UNIVERSITI TEKNOLOGI MARA

A QUANTITATIVE STUDY OF FACTORS INFLUENCING MALAYSIAN STUDENTS' DECISION TO PURSUE AN INFORMATION TECHNOLOGY MASTER'S DEGREE IN MALAYSIA

WAN MUHAMMAD AQIL BIN WAN HARUN

Computing Project submitted in partial fulfillment of the requirements for the degree of Master of Science in Information Technology

Faculty of Computer and Mathematical Sciences

July 2018

ABSTRACT

Malaysians who are pursuing a Master degree are decreasing by each year. Information technology is important as the world is moving towards Industry 4.0 and is in need of skilled workers that are respectable in computer science related fields. Therefore, this research aims to study the factors influencing Malaysians to pursue Master in Information Technology (IT). The objectives of this research are to identify the factors influencing one's decision to pursue Master in IT, analyse the result of this research along with the identified factors and determine which of the factors have the greatest influence on deciding to pursue Master in IT. The factors are identified through extensive literature review by revising past studies regarding factors that can influence one's intention to study at a higher education institution (HEI). The identified factors which are also the independent variables are individual attributes, societal influences, financial factor, HEI reputation and HEI marketing strategy. A research model was developed based on the Theory of Planned Behaviour to analyse the identified factors to determine which of the factors is significant and has the most influence on the dependent variable; intention to pursue a Master's degree in IT. This research uses questionnaire as its instrument and it has been tested via pilot study, which have been adopted for the fullscale study. Online and paper distribution method were used to conduct the survey. The responses are analysed and tested with normality tests, descriptive analysis, reliability test, inferential analysis via correlation and multiple regression analysis and independent sample t-test. Findings indicate that individual attributes have the greatest influence on the intention to pursue a Master's Degree in IT followed by HEI marketing strategy and societal influences. In addition, there is a substantial difference in gender that influence these factors. The significance of this research would be beneficial to the higher education institutions as the service provider, enrich the existing literature related to Malaysian higher education and act as a reference for the Ministry of Higher Education to enhance the education system.

ACKNOWLEDGEMENT

Firstly, I want to thank Allah for giving me the opportunity and strength to embark on my Master's degree and for completing this long and challenging journey successfully. My gratitude and thanks go to my supervisor Assoc. Prof, Dr Wan Adilah Wan Adnan for guiding me.

My appreciation goes to my friends and fellow peers who helped me during the sampling of my survey. Special thanks to my parents and my loved one for helping me with this project via financial and emotional support.

Finally, this thesis is dedicated to UiTM as part of my contribution toward enriching the literature and helping FSKM to understand the intention of Malaysian to pursue a Master's degree in IT or its related fields. This piece of triumph is dedicated to both of my parents who supported me until I'm in the final stages of my Master's degree. Alhamdulilah.

TABLE OF CONTENT

		r	Page		
	CON	CONFIRMATION BY PANEL OF EXAMINERS			
	AUT	iii			
	ABS	ABSTRACT ACKNOWLEDGEMENT			
	ACK				
	TAB	FABLE OF CONTENT			
	LIST	LIST OF TABLES			
	LIST	LIST OF FIGURES			
	LIST OF ABBREVIATIONS				
	CHA	PTER ONE INTRODUCTION	1		
	1.1	Introduction	1		
	1.2	Research Background	1		
	1.3	Problem Statement	2		
	1.4	Research Aim	3		
	1.5	Research Questions	3		
	1.6	Research Aim			
	1.7	Research Scope			
	1.8	Research Significant			
	1.9	Overall Research Chapter Outline	4		
	1.10	Chapter Summary	6		
	CHA	PTER TWO LITERATURE REVIEW	7		
2.1 Intro		Introduction			
	2.2	Master's Degree in Information Technology (IT) in Malaysia	7		
		2.2.1 MARA University of Technology's (UiTM) MSc IT	8		
		2.2.2 University of Malaya's (UM) MITM	9		
		2.2.3 Infrastructure University Kuala Lumpur's (IUKL) MIT	10		
	2.3	The Forth Revolution			
		2.3.1 Industry 4.0	12		

	2.3.2	Malaysia's Higher Education 4.0	15	
2.4	Maste	r's Degree in IT, Industry 4.0 and Higher Education 4.0	20	
2.5	HEIs Selection Process			
2.6	Relate	ed Literatures on Intention to Study at HEI	21	
	2.6.1	Important Factors Influence	23	
2.7	Influe	ncing Factors Definitions	24	
	2.7.1	Individual Attributes	24	
	2.7.2	Societal Influences	26	
	2.7.3	Financial Factors	28	
	2.7.4	HEI Reputation	29	
	2.7.5	HEI Marketing Strategy	30	
2.8	Surve	y Method	32	
	2.8.1	Paper Survey	32	
	2.8.2	Online Survey	33	
	2.8.3	Subtopic Review	34	
2.9	Chapte	er Summary	34	
•				
CHA	PTER I	FHREE RESEARCH MODEL	35	
3.1	Introduction			
3.2	Theory of Planned Behaviour			
3.3	Related Conceptual Model Review			
	3.3.1	Wagner's Factors Influencing Intention to Study at HEI	37	
	3.3.2	Sia's Higher Education Institution Choice in Malaysia	38	
	3.3.3	Aydn's University Choice Process	39	
3.4	Resear	rch Conceptual Model	40	
3.5	Variables Definition			
3.6	Hypot	potheses Construction		
	3.6.1	H1 - Individual Attribute	44	
	3.6.2	H2 – Societal Influences	44	
	3.6.3	H3 - Financial Factors	45	
	3.6.4	H4 - HEI Reputation	45	
	3.6.5	H5 - HEI Marketing Strategy	45	
3.7	Resear	rch Model	46	
3.8	Chapte	er Summary	46	