasingly evident in the attitudes of public servants and the government itself. This presentation is aimed at reviewing the key visions and objectives that underlie government innovation in Korea, and synthesizing the outcomes and challenges that lie ahead. In addition, it will put forth the major features of this government's innovation in the context of global trends.

Key Visions and Objectives of Government Innovation

The concept of reform adopted by the preceding Korean national administration drew from concepts supported in the "new public management." These

stressed efficiency, market orientation, and privatization. The main concepts of the reforms were:

- First, to establish a small government by reducing the size of the government at the central and local government levels;
- Second, to adopt a competition principle to the civil service;
- Third, to introduce a results-oriented fiscal system;
- And finally, to commercialize (privatize) some areas of the public sector.

Those government reform initiatives stimulated the reconstruction of the public sector and made considerable contributions toward tackling the financial crisis in Korea. However, excessive emphasis on efficiency, the top-down characteristics, and lack of participation have been widely criticized over the past few years. Moreover, the strategies for smaller government have noticeably weakened the government's capacity to perform.

Visions and Objectives of Government Innovation

Taking into account the past experiences of government reform, the government initiative has substantially changed the visions and strategies of government innovation. They can be differentiated from previous attempts in terms of:

- Setting up multiple innovation targets;
- Innovating government through participation and autonomy;
- Aiming to develop a competent and accountable government;
- And pursuing e-government founded on both hardware and software innovation.

First, innovation targets of the current government have been clearly established. The primary goal is to build a competent and interactive government. And under the primary goal, there are five subsidiary objectives toward government innovation. These are to build:

- An efficient government,
- A government that serves the people,
- A participatory government,
- A transparent government, and
- A decentralized government.

Second, the government promotes innovation based on participation and autonomy. The National Administration System has been readjusted to ac-

commodate citizens' participation in identifying innovation tasks, implementing policies, and evaluating the subsequent outcomes. Furthermore, public servants were, are, and always will be considered as the very agents of innovation, and therefore, the success of government innovation lies in the active participation of public servants.

Third, the initiative focuses on establishing a competent and accountable government. Rather than adopting previous strategies toward smaller government, it is in the interest of this administration and the people that governments first become efficient and able.

Fourth, the government leads its innovation based on e-government, as advanced information and communication technology can immensely change the process of providing public services, the way of work, and organizational structures. In this regard, an e-Government Bureau has been created under the Headquarters of Government Innovation in conjunction with the government reform initiatives.

Finally, participatory government emphasizes software reform. Although it does not neglect to further hardware reform, the focal point of these reforms is to manage policy quality and link e-government with innovation.

Building Infrastructure for Fostering Innovation

Since building an innovative infrastructure is a critical factor for fostering government innovation, the new administration established the Presidential Committee on Government Innovation and Decentralization to provide macroscopic direction and strategy for government innovation. In addition, the government set up the Headquarters for Administrative Innovation within the Ministry of Government Administration and Home Affairs to devise innovation methods and help ministries implement such reforms. And, to coordinate with their counterparts and to stimulate innovation implementation, the position of *innovation officer* was created in each ministry.

The government has also formulated the legal foundation for government innovation with the enactment of two related laws: the Special Law for decentralization, balanced nationwide development, and a new administrative capital, and the revised Government Organization Law.

Establishment of an Innovation Road Map

The Innovation Road Map for the Five Main Sectors of Society has been completed. In this road map, 153 reform agenda were proposed according to the five main sectors of administration, personnel management, decentralization, e-government, and fiscal system.

Upon the completion of the road map, the direction and timeline of government innovation were set sufficiently enough to draw a broad picture of government innovation of the participatory government.

Building Consensus of Government Innovation and Sharing Strategy

Building a consensus emphasis toward government innovation and sharing innovative values are both crucial necessities. In line with this, the government has held a series of workshops for ministers and vice ministers and assigned Saturday as a *learning day* to realize these critical needs. At these workshops, participants analyze and discuss the innovative success of the private sector, and previous administrative policy failures.

The government has selected seventeen "common tasks" for reinventing government; work on each task is currently under way. The selected tasks include innovation on HRM, management of policy quality, conflict management, and deregulation. Each common task is being led by a host ministry assisted by some related ministries. In this process, the leading ministry shares successful cases and systems with other ministries. Among the seventeen common tasks, several were assigned to the Ministry of Government Administration and Home Affairs (MOGAHA). These include policy quality, knowledge management, business process redesign, and e-government.

Knowledge Management

Knowledge management (KM) aims to maximize the capacity of the government organization by accumulating and sharing practical knowledge. KM can be utilized as the effective means of government innovation by systematizing personal and organizational know-how, inventing high-quality knowledge, and maximizing the productivity of the administration.

In Korea, the government's knowledge management system (KMS) was introduced in the year 2000 and in 2004 was operating in sixty-eight organizations including central and district governments. Among them, twenty-six organizations were digitally sharing information internally and externally.

Business Process Redesign (BPR) and Improving Working Patterns

Redesigning business processes and improving working patterns are also a part of the transformation tasks at hand. By eradicating unnecessary work,

and innovating ways of work, they aim to increase administrative productivity and change administrative culture.

Fostering E-Government

The e-government project aims to establish a ubiquitous government where public services are available regardless of place and time. In order to improve public services, the electronic public service system has been adopted and 420 items are available online. Also, citizens can receive digital certification for 8 items at their own personal computers. Future plans for e-government policy include establishing the e-participation portal system, which makes room for policy suggestions and feedback, and providing administrative services through mobile phones and PDAs.

A Global Trend in Government Innovation

The global trend in government innovation is today grounded on the viewpoint of "governance," which is characterized by the participation of various sectors and networks. In Korea, citizen participation in the policy-making process, partnerships between government and civil society, and continuous reform and management of innovation processes have become the major foci of government innovation.

Expanding Citizen Participation

The government initiative has adopted various innovative attempts to improve public service and expand citizen participation. Citizen participation has been extended in the areas of service production, consumption, and evaluation. In the policy planning process, procedures such as public hearings have been introduced to encourage citizen participation. In addition, the public portal service is being promoted for the same cause.

Building an Innovation Network

The participatory government initiative is in the process of building an innovation network within the government as well as in cooperation with civil society. This will enable various members in civil society to participate in the government's decision-making process. A committee comprising professionals, public servants, and citizens is being implemented as a measure to establish such networks. Also, to build a global network to enhance the global cooperation system, Korea plans to establish the OECD's Regional Center for Public Governance.

Three Stages of Reform

In order to succeed in this quest for reform, engraving reform in the minds of public servants is a must. At the next stage, reform must permeate into policy. And finally, reforms should be able to touch and move the hearts of the beneficiaries: the people. The most distinct feature of the participatory government's reform lies not within transforming individual policies, but in revolutionizing the way of thinking, ascertaining the problems of current government policies, and solving such problems by interacting with those who are affected by these policies.

Another feature of the participatory government's reform is the seeking of reform initiatives based on autonomy and participation. For this, the innovation officers in each ministry are appointed as change agents and formal/informal organizations have been activated.

Conclusion

Innovation is creating and applying new or distinctive ways of producing, distributing, and/or delivering products, services, or ideas from producers or suppliers to users. It also includes the design and implementation of new and distinctive organizational structures and processes, creating new services, or creatively experimenting with new combinations or products or services. Innovation can take place at any place in the value chain.

A primary goal of knowledge management in the public sector is to promote innovation and invention in government agencies. This includes applying new technologies, new and improved ways of delivering government services, and new or untried management processes and systems in organizations.

Previously, managing innovation in organizations focused on changing and improving processes. Until the global government reform movement took place in the 1990s, government managers and administrators had little opportunity or incentive to innovate. Today, however, government agencies, departments, and units must either innovate or explain "why not" to an active and knowledgeable electorate and legislative oversight bodies. A culture that rewards innovation in the way governments work and public-sector managers think has become common throughout the world, at all levels of government, from federal departments to the smallest local special service district. Managers in the public sector employ whatever methods they can in order to turn their once-bureaucratic organizations into learning organizations that are open to change and ready to accept new ways of doing things.

Public services require close interaction with clients/customers/citizens. Therefore, innovation in service organizations is often not only about *what* is being offered, but also about *how* and *by whom* it is being offered. Knowledge management helps make innovation possible by ensuring that information and knowledge are available when needed.