

**THE EFFECTIVENESS OF SCRUM IN PROJECT
MANAGEMENT IN THE SRI LANKAN CONTEXT**

MASTER OF BUSINESS ADMINISTRATION

IN



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The dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master of Business Administration in Information Technology.

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December 2009

Declaration

I hereby certify that this dissertation does not incorporate, without acknowledgement, any material previously submitted for a Degree or Diploma in any University and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations.

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Abstract

The challenges with developing software systems led to a switch from traditional software methodologies like Waterfall towards the Agile software methodologies. These Agile software methodologies have become more and more popular in recent times, and Scrum in particular has been adopted by many companies. The current literature suggests that these Agile methodologies are indeed more effective in project management, particularly in dealing with the complexity of modern software systems and the rapidly changing business environment.

Given however a lack of available evidence of such research on the factors leading to the adoption of Scrum, its usage and its impact within Sri Lanka, this thesis investigates the efficacy of Scrum in project management in the Sri Lankan context.

Agile methodologies were initially proposed as being effective in specialized scenarios, for example, with small co-located teams, but studies have shown that these methodologies are also effective in many other settings. The existing literature further proposes that many factors can affect the effectiveness of these methodologies. This thesis therefore set out to compare some of the critical success factors identified in the existing literature against various characteristics found in the Sri Lankan environment.

A questionnaire was developed for measuring the effectiveness of projects that use the Scrum methodology, and data was gathered from professionals in six companies. The results revealed that several factors were strongly associated with the effectiveness of projects, namely management support, organizational environment, customer involvement, project management process, delivery strategy and team environment. While this study is not able to confirm that these six factors directly cause an impact on the effectiveness of a project, they are important factors that practitioners should be aware of.

To ensure the success of their projects, stakeholders are urged to facilitate upper management support, create an Agile-friendly organizational environment, ensure strong customer involvement and follow an Agile project management process.

Key words: Agile project management, Scrum

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List of Abbreviations

PO	-	Product Owner
SM	-	ScrumMaster
SPSS	-	Statistical Package for the Social Sciences
SP	-	Successful Project
UnSP	-	Unsuccessful Project
MS	-	Management Support
OE	-	Organizational Environment
TE	-	Team Environment
TC	-	Team Capability
CI	-	Customer Involvement
PMP	-	Project Management Process
DS	-	Delivery Strategy
SAL	-	Scrum Adherence Level



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