Chapter 6
ICT Strategic Project Management

Robert Stalone Buwule
Kyambogo University, Uganda

ABSTRACT

Depending on how project managers strategically plan and utilize them, ICTs can prove to be either productive or counter-productive to any project. This chapter is about how project managers strategically plan and incorporate Information Communication Technologies (ICTs) in forming long-term objectives as well as analysing the strengths and weaknesses of an ICT-based project. It has four subdivisions, where the first sub division dwells on the strategic use of ICTs in projects, then a brief synopsis on the theoretical approach to ICT Strategic Project Management, which provides foundation for a detailed discussion on the roles of key players in ICT strategic project management, characteristics of ICT-compliant projects, and the steps taken to strategically manage ICT-based projects. The chapter is wrapped up with a disposition on the impetus of strategically managing communication in an ICT-based project.

INTRODUCTION

Information Communication Technologies (ICTs) are introducing several digital modes of managing projects every day. Depending on how Project managers strategically plan and utilise ICTs can prove them to be either productive or counter-productive to the project. Pearlson and Saunders (2009, p. 323) basically define strategy as a coordinated set of actions orchestrated to fulfil the project’s objectives, purposes and goals. It sets a limit on what the project will seek to accomplish. For a project to have an effective ICT strategy, it should have a well laid out plan of coordinating its activities to achieve the projects goal and mission. A project in this aspect is basically an endeavour undertaken to create a unique product, service, or result (Schwalbe, 2014, p. 4). Projects are different from operations because operations continue but projects end when their objectives have been reached or the project has been terminated.

ICT Strategic planning generally involves forming long-term objectives and analyzing the strengths and weaknesses of an ICT based project. Not only strengths and weaknesses are analysed but even opportunities and threats of the project.
ICT strategic planning forecasts future business trends and projects probable new products and services of the project (Schwalbe, 2014, p. 143). Below is a detailed discourse on ICT Strategic Project Management.

**INFORMATION COMMUNICATION TECHNOLOGY (ICT)**

Information Communication Technologies (ICTs) are devices and tools used to create, store, exchange and use information (Pearlson & Saunders, 2009, p. 16). The mission and main concern of this chapter is to cultivate the reader’s participation in planning for projects using ICTs. ICTs are key resources in the management processes of projects as they support wider project members’ participation. According to Swinford, McIntosh, and Jeffrey (2008, p. 1) strategically managing ICTs in projects takes the central role as they effectively educate or support decision making. These technologies like computer hardware, software and networks have become a significant factor in many businesses and they continue to radically change the work environment (Schwalbe, 2014, p. 2).

There is a lot of research going on about Information Technology and Project Management disciplines, as it is believed that technology is the principal driver of social economic outcomes (United Nations Conference on Trade and Development, 2013, p. 12). This protracted research has given birth to emerging trends in the integration of ICTs with Project Management. This is mainly because of the high competitiveness in the knowledge society which is causing many scholars to carry out in-depth research on critical relationships between knowledge disciplines. Therefore this is a timely point of studying the relationship between ICT and Strategic Project Management and hopefully it will provide a stage of more innovations that will improve the management of Information Technology (IT) projects in the future.

**Objectives**

By the time a reader completes to read this chapter, he or she is expected to:

- Be in position to explore the Strategic role of ICTs in Project Management.
- Be able to discuss the responsibilities of ICT key players in the project management process.
- Have Capabilities of highlighting the specific characteristics of ICT projects and why projects fail without ICTs.
- Find it easy to explain the impact of ICT in Information/Knowledge centre projects.
- Have competencies of strategically managing communication using ICTs in the context of a project.

In a nutshell, this chapter is expected to put the strategic management of ICTs in the context of Project Management. The readers will be able to grasp the fundamentals of strategically managing ICTs when running their projects. The chapter addresses both the concerns of the project managers and project members. Finally this chapter goes further to explore the theoretical and practical points of view, ICT strategic proposed project innovations using an interdisciplinary approach.

**THEORETICAL APPROACH TO ICT STRATEGIC PROJECT MANAGEMENT**

Strategic Management has emerged as one of the most active areas of current management research (Papadakis, Lioukas, & ChambersSource, 1998, p. 115). This area of research stems from the traditional behavioural decision theory which is recently gaining momentum (Schwenk, 1995). Project managers set up planning systems as a means through which personal decisions and