

**UNIVERSITI TEKNOLOGI MARA**

**A FRAMEWORK ON INFORMATION AND  
COMMUNICATION TECHNOLOGY (ICT)  
IMPLEMENTATION ISSUES: A CASE STUDY ON  
THE LOCAL GOVERNMENTS OF SELANGOR,  
MALAYSIA**

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## **Abstract**

The purpose of this research was to identify the issues that hinder the successful implementation of information and communication technologies (ICT) in the local governments of Selangor, Malaysia and, construct a framework of these issues. Mixed methodologies were employed where the quantitative analysis provided the foundation to corroborate and triangulate the discoveries from the qualitative analyses of the interviews, observations, field notes and documents conducted and obtained from the cases identified. Theoretical sampling technique was applied to determine the respondents where, an unstructured interview guide was used to probe and gather rich, in-depth data. The rigorous analyses of data allowed for the emergence of issues which were appropriately grouped into relevant themes. These themes provided the basis for the formation of a framework on ICT project implementation. The findings showed that four prominent themes validate both analyses, and these are social, technological, economic and political issues. Aside from these four main themes, the specific sub-issues formed the indicators for ICT implementation failures in the Selangor local governments. Each of these sub-issues is integral to developing a comprehensive understanding of the problems associated with ICT implementation in order to optimize the cost, time and value of investments in ICT. The emergent themes provided the groundwork for future deployment of ICT policies and strategies to the policymakers and ICT stakeholders. Further research is recommended to cascade down the themes into ICT key performance indicators and initiatives, so that the objectives of accomplishing the national ICT mission and vision are also met.

**Keywords:** ICT implementation, implementation failures, ICT issues, local government.

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# CHAPTER ONE

## INTRODUCTION

Information and communication technology (ICT) project implementation is a major undertaking for any organization as this requires a substantial investment of money, time and effort. In the public sector, the return of investment (ROI) or the performance measurement on ICT project implementation can be seen through effective and efficient service deliveries for the three levels of government – federal, state and local. Furthermore, effective government depends directly on effective automation to support services, programs and initiatives.

Thus, as with most developing countries, Malaysia is witnessing a shift from an industrial-based economy to an information-based economy in which information is intrinsic to organizational functioning (Mahathir Mohamad, 1998 & 2002). Driven by the need to acquire, manipulate and distribute information, the last decade have seen a massive growth in ICT 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 (Seneviratne & Garson, 1999). Given all of these events, there is little doubt that the Malaysian society has become increasingly dependent on ICT.