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THE IMPACT OF STRATEGIC KNOWLEDGE MANAGEMENT PROCESSES ON SOCIAL INNOVATION PRACTISES

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DOCTOR OF PHILOSOPHY UNIVERSITI UTARA MALAYSIA JULY 2017

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By

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ABSTRACT

Only recently, various developed countries had been chanting out social innovation as the new paradigm of innovation outcome strategy in addressing social, economic and technological issues in a concurrent way. Social innovation in the context of strategic knowledge management processes creates superior knowledge resource which regard as a new and novel solution that can be embedded into product, process and service which in turn leads to the outcome of improving the quality of people's life, stimulate economic growth and enhance technological aspect. However, social innovation is very much connected with pure social aspects. This study examine and explore the impact of strategic knowledge management processes on social innovation within the context of Malaysian universityindustry-community partnership projects funded by the Knowledge Transfer Partnership (KTP) grant program. The main data for this study was collected through survey questionnaires via personnel administered and internet email from 218 project leaders of Malaysian university-industry-community partnership projects. The data for this study were also obtained through face-to-face interview sessions with the academic, industry and community actors within the partnership projects. These data were collected from the period of May 2016 till October 2016. The data was analysed by using Statistical Package for Social Science (SPSS) version 19 software and the content of the interviews data was validated by experience and expert qualitative researchers within the respective field. The findings of this study indicate a significant positive relationship between strategic knowledge management processes and social innovation. Further, hyphotheses testing results also demonstrated that socialization towards leveraging new knowledge resource, ability to transform and absorb new knowledge resource, ICT skills and knowledge and selection process of actors is somewhat needs serious improvements. Furthermore, syncronization of missions, objectives and priorities, high bureaucracy practices, business disclosures issues, innovation specification requirements issues, understanding and commitment issues and financial constraints issues must be dealt with accordingly so that can provide improvements and added value to the existing policy and procedures.

Keywords: social innovation, strategic knowledge management processes, knowledge resource.

ABSTRAK

Sejak akhir-akhir ini, pelbagai negara maju telah melaungkan inovasi sosial sebagai paradigma baharu bagi strategi hasil inovasi dalam menangani isu sosial, ekonomi dan teknologi secara serentak. Inovasi sosial dalam konteks proses pengurusan pengetahuan strategik mewujudkan sumber pengetahuan superior yang dianggap sebagai penyelesaian baharu (novel) yang boleh diterapkan ke dalam produk, proses dan perkhidmatan yang seterusnya membawa kepada hasil bagi meningkatkan kualiti hidup rakyat, merangsang pertumbuhan ekonomi dan meningkatkan aspek teknologi. Walaubagaimanpun, inovasi sosial hanya berkait rapat dengan aspek sosial semata-mata. Kajian ini meneliti dan meninjau kesan proses pengurusan pengetahuan strategik inovasi sosial dalam konteks kerjasama antara universiti, industri, dan komuniti di Malaysia yang dibiayai oleh geran program pemindahan ilmu (KTP). Data utama kajian diperolehi daripada soal selidik melalui kakitangan tertadbir dan email internet daripada 218 orang ketua projek kerjasama universiti, industri dan komuniti Malaysia. Data lain diperolehi melalui sesi temu bual bersemuka dengan ahli akademik dan industri serta para pelakon dalam projek kerjasama. Data-data ini dikumpulkan dalam tempoh Mei 2016 hingga Oktober 2016. Data yang diperolehi dianalisis dengan menggunakan perisian Statistical Package for Social Science (SPSS) versi 19, dan kandungan data temu bual disahkan berdasarkan pengalaman dan pakar pengkaji kualitatif bidang masing-masing. Dapatan kajian ini menunjukkan hubungan positif yang signifikan di antara proses pengurusan pengetahuan strategik dengan inovasi sosial. Selanjutnya, keputusan ujian hipotesis juga menunjukkan bahawa sosialisasi ke arah memanfaatkan sumber pengetahuan baharu, keupayaan untuk mengubah dan menyerap sumber pengetahuan baharu, pengetahuan dan kemahiran ICT serta proses pemilihan pelakon memerlukan peningkatan yang serius. Tambahan pula, penyegerakan (syncronization) misi, objektif dan keutamaan, amalan birokrasi yang tinggi, isu pendedahan perniagaan, isu keperluan inovasi tertentu, isu kefahaman dan komitmen serta isu kekangan kewangan perlu ditangani dengan sewajarnya supaya boleh memberikan penambahbaikan dan nilai tambah kepada dasar dan prosedur sedia ada.

Kata kunci: inovasi sosial, proses pengurusan pengetahuan strategik, sumber pengetahuan.

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Appendix A Publications and Proceedings derived from the thesis

Appendix B Research Questionnaires and Semi-Structured Interview Protocol Questions



CHAPTER ONE

INTRODUCTION

1.0 Background of the Study

In recent years, the issues of poor social health, poor standard of living, poor education system, public income inequality, massive unemployment and poor economic growth are being identified as the most crucial and long-standing social and economic problems faced by many developed and developing nations worldwide (Kanter, 2013). According to Krlev, et.al., (2014), innovation is the notion that is being regarded as the vital solution in addressing those issues mentioned above. However, the presence paradigm of innovation outcome that refers to technological innovation is perhaps no longer sufficient in dealing with the aforementioned issues (Doherty et.al., 2014). To elaborate further, Makimattila et.al., (2015), stressed that, technological innovation is very much inclined and focus towards private maximization that somehow gives a huge advantage to the commercial driven innovation. Furthermore, according to Lizuka (2013), when technological innovation is adopted within a particular organization, the aspect of social well-being is somewhat being neglected due to its nature that specifically focuses on satisfying private needs. Hence, there is a consensus worldwide on the urgency to find a new paradigm of innovation outcome strategy that can become a better solution in order to solve the pressing social, economic and technological issues in a concurrent way (Kanter, 2013).

Given that, social innovation has emerged as a new and outstanding solution that offers various concern stakeholders a better outcome in dealing with the social, economic and technological issues (Dawson & Daniel, 2010; Pue et.al., 2015). Social innovation can be define as new and novel solution embedded into products, processes and services in order to

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- 1. Jali, M.N., Abas, Z., & Ariffin, A.S. (2017). Social Innovation in the context of Strategic Knowledge Management Processes for Supply Chain Performance Enhancement. International Journal of Supply Chain Management. Volume 6, No. 1, pp. 233-238. (Scopus Indexed Journal).
- 2. Jali, M. N., Abas, Z., & Ariffin, A. S. (2017). Corporate Social Responsibility and Corporate Social Innovation: A Conceptual Understanding. SHS Web of Conferences Vol. 34, pp. 01001. EDP Sciences. (ISI Indexed Journal).
- 3. Abas, Z., & Jali, M. N. (2015). Understanding knowledge management in developing emerging concept of innovation and technology into business: Conceptual review and empirical evidence. **International Academic Research Journal of Business and Technology**. 1(2) 2015, pp. 149-164. (**Refereed Journal**).
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- 5. Jali, M. N., Abas, Z., & Ariffin, A. S. (2016). Social Innovation: A New Paradigm Of Innovation Outcome Strategy In The Context Of Strategic Knowledge Management Processes. Sains Humanika, 8: 4-2 (2016), pp. 47–50. (Refereed Journal).
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- 7. Jali, M.N., Abas, Z., & Ariffin, A.S. (2016). Addressing Social Innovation in the Malaysian University-Industry-Community Knowledge Transfer Partnership: A Preliminary Empirical Insight. **Journal of Business, Management and Accounting (JBMA-UUM).** Paper acceptance date for publication: 6th February 2017. Paper will be published in June 2017. (**Refereed Journal**).

CONFERENCE PROCEEDINGS DERIVED FROM THE THESIS

- Jali, M.N., Abas, Z., & Ariffin, A.S. (2016). Social Innovation and Strategic Knowledge Management Processes: A critical conceptual overview: Proceedings of Knowledge Management International Conference (KMICe) 2016. Chiang Mai, Thailand. pp. 411-415. UUM College of Arts and Sciences, Universiti Utara Malaysia (UUM), Sintok Kedah Malaysia. 29 – 30 August 2016.
- Jali, M.N., Abas, Z., & Ariffin, A.S. (2016). Corporate Social Responsibility and Corporate Social Innovation: A Conceptual Understanding: Proceedings of 17th Asian Academic Accounting Association Annual Conference (four A) 2016. Kuching, Sarawak Malaysia, 20-22 November 2016.
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APPENDIX B

Research Questionnaires and Semi-Structured Interview Protocol Questions





CRITICAL AGENDA PROJECT KNOWLEDGE TRANSFER PROGRAMME - KTP MINISTRY OF HIGHER EDUCATION MALAYSIA



Knowledge Transfer Programme - KTP

Survey on KTP Grant Scheme under RMK-10 (2011-2015)

"The Impact of Strategic Knowledge Management Processes on Social Innovation Practises"

Dear Participants,

I hope that you can spend some of your priceless time to answer the questionnaires given. The information that you provide will help us to gain a better insights and improved understanding on the situation concern with the study.

You will remain completely anynymous and the response is strictly confidential. Only members within the research team will have access to the information given. Thank you very much for your time and cooperation.

Your Sincerely,		Universiti	Utara	Malaysia
Muhamad Nizam	ı Jali			

Pusat Pemindahan Ilmu (KTP) Pejabat Pengurusan TORAY-USM KTC

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SURVEY QUESTIONNAIRES

SECTION A: Demograpic Characteristics

General Information

- 1. Age: (*Umur*)
- Jantina: (Gender)
- 3. Education level: (Taraf Pendidikan)
- 4. Number of years in service/ industry/ community: (Tahun dalam perkhidmatan/ industri/ komuniti)
- 5. Name of KTP project: (Nama projek KTP)
- 6. Name of university-industry/ university-community partnership:
 (Nama hubungan kerjasama universiti-industry/universiti-komuniti)
- 7. Duration of university-industry/ university-community partnership: (Tempoh hubungan kerjasama universiti-industri/universiti-komuniti)
- 8. Rolling Phase 1st/ 2nd / 3rd/ 4th/ 5th: (Fasa 1/2/3/4/5)

Tick (/) where approriate.

į

PART	A: Social Innovation					
<u>Workp</u>	lace innovation	ı	2	3	4	5
1.	Project management team allows work autonomy, empowerment and flexible working schedule.					
2.	Project actors frequently work through partnership forum and team work.					
3.	Project management team constantly updating project process and allow job rotation among actors.					
4.	Project management team concern on the welfare and social security of the actors.					
5.	Project leader provide individual support in enhancing actors human resource value through training, sharing knowledge and stimulate learning culture among actors.					
6.	The project outcome creates new solution, techniques and methods towards improving products, processes and services.	rsiti U	tara N	1alays	sia	

Tick (/) where approriate.

PART A	A: Social Innovation	1	2	3	4	5
<u>Organiz</u>	zation innovation					
7.	The project management team allows decentralised decision making and flexible job responsibilities.					
8.	The project management team constantly encourage actor's social relationship as a medium to enhance social value and propensity to innovate towards project objective.					
9.	The project management team implement best practices and provide convenient environment throughout project duration to enhance actor's motivation, performance and participation.					
10.	The project management team constantly emphasizes on actor's integration between each other and working as a unit throughout project duration.					
11.	The project management team often restructure and redesign project process and structure to adapt to changes during the project duration.					
12.	The project management team often implement new administrative system to make the project more efficient and effective throughout the duration of the project.	sitio	ala M	alays		
_						·

Tick (/) where approriate.

PART A: Social Innovation	1	2	3	4	5
Social capital	, , , , , , , , , , , , , , , , , , ,	-	J	·	
13. All actors in the project shared the same belief, motives and goals towards the success of the project.					
14. All actors in the project are highly trusted and have a high sense of trustworthiness in sharing knowledge.					
15. All actors in the project have close social relationship (example: recreational activities, informal gathering) with each other.					
16. All actors frequently shared any knowledge and information regarding project matters with each other's to improve skills and capabilities.					
17. New solution that can be embedded into products, processes and services is created from shared resources of project actors relationships.					

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Tick (/) where approriate.

PART 1	B: Strategic knowledge management processes	1	2	3	4	5 .
<u>Knowle</u>	edge Creation		2	J	•	
1)	Socialization					
18.	All project actors spent a lot of time interacting through informal meeting and social activities in order to discuss and exchange ideas, experience and opinion.					
19.	The project management team allows sharing experience, observation, imitation and mentoring activities.					
20.	Project leader always encourage, motivate and guiding other project actors to have a formal and informal joint activities i.e. open dialogue, spending time together to share experience.					
21.	The environment within the project, take place in a high level of trust, interpersonal relationship, openness and low level of cultural and language differences.					
2)	Externalization					
22.	All project actors participate in open dialogue and community of practice with each other to structure and record knowledge.	eisitii L	tara	lalay	sia	
23.	All project actors have a high sense of trust, high degree of communication, social closeness and shared values.					
24.	The project leader/ project management team listens to all opinions and recommendations from every project actors.					
25.	All project actors keep new knowledge in documentation i.e. database, intranet files and other computer software, that are easy to understand and shared to others.					
3)	<u>Combination</u>					
26.	All project actors know very well about their roles and responsibility and have a positive attitude towards ICT.					
27.	The project management team equip actors with good ICT facilities and allow actors to access other related facilities.					

	28.	All project actors are ICT literate in order to reconfigure, diffuse and systemize new knowledge.					
	29.	All project actors frequently used ICT facilities in order to communicate and disseminate new knowledge to other actors.					
	4)	<u>Internalization</u>					
	30.	Project explicit knowledge is written in comprehensive and well-structured documents.					
	31.	The project always engages with practical activities such as learning by doing, experimenting, training and simulation.					
	32.	Project leader always tolerates failures and continuously encourage trial and error.					
	33.	Practical activities enhance all project actors tacit and personal knowledge.					
<u>Kn</u>	<u>owle</u>	dge Transfer					
	5)	Communication					
	34.	All project actors frequently communicate new knowledge with each other through verbal and non-verbal approach.	ersiti	Litara	Mala	T Color	
	35.	All project actors regularly donating and collecting new knowledge with each other.		Otara	Mala	y STG	<u> </u>
	36.	All project actors can communicate with each other effectively and efficiently.					
	37.	All project actors can express new knowledge and ideas clearly.					
•	38.	Project leader always play as a leading role in established a constructive communication climate throughout project duration.					
	6)	Transformation					
	39.	All project actors have the ability to transform new knowledge into practical work.					
	40.	All project actor's record and store new knowledge for future reference.					
	41.	All project actors are capable to absorb new knowledge and prepare it for further purposes and to make it available.					

42.	All project actors aware of their competencies to eliminate obsolete old knowledge and replace it with newly acquired knowledge for new innovation.					
43.	All project actors regularly meet to discuss on the progress of transformation and utilisation of new acquired knowledge towards products, processes and services development.					
Knowle	edge Application					
7)	Exploration					
44.	The project invents and introduces new products, processes and services that are completely new.					
45.	The project leader regularly organised special meeting with other actors to acquire new knowledge.					
46.	All project actors accept instruction that go beyond existing policy and procedures to develop new products, processes and services.					
47.	The project management team thoroughly observed technological trends and public demands throughout project duration.					
48.	Project actors frequently utilised new knowledge opportunity throughout project duration.	ersiti	Utara	Malay	Sia	
8)	Exploitation					
49.	The project frequently implements adaption of new knowledge towards existing products, processes and services.					
50.	The project improves existing products, processes and services within the project.					
51.	Project leader regularly review the development of products, processes and services to exploit of new knowledge.					
52.	All project actors are capable of recognising the usefulness of new knowledge to combine with existing knowledge within the project.					
53.	All project actors are capable in sharing new knowledge to improve and refine existing products, processes and services.					

54. It is clearly known among actors how activities within the project should be performed.	
1. Strongly Disagree 2. Disagree 3. 1 Tick (/) wher	Neutral 4. Agree 5. Strongly Agree e approriate.
PART C: Control variables	
<u>Leadership</u>	1 2 3 4 5
 Project leader articulates clear project vision, mission and objectives to other actors. 	
 Project leader regularly help other actors to increase level of enthusiasm and intellectual stimulation. 	
 Project leader always capable in giving inspirational motivation and guiding other actors to perform related job. 	
 Project leader frequently initiate meeting and leading discussion on any particular issues arise in the project. 	
 Project leader always guide other actors to look at problems from many different angle. 	
Organization structure	
 Our project management team provides other actors with easy access to various sources of information. 	
 Our project management team allows decentralised decision making made by the project actors. 	
62. Our project management team/ KTP project secretariat provides adequate resources (ex. financial and non-financial) for actors to think of creative solution and to explore innovative ideas.	
 Our project management team/ KTP project secretariat holds innovative actors and projects in high regard. 	
 Our project management team/ KTP project secretariat is tolerant of mistakes. 	

Human	resource management	<u> </u>				
65.	Project actors were rigorously recruited by the project leader in hiring process.					
66.	The project management team frequently provide continuous developmental training opportunities for project actors.					
67.	Our project encourages empowerment and high participation among actors.					
6 8 .	Our project activities involve a lot of teamwork rather than individual work.					
69.	Our project management team/ KTP project secretariat regularly rewards and appraised project actors when they perform excellently.					
<u>Trust</u>						
70.	We strongly believed that every project actor would not try to take advantage with each another.					
	We strongly believed that every project actor keep their words and promises with regards to project matters.					
72.	We strongly believed that our welfare, desire and needs are priority to the project management team/ KTP project secretariat.	ersiti	Utara	Malay	rsia	
73.	We feel very confident on every project team actor capabilities towards achieving project objectives.					
74.	All project actors have benefited from this partnership.					
Social ti	<u>es</u>					
75.	Our project actors frequently having a formal and informal face to face meeting with each other.					
76.	We frequently discuss in person with other actors regarding project matters rather than looking at documents for information.					
77.	We frequently meet outside the project formal activities to socialise and discuss with each other.					
78.	Our project actors regularly used other method such as social media to interact with each other.					

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CRITICAL AGENDA PROJECT KNOWLEDGE TRANSFER PROGRAMME - KTP MINISTRY OF HIGHER EDUCATION MALAYSIA



Knowledge Transfer Programme - KTP

Survey on KTP Grant Scheme under RMK-10 (2010-2015)

"The Impact of Strategic Knowledge Management Processes on Social Innovation Practises"

Dear Participants,

I hope that you can spend some of your priceless time to do an interview session. The information that you provide will help us to gain a better insights and improved understanding on the situation concern with the study.

You will remain completely anynymous and the response is stricly confidential. Only members within the research team will have access to the information given. Thank you very much for your time and cooperation.

Your Sincerely,	Universiti	Utara	Malaysi

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SEMI STRUCTURED INTERVIEW

SECTION A: Demograhic Characteristics

ene	ral Information
1.	Age:
	Umur)
2.	Jantina:
	(Gender)
3.	Education level:
	(Taraf Pendidikan)
4.	Number of years in service/ industry/ community:
	(Tahun dalam perkhidmatan/ industri/ komuniti)
5.	Name of KTP project:
	(Nama projek KTP)
6.	Name of university-industry/university-community partnership:
	(Nama hubungan kerjasama universiti-industry/universiti-komuniti)
7.	Duration of university-industry/ university-community partnership:
	(Tempoh hubungan kerjasama universiti-industry/universiti-komuniti)
8.	Rolling Phase 1st/ 2nd / 3rd/ 4th/ 5th:
	(Fasa 1/2/3/4/5)
9.	Interview date/time/venue:
10). Interview duration:

PART 1:

- 1. Could you tell me a bit about yourself i.e. background and experience?
- 2. Why do you interested to get involved in this partnership project?
- 3. Based on your knowledge, can you briefly explain about strategic knowledge management processes?
- 4. What contribution do you think that this strategic knowledge management partnership project contributes to?
- 5. Based on your involvement within this partnership project, what are the benefits that you and other partners gained?
- 6. Do you agree that this strategic knowledge management partnership project developed new innovation into the products, processes and services? If yes, what is this new innovation leads to achieve?

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PART 2:

- 7. Can you explain briefly about your roles and relationships in this partnership?
- 8. Do you think that you get involved in every processes of strategic knowledge management within this partnership project?
- 9. Have you ever been involved in commercializing the partnership project outcome i.e. products, processes and services?
- 10. What is this commercializing process leads to achieve?
- 11. Overall what have been your main challenges with regards to commercializing activities?
- 12. In your opinion, what are the improvement or any added value that must be undertaken in order to make sure that the commercialization activities can be fully achieved in regards to the new highly innovative products, processes or services created within your partnership project?