STAKEHOLDER ENGAGEMENT IN SMART CITY PROJECTS IN SRI LANKA

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DECLARATION

"I declare that this is my own work and this dissertation 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.

Further, I acknowledge the intellectual contribution of my research supervisors Mrs. B.H. Mallawaarachchi and Dr. (Mrs.) K.G.A.S. Waidyasekara for the successful completion of this research thesis. I affirm that I will not make any publication from this research without the names of my research supervisors as contributing authors unless otherwise I have obtained written consent from my research supervisors.

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ABSTRACT

STAKEHOLDER ENGAGEMENT IN SMART CITY PROJECTS IN SRI LANKA

Escalating challenges in the modern cities with the rapid urbanisation has initiated the need of sustainable urban development. Smart Cities are identified as the most suitable solution in achieving sustainable urban development. The concept of Smart Cities have created an anticipation in Sri Lanka and strategic plans are being developed in enabling Smart Cities in Sri Lanka. Though there is a growing requirement in developing Smart Cities, Smart City projects entails certain challenges, which are required to be resolved in order to achieve success of the project. Enabling the effective engagement of the stakeholders in the project is identified as a key for the achievement of successful Smart City projects. Therefore, the scope of this research focuses on enabling stakeholder engagement in Smart City projects in Sri Lanka.

The research was conducted by utilising the explanatory sequential mixed design under mixed research approach. A comprehensive literature synthesis was conducted in order to review the concept of Smart Cities, importance of Smart Cities in sustainable urban development and to identify the characteristics of Smart City projects. Moreover, stakeholders in Smart City projects and their contributions were identified through the literature review. Subsequently, a desktop study was carried out in order to identify stakeholders and their contributions in urban development projects in Sri Lanka. After the comparison of the findings of the literature review and the desktop study, a list of stakeholders in Smart City projects and their contributions were determined. Afterwards, a single case study was carried out to validate the stakeholders and to find their contributions in Smart City projects. Moreover, factors ensuring the engagement of stakeholders, which can be used as strategies were identified through the case study. Captured data from the desktop study and the case study were quantitatively and qualitatively analysed respectively.

In accordance with the findings, a model was developed in order to enable the engagement of stakeholders in the SC projects in Sri Lanka. Government, Local and Regional Administrative Bodies, financial suppliers/ investors, utility suppliers and developers are identified as the internal stakeholders in Smart City projects and Academia and Research Institutions, Media, citizens, non-profit organisations and opposition political parties are identified as the external stakeholders in Smart City projects. Specific contributions and common contributions of each stakeholder were presented in the model. The developed model was validated through an expert survey, which could be utilised to enable the engagement of the stakeholders in Smart City projects in Sri Lanka.

Key Words: Smart Cities, Stakeholders, Engagement, Sri Lanka

DEDICATION

To my beloved parents

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ABBREVIATIONS

CCD - Coast Conservation Department

CEA - Central Environmental Authority

CEB - Ceylon Electricity Board

ICT - Information and Communication Technology

NARA - National Aquatic Resources Research and Development Agency

MEP - Mechanical, Electrical and Plumbing

NGO - Non-Governmental Organisations

RDA - Road Development Authority

SC – Smart City

SCP – Smart City Project

SUD – Sustainable Urban Development

UDA - Urban Development Authority

UDP – Urban Development Project