

**THE ADOPTION OF WEB 2.0 TECHNOLOGY IN
MALAYSIAN RETAIL-CHAIN BUSINESSES**

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**DOCTORATE OF BUSINESS ADMINISTRATION
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CHAIN BUSINESSES**

**By
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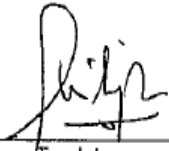
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Abstract

Motivation for this research derives from recognition that “Web 2.0” technology is being introduced and increased numbers of users. However, very little academic research has been done in reference to the phenomenon and its implications for Malaysian retail-chain businesses. This study attempts to answer three research questions; namely (1) What are the Web 2.0 technologies currently adopted by Malaysian retail-chain businesses? (2) What are the factors that influence Malaysian retail-chain businesses toward Web 2.0 technologies adoption? and (3) What are Malaysian retail-chain businesses perceptions towards Web 2.0 technologies? The research objectives are: (1) To identify the Web 2.0 technologies currently adopted by Malaysian retail-chain businesses, (2) To identify the factors that are likely to influence the Malaysian retail-chain businesses adoption of Web 2.0 technologies, and (3) To examine Malaysian retail-chain businesses perceived importance and satisfaction towards Web 2.0 technologies currently adopted. A theoretical framework for the organizational Web 2.0 adoption was built by reviewing the literature on information systems adoption and attitude towards behaviour. Based on the literature review, variables contexts such as perceived benefits, technology, organization, and environment were identified to predict the Malaysian retail-chain adoption of Web 2.0. Using a survey method, data were collected from 185 respondents in Malaysia. The data was analysed to test on eleven hypotheses. A research framework was proposed and tested using factor analysis, multiple regression analysis and Importance-Performance Analysis (IPA) grid techniques. Results showed that eight factors from the four contexts were found to play important role in the adoption of Web 2.0 except technology security, inter-organizational collaboration and organizational readiness. Lastly, this study provides empirical evidence that it is important to examine the organizations perception of importance and satisfaction toward different Web 2.0 technologies.

Keywords: Retail-chain business, Web 2.0 adoption, Institutional Theory, Malaysia

Abstrak

Kajian ini dijalankan berdasarkan kemajuan teknologi Web 2.0 yang mencatat jumlah pengguna yang sangat tinggi. Walau bagaimanapun, kajian akademi yang telah dihasilkan amat rendah dibandingkan dengan prestasinya and impak terhadap rantaian perniagaan runcit di Malaysia. Kajian ini bertujuan untuk menjawab tiga persoalan kajian iaitu (1) Apakah teknologi Web 2.0 yang diterima pakai pada masa ini oleh rantaian perniagaan runcit Malaysia? (2) Apakah faktor-faktor yang mempengaruhi rantaian perniagaan runcit Malaysia ke arah penerapan teknologi Web 2.0? dan (3) Apakah persepsi rantaian perniagaan runcit Malaysia terhadap penerapan teknologi Web 2.0? Objektif kajian adalah seperti berikut: (1) Untuk mengenal pasti teknologi Web 2.0 yang diterima pakai pada masa ini oleh rantaian perniagaan runcit Malaysia, (2) Untuk mengenal pasti faktor-faktor yang mempengaruhi rantaian perniagaan runcit Malaysia menerima pakai teknologi Web 2.0. (3) Untuk mengenal pasti tahap persepsi terhadap kepentingan dan kepuasan teknologi Web 2.0 pilihan yang diterima oleh rantaian perniagaan runcit Malaysia pada masa ini. Satu rangka kerja teoritikal bagi mengatur penerapan Web 2.0 telah dibina dengan cara meninjau semula literature yang berkaitan dengan penerimaan pakai sistem maklumat, sikap terhadap tingkah laku dan pelbagai konsep Web 2.0. Berdasarkan sorotan literatur, pembolehubah konteks seperti manfaat jangkaan, teknologi, organisasi, dan persekitaran dikenal pasti untuk meramalkan Penerimaan Pakai Web 2.0 oleh Rantaian Runcit Malaysia. Sampel bagi kajian ini terdiri daripada ahli MRCA yang menggunakan teknologi Web 2.0. Dengan menggunakan kaedah survey, data telah dikumpulkan daripada 185 responden di Malaysia. Data telah dianalisis untuk menguji sejumlah sebelas hipotesis. Satu bentuk rangka kerja kajian telah dicadangkan dan telah diuji dengan menggunakan analisis faktor, analisis regresi berganda dan Analisis Kepentingan Prestasi teknik grid (IPA). Dapatan menunjukkan bahawa lapan faktor daripada empat konteks didapati memainkan peranan penting dalam penerimaan pakai Web 2.0 kecuali teknologi keselamatan, kerjasama antara organisasi dan kesediaan organisasi. Akhir sekali, kajian ini telah menemukan bukti empirikal iaitu adalah penting untuk mengkaji persepsi organisasi terhadap kepentingan dan kepuasan terhadap teknologi Web 2.0 yang berbeza-beza.

Kata Kunci: rantaian perniagaan runcit, Web 2.0, teori institusi, Malaysia

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List of Abbreviations

AD	Web 2.0 technology Adoption
EN	Environmental Context
ENC	Coercive pressures – customers
ENM	Mimetic pressures – competitors
ENN	Normative pressures
ETP	Economic Transformation Programme
IBM	International Business Machine Corporation
IDT	Innovation Diffusion Theory Model
IM	Instant Messaging
IPA	Importance-Performance Analysis
IS	Information Systems
IT	Information Technology
MRCA	Malaysian Retailers-Chain Association
OR	Organizational Context
ORR	Organizational Readiness
ORT	Top Management Support
PB	Perceived Benefits
PBC	Inter-organizational Collaboration
PBK	Knowledge Sharing
PBM	Market Share
RSS	Really Simple Syndication
TAM	Technology Adoption Model
TE	Technological Context
TECO	Technology Cost
TECX	Complexity
TES	Security
TOE	Technology, Organization, and Environment Framework
Web 2.0	Web 2.0 Technology

CHAPTER 1 INTRODUCTION

1.1 Introduction

This chapter provides an overview of this study. It elaborates the background of this study, and the role of Web 2.0 technology (Web 2.0) in Malaysia particularly to businesses. The problem statement, research questions and objectives, significance and scope of this study are also highlighted the importance in the context of Web 2.0 adoption among Malaysian retail-chain businesses.

1.2 Background of Study

The strategic use of Internet technology and the use of information system (IS) to achieve competitive advantage have received much attention (Porter & Miller, 1985; King, Grover & Hufanagel, 1989; Monteiro & Macdonald, 1996). The use of Internet and IS are considered strategic because competitive advantage is achieved by using these technologies. These technologies are more than merely improving internal operations, enhance efficiency, and also to increase market share and/or profit in business organizations including the retail businesses. The Internet technology becomes a major source of customer information and empowerment (Urban, 2003; Constantinides, 2008). Lately, many businesses have started to adopt a new generation of web technologies and applications such as blogs, Web 2.0 media, and social networking, commonly referred as Web 2.0. White and Pauxtis (2010) opined Web 2.0 help to enhance works more efficiently whereby businesses are now competing at a different level. In general, Web 2.0 is a second generation of World Wide Web technologies, which enable users' collaboration, including generating, reviewing,

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