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IMPACT OF FACTORS INFLUENCING USE OF E-COMMERCE ON PERFORMANCE OF MALAYSIAN SMALL AND MEDIUM ENTERPRISE



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UUM
Universiti Utara Malaysia

**DOCTOR OF BUSINESS ADMINISTRATION
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PERFORMANCE OF MALAYSIAN SMALL AND MEDIUM ENTERPRISE**



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OTHMAN YEOP ABDULLAH GRADUATE SCHOOL OF BUSINESS
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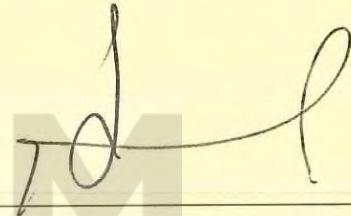
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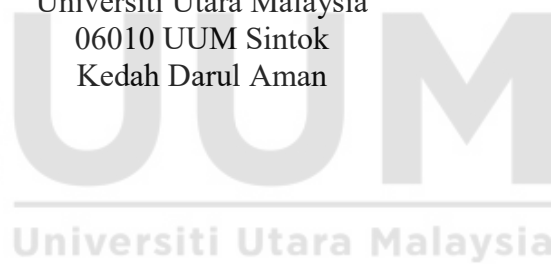
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ABSTRACT

Despite the huge government effort spent, the performance of Small and medium enterprise (SME) in Malaysia has not been in tandem with the pace of other nations. In this light, e-commerce offers the resolution to improve the SME performance. However, the e-commerce technology available in Malaysia has not been fully utilized. This research focuses on SMEs' adoption of technology and its impacts on their performance. This research examines the relationships among performance expectancy, effort expectancy, social influence, facilitating condition, perceived risk, use of e-commerce and SME performance. The research framework has been developed based on Resource-Based View (RBV) and Unified Theory of Acceptance & Use of Technology (UTAUT). The research data were collected from Malaysian SMEs operators who adopted e-commerce. A total of 1,595 companies were studied. Out of which 202 questionnaires were returned. This research used census sampling technique while the data were analyzed by using the SPSS 20 and SmartPLS 3.0 to examine its measurement model and structural model. The results showed that performance expectancy, effort expectancy, facilitating conditions and perceived risk have a significant direct relationship with the use of e-commerce, except social influence. The use of e-commerce has shown a significant direct relationship with SME performance. Besides that, the use of e-commerce as a mediating variable revealed that with the significant use of e-commerce by SMEs, performance expectancy, effort expectancy, facilitating conditions and perceived risk influenced SME performance except social influence. Thus, the findings of this research provide important insights to policy-makers, researcher and industry players to create further understanding on the impact of e-commerce adoption on SMEs performance.

Keywords: Use of e-commerce, SME performance, RBV, UTAUT, perceived risk, SMEs.

ABSTRAK

Di sebalik usaha gigih yang telah dilakukan oleh pihak kerajaan, prestasi Perusahaan Kecil dan Sederhana (PKS) di Malaysia masih tidak seiring dengan negara-negara lain. Oleh sebab itu, e-dagang menawarkan penyelesaian untuk meningkatkan prestasi PKS. Walau bagaimanapun, teknologi e-dagang yang ada di Malaysia tidak digunakan sepenuhnya. Kajian ini memberi tumpuan kepada penggunaan teknologi e-dagang dan kesannya terhadap prestasi PKS. Kajian ini menyelidik hubungan antara jangkaan prestasi, jangkaan usaha, pengaruh sosial, keadaan kemudahan, tanggapan risiko, penggunaan e-dagang dan prestasi PKS. Rangka kerja kajian ini adalah berdasarkan kepada Pandangan Berasaskan Sumber (RBV) dan Penggabungan Teori Penerimaan & Penggunaan Teknologi (UTAUT). Data diperolehi daripada PKS Malaysia yang menggunakan e-dagang. Sebanyak 1,595 syarikat telah diteliti dan hanya 202 soal selidik dikembalikan. Kajian ini menggunakan teknik persampelan bancian. Data dianalisis dengan menggunakan SPSS 20 dan SmartPLS 3.0 untuk mengkaji model pengukuran dan model strukturnya. Hasil kajian menunjukkan bahawa jangkaan prestasi, jangkaan usaha, keadaan kemudahan dan tanggapan risiko mempunyai hubungan langsung yang ketara dengan penggunaan e-dagang kecuali pengaruh sosial. Penggunaan e-dagang menunjukkan hubungan langsung yang ketara dengan prestasi PKS. Selain itu, penggunaan e-dagang sebagai pemboleh ubah perantara menunjukkan bahawa dengan penggunaan e-dagang yang ketara oleh PKS, jangkaan prestasi, jangkaan usaha, keadaan kemudahan dan tanggapan risiko mempengaruhi prestasi PKS kecuali pengaruh sosial. Oleh itu, dapatan kajian ini memberikan pandangan penting kepada pembuat dasar, penyelidik dan pakar industri untuk lebih memahami impak faktor penggunaan e-dagang terhadap prestasi PKS.

Kata kunci: Penggunaan E-dagang, prestasi PKS, RBV, UTAUT, tanggapan risiko, PKS.

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LIST OF ABBREVIATION/NOTATIONS/GLOSSARY OF TERMS

11MP	Eleventh Malaysian Plan
ACCCIM	Associated Chinese Chambers of Commerce & Industry of Malaysia
AIM	Agensi Inovasi Malaysia
ASEAN	Association of Southeast Asian Nations
ATUT	attitude towards using technology
AVE	average variance extracted
B2B	business-to-business
B2C	business-to-consumer
B2G	business-to-government
BI	behavioral intention
BNM	Bank Negara Malaysia
BU	behavioral use
C2B	consumer-to-business
C2C	customer-to-customer
CAGR	compounded average growth rate
CB-SEM	covariance based-structural equation modelling
CFA	confirmatory factor analysis
CI	confidence interval
CMA	Communication and Multimedia Act 1998
CMB	common method bias
CoD	Cash-on-delivery
CPA	Consumer Protection Act 2006
CPA	Copyright Protection Act 1997
CR	composite reliability
DV	dependent variable
EC	e-commerce
ECA	Electronic Commerce Act 2006
EDI	Electronic Data Interchange
EE	effort expectancy
EFT	Electronic Funds Transfer
ER	economical risk
ERP	enterprise resource planning
FC	facilitating condition
FR	functional risk
G2B	government-to-business
G2C	government-to-customer
GDP	Gross Domestic Product
GST	Goods & Service Tax
HACCP	Hazard Analysis Critical Control Point
HIPs	High Impact Programmes
HM	Hierarchical Model
HTML	Hypertext Markup Language
HTMT	Heterotrait-Monotrait Ratio
ICT	Information and Communication Technology
IDT	Innovation Diffusion Theory
IMP	Industrial Master Plan

ISO	International Standard Organization
IV	independent variable
JAKIM	Halal Standard
LL	lower limit
LV	latent variable
MAMPU	Malaysian Administrative Modernisation & Management Planning Unit
MATRADE	Malaysia External Trade Development Corporation
MDEC	Malaysia Digital Economy Corporation
MIS	Management Information Systems
MM	Motivational Model
MNC	Multinational Corporation
MOQ	minimum order quantity
MOSTI	Ministry of Science, Technology and Innovation
MPCU	The Model of PC Utilization
MRS	manufacturing-related services
MV	Mediating Variable
NEP	New Economic Policy
NSDC	National SME Development Council
OECD	Organization of Economic Corporation and Development
OTG	on-the-go
OYA-GSB	Othman Yeop Abdullah Graduate School of Business
PDPA	Personal Data Protection Act 2010
PE	performance expectancy
PEMUDAH	Pasukan Petugas Khas Pemudahcara Perniagaan
PLS	partial least square
PR	perceived risk
PWS	personal workstations
R&D	research & development
RBV	Resource Based View
RGM	Retail Group Malaysia
ROA	return of asset
ROE	return of equity
SCT	Social Cognitive Theory
SEM	structural equation modeling
SI	social influence
SIRIM	Malaysian Standard
SME Corp	Small Medium Enterprise Corporation
SME	Small Medium Enterprise
SOGA	Sales of Goods Act 1957
SP	SME performance
SPSS	Statistical Package for the Social Sciences
SR	security risk
SSM	Companies Commission Malaysia
TAM	technology acceptance model
TDA	Trade Description Act 2011
TMA	Trade Marks Act 1976
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action

UB	use behavior
UE	use of e-commerce
UL	upper limit
USA	United States of America
UTAUT	unified theory of acceptance & use of technology
UUM	Universiti Utara Malaysia
VB-SEM	variance based-structural equation modelling
VIF	variance inflation factor
VRIN	value, rarity, imitability and non-substitutable
VRIO	value, rarity, imitability and organization
WWW	World Wide Web
YIM	Yayasan Inovasi Malaysia



CHAPTER ONE

INTRODUCTION

This chapter introduces the study. The first chapter of this dissertation describes the overall idea, starting with the background of the study, problem statement, research questions, research objectives, and continuing with the discussion of the scope of the study, the significance of the study and the definition of key terms.

1.1 Background of the Study

Globally, most governments have realized that Small and Medium-sized Enterprises (SMEs) have an economic value in jobs creation, poverty reduction, regional development and Growth Domestic Product (GDP) improvement (Ayyagari *et al.*, 2007). They have posted the opportunity which may grow from SMEs to future large companies and corporations (Abouzeedan, 2011), hence, the wealth of a nation and growth of economies are highly dependable on the SMEs performance.

Generally, in most of the countries, SMEs make up 95 percent of the economy (Kotelnikov, 2007). For example, 99.8 percent of the established firms in Europe are SMEs which these SMEs create two-thirds of employment (Carayannis *et al.*, 2006). While in Malaysia, SMEs account for 98.5 percent or 907,065 of total businesses established (SME Corporation Malaysia [SME Corp], 2017). On average, SMEs contribute to almost 50 percent of the GDP in high-income countries (Ayyagari *et al.*, 2011) while Malaysian SMEs contribute 36.6 percent of the country's GDP with the

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APPENDIX

Table A1.1

Research questions, research objectives and hypothesis

	Research Questions	Research Objectives	Hypothesis
H1	Does performance expectancy have the relationship with the use of e-commerce ?	To examine the relationships between performance expectancy and use of e-commerce	Performance expectancy has an influence on the use of e-commerce
H2	Does effort expectancy have the relationship with the use of e-commerce ?	To examine the relationships between effort expectancy and use of e-commerce	Effort expectancy has an influence on the use of e-commerce
H3	Does social influence have the relationship with the use of e-commerce ?	To examine the relationships between social influence and use of e-commerce	Social influence has an influence on the use of e-commerce
H4	Does facilitating condition have the relationship with the use of e-commerce ?	To examine the relationships between facilitating condition and use of e-commerce	Facilitating condition has an influence on the use of e-commerce
H5	Does perceived risk have the relationship with the use of e-commerce ?	To examine the relationships between perceived risk and use of e-commerce	Perceived risk has an influence on the use of e-commerce
H6	Does use of e-commerce has a relationship with SME performance ?	To examine the relationships between use of e-commerce and SME performance	Use of e-commerce has an influence on SME performance
H7a	Does use of e-commerce mediate the relationship between performance expectancy, effort expectancy, social influence, facilitating condition and perceived risk on SME performance ?	To examine the use of e-commerce mediation on the relationship between performance expectancy, effort expectancy, social influence, facilitating condition and perceived risk on SME performance	The relationship between performance expectation and SME performance is mediated by the use of e-commerce
H7b			The relationship between effort expectation and SME performance is mediated by the use of e-commerce
H7c			The relationship between social influence and SME performance is mediated by the use of e-commerce
H7d			The relationship between facilitating condition and SME performance is mediated by the use of e-commerce
H7e			The relationship between perceived risk and SME performance is mediated by the use of e-commerce

Table A1.2*Estimated Item Listing Number in Lelong.my on 7th January 2017*

	Categories	Estimated Listing
1	Phone & Tablet	116,820
2	Electronics & Appliances	72,300
3	Fashion	129,420
4	Beauty & Personal Cares	45,540
5	Watches & Clocks	36,900
6	Home & Gardening	71,880
7	Sports & Recreation	32,220
8	Books & Comics	47,520
9	Computer & Software	161,040
10	Camera & Camcorder	31,080
11	Jewelry & Accessories	18,060
12	Baby, Kids, Mum	22,860
13	Cars & Transport	74,100
14	Food & Beverages	5,220
15	Pet Supplies	9,960

Table A1.3*Definition of Key Terms*

Key Term	Definition	Source
Behavioral Intention (BI)	A person's perceived likelihood or subjective probability that he or she will engage in a given behavior	Venkatesh <i>et al.</i> , 2003
Business performance	The reflection of the perspective of strategic management effectiveness, is a subset of the overall concept of organizational effectiveness	Venkatraman & Ramanujam, 1986
Business-to-Business (B2B)	The activities when business entities or organizations participate with other businesses or organizations to do e-commerce	Turban <i>et al.</i> , 2008
Business-to-Consumers (B2C)	The activities when a business or organization entity provides products or services to individual customers	Turban <i>et al.</i> , 2008
Consumer-to-Business (C2B)	A type of e-commerce in which individuals use the Internet to sell products or services to organizations, as well as, individuals who seek sellers to bid on products or services they need	Turban <i>et al.</i> , 2008

Economical Risk (ER)	Perceived economic risk arises from the perception of possible economic loss due to transaction error or faulty operation.	Koenig-Lewis <i>et al.</i> 2010
Effort Expectation (EE)	The degree of ease associated with the use of the system.	Venkatesh <i>et al.</i> , 2003
Electronic Commerce (EC)	The monetary process of buying, selling, transferring, or exchanging products, services, and/or information based on the following prevailing conditions	Turban <i>et al.</i> , 2008
Facilitating Conditions (FC)	The degree to which an individual believes that an organizational and technical infrastructure exists to support the use of the system.	Venkatesh <i>et al.</i> , 2003
Functional Risk (FR)	The perceived functional risk lies in the perception of possible lack of service reliability or accessibility	Wessels & Drennan, 2010
Location-based Commerce (L-commerce)	A type of m-commerce transactions targeted to individuals in specific locations, at specific times are known as location-based commerce	Turban <i>et al.</i> , 2008
Mobile Commerce (M-commerce)	A type of e-commerce transactions and activities conducted in full or in part in a wireless environment	Turban <i>et al.</i> , 2008
Perceived risk (PR)	A perception refers to an individual's subjective expectation of potential issues while conducting monetary transactions over mobile IT services. PR is "the perception of uncertainty and adverse consequences resulting from a given activity	Forsythe <i>et al.</i> , 2006
Performance Expectation (PE)	The degree to which an individual believes that using the system will help him or her to attain gains in job performance	Venkatesh <i>et al.</i> , 2003
Security Risk (SR)	The perceived security risk of mobile financial services lies in the perception of potential harm due to electronic fraud or hacker attacks	Mallat, 2007; Mallat <i>et al.</i> , 2006
SME Performance (SP)	A critical factor for effective management to which an operation fulfills the performance and meet the needs of the customers	Salaheldin, 2009; Slack <i>et al.</i> , 2001

Social Influence (SI)	The degree to which an individual perceives that important others believe he or she should use the new system.	Venkatesh <i>et al.</i> , 2003
Social network websites	A type of websites that allow visitors to register and connect to other registered members in order to communicate or share resources	Thelwall, 2008
Unified theory of acceptance and use of technology (UTAUT)	A consolidated model extensively used to explain an individual's acceptance and use of a technology	Venkatesh <i>et al.</i> , 2003
Use behavior (UB) or attitude towards using technology (ATUT).	An individual's liking, enjoyment, joy, and pleasure associated with technology use	Venkatesh <i>et al.</i> , 2003



Table A3.1

Operationalized Construct: Performance Expectancy

OPERATIONALIZATION OF VARIABLES			
a.	Construct Name	Performance Expectancy (PE)	
b.	Operational Definition	The degree to which an individual believes that using the system will help him or her to attain gains in job performance (Venkatesh <i>et al.</i> , 2003).	
c.	Objective	To measure the extent which SME believes that utilizing the e-commerce will help to attain gains in SME task performance.	
d.	Variable Type	Independent Variable	
e.	Measurement	Interval, Likert Scale (1 = strongly disagree to 7 = strongly agree)	
f.	Type of Analysis	Descriptive statistics	
g.	Cronbach Alpha	0.91-0.92	
Item	Original Construct/Item	Adapted Item	Sources
PE1	Perceived Usefulness: Using the system would enhance my effectiveness on the job.	Using the <u>e-commerce</u> would enhance my <u>business</u> effectiveness.	Davis 1989; Davis <i>et al.</i> , 1989; Venkatesh <i>et al.</i> , 2003
PE2	Perceived Usefulness: I would find the system useful in my job.	<u>My Company</u> would find that <u>e-commerce is</u> useful in my <u>business</u> .	Davis, 1989; Davis <i>et al.</i> , 1989; Venkatesh <i>et al.</i> , 2003
PE3	Relative Advantage: Using the system increases my productivity.	Using the <u>e-commerce</u> increases my <u>business</u> productivity.	Moore & Benbasat, 1991; Venkatesh <i>et al.</i> , 2003
PE4	Relative Advantage: Using the system enables me to accomplish tasks more quickly.	Using the <u>e-commerce</u> enables <u>my staff</u> to accomplish <u>transactions</u> more quickly.	Moore & Benbasat, 1991; Venkatesh <i>et al.</i> , 2003
PE5	Job-it: Use of the system can decrease the time needed for my important job responsibilities.	Use of the <u>e-commerce</u> can decrease the time needed for my <u>business transaction</u> .	Thompson <i>et al.</i> , 1991; Venkatesh <i>et al.</i> , 2003
PE6	Outcome Expectation: If I use the system... 3. I will increase the quality of output of my job.	If <u>my company</u> uses the <u>e-commerce</u> , <u>it</u> will increase the quality of sales of my <u>business</u> .	Compeau & Higgins, 1995; Venkatesh <i>et al.</i> , 2003

Table A3.2

Operationalized Construct: Effort Expectancy

OPERATIONALIZATION OF VARIABLES			
a.	Construct Name	Effort Expectancy (EE)	
b.	Operational Definition	The degree of ease associated with the use of the system (Venkatesh <i>et al.</i> , 2003).	
c.	Objective	To measure the extent which SME believes that learning to use the e-commerce will not require significant effort.	
d.	Variable Type	Independent Variable	
e.	Measurement	Interval, Likert Scale (1 = strongly disagree to 7 = strongly agree)	
f.	Type of Analysis	Descriptive statistics	
g.	Cronbach Alpha	0.90-0.94	
Item	Original Construct/Item	Adapted Item	Sources
EE1	Perceived Ease of Use: Learning to operate the system would be easy for me.	Learning to <u>use</u> the <u>e-commerce</u> would be easy for <u>my staff</u> .	Davis 1989; Davis <i>et al.</i> , 1989; Venkatesh <i>et al.</i> , 2003
EE2	Perceived Ease of Use: My interaction with the system would be clear and understandable.	My <u>staff</u> interaction with the <u>e-commerce</u> would be clear and understandable.	Davis 1989; Davis <i>et al.</i> , 1989; Venkatesh <i>et al.</i> , 2003
EE3	Perceived Ease of Use: It would be easy for me to become skillful at using the system.	It would be easy for my <u>staff</u> to become skillful at using <u>e-commerce</u> .	Davis 1989; Davis <i>et al.</i> , 1989; Venkatesh <i>et al.</i> , 2003
EE4	Perceived Ease of Use: I would find the system easy to use.	<u>My staff</u> would find <u>e-commerce</u> easy to use.	Davis 1989; Davis <i>et al.</i> , 1989; Venkatesh <i>et al.</i> , 2003
EE5	Complexity: Using the system involves too much time doing mechanical operations (for example, data input)	Using the <u>e-commerce</u> involves less time doing <u>business transaction</u> . [Reverse order from original item]	Thompson <i>et al.</i> , 1991; Venkatesh <i>et al.</i> , 2003
EE6	Complexity of the Service: This service is complicated in nature.	The e-commerce is simple in nature. [Reverse order from original item]	Burnham <i>et al.</i> , 2003

Table A3.3

Operationalized Construct: Social Influence

OPERATIONALIZATION OF VARIABLES			
a.	Construct Name	Social Influence (SI)	
b.	Operational Definition	The degree to which an individual perceives that important others believe he or she should use the new system (Venkatesh <i>et al.</i> , 2003).	
c.	Objective	To measure the extent which SME perceives that their peers directly or indirectly influence them to use e-commerce in their business.	
d.	Variable Type	Independent Variable	
e.	Measurement	Interval, Likert Scale (1 = strongly disagree to 7 = strongly agree)	
f.	Type of Analysis	Descriptive statistics	
g.	Cronbach Alpha	0.88-0.94	
Item	Original Construct/Item	Adapted Item	Sources
SI1	<u>Social Influence:</u> I feel people around me would encourage me to use mobile stock trading.	I feel people around me would encourage <u>my company</u> to use <u>e-commerce</u> .	Tai & Ku, 2013
SI2	<u>Subjective Norm:</u> People who are important to me think that I should use the system.	People who are important to the <u>company</u> would think that <u>my company</u> should use <u>e-commerce</u> .	Ajzen, 1991; Venkatesh <i>et al.</i> , 2003
SI3	<u>Image:</u> People in my organization who use the system have more prestige than those who do not.	<u>A company</u> which uses the <u>e-commerce</u> has more prestige than those who do not.	Moore & Benbassat, 1991; Venkatesh <i>et al.</i> , 2003
SI4	<u>Attitude Toward Word-of-Mouth (Online):</u> I like to learn about others' product and service experiences.	<u>My company</u> likes to learn about others' using <u>the e-commerce</u> experience (from blog, review, comment, business magazine etc.).	Khare <i>et al.</i> , 2011
SI5	<u>Attitude Toward the Website (Image):</u> People in my personal environment who use this website have a high profile.	<u>A company</u> which uses the <u>e-commerce</u> has a high profile.	Moore & Benbassat, 1991; Venkatesh & Davis, 2000
SI6	<u>Social Factor:</u> I use the system because of the proportion of coworkers who use the system.	<u>My company</u> uses the <u>e-commerce</u> because of my <u>peers for example business partners/competitors also using the e-commerce</u> .	Thompson <i>et al.</i> , 1991; Venkatesh <i>et al.</i> , 2003

Table A3.4

Operationalized Construct: Facilitating Conditions

OPERATIONALIZATION OF VARIABLES			
a.	Construct Name	Facilitating Conditions (FC)	
b.	Operational Definition	The degree to which an individual believes that an organizational and technical infrastructure exists to support the use of the system (Venkatesh <i>et al.</i> , 2003)	
c.	Objective	To measure the extent which SME perceives that the existing external or internal organizational and technical infrastructure to support them to use e-commerce.	
d.	Variable Type	Independent Variable	
e.	Measurement	Interval, Likert Scale (1 = strongly disagree to 7 = strongly agree)	
f.	Type of Analysis	Descriptive statistics	
g.	Cronbach Alpha	0.83-0.87	
Item	Original Construct/Item	Adapted Item	Sources
FC1	Perceived Behavioral Control: I have the resources necessary to use the system.	<u>My company</u> has the resources necessary to use the <u>e-commerce</u> for example man power, capital, etc.	Ajzen, 1991; Taylor & Todd 1995a, 1995b; Venkatesh <i>et al.</i> , 2003
FC2	Perceived Behavioral Control: Given the resources, opportunities and knowledge it takes to use the system, it would be easy for me to use the system.	Given the government resources (for example SME Corp, training, subsidies, etc.), opportunities and knowledge it takes to use the system, it would be easy for <u>my company</u> to use the <u>e-commerce</u> .	Ajzen, 1991; Taylor & Todd 1995a, 1995b; Venkatesh <i>et al.</i> , 2003
FC3	Facilitating Conditions: Guidance was available to me in the selection of the system	Guidance was available to <u>my company</u> in the selection of the <u>e-commerce platforms</u> for example Lazada's webinar.	Thompson <i>et al.</i> , 1991; Venkatesh <i>et al.</i> , 2003
FC4	Facilitating Conditions: A specific person (or group) is available for assistance with system difficulties.	A specific <u>instructor</u> is available for assistance with system difficulties for example Lazada's technician to help about product listing, Shopee university etc.	Thompson <i>et al.</i> , 1991; Venkatesh <i>et al.</i> , 2003
FC5	Compatibility: Using the system fits into my work style.	Using the <u>e-commerce</u> fits into <u>our way of doing business</u> .	Moore & Benbasat, 1991; Venkatesh <i>et al.</i> , 2003
FC6	Compatibility: Using the system is compatible with all aspects of my work.	Using the <u>e-commerce</u> is compatible with all aspects of <u>my business transaction</u> .	Moore & Benbasat, 1991; Venkatesh <i>et al.</i> , 2003

Table A3.5

Operationalized Construct: Perceived Risk

OPERATIONALIZATION OF VARIABLES			
a.	Construct Name	Perceived Risk (PR)	
b.	Operational Definition	A perception refers to an individual's subjective expectation of potential issues while conducting monetary transactions over ICT services. PR is the perception of uncertainty and adverse consequences resulting from a given activity (Forsythe <i>et al.</i> , 2006)	
c.	Objective	To measure the extent which SME perceives that the uncertainty and adverse consequences resulting from using the e-commerce in their business.	
d.	Variable Type	Independent Variable	
e.	Measurement	Interval, Likert Scale (1 = strongly disagree to 7 = strongly agree)	
f.	Type of Analysis	Descriptive statistics	
g.	Cronbach Alpha	0.78-0.91	
Item	Original Construct/Item	Adapted Item	Sources
PR1	Security Risk: I am worried that others might be able to access my mobile stock trading account.	<i>My company</i> is worried that others might be able to access <i>my company e-commerce</i> account.	Tai & Ku, 2013
PR2	Security Risk: I would not feel totally safe providing personal information over mobile stock trading systems.	<i>My company</i> would not feel totally safe providing <i>business information</i> to <i>e-commerce marketplace operators</i> (for example Lazada, 11street, Lelong etc.)	Tai & Ku, 2013
PR3	Economic Risk: I am uneasy about using mobile stock trading because I may lose money due to incorrect operation, a careless mistake and system processing errors.	<i>My company</i> is uneasy about <i>using e-commerce</i> because the company may lose money due to incorrect operation, a careless mistake and system processing errors.	Tai & Ku, 2013
PR4	Product Failure Severity: The problem caused great financial loss to me.	<i>When a marketplace shutdown</i> (for example Rakuten SEA), that problem caused great financial loss to <i>my company</i> .	Homburg <i>et al.</i> , 2010
PR5	Functional Risk: I am concerned that mobile stock trading services cannot meet my needs due to poor functionality or system malfunctions.	<i>My company</i> concerns that <i>e-commerce</i> cannot meet my company needs due to poor functionality or system malfunctions.	Tai & Ku, 2013
PR6	Performance Risk: The likelihood of _____ performing as expected is significantly lower than the likelihood of standard _____ performing as expected.	The likelihood of <i>e-commerce</i> performance is expected significantly lower than the likelihood of <i>my real retail business</i> performing as expected.	Gürhan-Canli and Batra, 2004

Table A3.6

Operationalized Construct: use of e-commerce

OPERATIONALIZATION OF VARIABLES			
a.	Construct Name	Use of e-commerce (UE)	
b.	Operational Definition	An individual's liking, enjoyment, joy, and pleasure associated with technology use (Venkatesh <i>et al.</i> , 2003)	
c.	Objective	To measure the extent which SME perceives that using the e-commerce in their business.	
d.	Variable Type	Mediating Variable	
e.	Measurement	Interval, Likert Scale (1 = strongly disagree to 7 = strongly agree)	
f.	Type of Analysis	Descriptive statistics	
g.	Cronbach Alpha	0.77-0.84	
Item	Original Construct/Item	Adapted Item	Sources
UE1	<u>Attitude toward Behavior:</u> Using the system is a bad/good idea.	Using the <u>e-commerce</u> is a good idea.	Davis <i>et al.</i> , 1989; Fishbein and Ajzen, 1980; Taylor and Todd 1995a, 1995b; Venkatesh <i>et al.</i> , 2003
UE2	<u>Intrinsic Motivation:</u> I find using the system to be enjoyable	<u>My company</u> finds using the <u>e-commerce</u> to be enjoyable.	Davis <i>et al.</i> , 1992; Venkatesh <i>et al.</i> , 2003
UE3	<u>Intrinsic Motivation:</u> I have fun using the system.	<u>My company</u> has fun using the <u>e-commerce</u> .	Davis <i>et al.</i> , 1992; Venkatesh <i>et al.</i> , 2003
UE4	<u>Affect toward Use:</u> The system makes work more interesting.	The <u>e-commerce</u> makes <u>business</u> more interesting.	Thompson <i>et al.</i> , 1991; Venkatesh <i>et al.</i> , 2003
UE5	<u>Affect toward Use:</u> Working with the system is fun.	<u>Doing business</u> with <u>e-commerce</u> is fun.	Thompson <i>et al.</i> , 1991; Venkatesh <i>et al.</i> , 2003
UE6	<u>Affect:</u> I like working with the system.	I like <u>doing business</u> with the <u>e-commerce</u> .	Compeau and Higgins, 1995b; Compeau <i>et al.</i> , 1999; Venkatesh <i>et al.</i> , 2003

Table A3.7*Operationalized construct: SME Performance*

OPERATIONALIZATION OF VARIABLES			
a.	Construct Name	SME Performance (SP)	
b.	Operational Definition	SME Performance is a critical factor for effective management (Salaheldin, 2009) to which an operation fulfills the performance and meet the needs of the customers (Slack <i>et al.</i> , 2001)	
c.	Objective	To measure performance scope of growth in sales revenue, profitability, returns on assets, returns on sales, market share, labor productivity, level of customer satisfaction, overall financial performance, level of customer loyalty and growth of worker (machine).	
d.	Variable Type	Dependent Variable	
e.	Measurement	Interval, Likert Scale (1 = strongly disagree to 7 = strongly agree)	
f.	Type of Analysis	Descriptive statistics	
g.	Cronbach Alpha	0.9	
Item	Original Construct/Item	Adapter/adopted Item	Sources
SP1	The company has increased on growth in sales revenue	The company has increased on growth in sales revenue	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP2	The company has increased on profitability	The company has increased on profitability	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP3	The company has increased on return on asset	The company has increased on return on asset	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP4	The company has increased on return on sales	The company has increased on return on sales	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP5	The company has increased in market share	The company has increased in market share	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP6	The company has increased on labor productivity	The company has increased on labor productivity	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP7	The company has increased on level of customer satisfaction	The company has increased on level of customer satisfaction	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP8	The company has increased on overall financial performance	The company has increased on overall financial performance	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP9	The company has increased on level of customer loyalty	The company has increased on level of customer loyalty	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014
SP10	The company has increased in growth of the machine	The company has increased in growth of machine or worker	Mohd Rosli <i>et al.</i> , 2012; Shamsuddin, 2014

Form A3.8 Questionnaire

UNDERSTANDING SME PERFORMANCE AND THE USE OF E-COMMERCE BY MALAYSIAN SME/MEMAHAMI PRESTASI SME DAN PENGGUNAAN E-DAGANG OLEH SME MALAYSIA/中小企业绩效和马来西亚中小企业使用的电子商 务

I am doing my Universiti Utara Malaysia doctoral research about the use of e-commerce by Malaysian SME. The research topic is about the use of e-commerce that might improve your company performance. I have prepared the academic questionnaire which you might take 10 minutes to fill up the scale. No explicit personal information will be taken. It is purely for the academic purposes. Thank you very much.

Saya menjalankan penyelidikan doktor di Universiti Utara Malaysia mengenai penggunaan e-dagang oleh SME Malaysia. Topik penyelidikan adalah mengenai penggunaan e-dagang yang mungkin meningkatkan prestasi syarikat anda. Saya telah menyediakan soal selidik akademik yang anda mungkin mengambil masa 10 minit untuk mengisi skala. Tiada maklumat peribadi yang jelas akan diambil. Ia semata-mata untuk tujuan akademik. Terima kasih banyak - banyak.

我正在做我的马来西亚北方大学博士研究。研究课题是关于马来西亚中小企业对电子商务的使用，这可能会提高您的公司业绩。我准备了学术问卷，你可能需要10分钟才能完成填写这个研究。没有明确的个人信息将被采取。它纯粹是为了学术目的。致谢。

Chin Hon Keong (Matrix No. 95923)

* Required



1. Email address *

Demographic

1. What is your position held in your organization? Apakah Jawatan anda dalam organisasi anda? 您在组织中的职位是什么? *

Mark only one oval.

- Owner. Pemilik. 业主.
 Manager. Pengurus. 经理.
 Others. Lain-lain. 其他.

2. Gender. Jantina. 性别. *

Mark only one oval.

- Male. Lelaki. 男.
 Female. Perempuan. 女.

3. Age (in years). Umur (dalam tahun). 年龄

*

4. Does your organization has experience of selling items or services online? Adakah organisasi anda mempunyai pengalaman menjual barangan atau perkhidmatan dalam online? 您的组织是否有在线销售商品或服务的经验? *

Mark only one oval.

- Yes
 No

5. Which online marketplace do you currently use? Apakah Online Marketplace anda guna sekarang? 你目前使用哪个在线市场? *

Check all that apply.

- Facebook
 Own Website with payment gateway e.g. M2U pay, ipay88, MOL, Netpay
 Own Website without payment gateway e.g. direct bank-in, interbank transfer
 Lazada online market place
 Lelong online market place
 11street online market place
 Qoo10 online market place
 Gemfive online market place
 Ensogo online market place
 Groupon
 Carousel, Duriana, Shopee, imSold! online mobile market place
 Mudah
 Other:

6. Which area where you target to sell to? Kawasan manakah yang anda sasarkan untuk menjual? 您要销售到哪个区域? *

Check all that apply.

- West Malaysia
 East Malaysia
 South East Asia
 International

7. Online selling experience. Pengalaman jualan dalam internet. 在线销售经验 * Mark only one oval.

- less than a year
 a year to three years
 three to five years
 five years and above

8. Do you have a valid SSM registration? Adakah anda mempunyai pendaftaran SSM yang sah? 您是否拥有有效的马来西亚公司注册局(SSM)的注册? *

Mark only one oval.

- Yes
 No

9. Do you have a physical stall and/or shop? Adakah anda mempunyai kedai dan/atau gerai? 你有摊位和/或商店吗? *

Mark only one oval.

- Yes
 No

10. What is the core products that you are selling? Apakah produk teras yang anda jual? 你销售的核心产品是什么? *

Mark only one oval.

- Baby and Kid
 Fashion
 Home and Living
 Mobile Gadget and Computer
 Outdoor and Sport
 Office and Stationery
 Travel and Ticket
 Voucher, Coupon and Top-up
 Other: _____

11. How many listing in your webstore? Berapa banyak penyenaian di webstore anda? 你的网上商店有多少样物品上市? *

Mark only one oval.

- Less than 20 items
 Between 21 to 50 items
 Between 51 to 100 items
 Between 101 to 500 items
 Between 501 to 1000 items
 Between 1001 to 2500 items
 More than 2501 items

12. Are you a GST registered seller? Adakah anda penjual GST berdaftar? 你是GST注册卖家吗? *

Mark only one oval.

- Yes
 No

13. What is your company average online sales per month? Apakah purata jualan dalam talian syarikat anda sebulan? 您的公司每月平均网路销售是多少? *

Mark only one oval.

- Below RM500
 Between RM501 to RM1000
 Between RM1001 to RM5000
 Between RM5001 to RM10000
 Over RM10000

14. How many workers in your company? Berapa ramai pekerja di syarikat anda? 贵公司有
多少名员工? *

Mark only one oval.

- Below 5 workers
 Between 6 to 30 workers
 Between 31 to 75 workers
 Over 75 workers

15. Do you accept dropshipper? Adakah anda menerima dropshipper? 你接受的
dropshipper? *

Mark only one oval.

- Yes
 No

Research Questionnaire

Instructions: Please take a few minutes to tell us what you think about the using the e-commerce in selling your products and services. There are no right or wrong responses; we are merely interested in your personal opinions in the academic study about use of e-commerce to boost your company sales (1: Strongly Disagree, 2: Disagree, 3: Somewhat Disagree, 4: Neutral, 5: Somewhat Agree, 6: Agree and 7: Strongly Agree).

Arahan: Sila ambil beberapa minit untuk memberitahu kami tentang apa yang anda fikirkan tentang penggunaan e-dagang dalam menjual produk dan perkhidmatan anda. Tidak ada tindak balas yang betul atau salah; Kami hanya tertarik dengan pendapat peribadi anda dalam kajian akademik mengenai penggunaan e-dagang untuk meningkatkan jualan syarikat anda (1: Sangat Tidak Setuju, 2: Tidak Setuju, 3: Tidak Setuju, 4: Neutral, 5: Agree Setuju, 6: Setuju Dan 7: Sangat Setuju).

说明, 请花几分钟时间告诉我们您在销售产品和服务时使用电子商务的想法。没有正确或错误的答复;我们仅仅关注使用电子商务促进公司销售的学术研究中的个人观点(1: 强烈不同意, 2: 不同意, 3: 有点不同意, 4: 中立, 5: 有点同意, 6: 同意 和7: 非常同意)。

PE1: Using the e-commerce would enhance my business effectiveness. Menggunakan e-dagang akan meningkatkan keberkesanan perniagaan saya. 使用电子商务将提高我的业务效率。 *

Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

PE2: My Company would find that e-commerce is useful in my business. Syarikat saya akan mendapati bahawa e-dagang berguna dalam perniagaan saya.

我的公司会发现电子商务在我的业务中是有用的。 *

Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

PE3: Using the e-commerce increases my business productivity. Menggunakan e-dagang meningkatkan produktiviti perniagaan saya. 使用电子商务增加了我的业务生产力。 * Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

PE4: Using the e-commerce enables my staff to accomplish transactions more quickly. Dengan menggunakan e-dagang, kakitangan saya dapat melakukan transaksi lebih cepat. 使用电子商务可以让我的员工更加完成交易。 * Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

PE5: Use of the e-commerce can decrease the time needed for my business transaction. Penggunaan e-dagang dapat mengurangkan masa yang diperlukan untuk transaksi perniagaan saya. 使用电子商务可以减少我的业务交易所需的时间。 * Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

PE6: If my company uses the e-commerce, it will increase the quality of sales of my business. Jika syarikat saya menggunakan e-dagang, ia akan meningkatkan kualiti jualan perniagaan saya. 如果我公司使用电子商务, 这将提高我的业务销售质量。 * Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

EE1: Learning to use the e-commerce would be easy for my staff. Belajar menggunakan e-dagang adalah mudah untuk kakitangan saya. 学习使用电子商务对我的员工来说是容易的。 * Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

EE2: My staff interaction with the e-commerce would be clear and understandable. Interaksi kakitangan saya dengan e-dagang adalah jelas dan mudah difahami. 我的员工与电子商务的互动是明确和可理解的。 * Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

EE3: It would be easy for my staff to become skillful at using e-commerce. Adalah mudah bagi kakitangan saya untuk menjadi mahir dalam menggunakan e-dagang. 我的员工很容易熟练使用电子商务。 * Mark only one oval.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

EE4: My staff would find e-commerce easy to use. Kakitangan saya mendapati e-dagang mudah digunakan. 我的工作人员会发现电子商务易于使用 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

EE5: Using the e-commerce involves less time doing business transaction. Menggunakan e-dagang melibatkan masa yang kurang melakukan transaksi perniagaan. 使用电子商务涉及较少的时间进行商业交易 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

EE6: The e-commerce is simple in nature. E-dagang sememangnya mudah. 电子商务本质上很简单 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SI1: I feel people around me would encourage my company to use e-commerce. Saya rasa orang di sekeliling saya akan menggalakkan syarikat saya menggunakan e-dagang. 我觉得周围的人会鼓励我的公司使用电子商务 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SI2: People who are important to the company would think that my company should use e-commerce. Orang yang penting kepada syarikat saya berfikir bahawa syarikat saya harus menggunakan e-dagang. 对公司重要的人会认为我公司应该使用电子商务 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SI3: A company which uses the e-commerce has more prestige than those who do not. Sebuah syarikat yang menggunakan e-dagang mempunyai lebih berprestise daripada mereka yang tidak. 使用电子商务的公司比没有电子商务的公司更有声望 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SI4: My company likes to learn about others' using the e-commerce experience (from blog, review, comment, business magazine etc.). Syarikat saya suka belajar tentang pengalaman orang lain yang menggunakan e-dagang (dari blog, ulasan, majalah perniagaan dan sebagainya). 我公司喜欢了解别人使用电子商务的经验(从博客, 评论, 商业杂志等) * *Mark only one oval.*

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

SI5: A company which uses the e-commerce has a high profile. Sebuah syarikat yang menggunakan e-dagang mempunyai profil yang tinggi. 使用电子商务的公司有很高的知名度 * *Mark only one oval.*

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

SI6: My company uses the e-commerce because of my peers e.g. business partners/competitors also using the e-commerce. Syarikat saya menggunakan e-dagang kerana rakan-rakan saya misalnya, rakan kongsi/pesaing perniagaan juga menggunakan e-dagang. 我的公司使用电子商务是因为我的同行, 例如 商业伙伴/竞争对手也使用电子商务 * *Mark only one oval.*

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

FC1: My company has the resources necessary to use the e-commerce e.g. manpower, capital, etc. Syarikat saya mempunyai sumber yang diperlukan untuk menggunakan e-dagang misalnya tenaga kerja, modal dan sebagainya. 我公司拥有使用电子商务所需的资源, 例如 人力, 资金等 * *Mark only one oval.*

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

FC2: Given the government resources (e.g. SMECorp, training, subsidies, etc.), opportunities and knowledge it takes to use the system, it would be easy for my company to use the e-commerce. Memandangkan sumber kerajaan (cth. SMECorp, latihan, subsidi, dll.), peluang dan pengetahuan yang diperlukan untuk menggunakan sistem, akan mudah bagi syarikat saya untuk menggunakan e-dagang. 鉴于政府资源(如SMECorp, 培训, 补贴等), 使用系统所需的机会和知识, 我公司很容易使用电子商务 * *Mark only one oval.*

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

FC3: Guidance was available to my company in the e-commerce platforms e.g. Lazada's webinar. Panduan disediakan untuk syarikat saya dalam platform e-dagang misalnya Webinar Lazada. 我公司的电子商务平台中提供了使用指导, 例如 Lazada的网络研讨会 * Mark only one oval.

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

FC4: A specific instructor is available for assistance with system difficulties e.g. Lazada's technician to help about product listing, Shopee university etc. Pengajar khusus boleh didapati untuk bantuan dengan masalah sistem, contohnya Juruteknik Lazada untuk membantu penyenaian produk, universiti Shopee dll. 具体的教练可以帮助克服系统的困难, 例如Lazada的技术人员帮助产品上市, Shopee大学等 * Mark only one oval.

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

FC5: Using the e-commerce fits into our way of doing business. Menggunakan e-dagang sesuai dengan cara kami menjalankan perniagaan. 使用电子商务符合我们的经营方式 * Mark only one oval.

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

FC6: Using the e-commerce is compatible with all aspects of my business transaction. Menggunakan e-dagang ini bersesuaian dengan semua aspek transaksi perniagaan saya. 使用电子商务兼容我的业务交易的所有方面 * Mark only one oval.

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

SR1: My company is worried that others might be able to access my company e-commerce account. Syarikat saya bimbang orang lain mungkin dapat mengakses akaun e-dagang syarikat saya. 我公司担心其他人可能能够访问我公司的电子商务账户 * Mark only one oval.

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

SR2: My company would not feel totally safe providing business information to e-commerce marketplace operators (e.g. Lazada, 11street, Lelong etc.). Syarikat saya tidak akan merasa benar-benar selamat memberikan maklumat perniagaan kepada pengendali pasaran e-dagang (cth. Lazada, 11street, Lelong dll). 我的公司会觉得不安全把公司的业务信息提供给电子商务市场运营商(如Lazada, 11street, Lelong等) * Mark only one oval.

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

ER1: My company is uneasy about using e-commerce because my company may lose money due to incorrect operation, a careless mistake and system processing errors. Syarikat saya tidak selesa menggunakan e-dagang kerana syarikat mungkin kehilangan wang kerana operasi yang salah, kesilapan yang tidak bijak dan kesalahan pemprosesan system. 我对使用电子商务感到不安, 因为公司可能由于操作不正确, 粗心大意的错误和系统处理错误而造成损失。*

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

ER2: When a e-marketplace shutdown (e.g. Rakuten SEA), that problem caused great financial loss to my company. Apabila penutupan e-pasaran (misalnya Rakuten SEA), masalah itu menyebabkan kerugian kewangan yang besar kepada syarikat saya. 当电子市场关闭(例Rakuten SEA)时, 这个问题会带给我的公司巨大的经济损失。*

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

FR1: My company concerns that e-commerce cannot meet my company needs due to poor functionality or system malfunctions. Syarikat saya bimbang bahawa e-dagang tidak dapat memenuhi keperluan syarikat saya disebabkan oleh fungsi atau kesilapan sistem yang tidak baik. 我的公司担心电子商务功能差或系统故障而无法满足我的公司需求。*

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

FR2: The likelihood of e-commerce performance is expected significantly lower than the likelihood of my real retail business performing as expected. Kemungkinan prestasi e-dagang dijangka jauh lebih rendah berbanding daripada kemungkinan menjalankan perniagaan runcit. 预期电子商务业绩的可能大大低于我的零售业务预期的业绩。*

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

UE1: Using the e-commerce is a good idea. Menggunakan e-dagang adalah idea yang baik. 使用电子商务是一个好主意。*

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

UE2: My company finds using the e-commerce to be enjoyable. Syarikat saya mendapati menggunakan e-dagang adalah menyeronokkan. 我公司使用电子商务是愉快的。*

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

UE3: My company has fun using the e-commerce. Syarikat saya berseronok menggunakan e-dagang. 我公司使用电子商务是很有趣 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

UE4: The e-commerce makes business more interesting. E-dagang menjadikan perniagaan lebih menarik. 电子商务使业务更有趣 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

UE5: Doing business with e-commerce is fun. Menjalankan perniagaan dengan e-dagang adalah menyeronokkan. 使用电子商务做生意很有趣 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

UE6: I like doing business with the e-commerce. Saya suka melakukan perniagaan dengan e-dagang. 我喜欢使用电子商务做生意 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP1: The company has increased on growth in sales revenue. Syarikat telah meningkatkan pertumbuhan pendapatan jualan. 公司的销售收入增长有所增加 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP2: The company has increased on profitability. Syarikat telah meningkatkan keuntungan. 公司盈利能力有所提高 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP3: The company has increased on return on asset. Syarikat telah meningkat pulangan asset (ROA). 公司资产回报率有所上升 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP4: The company has increased on return on sales. Syarikat itu telah meningkatkan pulangan jualan. 公司的销售回报率有所增加 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP5: The company has increased in market share. Syarikat itu telah meningkat dalam bahagian pasaran (market share). 公司的市场份额有所增加 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP6: The company has increased on labor productivity. Syarikat telah meningkatkan produktiviti buruh. 公司劳动生产率有所上升 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP7: The company has increased on level of customer satisfaction. Syarikat telah meningkatkan tahap kepuasan pelanggan. 公司客户满意度有所提高了 *
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP8: The company has increased on overall financial performance. Syarikat telah meningkatkan prestasi kewangan secara keseluruhan. 公司整体财务业绩有所增加 * Mark only one oval.

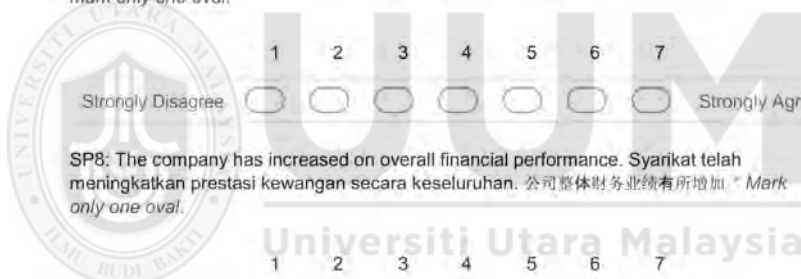
	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP9: The company has increased on level of customer loyalty. Syarikat telah meningkatkan tahap kesetiaan pelanggan. 公司的客户忠诚度水平有所提高 * Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

SP10: The company has increased in growth of machine or worker. Syarikat itu telah meningkat dalam pertumbuhan mesin atau pekerja. 公司的机器或工人的增长率有所增加 * Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree




Feedback

Your feedback is extremely valuable to this research. Please comment if you think you have words for the e-commerce practice. Thank you. Maklum balas anda amat berharga untuk penyelidikan ini. Sila komen jika anda fikir anda mempunyai kata-kata untuk amalan e-dagang. Terima kasih. 您的反馈对本研究非常有价值 如果您认为您有电子商务实践的话, 请评论 谢谢

Appreciation

Your response has been recorded. Thank you very much.

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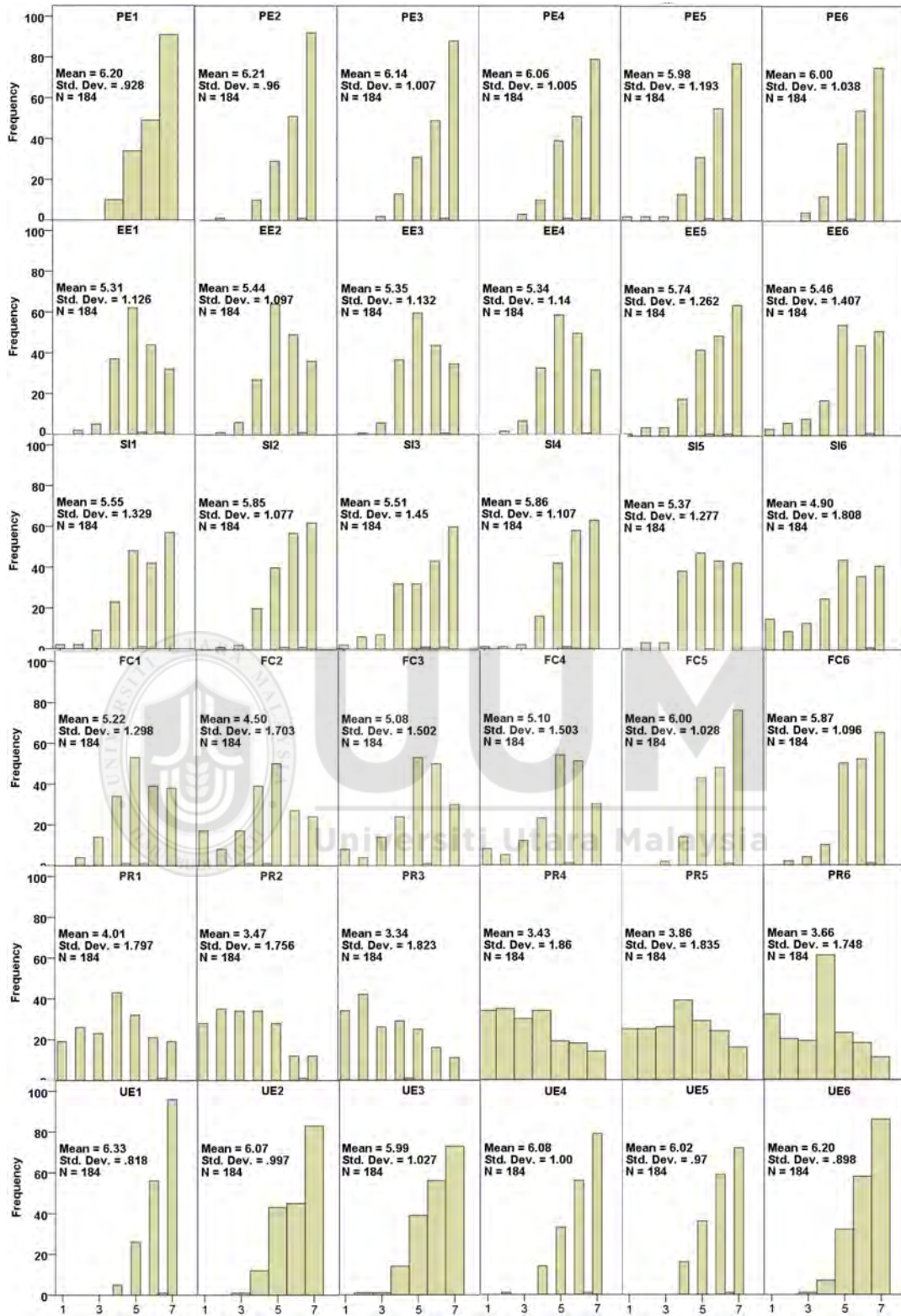


Figure A4.1
Descriptive Analysis for Indicators

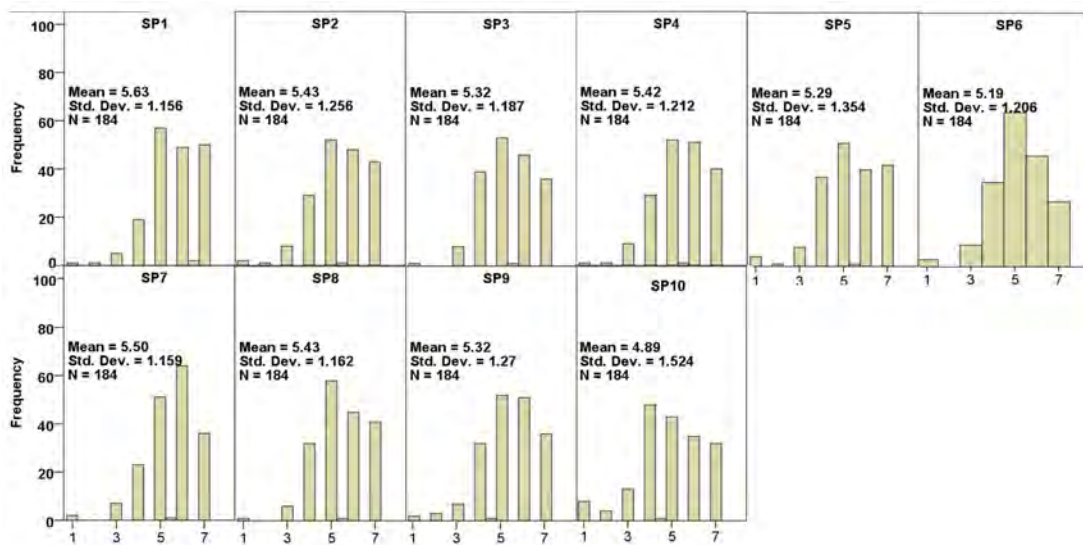


Figure A4.1
Descriptive Analysis for Indicators (Continue)



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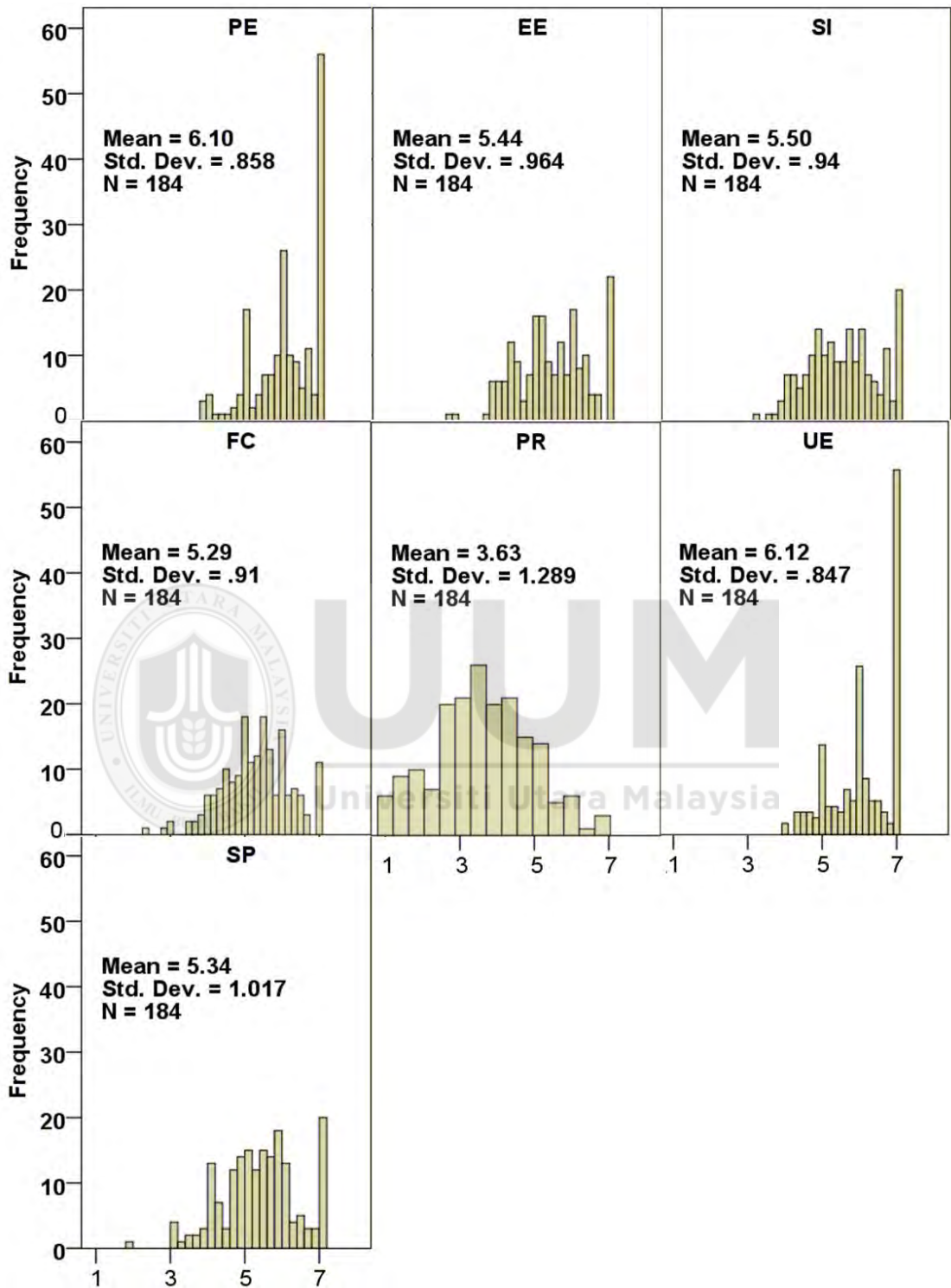


Figure A4.2
Descriptive Analysis for Latent Variables

Table 4.3
Cross Loading

	PE	EE	SI	FC	PR	UE	SP
PE1	0.931	0.478	0.533	0.584	-0.182	0.679	0.561
PE2	0.928	0.425	0.504	0.580	-0.214	0.693	0.521
PE3	0.924	0.511	0.491	0.592	-0.203	0.661	0.559
PE6	0.865	0.533	0.592	0.623	-0.178	0.712	0.607
EE1	0.364	0.844	0.390	0.468	-0.170	0.393	0.396
EE2	0.435	0.811	0.435	0.557	-0.110	0.400	0.373
EE3	0.354	0.800	0.383	0.467	-0.149	0.344	0.375
EE5	0.505	0.758	0.501	0.558	-0.191	0.553	0.454
EE6	0.440	0.813	0.526	0.501	-0.200	0.497	0.485
SI1	0.474	0.440	0.716	0.555	-0.067	0.357	0.398
SI2	0.497	0.444	0.780	0.610	-0.157	0.425	0.462
SI3	0.405	0.439	0.774	0.470	-0.026	0.461	0.457
SI4	0.398	0.311	0.635	0.365	-0.180	0.335	0.355
SI5	0.386	0.458	0.780	0.415	-0.075	0.385	0.459
FC1	0.388	0.462	0.460	0.700	-0.084	0.405	0.437
FC4	0.246	0.347	0.385	0.506	-0.008	0.242	0.261
FC5	0.635	0.545	0.526	0.875	-0.152	0.623	0.531
FC6	0.550	0.524	0.568	0.818	-0.175	0.540	0.437
PR1	0.027	-0.016	0.078	-0.006	0.629	-0.076	0.006
PR2	-0.102	-0.074	0.067	-0.056	0.718	-0.132	-0.014
PR3	-0.128	-0.116	-0.103	-0.076	0.791	-0.173	-0.076
PR5	-0.145	-0.166	-0.077	-0.106	0.767	-0.154	-0.070
PR6	-0.271	-0.260	-0.240	-0.225	0.770	-0.268	-0.224
UE2	0.727	0.529	0.464	0.676	-0.222	0.912	0.596
UE3	0.680	0.505	0.523	0.582	-0.147	0.931	0.594
UE4	0.696	0.509	0.471	0.560	-0.294	0.910	0.593
UE5	0.663	0.519	0.514	0.556	-0.242	0.921	0.598
SP1	0.580	0.401	0.540	0.519	-0.161	0.606	0.839
SP2	0.529	0.442	0.480	0.442	-0.176	0.576	0.875
SP3	0.604	0.417	0.500	0.501	-0.215	0.591	0.872
SP4	0.497	0.432	0.449	0.481	-0.111	0.535	0.877
SP5	0.499	0.408	0.472	0.425	-0.022	0.540	0.832
SP6	0.495	0.481	0.483	0.426	-0.087	0.441	0.785
SP7	0.447	0.450	0.450	0.475	-0.050	0.485	0.768
SP8	0.532	0.490	0.503	0.606	-0.117	0.600	0.894
SP9	0.412	0.464	0.471	0.447	-0.088	0.442	0.735