ABSTRACT

Academic entrepreneur’s collective memories soft information, such as research ideas, expertise, experiences, academic skills, know-what, know-how and know-why which inevitability it is considered should made accessible. The Higher Education Institution needs to identify, collect, classify, verbalize and diffuse the Academic entrepreneur’s soft information specifically research ideas present in the university for knowledge enrichment. This can be implemented by actively sharing the Academic entrepreneurs’ research ideas with others. Actively sharing research ideas by Academic entrepreneurs will have great impact on the enrichment of their intellectual capability as most of the valuable knowledge resides in one’s brain. However, as there is no specific medium to bring their research ideas into the surface and be visible to others, the precious research ideas still remain in the Academic entrepreneurs’ brains. Therefore, the objective of the study is to explore academic entrepreneur’s behaviour towards the development of a sharing research ideas web portal at private university colleges in Selangor. This study used the qualitative method that is a multiple cases study. The study refers to four private university colleges in Selangor. In-depth interview, focus group discussion and document analysis were used as tools for data collection for this study. The theory of Planned Behaviour by Ajzen (1991) was used to determine academic entrepreneur’s behaviour. This study showed that the academic entrepreneur’s attitude, subjective norms, and perceived behavioural control towards developing a web portal for sharing research ideas all affect their intention to share their research ideas with others.

Field of Research: Academician, sharing research idea, attitude, subjective norm, perceived behavioural control, intention

1. Introduction

In Malaysia, in line with globalization changes in the Higher Education Institution (HEI), the role of private university colleges has been scrutinized and challenged by society. To face the challenges, the academic entrepreneurs in the private universities’ should actively undertake research as part of their job function to share the latest developments, insights and expertise with society and produce high quality findings which will serve as motivation for learning and commercialization. Hence, research is the road to discovery with a proven worldwide acceptance that research contributes positively to society economically. Generally, research process starts with developing knowledge which resides in the minds of the academic entrepreneurs. According to Nonaka and Takeuchi (1995), this type of knowledge is known as tacit knowledge that is knowledge which is rooted in action, experience and involvement in a specific context. Tacit knowledge is comprised of cognitive and technical elements. Nevertheless, Nonaka and Takeuchi (1995) acknowledged that tacit knowledge is almost impossible to be shared without the active participation and cooperation of the knower. As noted, it is commonly known that one of the platforms that enable the knower to share ideas is through information communication technology such as the web portal. Hence, the
academic entrepreneurs need specific web portal to capture knowledgeable research ideas and share their research ideas with interested parties, and next, help them to implement research works efficiently and commercialize their research findings successfully.

2. A review of academic entrepreneur

In this research, academic entrepreneur is defined as the leadership process of creating economic value through acts of organizational creation, renewal or innovation that occurs within or outside the academic institution that results in research and technology commercialization (Farsi and Talebi, 2009). The leadership process occurs at the level of individuals or groups of individuals acting independently or as part of faculty or university systems, who create new organizations or instigate renewal or innovation within or outside the academic institutions. In the scholarly debate, there is an increasing interest in academic researches to analyse the process of academic involvement into commercialization and its economic and social consequences. Academic entrepreneurship activities includes: Industry-university collaborations, university-based venture funds, university based incubator firms and start-up founding by academicians.

3. Web portal and Higher Education Institution

A web portal is an online tool to aggregate information in one location in an organized manner for dissemination. The most recent application of portals in HEI has been to create a point of access for administrative functions for students, such as registration, financial aid, and academic records, or for staff, such as time sheets, leave balances. Therefore, the use of portals maximizes the efficient use of staff and students’ time (Rajalakshmi, 2010). Today’s portals are increasingly secured applications designated to give users simple, quick, secure access to relevant organizations and personal data. The portal is a place for HEI’s members with common interest on any matters to meet and chat virtually. It is a source of information and knowledge to be shared among the HEI members. The portal through its functions allows the HEI members to share ideas and information and helps them to get to know each other. As a collaboration tool, the portal helps HEI in promoting activities for mutual benefits.

4. Knowledge sharing and Higher Education Institution

Knowledge sharing is considered as the foundation of learning and research at HEIs. In the context of higher education, Ali (2010) defines knowledge sharing as the process of exchanging and acquiring knowledge that is needed through informal and formal technical facilities channels. Scholars and practitioners have emphatically argued that a large part of knowledge in organizations is tacit. Unlike explicit knowledge, tacit knowledge essentially resides in the minds of the knower. Thus, it has been determined that knowledge sharing becomes a major focus area in knowledge management as knowledge sharing serves as a link between the strata of individual knowledge, where the knowledge resides and the strata of the organization where knowledge generates its economic and competitive gains. However, the study in 2005 which involved all the 17 public universities in Selangor found that the existence of a knowledge sharing culture in Selangor public HEIs was still very low. Only 29.4% of the staff of Selangor public HEIs has positive culture in their routine work (Suhaime, 2006). The study implies that as academic entrepreneurs show a positive attitude and tremendous feeling of enjoyment in their working environment, their self-efficacy and knowledge sharing levels improve.

5. Theory of Planned Behaviour and knowledge sharing

Theory of Planned Behaviour (TPB) is a widely accepted model and is used in finding factors influencing behaviour as this theory is a general model of behaviour specific that can predict a range of behaviour. TPB assumes that individuals’ behaviour is determined by behavioural intention and
perceived behavioural control. Attitude toward behaviour, subjective norm and perceived behavioural control determine the behavioural intention. TPB proposed by Ajzen (1991), explained that behavioural intentions are motivational factors that show to what extent people are prepared to perform a behaviour. Attitude has been regarded as influencing behavioural intention. Bock, Kim and Lee (2005) found that an individual’s intention to share knowledge is driven primarily by attitude towards knowledge sharing. Subjective norm indicates that behaviour is directed by one’s desire to act as an important referent to how others act or think one ought to act. When applied to the focal behaviour, subjective norm echoes the participant’s perceptions of whether the behaviour is accepted, encouraged, and implemented by the participant’s spheres of influence. Subjective norm is also considered as an outcome of beliefs that specific individual’s approve or disapprove of performing the behaviour. Perceived behavioural control factors are individual natural factors and include the extent of information a person has, together with the skills, abilities, emotions, and needs of that person regarding a specific behaviour. It concerns the degree to which an individual thinks that performance or non-performance of the behaviour in question is under his or her free control.

6. Problem statement

The research ideas of private university academic entrepreneurs’ are important in producing a knowledge society and helping Malaysia to become knowledge based economy country. However, some of the precious research ideas remain in the academic entrepreneurs’ brains as there is no specific web portal to bring their research ideas into the open to be visible to others. At present, available web portals are becoming an increasingly important tool to help private university colleges to gather intellectual resources. Nevertheless, there is no specific web portal for the academic entrepreneurs to capture and share their research ideas with interested parties and next, help them to implement and commercialize their research findings efficiently. In addition, currently, there is no specific web portal that enables the management of private university colleges to identify what is required by academic entrepreneurs to carry out research works and to offer appropriate rewards or incentives as appreciation for the research ideas most contributed and the research ideas most referred to.

7. Research question and research objective

The research question of the study is: What is the behaviour of private university college academic entrepreneurs’ towards developing web portal for sharing research ideas?

The research objective is to investigate the behaviour of private university college academic entrepreneurs’ towards developing a web portal for sharing research ideas.

8. Study’s significances

The study’s findings enable the private universities in Selangor to:

• Indicate the academic entrepreneurs’ behaviour toward developing a web portal for sharing research ideas.

• Justify developing the web portal for sharing research ideas as a robust virtual platform for the motivated academic entrepreneurs or other interested parties to acquire and share the research ideas that resides in one’s brain.

• Clarify that the web portal is a platform for the academic entrepreneurs who lack experience in researching works to acquire knowledgeable research ideas from other experience parties and then implement their research works.
• Justify that web portal is a platform for the private university colleges’ management to identify the research instruments required by the academic entrepreneurs and other interested parties.

• Justify that the web portal is a platform for the management of private university colleges to appreciate the research ideas most contributed and most referred to.

• Determine that the web portal for sharing research idea is an aid to private University colleges’ management to improve their reputation and enhance the productivity through producing high quality research.

9. Conceptual framework

Figure 1 shows the conceptual framework of the study. The study’s conceptual framework explains that the academic entrepreneurs’ attitude, subjective norm and perceived behavioural control influenced their intention to use the web portal for sharing research ideas. Next, the intention either to use or not to use the developing web portal for sharing research ideas will affect the academic entrepreneurs’ actual behaviour towards the web portal for sharing research ideas by private university colleges’ management.

10. Developing the web portal for sharing research ideas

This section describes the development of the web portal for sharing research ideas. Specifically, the functions of developing a web portal for sharing research ideas is to help academic entrepreneurs or other interested people to share and determine the research ideas needed and to transform those ideas into a web base knowledge bank. This makes the research ideas available to interested people at the right time, connects people and builds relationships across various educational or other interested institutions. Next, the sharing research ideas process through the application of the sharing research ideas web portal enable the academic entrepreneurs or other interested parties to implement their research works efficiently. Apart from that, through developing the sharing
research ideas web portal, the university management is able to determine the requirements of academic entrepreneurs or other people relating to research works or commercialization. It also functions as a motivational tool by identifying appropriate rewards or attractive incentives to the contributors of the most research ideas and the most research ideas referred to. Figure 2 shows the entity relationship for the developing the sharing research ideas web portal.

![Diagram of entity relationship for the sharing research ideas web portal]

**Figure 2: Entity relationship for the sharing research ideas web portal**

11. **Research methodology**

In order to achieve the objectives mentioned above, this study used a qualitative research method. This method focuses on understanding the point of view, experience and interpretation of the private university colleges' academic entrepreneurs. Hence, in this study, the qualitative research design used is multiple cases study. In this study, it refers to four main cases (four private university colleges in Selangor) where it is a valuable and useful in the exploratory and descriptive and early stages of research regarding academic entrepreneurs' behaviour toward developing a sharing
research ideas web portal. In-depth interviews, focus group discussions and document analysis were the data collection for this study.

The research design started with a literature review which discusses the literature from numerous sources in order to exhibit an in-depth knowledge of the research problem. A well-defined research problem is required before the researcher can commence the process of research design and subsequent data collection (Yin, 1994). After reviewing previous literature, research problems of this study were obtained. The development of the conceptual framework is derived from the literature review discussion and research objective. Next questions for in-depth and focus group interviews were developed. The constructs in in-depth and focus group interview related to academic entrepreneurs’ behaviour were based on the Theory of Planned Behaviour model by Ajzen (1991).

Next, the sample design was developed. Both samples for the pilot interview and main case study interview consist of academic entrepreneurs from four private university colleges in Selangor. The sample of academic entrepreneurs for this study was selected by using purposive sampling and chosen by the four private university colleges’ management. In this study the samples of the main case study consist of forty academic entrepreneurs. They are from social science and science faculties, the length of working experience as academic entrepreneurs is more than one year, they hold a Master Degree or PhD degree and they had designations as head of program and senior academician The in-depth interview consists of twenty academic entrepreneurs and the focus group consists of four groups of academic entrepreneurs with five academic entrepreneurs per group. Table 1 shows the summary of data collection methods, academic entrepreneurs involved in in-depth interview and focus group discussion and frequency of data collections session.

After that, five pilot interviews were conducted to improve the data collection processes before the main case studies commenced. This phase represents the final preparation for data collection which is used more formatively to assist the researcher to develop relevant lines of questioning as well as provide some conceptual clarification for the research design. Permission to conduct the research was obtained from the private university colleges’ management. After obtaining approval, the requested lists of academic entrepreneurs were taken from the private university colleges’ management. Then, the researcher send a letter to each of the academic entrepreneurs selected to inform them about the research and the date that the interview would take place. Each letter clearly explained the objective of the study. In addition, the academic entrepreneurs were informed about the importance of the interview, the confidentiality of their responses and that the data would only be utilized for the purpose of the study. Once the interviews had been conducted, recorded and transcribed, the information was analysed and interpreted in order to produce the findings. Findings were inducted from the data.

Table 1: Summary of data collection methods, participants and frequency

<table>
<thead>
<tr>
<th>Method of data collection</th>
<th>Academic entrepreneurs involved in data collection</th>
<th>Frequency of data collections session</th>
<th>Total number of data collection sessions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic entrepreneurs interview</td>
<td>20 academic entrepreneurs (5 academic entrepreneurs per case study)</td>
<td>40 minutes per session</td>
<td>20 interviews</td>
</tr>
<tr>
<td>Focus group interview</td>
<td>5 academic entrepreneurs per focus group</td>
<td>1 hour per session</td>
<td>4 focus groups interviews</td>
</tr>
</tbody>
</table>
12. Research instrument

The research instrument consists of semi structured interview, tape record for recording conversation during in depth interview and focus group interview. The semi structured questions are about the academic entrepreneurs’ behaviour towards a web portal for sharing research ideas. During the interview, the researcher makes reference to an outline of the topics to be covered during the conversation. Within each topic, the researcher as interviewer is free to conduct the conversation. The way of conducting interview gives both the researcher and the respondent freedom to discuss, while at the same time ensuring that all the relevant topics are covered and all necessary information collected.

13. Data analysis

In this study, the information gathered from in-depth interview and focus group interviews was recorded into audiotape and converted into text data. Then, the researcher carried out the transcription process and coding. In analysing the transcripts of textual data from the in-depth interview and focus groups, the four attributes in TPB that is attitude, subjective norm, perceived behavioural control and intention were used as umbrella categories for the coding of data. They provided a useful sorting device for sub themes relevant to these four TPB attributes.

After completing the transcription process, the researcher performed the coding process which aims to derive meaning out of the text data, by dividing it into text and labelling the segments with codes. The coding process also serves to avoid overlap and redundancy. The researcher needed to compile the list of themes, cluster similar topics together, and create categories and subcategories. An iterative, inductive process was used in the coding and analysis of data. Thereafter, in-depth interviews and focus groups interviews, transcribed from audiotape were thematically coded by content analysis, using a coding system devised by the researcher.

In order to manage the data efficiently, the researcher used the qualitative data analysis software tool NVivo9. NVivo9 is a computer program which allows one to import and code textual data, edit the text; retrieve, review and recode coded data; search for combinations of words in the text or pattern in the coding and import from or export data to other quantitative analysis software. Specifically, NVivo9 is designed to facilitate the construction of relational networks identifying the content and structure of respondents’ opinions. NVivo9 involves the development of a tree-like structure of relationships between elements referred to as nodes.

14. Provision of trustworthiness

Guba (1981) proposes four criteria should be considered by qualitative researchers in the pursuit of a trustworthy study.

14.1. Reliability and validity in qualitative research

According to Patton (2002) the use of triangulation will strengthen a study by combining methods which use several kinds of method or data, including using both quantitative and qualitative approaches. In this study, the researcher adopts the triangulation method because the researcher believed that the approach would strengthen the research study in terms of supporting the credibility of qualitative method that is content analysis derived from in-depth interview and focus group interview and document analysis.

14.2. Reliability and validity in content analysis

Milne and Adler (1999) suggested that the researcher should use appropriate instruments in order to permit replicable and valid inferences to be drawn from data derived from content analysis,
therefore ensuring the reliability of the instruments and the data collected. In this study, the researcher uses data management software namely NVivo 9 to assemble, organize, classify, sort and arrange data from four main cases study. Applying inductive (emerging nodes or themes) approach in NVivo9 where all the themes and sub themes were linked, shaped and modelled has ensured consistency in the data analysis.

14.3 Credibility

Smyth (2006) stated that credibility was enhanced through scrutiny of node data reports in NVivo9 by detailing the number of respondents represented and the number of opinions reported based on the researcher decisions concerning nodes to which data are coded. In this study the use of NVivo9 as the data management software for coding process especially in conducting content analysis of the behaviour of academic entrepreneurs’ towards a web portal for sharing research idea could address the credibility issue.

14.4 Confirmability

Guba and Lincoln (1989) and Lincoln and Guba (2000) clarified there must be evidence that the variety constructions presented within the data have been honoured, communicated and faithfully portrayed. One way to present such information is in the form of concept maps, exported from NVivo 9 as models. In this study researcher developed three models in answering research question from NVivo 9.

15. Study’s findings

15.1. Academic entrepreneurs’ attitude

All the academic entrepreneurs from four private university colleges in Selangor supported the development of a web portal for sharing research ideas. They admitted that the sharing research idea web portal would help them to identify required information and knowledge to complete their research process. The academic entrepreneurs said that through the sharing research ideas web portal, they would be able to build up teamwork and relationships with people interested in their research works and in addition, help them in the commercialization process. At the same time, the academic entrepreneurs agreed that developing the sharing research idea web portal is the appropriate platform for them to communicate with others regarding research matters.

15.2 Academic entrepreneurs’ subjective norm

The people around academic entrepreneurs, specifically their superiors, colleagues and friends encourage them to use the sharing research ideas web portal. According to those people, the sharing research ideas web portal will help to produce innovative and creative academic entrepreneurs in future. This is evident from the encouragement given by the university management through rewarding active and innovative research ideas contributors. These people admitted that when the academic entrepreneurs actively commercialize their findings, indirectly, the university achieves a good reputation and gathers better profit.

15.3 Academic entrepreneurs’ perceived behavioural control

As known, the academic entrepreneurs justified that the sharing research ideas web portal gives benefit to their research works. Therefore, they admitted that the application of developing the sharing research ideas web portal enables them to enhance their skill, knowledge and experience.
15.4. Academic entrepreneurs’ intention

The academic entrepreneurs’ attitude, subjective norm and perceived behavioural control towards developing the sharing research idea webs portal are encouraging, thus, all of them have the intention of using the sharing research ideas web portal.

15.5. Academic entrepreneurs’ behaviour

As all of the academic entrepreneurs have the intention of using the sharing research idea web portal, their behaviour is towards applying themselves to the development of the sharing research ideas web portal.

16. Conclusion and Future Recommendation

The private university colleges’ academic entrepreneurs’ behaviour towards developing the sharing research idea web portal is encouraging. They identify that the functions of the sharing research ideas web portal will enable them to achieve their mission that is to produce high quality commercialize research findings. Apart from that, they clarify that through the sharing research ideas web portal, they are also able to collaborate with relevant parties and build up relationships with other people who are actively and interested in the research works. As for recommendation, in future, the private university colleges in Selangor should establish the knowledge sharing center and equip it with the appropriate and efficient information communication technology which supports communication via technology. Efficient communication technological facilities will encourage the academic entrepreneurs to share their research ideas through technology. In addition, the private university colleges’ management should upgrade the sharing research idea web portal to be accessible to other institutions abroad.

References


