Chapter 12
Future Directions for Public Service Delivery in the Digital Era

ABSTRACT

This chapter discusses emerging issues and technologies, such as ethical responsibilities in a changing technological environment, the use of analytics and artificial intelligence, the evolution of communications technology, and the growth of block chain and mobile apps technology. Mobile apps technology is a very exciting development because the nature of the applications is very personal and target specific customer needs, hence gradually resolving the issue of explicitly knowing the customer and meeting its personal needs through the concept of personas. This chapter provides numerous examples of how the various technological developments can be specifically implemented to enhance public service delivery in the digital era. In this context, Chapter 12 has two important implications, namely the impact of the technology trends to revolutionise public service delivery on the operations of government entities and users of government services in the future.

INTRODUCTION

Change is the law of life. And those who look only to the past or present are certain to miss the future. John F. Kennedy, 35th President of the United States of America

Technology and its application to Public Service delivery is a very dynamic and rapidly moving development. What is current today becomes obsolete within a very short time span. Hence, technology in the context of Public Service Delivery in the digital era requires persistent investment and unrelenting research of technological future trends and development. Under this scenario executive management must cope with a very challenging environment and decide whether to be a leader or a follower.

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A technological leader encourages and promotes technological innovation, and is aware of the complete process of change and development that a particular technological breakthrough will bring about during its useful life. Hence, a technological leader must be able to read the signs and be precisely aware of the stage a particular technology is at, as it travels through its life cycle, thus to be able to decide when to embrace it and when to abandon it and move on to embrace other developments. Such a leader links corporate business strategies and technology strategies; knows how to manage technology and the change it generates; and understands the transformational power of technological breakthroughs.

Gallo (2001) quotes Steve Jobs as saying: "Innovation distinguishes between a leader and a follower." According to Piroth (2017) many organizations reactively follow emerging technologies instead of proactively leading technology trends. He contends that the concern is that too many managers are narrow thinkers and therefore lack vision. He argues that when the iPhone was first released in 2007, employees were eager to use it in the workplace. However, the IT departments were hesitant to embrace the trend citing security and logistical concerns, even though the iPhone technology was viewed as being an enabler that could revolutionize workplace productivity. Piroth (2017) found that global executives cited costs, security, limited skills and regulatory compliance as the top four obstacles preventing their organizations from applying emerging technologies.

He contends that the inability to outthink these challenges has real consequences for digital innovation that needs to be addressed by executives through a new approach to innovation to see digital reinvention initiatives reach their potential. Hence, Piroth (2017) recommends three methods to overcome obstacles and use emerging technologies to lead business innovation, rather than follow it:

1. Think beyond your obstacles. Organisations need to remove the obstacles through innovative thinking. He quotes as examples Skype and Airbnb. The former provides video conferencing services even though it does not have any telecommunications infrastructure; and the latter is a top accommodation supplier without real estate assets.
2. Implement a framework to assess emerging technologies. Organisations need to continuously evaluate suitable technologies by focusing on what the organisation needs to achieve and develop the capacity and ecosystem needed to sustain technology implementation.
3. Stay ahead of your customers. Instead of reacting to customers' needs, the organisation needs to anticipate their needs by listening to them and through continuous research, focusing on the relationships between IT, the customer and the findings of the continuous appraisal of promising technologies. Piroth (2017) argues that organisations need to develop a holistic mindset, with convergence being the fundamental factor for discharging the power of emerging technologies. He cites as an example the application of drones by telecommunications companies to conduct cell tower inspections, whose usefulness totally depends on integrated intelligent technology that stitch up images together into meaningful intelligence, otherwise analysts would be faced with thousands of individual images that would be impossible to manage and decipher.

The above illustrates that obstacles to the application of technology and innovation will often exist. However, an obstacle need not be viewed as an impenetrable barrier. Where there is a will there is a way. Obstacles need to be understood and once they are understood, they need to be resolved.