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Master of Science in Management of Information Systems

**A study of ICT risk management approaches in formal
methodologies and practical application.**

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Abstract

Awareness of uncertainty and risk management in many sectors of personal, public and business activities have become one of the main challenges. When it comes to Information and Communication Technology (ICT) business sector, risk and uncertainty becomes even more relevant due to its fast evolution and complexity.

Efficient risk management in ICT projects has become one of the key awareness points for businesses involved or employing ICT (CJ Alberts, A Dorofee, 2002). There is a significant stream of research on risk management and mitigation, which resulted in a number of frameworks, recommendations and techniques aiming to make an ICT project manager's work more streamlined by following a proposed pattern in responding to a risk. Despite well-established project risk management processes, some ICT project managers perceive their application as ineffective to manage risks.

This research proposes to examine a case to investigate how ICT managers managed risks, their approaches, behaviours and actions. The focus is on differences between risk management techniques proposed by well-established project management guides and real actions undertaken by ICT project managers in response to risks in ICT projects. This will address the primary research question: *“Do current risk management practices, employed by ICT managers in complex ICT projects, differ from theoretical knowledge and how?”*

The research objective will be achieved using a case study based on a complex ICT programme, which was managed by the lead researcher between years 2014 and 2016. The research method is based on semi-structured interviews of ICT professionals involved in managing different parts of the selected case programme.

Survey data analysis confirmed that the risk management often deviated from the case programme guides and in some cases was different from what industry best practices prescribe due to different factors faced during the course of their projects. Identification of those factors was a secondary target of the research, which was completed and summarised.