Technology gone mad?

Implementing IT solutions in the Public Sector

In wanting to provide consumer-centric and efficient services, the public sector is adopting new technology services and implementing new IT solutions to achieve its strategic objectives. But the challenges abound.

First: the benefits

The public sector faces the demanding challenge of promoting economic development and social welfare through the implementation of effective policies and efficient service delivery, which goes hand in hand with the growing need to provide the community with efficient, sustainable, consumer-centric and environmental-friendly services. Public sector entities, following in the footsteps of private sector companies, are adopting technology transformations in order to enhance the delivery of services and optimize the internal processes that are in line with these strategic initiatives. Investing in the right technologies and innovative usage of these technologies would enable the public sector to achieve economic and social development as well as to improve their image. The benefits of this investment, at least in theory are clear:

1. Governments should benefit from IT systems to integrate their data and offer more efficient, quicker and convenient services to the public through online platforms (e-government systems.) The citizens could then be easily informed about new public sector initiatives. More importantly, by implementing such services, the public sector could encourage citizen interaction and keep up with customers' expectations and habits that are already adapting to technology-driven private sector services.

2. IT solutions should constitute a key knowledge-sharing medium between different parties, such as government entities, safety agencies, private sector organizations, stakeholders and, most importantly, citizens, which in turn increases transparency and public trust.

3. Technology solutions could enable public sector entities to optimize their internal functions. In fact, automated operations imply increased productivity and accuracy, decreased redundancy and cost-effectiveness in core as well as supporting functions including Human Resources, Finance and Procurement. Additionally, automated processes allow more accurate and efficient exchange of information, reporting and forecasting processes across the organization, which would facilitate the identification of key areas of improvement.

4. Technology transformation projects, depending on their scale, would require internal and external operations to be streamlined in order to achieve the technology initiatives. The private sector is mature as compared to the public sector in these areas of technology implementation and organization transformation for performance and productivity enhancement. But public sector agencies are now determined to fill this gap driven by customer and stakeholder expectations.

In practice however, the challenges faced by the public sector are considerable and different from those in the private sector, as many transformations in the public sector have social and political impacts. Below we highlight some of the major difficulties faced during IT implementation in the public sector.

Second: the challenges

The first key challenge is from the political forces and the decision-making process within public sector entities. Depending on the scale of implementation, technology transformations require the involvement of a range of stakeholders with different interests, which

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may create bottlenecks in the decision-making process and delays in the implementation and expected outcomes, especially if there is no strong project leadership. When leadership and ownership are not clearly defined and centralized, projects may sometimes be duplicated in different public sector entities, and without the proper communication dealing with this overlap will in turn add additional complexities to the implementation process.

Changes in political power and environment might also cause further disruption and delays in implementation. In some cases, the initiatives for automation are based on temporary strategies of existing arrangements rather than on long-term improvement visions, and are thus terminated and initiated whimsically with political shifts.

Therefore, strong government support and communication strategies are essential for IT solution implementations to proceed smoothly in terms of funding, leadership and involvement of other public and private sector stakeholders. The involvement of legal and regulatory institutions is also vital to ensure the robustness of the legislations as to the change to be implemented.

A second key challenge is internal resistance to organizational change implied by process automation. Unlike other process reengineering and automation initiatives in the private sector, public sector organizations may face more intensive cultural and political resistance to transformation, mainly driven by a) the bureaucratic nature of public sector entities and b) the technical capabilities of available resources. In fact, the introduction of automated systems and organizational transformation normally imply changes in roles and responsibilities, administrative mechanisms and work activities and public sector agencies tend to avoid related bureaucratic changes.

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Another hindering factor is that employees might not have the required knowledge and operational skills for the new technologies and, as such, will require awareness campaigns to decrease their resistance to change as well as knowledge building to provide them with the necessary skills to operate efficiently.

The third key complexity relates to the much greater numbers of target customers for public sector services (in this case the general population) rendering the degree of risk in the scale of transformation and innovation accordingly greater. The public sector would be less willing to invest in cutting edge technologies to avoid the possibility of failure and thus harm to its public image.

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Third: a possible way forward

A key success factor in an environment with various political forces and decision-making dynamics is a strong leadership capable of supporting the project through political changes and promoting and enforcing the use of technologies across the organization. An independent program/project management can also ensure continuous communication with the different stakeholders and alignment of initiatives together with continuous monitoring of progress and outcomes. Escalation of any problem or unexpected result at any stage of the process to the related stakeholders is critical to enable the appropriate action to be taken accordingly. A smooth transition of operations and organizational change also requires appropriate change management strategies in place.

Development of an overall technology strategy for the public sector organization prior to its implementation is also highly advisable. It is important to
• Understand the organization, its operations, requirements and existing issues;
• Determine short-run and long-term objectives by identifying relevant IT solutions that need to be implemented as well as functional requirements;
• Conduct a gap analysis to assess the current state and plan the actions required to achieve the defined objectives;
• Develop an implementation roadmap where strategy initiatives are prioritized with:
 - Ownership of the initiatives clearly defined and centralized;
 - Identification of key stakeholders and their involvement from start to finish to avoid conflicts;
 - Technology strategies serving the long-term goal of creating sustainable public value rather than by temporary fixes driven by political factors.

Technology implementation in the public sector is inherently risky because of its wide reach and impact. One way to mitigate such risks, especially in the case of highly innovative solutions, would be to conduct pilot projects to test the implementation prior to delivering the solution to the entire population, or to follow a phased delivery process by module or service.

Furthermore, since public sector employees do not normally have the competencies and expertise required for designing, delivering and maintaining the new IT systems, it is advisable to outsource the work at first and progressively build in-house knowledge through knowledge transfer sessions and trainings.

Finally, where the end-users of the services are the citizens, it is important to communicate changes and initiatives to the citizens/customers in order to develop public awareness and trust.

In essence, for successful technology implementation, it is critical to understand the broader context and possible outcomes, internal and external, to the public sector organization. The public sector entities should consider all aspects of human resources, processes, information requirements, political environment, stakeholders and impact on citizens. Hence, technology should be considered as 'transformation' rather than merely 'implementation.' It is about identifying opportunities where technology can deliver value, have clear direction, and then use the right resources to make that happen.

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