# ACTION RESEARCH BASED CASE STUDY ON ADOPTING IT FOR SMALL AND MEDIUM ENTERPRISES

Gehan Mallikarachchi

(159124C)

Degree of Master of Business Administration in IT

Department of Computer Science & Engineering

University of Moratuwa Sri Lanka

June 2017

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Thesis submitted in partial fulfillment of the requirements for the degree

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#### **DECLARATION**

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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### **DEDICATION**

I take this opportunity to dedicate this thesis to my late father Dr. Dias Mallikarachchi. Further I thank my mother and wife giving me courage and support for making this a success.

#### **ACKNOWLEDGEMENT**

This research may not be completed with success without the support and guidance from many people. I would like to extend my humble gratitude to the people who guided and directed me towards the completion. It may not be an easy journey with the absence of those parties.

Firstly, I would like to thank my supervisor Dr. Amal Shehan Perera who guided throughout the project timeline to achieve this research milestone. The commitment and the timely advice given by the supervisor were helpful in delivering the deliverables on time.

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## Action Research Based Case Study on Adopting IT for Small and Medium Enterprises

#### **Abstract**

Sri Lanka is a major tea supplying country to the World tea market. The Tea Small Holdings (TSHs) sector is the main green leaf provider. However, for the past five years, the national tea production is in a declining trend. Recently, researchers have attributed this decline to lack of productivity, high production costs and labour shortage while poor business practices and poor knowledge on cultivation techniques are the main reasons for lack of productivity in TSH sector. In addition, there is a lag in distributing knowledge and support from Tea Small Holdings Development Authority (TSHDA) to TSHs.

Information and Communication Technology (ICT) has been acknowledged in the agricultural sector in the form of information sharing networks for supply chain management and decision support software systems such as 'precision agriculture'. Several studies have suggested to adopt ICT to tea industry for better coordination and for better information sharing. The Kenya Tea Development Agency (KTDA) considered information technology as a facilitator for competitiveness. However, there are inhibiting factors when adopting Information Technology (IT) to tea small holdings.

This is an action research based case study that develops an IT system for a tea small holding in Sri Lanka, for its internal operations. The Design science research methods have been used for the development of the system. The adoption of the technology made use of the concept of IT therapy to overcome certain barriers such as lack of IT knowledge.

The case study revealed a successful IT system for the internal operations of TSHs. Further research is needed to find the effects of the system on the productivity of TSHs. The adoption of IT could be facilitated by giving IT therapy. The study suggested to give free IT therapy to TSHs prior to the investment on adopting IT by a government or non-government agency.

Key words; Tea Small Holdings, Adoption of IT, Action research, DSR, IT Therapy

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## LIST OF ABBREVIATIONS

Abbreviation	Description
CEO	Chief Executive Officer
DSR	Design Science Research
DSS	Decision Support System
ICT	Information Communication Technology
IS	Information Systems
ISP	Internet Service Provider
IT	Information Technology
KACE	Kenya Agricultural Commodity Exchange
KTDA	Kenya Tea Development Agency
PA	Precision Agriculture
SLTB	Sri Lanka Tea Board
SMEs	Small Medium Enterprises
SSM	Site Specific Management
TRI	Tea Research Institute
TSHDA	Tea Small Holdings Development Authority
TSHs	Tea Small Holdings

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