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Strategy for Patent Protection in Crowdfunding: A Case Study in Malaysia

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Abstract: Crowdfunding has become the alternative way for many inventors to raise fund for their business. However, online crowdfunding raises some patent issues that relevant to the inventors. Hence, this paper examines the patent protection issues in crowdfunding practices and the strategies to resolve the issues in the context of Malaysia. For that purpose, interviews were conducted with six experts from crowdfunding operators and fundraisers. The findings showed that the largest obstacle perceived was a lack of awareness amongst the users of crowdfunding pertaining to the importance on how to protect the patent and project confidentiality during the crowdfunding process. Most of the project owners do not prioritise patenting their invention before disclosing the information on the crowdfunding platform, this might lead to patent infringement issues. Furthermore, the disclosed invention may not be patentable, and public disclosure also may put them at risk of infringement allegation by a third party. Crowdfunding users also should be more aware of the importance of intellectual property rights before they launch their crowdfunding campaign through an online basis. A proper patent protection strategy is important to protect inventors in the crowdfunding practices in Malaysia.

Keywords: Crowdfunding, patent issues, patent protection, Malaysia

1. Introduction

Crowdfunding is a novel method for funding various new ventures, allowing individual founders of for-profit, cultural, or social projects to request funding from many individuals, often in return for future products or equity (Mollick, 2013). The capital structure of start-up ventures depends heavily on the inventor's resources, such as financial needs (Allen, 2008). At the beginning of new product development, inventors and innovators usually face the common problem of getting financial assistance and difficulty attracting capital providers. Inevitably, crowdfunding is emerging as an alternative tool for entrepreneurs to access their capital.

Although crowdfunding appears to be a simple and user-friendly solution, that is not always the case. Several risks associated with crowdfunding, such as one's ideas might be copied by another party jeopardising the criteria for patentability of that creation as claimed by Buysere et al. (2012). Furthermore, there is also the risk of infringement issue from the third party when the idea and concept of the invention are published on crowdfunding sites. Thus, adopting certain strategies for patent protection is significant to secure the invention.

This research paper aims to examine the current patent protection issues of crowdfunding in the context of Malaysia and subsequently proposes a patent protection strategy to overcome the issue.

The research questions are as follows:

- i. What are the patent protection issues in crowdfunding practice in Malaysia?
- ii. What are the strategies to overcome the patent protection issues of crowdfunding practice in Malaysia?

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2. Literature Review

An inherent problem that most of the inventors faced at the very beginning of their entrepreneurial initiative is to attract outside venture capital, given the lack of collateral and sufficient cash flows and the presence of significant information asymmetry among investors (Cosh et al., 2009). Due to the insufficient funding at the initial stage, some entrepreneurs have started to rely on crowdfunding initiatives to directly seek financial support from the public instead of approaching conventional financial investors such as business angels, banks or venture capital funds.

Crowdfunding projects can range greatly in both goal and magnitude, from small artistic projects to entrepreneurs seeking hundreds thousands of dollars in seed capital as an alternative to traditional venture capital investment (Schwienbacher & Larralde, 2010). Moss & Evans (2006) state that any business organisation developing ideas for new products want to be assured of legal protection against the unauthorised use of such ideas by competitors. This is important, especially for those businesses which disclose key business ideas on the online crowdfunding site for their fundraising purposes.

Yet & Li (2015) state that not every crowdfunding project creator (inventors) can file a patent before disclosing their invention ideas or any valuable information to the online crowdfunding platforms. Instead, most of the crowdfunding projects ended up with no patent protection during their fundraising campaign, due to a limited budget prior to the crowdfunding, or strained by limited time and tight schedule for fundraising, making it difficult for them to do the patent drafting for their invention (Roberts & Nowotarski 2013; Li, 2015). However, the majority of the inventors do not know the importance of patenting their invention and have limited knowledge of designing their patent protection strategy (Schwent, 2015).

Moreover, an invention without good patent protection not only will be infringed by others but it also may lead to patent infringement allegations by a third party too. There are a few cases of patent infringement allegations that happen on crowdfunding platforms in the United States, a leading role in the global crowdfunding industry. One of the cases happened on Kickstarter.com, one of the most prominent projects in the United States; crowdfunding platforms is being sued for the promotion of the highly successful 3D printer project put forth by Formlabs, a Massachusetts firm comprised of the Massachusetts Institute of Technology (MIT) Media Lab researchers. 3D Systems, an industry leader in 3D printing, has claimed that Formlabs infringed on its invention patents and that Kickstarter escalated the damage by promoting the research project through its online crowdfunding website (BBC News, 2012). This case shows precisely what may happen to crowdfund platforms upon crowdfunding disclosure. They will likely and quickly become targets of patent infringement allegations. Furthermore, Li (2015) mention that the detailed project descriptions required by the crowdfunding platforms and the amounts of funds raised, which are always transparent to the public, are overwhelming evidence for patent infringement allegations.

Moreover, Ahlers et al. (2015) mention that information is always a potential risk, especially the disclosure documents on crowdfunding sites. Many experts and academicians have also expressed significant worries about disclosure requirements for crowdfunding securities issuers (Orbidans, 2014; Gregory, 2015). Therefore, from the inventors' perspective, many start-ups might not want to participate in crowdfunding because of the mandatory disclosure requirement. Therefore, the prevention and deterrence of disclosure documents of crowdfunding is crucial to protecting confidentiality in crowdfunding. Therefore, it is essential to have a good patent strategy before launching the crowdfunding campaign.

This research study comes out with the conceptual framework as shown in Figure 1. Initially, the process of crowdfunding provides an understanding of how it works. In the result finding and discussion, we recommend some improvements to the crowdfunding process in order to strengthen its security. The last part includes the strategies that can be used to engage patent and confidential issues in crowdfunding practice in Malaysia.

Process of Crowdfunding Intellectual Property Rights for Malaysia Intellectual Property Issues 1. Patent Protection 2. Patent Infringement Allegation from Third Party 3. Breach of Confidentiality Patent Protection Strategies Patent Protection Strategies Confidential Information Security

Fig. 1 - Conceptual framework

3. Method of Study

This study adopts a qualitative approach to examine the current patent protection issues that happen in crowdfunding and propose the strategies to encounter it.

Semi-structured and in-depth interviews were the main method for this research. The research interviews involved respondents who work at crowdfunding platforms in Malaysia (PitchIN and MyStartr) with the designation of top management. Moreover, the respondents also come from inventors that have been involved with crowdfunding campaigns in Malaysia. All of them are experts who are directly involved in crowdfunding initiatives in Malaysia. From there, this study able to gain crucial information and point of view from both managerial and fundraisers' perspectives. Specifically, this study addressed the experts according to the pseudonyms 1, 2, 3, 4, 5, and 6.

4. Results and Discussion

Patent protection is one of the most important ways for inventors to safeguard their intellectual assets during public disclosure in crowdfunding campaigns (Lau & Chew, 2016). Patents provide a stronghold for the inventors when they disclose their valuable idea to the public. However, most importantly, patents allow inventors to prevent latecomers from getting a foothold. As mentioned earlier, many fundraisers (inventors) do not know or have limited knowledge of how to design their patent protection strategy and file their patent applications.

Respondents 4 and 5 commented that many of the inventors do not prioritise patenting the ideas due to time constraints, limited budget prior to the crowdfunding, and they are on a tight schedule for fundraising that hardly allows patent drafting. All these reasons were confirmed by respondents 5 and 6. In fact, many of them do not know the importance of patenting their invention before disclosing it to the public crowd; many of these projects turn to crowdfunding due to a lack of funds; therefore, most of the inventors think that hiring a patent attorney to draft the patent application is costly and impossible. Patenting the invention is a priority in maximising the patent assets (Schwent, 2016). Respondent 4 agrees with the statement that it is better to file as soon as possible before the knowledge becomes public property since the information will be published online in crowdfunding. Besides,

respondent 4 also states that it is better to file the patent first before launching the crowdfunding campaign because filing the patent early can help to convince the investors to have faith in supporting the project. Miller et al. (2007) comment that a patent application should be filed as soon as it can be sufficiently described in a patent specification and the inventors can predict the scope of the invention. This means more than simply patenting those technological advances that the crowd-funded idea considers to be valuable, it is important and helps to convince the public crowd to invest the technology for their crowdfunding campaign. In addition, this also allows far too many assets to slip through unprotected and risks unauthorised disclosures along with the crowdfunding campaign, to invalidating some potential patents (Schwent, 2016). Moreover, the valuable invention information should remain confidential, especially if the inventor has yet to decide whether to file a patent application (Kemp et al., 2003). Therefore, the researcher agrees with the scholars that prioritising patenting the invention is crucial.

Next, a good strategy to manage the patent and potential patent assets is to have a process in place to identify key technological advances early in the development process (Schwent, 2016). Knowing what technology is being developed and carefully evaluating it in a competitive marketplace will allow the company to muster the assets necessary to protect critical advances of the inventions. Early identification of key technology can help prevent unauthorised disclosures from unauthorised parties. Schwent (2016) mentioned the importance of early identification because when technology is exposed to the public (whether through use, publication, sale, or offers for sale), the ability to patent the invention is lost. Miller et al. (2007) support that identified subject matter that requires intellectual property protection as early as the planning stage of a project is important. Dodds (2007) and Knight (2012) further added that the very first step in developing an intellectual property strategy is to understand and document the technologies that already exist in the organisation, plus the technologies in development. The invention, as claimed, must be supported by or consistent with the detailed description (Miller et al., 2007). The most critical elements of the technologies should place in a database. Knight (2012) also admits and comments that the key part of establishing a patent strategy is recognising what provides a real competitive advantage and then attempting to maintain the proprietary nature of this advantage. In addition, Knight (2012) also states that to restrict the third party by using patents, the patentee should obtain a strong patent that is broad enough to claim the patents.

Moss & Evans (2006) revealed that most people lack awareness of when to consult the services of a patent agent. An agent is important in helping through all the stages of processing the patent protection application because they are experts in this field. In addition, before starting a patent application, the inventor should look for "prior art" using a patentability search (Miller, 2007). Miller (2007) explains that the reason to conduct patentability searches is to find out whether the invention is anticipated by any 'prior art' or infringes the existing patent rights of others. Respondent 4 strongly endorse that finding a patent agent to help patent protection applications is a workable way because by using a patent agent, the inventor no only able to protect their invention but also to prevent the allegation from the third party. Schwent (2016) states that a good patent asset management strategy must include some idea of what competitors in the same field are doing in the marketplace. In addition, McClusky (2002) also comments that analysis of a competitor's intellectual property offers a wealth of strategic insight for the inventors, such as advance glimpses of new product introductions or a view of the competitor's research and development organisation. Besides, an Intellectual Property review can provide real understanding of a competitor's strategic intent, where it is placing its bets, and how it intends to lead or respond to competition (McClusky, 2002). This monitoring serves two main purposes: defensive and offensive (Dodds, 2007; Schwent, 2016). In the first sense, the patent is used to "defend" a product, such as a company's most important product from copying by competitors. In the second sense, patents are used to "defend" the inventors generally from hostile patent infringement lawsuits from competitors (World Intellectual Property Organisation, 2016).

Schwent (2016) explains in more detail that the importance of monitoring the competitor is, first, by monitoring what the competition is doing, a business can ensure it stays at the forefront of technology and is in a position to develop responsive technology when competitors achieve technological breakthroughs. Effective monitoring of the competitive landscape can be achieved by, for example, encouraging salespeople to report on the new technology they encounter in the field. Marketing personnel should also be encouraged to monitor what the competition says about its new technology and development. Key personnel should also attend national conferences to identify technological trends and cutting-edge developments. These steps help ensure the business is never far from the technological forefront (McClusky, 2002; Schewent, 2016).

The second reason for monitoring, pointed out by Schwent (2016) is to ensure that instances of infringement are promptly identified and stopped. As noted earlier, patent rights are worthless unless enforced. When infringing technology is found in the marketplace, it should immediately be brought to management's attention so that appropriate steps can be taken to put an end to it. Again, sales and marketing personnel should be encouraged to report potential infringing activity, and customers should also be encouraged and incentivised to report on such activity. By actively investigating possible infringement and taking steps to halt it, the business maximises the value of its patent rights and confidential information. It gets maximum return on its research and development investment.

5. Conclusion and Future Work

This paper examines the patent protection issues in crowdfunding practices and the strategies to resolve the issues in the context of Malaysia. Based on the semi-structured and in-depth interviews conducted with six crowdfunding operators, this paper identified several key findings as follows. The findings showed that the largest obstacle perceived was lack of awareness amongst the users of crowdfunding pertaining the importance on how to protect the patent and project confidentiality during the crowdfunding process. Most of the project owners do not prioritise patenting their invention before disclosing the information on the crowdfunding platform, this might lead to patent infringement issues. Furthermore, the disclosed invention may not be patentable, and public disclosure also may put them at risk of infringement allegation by a third party. This findings obtained in this research enable readers to know more about the patent issues that pose challenges to the crowdfunding initiative in Malaysia and investigate how the fundraisers overcome those challenges. Framed within the socio-technical perspectives, which mean this research outlook that highlights the linkages between people (crowdfunding operator and project owners) and the technology (crowdfunding online platform), and analysed the patent protection issues currently faced by the fundraisers in crowdfunding. In addition, this research paper also proposes a patent protection strategy to address the issues.

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