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**THE IMPACT OF ORGANISATIONAL INNOVATIVENESS,
ENTREPRENEURIAL COMPETENCIES AND EXTERNAL ENVIRONMENT ON
EXPORT PERFORMANCE OF SMEs IN MALAYSIA**



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**Thesis submitted to
Othman Yeop Abdullah Graduate School of Business,
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in Partial Fulfilment of the Requirement for the Doctor of Business Administration**



**OTHMAN YEOP ABDULLAH GRADUATE SCHOOL OF BUSINESS
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ABSTRACT

Small and medium-sized enterprises (SMEs) are crucial to Malaysia's economy as they contribute to gross domestic product, employment opportunities, and export performance. However, the export performance of SMEs is below the target set by the government. This study investigates the influence of organisational innovativeness (OI), entrepreneurial competencies (EC), and external environment (EE) on the export performance (EP) of SMEs in Malaysia. Systematic random sampling was used to select and collect data from 1,101 respondents listed in the Malaysia External Trade Development Corporation directory. 133 usable data were analysed using partial least squares structural equation modelling (PLS-SEM). The results show that OI and EC have a significant influence on EP of SMEs. OI should be embedded as part of the processes in SMEs, and owner-managers should continuously enhance their competencies to improve EP. Furthermore, EE significantly moderates the relationship between EC and EP of SMEs in a negative direction. This shows how important it is for SMEs to check and monitor EE in international business to act proactively. The results helped advance empirical research on SMEs EP in a developing country by using the resource-based view (RBV) theory and the contingency theory (CT) as theoretical bases. SME exporters should focus on EE to improve their EP. SMEs should conduct OI activities to improve EP, while owner-managers need to assess and improve their EC. Government agencies can use the dimensions of EC as a basis for developing training modules and financial institutions can use them to assess the competencies of borrowers to increase the likelihood of business success.

Keywords: Organisational Innovativeness, Entrepreneurial Competencies, External Environment, Export Performance, Small and Medium-Sized Enterprises.

ABSTRAK

Perusahaan Kecil dan Sederhana (PKS) adalah penting kepada ekonomi Malaysia kerana menyumbang kepada keluaran dalam negara kasar, peluang pekerjaan dan prestasi eksport. Bagaimanapun, prestasi eksport PKS adalah lebih rendah berbanding sasaran yang telah ditetapkan oleh kerajaan. Kajian ini menyiasat pengaruh inovasi organisasi (OI), kompetensi keusahawanan (EC), dan persekitaran luaran (EE) ke atas prestasi eksport (EP) bagi PKS di Malaysia. Persampelan rawak sistematik digunakan untuk memilih dan mengumpul data daripada 1,101 responden yang tersenarai dalam direktori Perbadanan Pembangunan Luar Malaysia. 133 data boleh guna dianalisis menggunakan *partial least squares-structural equation modelling* (PLS-SEM). Keputusan menunjukkan bahawa OI dan EC mempunyai pengaruh yang signifikan terhadap EP PKS. OI harus diterapkan sebagai sebahagian proses dalam PKS dan pengurus pemilik harus terus meningkatkan kecekapan mereka untuk menambah baik EP. Tambahan pula, EE secara signifikan menyederhanakan hubungan antara EC dan EP bagi PKS ke arah negatif. Ini menunjukkan betapa pentingnya PKS menyemak dan memantau EE dalam perniagaan antarabangsa untuk bertindak secara proaktif. Hasil kajian membantu memajukan penyelidikan empirikal mengenai EP PKS di negara membangun dengan menggunakan teori pandangan berasaskan sumber (RBV) dan teori kontingensi (CT) sebagai asas-asas teori. Pengeksport PKS harus memberi tumpuan kepada EE untuk menambah baik EP mereka. PKS harus menjalankan aktiviti OI untuk menambahbaik EP, manakala pengurus pemilik perlu menilai dan menambah baik EC mereka. Agensi kerajaan boleh menggunakan dimensi EC sebagai asas untuk membangunkan modul latihan, dan institusi kewangan boleh menggunakannya untuk menilai kecekapan peminjam untuk meningkatkan kemungkinan kejayaan perniagaan.

Kata Kunci: Inovasi Organisasi, Kompetensi Keusahawanan, Persekitaran Luaran, Prestasi Eksport, Perusahaan Kecil dan Sederhana.

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LIST OF ABBREVIATIONS

AEC	ASEAN Economic Community
AFTA	ASEAN Free Trade Agreement
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
DOSM	Department of Statistics Malaysia
ETP	Economic Transformation Program
FTAs	Free Trade Agreements
GDP	Gross Domestic Products
MATRADE	Malaysia External Trade Development Corporation
MIDA	Malaysian Development Investment Authority
MITI	Ministry of International Trade and Industry
NESDC	National Entrepreneur and SME Development Council
NKEA	National Key Economic Area
NSDC	National SME Development Council
PEMANDU	Performance Management and Delivery Unit
RCEP	Regional Comprehensive Economic Partnership
SME Corp	SME Corporation Malaysia
SMEs	Small and Medium-sized Enterprises
SMIDEC	Small and Medium Industries Corporation
SRI	Strategic Reform Initiatives



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CHAPTER ONE: INTRODUCTION

1.1 Background of Study

The main industries in Malaysia in 1950s were related to tin mining and rubber cultivation. For the period 1957- 1970 the government policy was to diversify away from the commodities with new policies aimed to shift Malaysia from an agriculture-based economy to an industrialised country (Lee, 2019; Lockard, Ahmad, Bee & Leinbach, 2019). In the late 1980s with robust manufacturing activities, outstanding economic growth was recorded (Common Wealth Secretariat, 2019). The electrical and electronic sector contributed significantly to export performance and positioned Malaysia as one of the most successful countries in the world (MIDA, 2021).

In addition, SME Corporation Malaysia (SME Corp) an agency under Ministry of Entrepreneur Development and Cooperatives (MEDAC) and Malaysia External Trade Development Corporation (MATRADE) an agency under Ministry of International trade and Industry (MITI) are agencies given the responsibilities to develop and promote small and medium-sized enterprises (SMEs) achieve success in international market (SME Corp. Malaysia, 2021; MATRADE, 2022).

The economic growth of Japan and Korea are significantly generated by SMEs activities with contribution to GDP at around 60 % (Halim, Hanifah, Thurasamy & Ahmad, 2021). Similarly, SMEs played a crucial function in economic development of Malaysia (Bank Negara Malaysia, 2019) as the SMEs activities formed the backbone of the economy of Malaysia (Umar, Omar, Hamzah & Hashim, 2018). SMEs contribute to gross domestic product (GDP), create employment opportunity and contribute towards export (NESDC, 2021; DOSM, 2021).

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SURVEY QUESTIONNAIRE

Dear Sir/Madam,

I am a doctoral candidate in Othman Yeop Abdullah Graduate School of Business, University Utara Malaysia. As part of the fulfilment for my Doctor of Business in Administration (DBA) study, a dissertation is prerequisite to be submitted. I have chosen to carry out a study on “The relationships between Organisational innovativeness, Entrepreneurial competencies, External environment and Export performance of SMEs in Malaysia”. The questionnaire that is with you is developed to capture the information/data from the respondents before it is further analyse using statistical software.

Being the owner-manager of SME in Malaysia and engaging in export business, your views on the relationship of the variables are very important for me in completing my study and contributing to the pool of knowledge on the subject matter.

Your company was selected from the List of companies registered in MATRADE website and selection was done randomly. Please rest assured that all information collected from this survey will not be disclosed to third party and only be used for my own usage to complete the study.

I would be grateful if you can spare about 10 minutes of your valuable time to fill up the questionnaire and mail it back using the self addressed envelope given. For any clarification you can contact me directly using my mobile number.

Thanking you in advance for your participation.

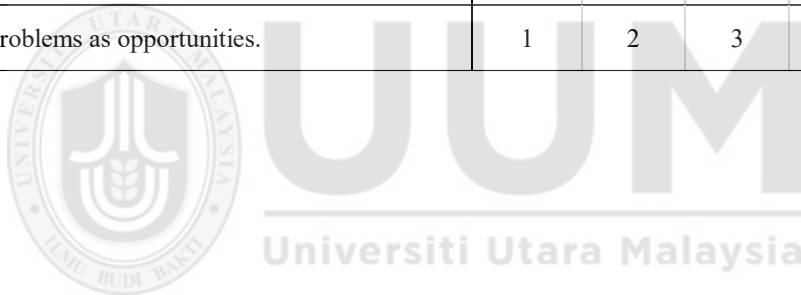
MOHD YUSOFF AB.GHANI

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Section A: Organizational innovativeness						
Below are statements that describe the organizational innovativeness in your firm. Please use the following scales to indicate your level of agreement or disagreement by making a tick (/) or circle on any scale that you feel appropriate.						
1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree						
No	Items	Strongly Disagree	←	→	Strongly Agree	
1	Management team dynamically searches for new ideas.	1	2	3	4	5
2	Program or project management eagerly accepts innovation.	1	2	3	4	5
3	Scientific innovation derived from study results is enthusiastically agreed to.	1	2	3	4	5
4	In this organization, innovation is considered excessively uncertain and is therefore denied.	1	2	3	4	5
5	Our firm is usually the first in the market to introduce new products and services.	1	2	3	4	5
6	Our customers always regard our newly-launched products and services as highly innovative.	1	2	3	4	5
7	In the past five years, our firm has launched more new products and services than our competitors.	1	2	3	4	5
8	Compared to our competitors, our firm gains less achievement in the introduction of new products and services.	1	2	3	4	5
9	We continue to improve our business procedures.	1	2	3	4	5
10	Compared with our competitors, our firm alters the techniques of production more rapidly.	1	2	3	4	5
11	Our firm has improved several new approaches in management in the past five years.	1	2	3	4	5
12	In comparison with our competitors, our products' most recent marketing programme is revolutionary in the market.	1	2	3	4	5
13	Our recent new products and services are only minor changes from our previous products and services.	1	2	3	4	5
14	In new product and service introductions, our company is often at the cutting edge of technology.	1	2	3	4	5
15	New products and services in our company often take us up against new competitors.	1	2	3	4	5

Section B: Entrepreneurial Competencies						
Below are statements that describe the perceptions of owner-manager on entrepreneurial competencies*. Please use the following scales to indicate your level of agreement or disagreement by making a tick (/) or circle on any scale that you feel appropriate. *(Entrepreneurial competencies is defined as the underlying characteristics of an entrepreneur that comprises of specific knowledge, self-images, skills, traits, motives and social roles that resulted in the creation of business venture, survival and growth (Bird, 1995)) 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree						
B1	Entrepreneurial competencies-STRATEGIC					
No	Items	Strongly Disagree	←		→	Strongly Agree
1	Identify long term issues, problems or opportunities.	1	2	3	4	5
2	Be aware of the projected directions of the industry and how changes might impact the firm.	1	2	3	4	5
3	Prioritise work in alignment with business goals.	1	2	3	4	5
4	Redesign the business to better meet long term objectives and changes.	1	2	3	4	5
5	Align current actions with strategic goals.	1	2	3	4	5
6	Assess and link short term, day to day tasks in the context of long term direction.	1	2	3	4	5
7	Monitor progress towards strategic goals.	1	2	3	4	5
8	Evaluate results against strategic goals.	1	2	3	4	5
9	Determine strategic actions by weighing costs and benefits.	1	2	3	4	5

B2	Entrepreneurial competencies-COMMITMENT & CONCEPTUAL					
No	Items	Strongly Disagree	←		→	Strongly Agree
1	Dedicate to make the business work.	1	2	3	4	5
2	Refuse to let the business fail.	1	2	3	4	5
3	Have an extremely strong internal drive.	1	2	3	4	5
4	Commit to long term business goals.	1	2	3	4	5
5	Understand the broader implications of issues and observations.	1	2	3	4	5
6	Translate ideas and observations into the business context.	1	2	3	4	5
7	Take reasonable job-related risks.	1	2	3	4	5
8	Monitor progress toward objectives in risky actions.	1	2	3	4	5
9	Look at problems in new ways.	1	2	3	4	5
10	Explore new ideas.	1	2	3	4	5
11	Treat new problems as opportunities.	1	2	3	4	5



B3	Entrepreneurial competencies-OPPORTUNITY & ORGANISING					
No	Items	Strongly Disagree	←		→	Strongly Agree
1	Identify the goods or services that the customer wants.	1	2	3	4	5
2	Perceive unmet consumer needs.	1	2	3	4	5
3	Actively look for products or services that provide real benefit to customers.	1	2	3	4	5
4	Seize high quality business opportunities.	1	2	3	4	5
5	Plan the operations of the business.	1	2	3	4	5
6	Plan the organisation of different resources.	1	2	3	4	5
7	Keep the organisation running smoothly.	1	2	3	4	5
8	Organise resources.	1	2	3	4	5
9	Coordinate tasks.	1	2	3	4	5
10	Supervise subordinates.	1	2	3	4	5
11	Lead subordinates.	1	2	3	4	5
12	Organise people.	1	2	3	4	5
13	Motivate people.	1	2	3	4	5
14	Delegate effectively.	1	2	3	4	5

B4	Entrepreneurial competencies-RELATIONSHIP & TECHNICAL					
No	Items	Strongly Disagree	←		→	Strongly Agree
1	Develop long term trusting relationships with others.	1	2	3	4	5
2	Negotiate with others.	1	2	3	4	5
3	Interact with others.	1	2	3	4	5
4	Maintain a personal network of work conacts.	1	2	3	4	5
5	Communicate with others effectively.	1	2	3	4	5
6	Possess expertise in technical or functional area.	1	2	3	4	5
7	Use specific techniques/tools relevant to business.	1	2	3	4	5
8	Have good basic knowledge in the business area.	1	2	3	4	5
9	Utilise technical knowledge relevant to the business.	1	2	3	4	5



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Section C: External Environment						
Below are statements that describe the external environment that your firm is operating in. Please use the following scales to indicate your level of agreement or disagreement by making a tick (/) or circle on any scale that you feel appropriate.						
1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree						
No	Items	Strongly Disagree	←		→	Strongly Agree
1	In our kind of business, customer's need and preferences change rapidly.	1	2	3	4	5
2	Actions of competitors can easily be predicted and matched readily.	1	2	3	4	5
3	We operate in a much diversified customer markets.	1	2	3	4	5
4	We operate in a very cutthroat competitive industry.	1	2	3	4	5
5	Our competitors are relatively weak.	1	2	3	4	5
6	Price competition is an important feature of our industry.	1	2	3	4	5
7	We cater to many of the same customers that we used to in the past.	1	2	3	4	5
8	We face difficulty in maintaining profit margins due to competitors quick response to the market opportunities.	1	2	3	4	5

Section D: Export Performance						
Below are statements that describe the export performance of your firm. Please use the following scales to indicate your level of agreement or disagreement by making a tick (/) or circle on any scale that you feel appropriate.						
1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree						
No	Items	Strongly Disagree	←	→		Strongly Agree
1	Our firm export business has been very profitable.	1	2	3	4	5
2	Our firm export business has generated a high volume of sales.	1	2	3	4	5
3	Our firm export business has achieved rapid growth	1	2	3	4	5
4	Our firm export business has improved our competitiveness.	1	2	3	4	5
5	Our firm export business has strengthened our strategic position.	1	2	3	4	5
6	Our firm export business has significantly increased our global market share.	1	2	3	4	5
7	The performance of our firm export business has been very satisfactory.	1	2	3	4	5
8	Our firm export business has been very successful.	1	2	3	4	5
9	Our firm export business has fully met our expectation.	1	2	3	4	5

Section E: Demographic profile of Respondent				
Please indicate your answers by making a tick (/) in the corresponding boxes.				
1. Position in the company:	i) Business owner	☐	ii) Partner	☐
2. No of years in the company:	i) 2-5 years	☐	ii) 6-10 years	☐
	iii) 11-20 years	☐	iv) Above 21 years	☐
3. Current age (Years old):	i) Under 30	☐	ii) 31-40	☐
	iii) 41-50	☐	iv) 51 or above	☐
4. Gender:	i) Male	☐	ii) Female	☐
5. Ethnicity:	i) Malay	☐	ii) Chinese	☐
	iii) Indian	☐	iv) Others	☐
6. Educational background:	i) High school	☐	ii) Certificate level	☐
	iii) Diploma	☐	iv) Bachelor degree	☐
	v) Post graduate	☐	vi) Professional	☐
Section F: Company's profile				
Please indicate your answers by making a tick (/) in the corresponding boxes.				
1) Total number of employees:	i) Less than 75	☐	ii) 75-137	☐
	iii) 138-200	☐	iv) More than 200	☐
2) Business area/Sector:	i) Manufacturing	☐	ii) Services	☐
3) Firm's location:	i) Selangor	☐	ii) Kuala Lumpur	☐
THANK YOU FOR PARTICIPATING IN THIS SURVEY.				

Table 4.9 Cross Loadings of Lower Order Constructs

Appendix III

Items	ECCM	ECCP	ECOP	ECOR	ECRL	ECST	ECTC	EECI	EPEC	EPOV	EPST	OIBH	OIMK	OIPC	OIPD
ECCM1	0.765	0.082	-0.116	-0.077	0.118	-0.131	0.170	0.024	0.057	0.057	0.110	-0.076	-0.040	0.065	0.096
ECCM2	0.931	0.049	-0.104	0.041	0.016	0.041	0.229	-0.061	0.255	0.231	0.204	0.003	0.086	0.099	0.062
ECCM3	0.776	0.053	-0.070	-0.031	0.050	-0.066	0.308	-0.038	0.055	0.091	0.157	-0.137	0.198	0.136	0.155
ECCM4	0.657	0.043	-0.006	0.017	0.100	-0.171	0.256	-0.025	-0.022	0.018	0.037	-0.111	-0.048	0.160	0.047
ECCP2	0.041	0.953	-0.031	0.052	0.144	-0.062	-0.134	-0.024	0.086	0.105	0.160	0.052	0.039	-0.068	0.141
ECCP3	0.091	0.873	0.004	0.060	0.153	0.059	-0.010	-0.050	0.110	0.062	0.063	0.015	0.104	0.101	0.189
ECCP6	0.064	0.573	0.020	-0.029	0.042	-0.024	-0.021	-0.026	-0.002	0.010	-0.021	-0.023	0.017	0.017	0.094
ECOP1	-0.113	-0.078	0.789	-0.005	0.007	0.004	-0.047	-0.027	-0.149	-0.104	-0.118	0.117	-0.003	-0.044	-0.069
ECOP2	-0.095	0.012	0.819	0.029	0.046	-0.018	-0.144	-0.123	-0.116	-0.026	0.085	0.000	-0.096	-0.041	0.105
ECOP3	-0.056	0.013	0.850	0.008	0.053	0.064	-0.072	-0.118	-0.104	-0.102	-0.044	0.061	-0.001	-0.079	0.053
ECOP4	-0.094	0.026	0.830	0.122	0.063	-0.013	-0.066	-0.164	-0.131	-0.061	0.029	-0.002	-0.119	-0.002	0.066
ECOR1	-0.085	0.027	0.080	0.739	0.021	0.045	0.021	0.071	0.057	0.055	0.084	-0.137	0.029	0.062	0.083
ECOR10	-0.009	0.123	0.075	0.802	0.140	-0.043	0.014	0.005	0.135	0.083	0.115	-0.008	0.090	0.166	0.063
ECOR2	0.027	-0.013	0.010	0.642	-0.020	-0.069	0.060	-0.193	0.045	0.070	0.194	-0.054	-0.001	0.082	-0.024
ECOR5	0.020	0.032	-0.083	0.747	0.115	-0.069	-0.059	0.135	0.134	0.158	0.083	-0.177	-0.016	0.055	0.019
ECOR8	0.017	0.044	0.155	0.640	0.170	-0.076	-0.043	-0.081	0.152	0.028	0.003	0.026	0.078	0.115	-0.043
ECOR9	-0.051	0.038	0.066	0.760	0.092	-0.064	0.050	-0.016	-0.034	-0.020	0.008	-0.148	0.006	0.133	-0.026
ECRL1	-0.001	0.144	0.118	0.002	0.695	0.024	0.034	-0.029	0.036	0.095	0.074	-0.094	-0.014	0.060	0.246
ECRL2	0.068	0.204	-0.031	0.126	0.693	0.106	0.009	-0.129	0.084	0.077	0.060	0.138	0.004	0.077	0.058
ECRL4	0.030	0.020	0.009	0.095	0.813	0.056	0.105	0.018	0.059	0.063	0.036	0.039	0.088	0.225	0.179
ECRL5	0.060	0.071	0.037	0.140	0.783	-0.007	0.011	-0.002	0.037	0.084	0.029	-0.078	-0.049	0.130	0.228
ECST1	0.032	0.142	-0.110	0.018	0.033	0.662	0.141	0.014	0.039	0.097	0.038	0.036	0.089	0.070	-0.062
ECST4	0.015	-0.097	0.058	-0.074	0.085	0.764	0.138	0.010	0.122	0.074	-0.063	0.047	0.084	0.030	0.071
ECST7	-0.079	-0.014	0.032	-0.062	0.022	0.766	0.008	0.059	0.099	0.118	-0.040	0.083	0.067	0.036	0.000
ECTC1	0.220	-0.071	-0.033	0.043	-0.054	0.177	0.756	-0.061	-0.075	-0.155	-0.034	0.094	0.293	0.202	-0.073
ECTC2	0.229	0.009	-0.030	-0.064	0.097	0.025	0.745	-0.001	-0.035	-0.148	-0.034	0.001	0.042	0.210	0.001

ECTC3	0.191	-0.111	-0.143	0.047	0.106	0.072	0.784	0.027	-0.127	-0.093	0.005	0.053	0.141	0.153	0.004
ECTC4	0.198	-0.152	-0.081	-0.086	0.008	0.044	0.762	-0.015	-0.057	-0.056	-0.018	0.032	0.109	0.102	-0.001
EECI2	-0.049	-0.024	-0.014	-0.073	-0.047	0.057	0.048	0.705	0.046	0.068	-0.106	-0.177	0.089	0.011	-0.088
EECI3r	-0.040	-0.023	-0.133	0.033	-0.030	0.035	0.016	0.824	0.115	0.096	-0.128	-0.071	0.155	-0.012	-0.078
EECI4	-0.069	-0.016	-0.099	-0.075	-0.038	0.071	-0.002	0.907	0.148	0.096	-0.097	-0.087	0.144	-0.035	-0.051
EECI5	-0.013	-0.046	-0.108	0.032	-0.064	0.003	-0.066	0.824	0.271	0.190	-0.018	-0.306	-0.065	-0.064	-0.009
EPEC1	0.151	0.058	-0.134	0.022	0.059	0.122	-0.141	0.238	0.843	0.639	0.290	0.035	0.103	-0.023	-0.032
EPEC2	0.170	0.114	-0.080	0.130	0.069	0.089	-0.079	0.094	0.848	0.547	0.545	0.015	0.053	0.160	0.117
EPEC3	0.176	0.105	-0.183	0.235	0.067	0.121	-0.046	0.211	0.921	0.608	0.454	-0.111	0.113	0.116	0.092
EPOV1	0.099	0.002	-0.064	0.051	0.011	0.138	-0.130	0.210	0.684	0.814	0.448	-0.045	0.145	0.095	0.057
EPOV2	0.128	0.114	-0.015	0.101	0.180	0.082	-0.228	0.020	0.534	0.817	0.402	-0.109	0.044	0.095	0.184
EPOV3	0.220	0.112	-0.150	0.151	0.077	0.108	-0.060	0.162	0.522	0.861	0.352	-0.197	0.112	0.236	0.183
EPST1	0.178	0.133	-0.061	0.123	0.015	-0.033	-0.053	-0.061	0.425	0.405	0.861	0.081	-0.021	0.066	0.172
EPST2	0.166	0.102	-0.041	0.117	0.184	0.000	0.007	-0.071	0.478	0.442	0.829	0.014	0.004	0.132	0.079
EPST3	0.112	0.069	0.038	0.115	-0.056	-0.086	-0.009	-0.087	0.186	0.230	0.614	0.038	0.101	-0.025	0.015
OIBH1	-0.049	0.047	0.089	-0.172	0.109	0.223	-0.020	-0.140	0.052	-0.031	0.067	0.788	0.028	-0.108	0.002
OIBH2	-0.054	0.033	0.030	-0.087	-0.009	0.031	0.085	-0.218	-0.049	-0.177	0.069	0.976	-0.021	-0.167	-0.009
OIBH3	-0.042	0.057	0.192	-0.037	-0.028	0.113	0.014	-0.175	-0.006	-0.053	-0.027	0.704	-0.074	-0.130	-0.034
OIMK1	0.083	-0.001	-0.017	0.009	-0.018	0.094	0.237	0.049	0.126	0.093	0.032	0.014	0.811	0.059	-0.078
OIMK2r	0.124	0.130	-0.036	0.097	0.026	0.122	0.186	0.030	0.081	0.094	-0.006	-0.038	0.917	0.069	-0.094
OIMK3	0.062	0.071	-0.091	0.022	0.017	0.061	0.108	0.098	0.060	0.125	0.022	-0.044	0.888	-0.035	-0.099
OIPC1	0.094	-0.033	-0.099	0.048	0.155	0.069	0.158	-0.103	0.068	0.147	0.065	-0.163	0.084	0.816	-0.012
OIPC2	0.124	0.027	-0.062	0.137	0.108	0.048	0.225	-0.015	0.095	0.168	0.131	-0.113	0.033	0.898	0.112
OIPC3	0.085	-0.012	0.045	0.155	0.150	0.020	0.209	0.008	0.080	0.145	-0.006	-0.170	-0.035	0.850	-0.050
OIPD1	0.032	0.106	-0.062	0.007	0.043	-0.013	-0.014	-0.016	0.090	0.086	0.141	0.105	-0.022	-0.054	0.704
OIPD2	0.040	0.145	0.106	0.010	0.358	0.020	0.007	-0.021	0.091	0.147	0.069	0.049	-0.045	-0.044	0.706
OIPD3	0.102	0.052	-0.069	-0.013	0.124	-0.007	0.036	-0.018	-0.018	0.117	0.012	-0.075	-0.159	0.071	0.740
OIPD4r	0.141	0.167	0.053	0.065	0.138	0.039	-0.081	-0.090	0.006	0.158	0.121	-0.133	-0.113	0.137	0.783

Note: Entrepreneurial Competencies-Commitment (ECCM), Entrepreneurial Competencies-Conceptual (ECCP), Entrepreneurial Competencies-Opportunity (ECOP), Entrepreneurial Competencies-Organisation (ECOR), Entrepreneurial Competencies-Relationship (ECRL), Entrepreneurial Competencies-Strategy (ECST), Entrepreneurial Competencies-Technical (ECTC), External Environment-(EECI), Export Performance-Economics (EPEC), Export Performance-Overall (EPOV), Export Performance-Strategy (EPST), Organisational Innovativeness-Behaviour (OIBH), Organisational Innovativeness-Market (OIMK), Organisational Innovativeness-Process (OIPC), Organisational Innovativeness-Product (OIPD).

Table 4.9 above shows that all the items loaded highest on the assigned construct, hence discriminant validity is established.

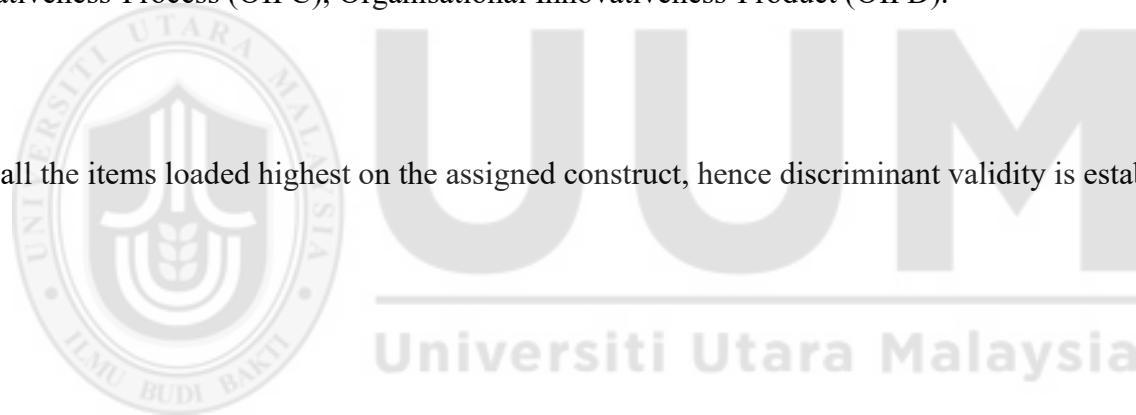


Table 4.10 *Fornell-Larcker Criterion*

Constructs	ECCM	ECCP	ECOP	ECOR	ECRL	ECST	ECTC	EECI	EPEC	EPOV	EPST	OIBH	OIMK	OIPC	OIPD
ECCCommitment	0.789														
ECConceptual	0.065	0.816													
ECOpportunity	-0.111	-0.020	0.822												
ECOrganisation	0.002	0.062	0.041	0.724											
ECRelationship	0.052	0.162	0.046	0.118	0.748										
ECStrategy	-0.026	-0.016	0.015	-0.066	0.065	0.732									
ECTechnical	0.279	-0.094	-0.089	-0.005	0.050	0.116	0.762								
EECompIntensity	-0.046	-0.037	-0.119	-0.010	-0.057	0.041	-0.020	0.818							
EPEconomics	0.190	0.106	-0.156	0.154	0.074	0.128	-0.099	0.212	0.871						
EPOverall	0.187	0.097	-0.099	0.127	0.109	0.130	-0.161	0.156	0.687	0.831					
EPStrategy	0.200	0.136	-0.040	0.150	0.070	-0.043	-0.028	-0.089	0.489	0.475	0.776				
OIBehaviour	-0.056	0.042	0.069	-0.103	0.007	0.080	0.064	-0.220	-0.030	-0.150	0.061	0.831			
OIMarket	0.102	0.071	-0.054	0.045	0.008	0.106	0.207	0.068	0.105	0.120	0.020	-0.023	0.873		
OIPProcess	0.121	-0.003	-0.052	0.132	0.156	0.055	0.232	-0.042	0.096	0.180	0.085	-0.168	0.036	0.855	
OIPProduct	0.106	0.174	0.026	0.031	0.234	0.018	-0.029	-0.055	0.067	0.176	0.131	-0.012	-0.103	0.034	0.734

Note: ECCCommitment (ECCM), ECConceptual (ECCP), ECOpportunity (ECOP), ECOrganisation (ECOR), ECRelationship (ECRL), ECStrategy (ECST), ECTechnical (ECTC), EECompIntensity (EECI), EPEconomics (EPEC), EPOverall (EPOV), EPStrategy (EPST), OIBehaviour (OIBH), OIMarket (OIMK), OIPProcess (OIPC), OIPProduct (OIPD).

The square root of AVE on its diagonal is higher than the correlation of the off-diagonal which indicates that discriminant validity is established.

Table 4.11 *HTMT Correlation ratio of Lower Order Constructs*

Constructs	ECCM	ECCP	ECOP	ECOR	ECRL	ECST	ECTC	EPEC	EPOV	EPST	EECI	OIBH	OIMK	OIPC	OIPD
ECCCommitment															
ECConceptual	0.113														
ECOpportunity	0.118	0.053													
ECOrganisation	0.100	0.094	0.139												
ECRelationship	0.120	0.176	0.125	0.182											
ECStrategy	0.217	0.141	0.158	0.145	0.151										
ECTechnical	0.351	0.155	0.144	0.141	0.177	0.207									
EECompIntensity	0.064	0.050	0.150	0.181	0.088	0.094	0.068								
EPEconomics	0.147	0.104	0.173	0.178	0.093	0.180	0.124	0.204							
EPOverall	0.186	0.104	0.139	0.116	0.163	0.195	0.200	0.188	0.861						
EPStrategy	0.201	0.130	0.122	0.156	0.158	0.137	0.092	0.152	0.628	0.646					
OIBehaviour	0.145	0.068	0.148	0.173	0.151	0.193	0.090	0.221	0.075	0.174	0.090				
OIMarket	0.134	0.107	0.096	0.107	0.086	0.156	0.237	0.169	0.123	0.156	0.095	0.067			
OIPProcess	0.162	0.087	0.098	0.167	0.225	0.101	0.273	0.063	0.135	0.211	0.147	0.195	0.086		
OIPProduct	0.149	0.200	0.151	0.096	0.357	0.098	0.120	0.113	0.123	0.221	0.187	0.178	0.159	0.169	

Note: ECCCommitment (ECCM), ECConceptual (ECCP), ECOpportunity (ECOP), ECOrganisation (ECOR), ECRelationship (ECRL), ECStrategy (ECST), ECTechnical (ECTC), EECompIntensity (EECI), EPEconomics (EPEC), EPOverall (EPOV), EPStrategy (EPST), OIBehaviour (OIBH), OIMarket (OIMK), OIPProcess (OIPC), OIPProduct (OIPD).

In Table 4.11 above the ratio of correlation within the construct to the correlation between constructs value is less than 0.90 (Gold, Malhotra & Segars, 2001) hence discriminant validity is established.

