

EFFECT OF ORGANISATIONAL AND INDIVIDUAL FACTORS ON INTRAPRENEURIAL BEHAVIOUR OF PUBLIC UNIVERSITY ACADEMICIANS



MASTER OF SCIENCE IN ENTREPRENEURSHIP



Faculty of Technology Management and Technopreneurship



EFFECT OF ORGANISATIONAL AND INDIVIDUAL FACTORS ON INTRAPRENEURIAL BEHAVIOUR OF PUBLIC UNIVERSITY ACADEMICIANS

Jahirul Islam

Master of Science in Entrepreneurship

EFFECT OF ORGANISATIONAL AND INDIVIDUAL FACTORS ON INTRAPRENEURIAL BEHAVIOUR OF PUBLIC UNIVERSITY ACADEMICIANS

JAHIRUL ISLAM

A thesis submitted in fulfilment of the requirements for the degree of Master of Science in Entrepreneurship

Faculty of Technology Management and Technopreneurship

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

DECLARATION

I declare that this thesis entitled "Effect of Organisational and Individual Factors on Intrapreneurial Behaviour of Public Universities Academicians" is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.



APPROVAL

I hereby declare that I have read this thesis and in my opinion this thesis is sufficient in scope and quality for the award of Master of Science in Entrepreneurship.



DEDICATION

To my beloved mother and father



ABSTRACT

In recent years, academia in Malaysia is striving to move forward towards more innovative and intrapreneurial culture. However, factors affecting intrapreneurial behaviour of academicians working at the public university in the Southern part of Peninsular Malaysia received limited attention in academic research. Hence, this research aims to examine both organisational and individual factors affecting their intrapreneurial behaviour, since it is assumed that both organisational and individual attributes have independent effects on intrapreneurial exposure. Four organisational factors were identified, namely managerial support, flexible organisational structure, favourable organisational culture and recognition of intrapreneurial activity, whereas four other individual factors were identified, namely proactive personality, self-efficacy, need for autonomy and risk-taking propensity. Three underpinning theories namely, human capital theory, resource-based theory and McGregor's Theory of X and Y have been adopted to support the prospective findings. Primary data was collected from a sample of 250 respondents who are academicians at four universities in the Southern part of Peninsular Malaysia through online survey questionnaire. The study finds that all the organisational factors and individual factors have an effect on intrapreneurial behaviour of academicians. However, while gender acts as moderating variable, all other factors show significant effect on intrapreneurial behaviour except self-efficacy and recognition of intrapreneurial activity. The study has both theoretical implications and practical implications. Academicians are recommended to develop the abovementioned individual factors and university managements are recommended to provide support and reward in favour of intrapreneurship inside the campus.

KESAN FAKTOR ORGANISASI DAN INDIVIDU TERHADAP TINGKAH LAKU INTRAPRENEURIAL AHLI AKADEMIK UNIVERSITI AWAM

ABSTRAK

Dalam beberapa tahun kebelakangan ini, ahli akademik di Malaysia sedang berusaha untuk bergerak ke hadapan ke arah budaya yang lebih inovatif dan intrapreneurial. Walau bagaimanapun, faktor-faktor yang mempengaruhi tingkah laku intrapreneurial ahli akademik yang bekerja di universiti awam di wilayah Selatan Malaysia telah mendapat perhatian yang terhad dalam penyelidikan akademik. Oleh itu, penyelidikan ini bertujuan untuk mengkaji kedua-dua faktor organisasi dan individu yang mempengaruhi tingkah laku intrapreneurial mereka, kerana diandaikan bahawa kedua-dua atribut organisasi dan individu mempunyai kesan bebas terhadap pendedahan intrapreneurial. Empat faktor organisasi dikenal pasti iaitu sokongan pengurusan, struktur organisasi yang fleksibel, budaya organisasi yang menggalakkan dan pengiktirafan aktiviti intrapreneurial, manakala empat lagi faktor individu dikenal pasti jaitu personaliti proaktif, efikasi kendiri, keperluan autonomi dan kecenderungan mengambil risiko. Tiga teori asas iaitu, teori modal insan, teori berasaskan sumber dan Teori X dan Y McGregor telah diterima pakai untuk menyokong penemuan prospektif. Data primer dikumpul daripada sampel 250 responden yang merupakan ahli akademik di empat universiti di wilayah Selatan Malaysia melalui soal selidik tinjauan dalam talian. Kajian mendapati semua faktor organisasi dan faktor individu mempunyai kesan terhadap tingkah laku intrapreneurial ahli akademik. Walau bagaimanapun, sementara jantina bertindak sebagai pembolehubah penyederhana, semua faktor lain menunjukkan kesan yang ketara ke atas tingkah laku intrapreneurial kecuali efikasi kendiri dan pengiktirafan aktiviti intrapreneurial. Kajian ini mempunyai implikasi teori dan implikasi praktikal. Ahli akademik disyorkan untuk membangunkan faktor individu yang dinyatakan di atas dan pengurusan universiti disyorkan untuk memberikan sokongan dan ganjaran yang memihak kepada intrapreneurship di kampus.

ACKNOWLEDGEMENTS

First and foremost, I would like to take this opportunity to express my sincere acknowledgement to my supervisor Dr. Nor Azah Binti Abdul Aziz from the Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka (UTeM) for her essential supervision, support and encouragement towards the completion of this thesis.

I would like to express my greatest gratitude to Dr. Nusaibah Binti Mansor from Faculty of Technology Management and Technopreneurship, co-supervisor of this research for her advice and suggestions in evaluation of intrapreneurial behaviour of public universities academicians in Malaysia.

I am also grateful to thank Faculty of Technology Management and Technopreneurship (FPTT) and Universiti Teknikal Malaysia Melaka (UTeM) for providing me with opportunities and facilities to accomplish this research work.

Special thanks to my beloved mother, father and siblings for their moral support in completing this thesis. Last but not least, thanks to everyone who has helped me in data collection, analysis and editing of this thesis.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

TABLE OF CONTENTS

TABLE OLIST OF LIST OF LIST OF	AL TION CT K WLEDGEMENTS OF CONTENTS	PAGE iii iv v vi vii viii ix xiii xv xv xvi xvi
СНАРТЕ		
1. INT 1.1 1.2 1.3 1.4 1.5	Background of the Study Problem Statement Research Questions Research Objectives 1.5.1 General Objectives 1.5.2 Specific Objectives Scope of the Study Significance of the Study 1.7.1 Theoretical Significance	1 1 2 4 8 8 8 9 9 10 10
1.8	1.7.2 Practical Significance Operational Definition of Key Terms	11 12
1.0	1.8.1 Public Universities	12
	1.8.2 Public University Academicians	12
	1.8.3 Intrapreneurial Behaviour	13
	1.8.4 Management Support	14
	1.8.5 Favourable Organisational Culture	14
	1.8.6 Flexible Organisational Structure	15
	1.8.7 Recognition of Intrapreneurial Activity1.8.8 Proactive Personality	15 15
	1.8.9 Self-efficacy	16
	1.8.10 Need for Autonomy	16
	1.8.11 Risk-taking Propensity	16
	1.8.12 Gender	17
1.9	Organisation of the Thesis	17
1.10	<u> </u>	18

2.	LITE	RATURE REVIEW	19	
	2.1	Introduction		
	2.2	Intrapreneurial Behaviour of Academicians		
	2.3	Management Support		
	2.4	Favourable Organisational Culture		
	2.5	Flexible Organisational Structure		
	2.6	Recognition of Intrapreneurial Activity	24	
	2.7	Proactive Personality	25	
	2.8	Self-efficacy	25	
	2.9	Need for Autonomy	26	
	2.10	Risk-taking propensity	26	
	2.11	Gender	27	
	2.12	Underpinning Theories	27	
		2.12.1 Human Capital Theory	28	
		2.12.2 Resource-Based Theory	29	
		2.12.3 McGregor's Theory of X and Y	30	
	2.13	Hypotheses Development	31	
		2.13.1 Management Support and Intrapreneurial Behaviour	31	
	1	2.13.2 Favourable Organisational Culture and Intrapreneurial	34	
	3	Behaviour		
	m sc	2.13.3 Flexible Organisational Structure and Intrapreneurial	37	
		Behaviour		
	3	2.13.4 Recognition of Intrapreneurial Activity and	39	
		Intrapreneurial Behaviour		
		2.13.5 Proactive Personality and Intrapreneurial Behaviour	42	
	41	2.13.6 Self-efficacy and Intrapreneurial Behaviour	45	
	-	2.13.7 Need for Autonomy and Intrapreneurial Behaviour	48	
		2.13.8 Risk-taking Propensity and Intrapreneurial Behaviour	50	
	LIK	2.13.9 Moderating Effect of Gender	53	
	2.14	Conceptual Framework	60	
	2.15	Summary	62	
		·		
3.	RESE	ARCH METHODOLOGY	63	
	3.1	Introduction	63	
	3.2	Research Design	63	
	3.3	Research Philosophy	64	
	3.4	Research Approach	65	
	3.5	Research Choice	65	
	3.6	Research Strategy	65	
	3.7	Time Horizon	66	
	3.8	Data Collection Method	66	
		3.8.1 Primary Data	66	
		3.8.2 Secondary Data	67	
	3.9	Instrumentation	67	
	3.10	Population and Sampling	68	
		3.10.1 Population Size	68	

		3.10.2	Sample	Size	69
		3.10.3	Samplin	g Frame	69
		3.10.4	Samplin	g Method	69
	3.11	Validat	ion		71
		3.11.1	Face Va	lidation	71
		3.11.2	Pilot Te	st	71
	3.12	Data Pı	rocessing		72
		3.12.1	Data Cle	eaning	72
		3.12.2	Data Co	ding	72
		3.12.3		cation and Tabulation of Data	73
	3.13	Data A	nalysis		73
	3.14	Ethical	Considerat	tions	74
		3.14.1	Privacy	and Confidentiality	74
		3.14.2	Indiscrin	nination	74
		3.14.3	Volunta	ry Participation	74
	3.15	Summa	ary	•	75
			,		
4.	DATA	ANALY	YSIS AND	RESULTS DISCUSSION	76
	4.1	Introdu	ction		76
	4.2	Cronba	ch's Alpha	Reliability Test	76
	4.3	Descrip	otive		77
	F	Analys			
	7	4.3.1	Demogr		77
		4.3.2		ive Statistics of Dependent Variable and	80
		Allin.		dent Variables	
	4.4			t using SmartPLS (SEM)	85
	5	4.4.1	Converg	ent Validity	86
		4.4.2		inant Validity	90
		4.4.3		ent of the Structural Model (Inner Model)	95
	U	VIVERS		Path Coefficients Assessment LAKA	96
			4.4.3.2	2 71	97
			4.4.3.3	Assessment of Coefficient of Determination	99
				(R^2)	
			4.4.3.4	Assessment of Effect Size (f^2)	99
			4.4.3.5	Assessment of Predictive Relevance (Q^2)	100
	4.5	Results	and Discu	ssion	101
	4.6	Summa	ary		105
5.	CONCLUSION AND RECOMMENDATIONS				
	5.1	Conclu	sion		106
	5.2 Implications of the Study				111
		5.2.1	Theoretic	cal Implications	111
		5.2.2	Practical	Implications	112
			5.2.2.1	Managerial Implications	112
			5.2.2.2	Policy Implications	113
	5.3	Limitati	ions of the	Study	113
	5.4	Recom	nendations		114

5.4.1	Recommendation for Future Researchers	114
5.4.2	Recommendation for Academicians	114
REFERENCES		
APPENDICES		138



LIST OF TABLES

TABLE	TITLE	PAGE
2.1	Summary of Literature Review	55
4.1	Reliability Statistics	77
4.2	Demographic Characteristics of Respondents	78
4.3	Means and Standard Deviation of Intrapreneurial Behaviour	80
4.4	Means and Standard Deviation of Organisational Factors	81
4.5	Means and Standard Deviation of Individual Factors	83
4.6	Factor Loadings of the Indicators	87
4.7	Fornell and Larcker Criterion	91
4.8	Heterotrait and Monotrait (HTMT) Ration	92
4.9	Cross-Loading	93
4.10	The structural model assessment with model's direct paths	97
	relationship, t-value and p-value	
4.11	Hypothesis Test with Moderation	98
4.12	Result of R^2 value	99
4.13	Result of f^2	100
4.14	Construct cross-validated redundancy (Q^2) test	101

LIST OF FIGURES

FIGURE	TITLE	PAGE
2.1	Conceptual framework of the study	61
3.1	Onion model for the study	64
4.1	Two-step partial least squares (PLS) path model assessment	85
4.2	Measurement model of the study	90
4.3	The structural model of the study	96
	اونيؤم سيتي تيكنيكل مليسيا ملاك	
	UNIVERSITI TEKNIKAL MALAYSIA MELAKA	

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
A	Public universities located in the Southern part of Peninsular	138
	Malaysia	
В	Total number of academicians in the public universities located at	139
	Southern part of Peninsular Malaysia	
C	Sample size calculation of this study	140
D	Questionnaire validation sheet	141
E	Actual questionnaire circulated via Google Form online	151
	اونيوسيتي تيكنيك لمليسيا ملاك	
	IINIVERSITI TEKNIKAL MALAYSIA MELAKA	

LIST OF ABBREVIATIONS

ACRONYM ABBREVIATION

ANOVA - Analysis of variance

AVE - Average Variance Extracted

DTD - Domestic Texas Department

ETP Economic Transformation Plan

FBiH Bosnia and Herzegovina Federation

FOC - Favourable Organisational Culture

FOS Flexible Organisational Structure

FPMAG - Fruit Processors and Marketing Association of Ghana

GTP Government Transformation Plan

IBA - Intrapreneurial Behaviour of Academicians

IBM - Intrapreneurial Behaviour Measure

IT - Information Technology

JCorp - Johor Corp

KRA - Kenya Revenue Authority

KPJ - KPJ Healthcare Bhd

MCQ - Multiple Choice Questions

MECA - Malaysia Employers Consulting Agency

MOHE - Ministry of Higher Education

MRU - Malaysian Research University

MS - Management Support

ACRONYM ABBREVIATION

NA - Need for Autonomy

NHESP - National Higher Education Strategic Plan

PLS - Partial Least Squares

PP - Proactive Personality

R&D - Research and Development

RIA - Recognition of Intrapreneurial Activity

RO - Research Objectives

RQ - Research Questions

RTP Risk-Taking Propensity

SE - Self-Efficacy

SEM Structural Equation Modelling

SPSS - Statistical Package for the Social Sciences

SRMR Standardized Root Mean Residual

SSE - Sum of Squares of Prediction Errors

SSO UN-VER Sum of Squares of Observations SIA MELAKA

STDEV - Standard Deviation

UiTM - Universiti Teknologi MARA

UKM - Universiti Kebangsaan Malaysia

UNESCO - United Nations Educational, Scientific and Cultural Organisation

UTeM - Universiti Teknikal Malaysia Melaka

UTHM - Universiti Tun Hussein Onn Malaysia

UTM - Universiti Teknologi Malaysia

LIST OF PUBLICATIONS

Islam, J., Aziz, N.A.B.A., Mansor, N.B. 2024. Effect of Organisational Factors on Intrapreneurial Behaviour of Public University Academicians in Malaysia. *Qeios*. https://doi.org/10.32388/J3Q3X2.2



CHAPTER 1

INTRODUCTION

1.1 Introduction

Technological advancement, globalisation and fluctuation in economies have increased competitions among organisations around the world. Organisations are now seeking ways to increase profitability and at the same time retain the employees who have more contribution to organisational growth. Intrapreneurship refers to the behaviour of employees that allow them to be proactive, risk-taker and innovative within the organisational boundary (Bakar, Mahmood and Lucky, 2015). Thus, organisations worldwide now require people who possess and demonstrate intrapreneurial behaviour.

The term 'intrapreneurship' should not be confused with the term 'entrepreneurship'. Both the terms have clear differences. Entrepreneurship refers to exploring an opportunity and developing new business models or strategies through innovation and maximum risk taking in a business platform, whereas intrapreneurship is a revolutionary process of challenging the existing system and process by innovating and bringing change into them within an organisation (Maier and Zenovia, 2011). Though both entrepreneur and intrapreneur have similar characteristics and traits, such as innovativeness, flexibility, risk taking propensity and ambition, the traits among entrepreneurs are higher comparatively and are demonstrated in an unsafe business platform, whereas traits of intrapreneurs are demonstrated in a safer boundary of an organisation (Cadar and Badulescu, 2015).

Price (2016) affirmed that the academia world now has moved towards recognising 'Intrapreneur Teacher'. A lecturer with intrapreneurial behaviour has to have three basic characteristics, such as a role model for students, a world shaper and an innovation facilitator who transfer industry-required skills into students.

Intrapreneurship has not yet become a common practice in Malaysia (Yeoh, 2017). Organisations in Malaysia provide minimum freedom for experiment and autonomy to the employees. Due to lack of such practice, those employees who are creative, innovative and bold in nature usually leave the workplace in order to find a better and favourable workplace that would provide them adequate autonomy to work with freedom.

1.2 Background of the Study

In the past two decades, higher learning institutions in Malaysia have become more exposed to intrapreneurship due to rising demand of innovation and adaption of trend at workplace across all sectors (Blanka, 2019). Growing interest have been noticed among academic researchers in exploring the context of intrapreneurship in the past two decades in Malaysia. Ramlee et al. (2022) examined various intrapreneurial behaviour of the academicians of Universiti Teknologi MARA and established significant relationship between intrapreneurship and the academicians' performance. A total of 8 academicians from 4 public higher learning institutions, more known for research grants from government, were involved in a study of Yusof Siddiq and Nor (2014). They revealed that when intrapreneurship is involved in research and publications among academicians, it helps to bring creative idea, solve problems and as well as transfer knowledge not only among the researchers, but also from researchers to students and to practitioners. Nordin (2020), a specialist at Universiti Kebangsaan Malaysia (UKM), revealed that due to novel coronavirus outbreak, the academics

have seen a paradigm shift in learning, working and socialising. Now intrapreneurship is no more limited to classroom activities, it has rather shifted to online learning. Academicians now work extra hours, even staying home, prepare lessons, tutorials, infographics, web seminars and home assignments that can be broadcasted online either through social media or Youtube platform. Furthermore, intrapreneurship may also involve activities such as, raising awareness among students and colleagues and during the pandemic. One of the examples is 'Majalah Sains' that has been created by some of the academicians at UKM, through which information on awareness are disseminated. Intrapreneurship by academicians may also enable rapid and cost-effective decision-making through virtual meetings via video conferencing.

Having received considerable support in terms of research grants, and technical and regulatory policies, it has become more environment-friendly for public universities in Malaysia to imply intrapreneurial culture in respective premises. The Economic Transformation Plan (ETP), the Government Transformation Plan (GTP) and the National Higher Education Strategic Plan (NHESP) endorsed by the Malaysian government attempt to guide academic leaders in Malaysia to demonstrate intrapreneurship and adopt appropriate knowledge sharing style, embracing technology as well as contemporary changes (Bakar, Mahmood and Lucky, 2015).

The government initiatives have sparked growing interest of practicing intrapreneurship in Malaysian public universities, especially in the Southern region of the country's peninsular part. There are four public universities with six campuses (**Appendix A**) in the Southern part of Peninsular Malaysia (Negeri Sembilan, Melaka and Johor). The intrapreneurial behaviour of the academicians in these universities require more attention in an empirical research context.

1.3 Problem Statement

Past studies reveal that intrapreneurial behaviour of academicians are affected by both organisational factors and individual factors (Tende, Onuoha and Alagah, 2022). Numerous literatures examined the effect of several organisational factors on intrapreneurial behaviour, outside the academic context, such as management support (Yariv and Galit, 2017; Aparicio, 2017), favourable organisational culture (Kapil and Saxena, 2019; Eze et al., 2018, Gürsoy and Güven, 2016), flexible organisational culture (Delić, Alibegović and Mešanović, 2016; Shoghi and Safieepoor, 2013), recognition of intrapreneurial activity (Tastana and Güçel, 2014; Ferrier, 2014; Madu, 2011). Others have sought to examine various individual factors, such as, proactive personality (Neessen et al., 2019, Blanka et al., 2019; Razavi and Abdul Aziz, 2017; Weel, 2017), self-efficacy (Afriyie, Melyoki and Nchimbi, 2020; Adriaans, 2019; Soran, Şeşen and Güven, 2019; Bearelle, 2017; Blumbergs, 2017; Zurriaga- Carda, Kageyama and Akai, 2016), need for autonomy (Shir, Nikolaev and Wincent, 2019; Omari, 2018; Arunga, 2017; Mbaka, 2017), risk-taking propensity (Madell, 2014; Azami, 2013; Martiarena, 2013; Heinonen, Hytti and Vuorinen, 2013; Bayhan, Serinkan and Arat, 2013; Nunes et al., 2012). All these researches have been carried out focusing on population who are nonacademicians. Hence, not all the abovementioned factors were empirically tested involving academicians.

Only few of the aforementioned determinants were empirically studied involving academicians, such as management support (Mathu, 2016; Lizote, Lana and Verdinelli, 2014), flexible organisational structure (Gupta and Srivastava, 2013), proactivity and risk-taking propensity (Vargas-Halabí, Mora-Esquivel and Siles, 2017). However, the relationships among these factors and intrapreneurial behaviour are still unclear. The current research fills the research gap.

It can be argued whether both organizational and individual factors are crucial for growth in the performance of academicians as well as higher learning institutions. Researchers are of the view that organizational motivation in the form of support, culture, reward and recognition are not adequate, if there are no academician interested to undertake intrapreneurship. On the other hand, academicians with individual innovative characteristics have no value, if respective institutions cannot provide adequate support and environment. For example, Norhasimah et al. (2012) revealed that whereas innovativeness and risk-taking is significantly related to job satisfaction, innovativeness and pro-activeness have positive and significant effect on individual job performance which further affects organisational performance. Others acknowledged that when enabling environment for intrapreneurial behaviour such as, innovativeness and pro-activeness is provided by organisations, it increases the organisational adaptive capacity of employees (Thomas and Bolaji, 2016). That is why, examining both organisational factors and individual factors in a single research work is important in the context of Malaysian academicians.

Very few researches have focused on both organisational factors and individual factors UNIVERSITI TEKNIKAL MALAYSIA MELAKA
that may have effect on intrapreneurial behaviour of academicians in Malaysian context.

Mathu (2016) carried out similar research in the context of Kenya, however, the study was based on different factors of intrapreneurial behaviour except only management support. This research also fills the gap of examining both organisational factors and individual factors and their effect on the intrapreneurial behaviour of academicians in Malaysia.

The study is required to be carried out from the viewpoint of both higher learning institutions and academicians since researchers also argue that adequate opportunities, support and environment in the academia increase employee engagement, satisfaction and performance (Bubenik, 2019). Ismail et al. (2012) affirmed that whereas innovativeness and