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**DETERMINANTS OF PURCHASE DECISION OF  
CLIENT-SERVER HARDWARE SYSTEM (C-SHS)  
IN MALAYSIAN SME BUSINESSES**



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## ABSTRACT

Information and communications technologies (ICT) is regarded as an essential tool in enhancing competitiveness of small and medium enterprises (SMEs) in global marketplaces. Consequently, client-server hardware system (C-SHS) has gained its popularity in SM enterprises. However, there is no specific research done about determinants of purchase decision of C-SHS in SMEs particularly in Malaysia. Thus, this research filled this gap and developed a research problem on *why and how to establish the determinants of purchase decision of C-SHS in Malaysian SME businesses*. A preliminary theoretical framework based on literature and also the integration of Technology Acceptance Model, Diffusion of Innovation theory, and Technology, Organization, and Environment framework was developed. This research employed qualitative methodology using convergent interview and thematic data analysis techniques to explore and confirm the preliminary theoretical framework. Convergent interview is opted since it allows a greater depth of data collection than other types of interviews as it attempts to gain insight into the informant's understanding of a situation or process. The identification of respondents in this research was based on a snowballing technique. The findings from this research confirmed 16 determinants of purchase decision of C-SHS in SMEs, that are, relative advantage, compatibility system, complexity system, existing IT infrastructure, trialability, cost of purchase, top management support, end user IT skill, owner characteristics, resources availability/constraint, perceived usefulness, perceived ease of use, competitive pressure, government support, customer pressure, vendors competency & support. In addition, five (5) newly determinants had been discovered, that are, scalability system, security system, new initiative, brand loyalty, and green IT environment. These newly discovered determinants represent new contributions to the body of knowledge. As a consequent, a revised theoretical framework is derived to capture these new discoveries. The finding of this research has implications on policy, practice, and methodological aspects.

**Keywords:** Information and Communications Technologies, client-server hardware system, Small and Medium Enterprises.

## ABSTRAK

Teknologi maklumat dan komunikasi (ICT) dianggap sebagai alat yang penting dalam meningkatkan daya saing perusahaan kecil dan sederhana (PKS) di arena pasaran global. Antara perkakasan ICT yang penting ialah sistem pelanggan-pelayan (C-SHS) yang semakin mendapat populariti yang tinggi dalam perniagaan. Walau bagaimanapun, penyelidikan dalam topik itu adalah terlalu terhad khususnya di Malaysia. Justeru, kajian ini dilakukan untuk mengisi jurang tersebut dan mengenal pasti masalah kajian iaitu *bagaimana dan mengapa perlu wujudnya penentu keputusan pembelian C-SHS dalam perniagaan PKS di Malaysia*. Sebuah kerangka teori awal telah dibangunkan berdasarkan ulasan karya serta integrasi model penerimaan teknologi (TAM), teori penyebaran inovasi (DOI) dan teori rangka kerja teknologi, organisasi, dan persekitaran (TOE). Penyelidikan ini menggunakan kaedah kualitatif dengan mengaplikasikan kaedah kajian wawancara tertumpu (*convergent*). Penentuan responden dalam kajian ini adalah berdasarkan teknik *snowballing*. Kaedah analisis data tematik telah diguna pakai untuk menganalisis data-data yang dihasilkan melalui kaedah wawancara tertumpu untuk mengesahkan kerangka teori awal yang telah dibangunkan sebelum ini. Hasil daripada analisa kajian ini, sejumlah 16 penentu keputusan pembelian C-SHS telah disahkan, iaitu kelebihan relatif, keserasian sistem, sistem kerumitan, infrastruktur IT yang sedia ada, keupayaan percubaan, kos pembelian, sokongan pengurusan atasan, kemahiran pengguna IT, karakter pemilik, sumber ketersediaan/kekangan, persepsi kemanfaatan, persepsi mudah penggunaan, tekanan persaingan, sokongan kerajaan, tekanan pelanggan, kompetensi & sokongan vendor. Tambahan lagi, terdapat lima (5) penentu keputusan pembelian C-SHS baharu telah dikenalpasti, meliputi; sistem berskala, sistem keselamatan, inisiatif baru, kesetiaan jenama, dan persekitaran IT hijau. Penemuan baharu ini telah memberi sumbangan serta memberi impak yang tinggi dalam dunia keilmuan global. Kerangka awal teori penyelidikan ini telah disemak dan diubahsuai semula sejajar dengan dapatan kajian ini. Kajian ini telah menggariskan tiga (3) implikasi utama yang meliputi dasar, amalan, dan aspek metodologi.

**Kata kunci:** Teknologi Maklumat dan Komunikasi, Sistem Pelanggan-Pelayan, Perusahaan Kecil dan Sederhana

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## **List of Abbreviations**

- ACCA : Association of Chartered Certified Accountants.
- ADB : Asian Development Bank
- APEC : Asia-Pacific Economic Cooperation
- C-SHS : Client-Server Hardware System
- CP : Computer Paradigm
- EC : Economic Census
- ED : Environmental Determinants
- EG : Edinburgh Group
- ICT : Information and Communication Technology
- IFC : International Finance Cooperation
- IS : Information System
- IT : Information Technology
- MENA: Middle East and Northern Africa
- MNEs : Multinational Enterprises
- NSDC : National SME Development Council
- OECD : Organization for Economic Co-operation and Development
- OD : Organizational Determinants
- SMEs : Small and Medium Enterprises
- SSM : Suruhanjaya Syarikat Malaysia (Companies Commission of Malaysia)
- TD : Technological Determinants



# CHAPTER 1: INTRODUCTION

## 1.0 Introduction

This chapter mainly serves as the overview and the background of what this research topic is all about and what is the main problem to be addressed by undertaking this research. It discusses the importance of this research topic and its contribution to the body of knowledge in pertaining to the information and communication technology (ICT) context, specifically in the small and medium enterprises (SMEs) business in Malaysia. In addition this chapter also outlines how this dissertation is prepared. In brief, this chapter is organized according to nine (9) main sections as shown in the flow chart below, Figure 1.1.

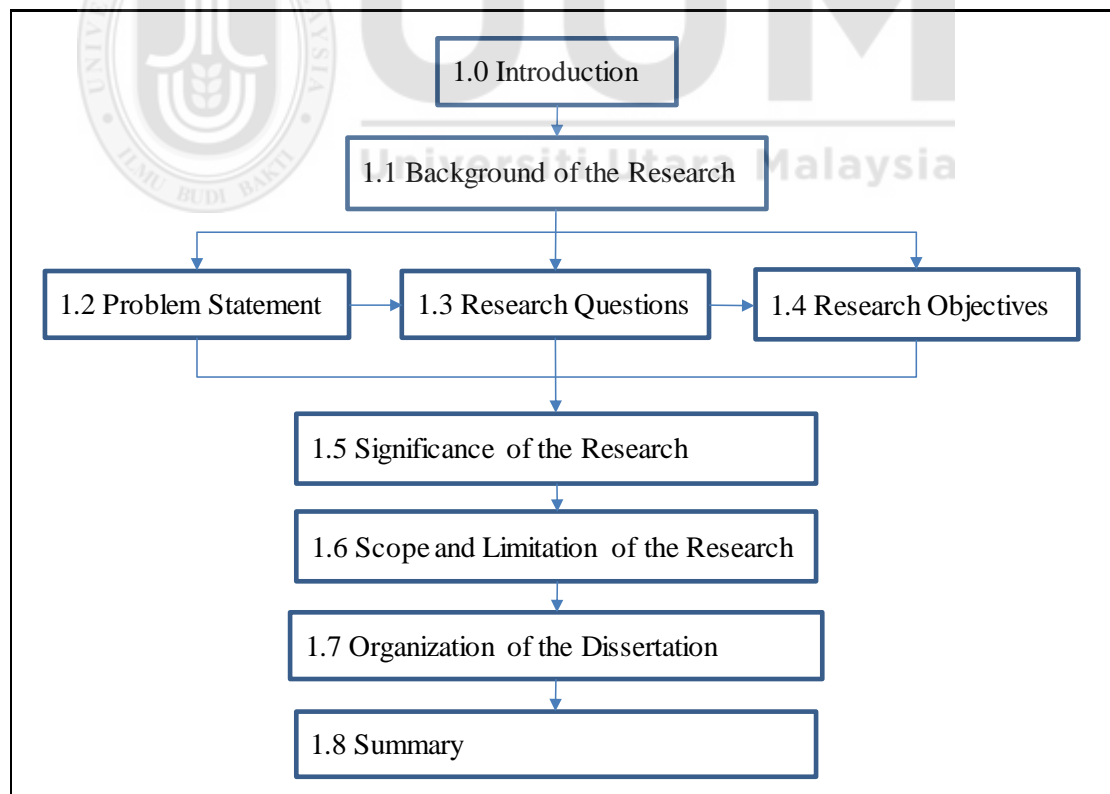


Figure 1.1  
*The organization and flow of Chapter 1*

Source: developed for this research

The contents of  
the thesis is for  
internal user  
only

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