Student's Entrepreneur Model Development in Creative Industry through Utilization of Web Development Software and Educational Game

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Abstract. The creative industry is the utilization of creativity, skill and talent of individuals to create wealth and jobs by generating and exploiting creativity power of individual. In the field of design, utilization of information technology can spur creative industry, development of creative industry design will accommodate a lot of creative energy that can pour their ideas and creativity without limitations. Open Source software is a trend in the field of information technology has developed since the 1990s. Examples of applications developed by the Open Source approach is the Apache web services, Linux and Android Operating System, the MySQL database. This community service activities based entrepreneurship aims to: 1). give an idea about the profile of the UPI student's knowledge of entrepreneurship about the business based creative industries in software by using web software development and educational game 2) create a model for fostering entrepreneurship based on the creative industries in software by leveraging web development and educational games, 3) conduct training and guidance on UPI students who want to develop business in the field of creative industries engaged in the software industry . PKM-based entrepreneurship activity was attended by about 35 students DPTE FPTK UPI had entrepreneurial high interest and competence in information technology. Outcome generated from PKM entrepreneurship is the emergence of entrepreneurs from the students who are interested in the creative industry in the field of software which is able to open up business opportunities for themselves and others. Another outcome of this entrepreneurship PKM activity is the publication of articles or scientific publications in journals of national/international indexed.

1. Introduction

The development of business and industry with the globalization of the economy has risen sharply. Economic globalization and the information era to encourage industry to use the human resources of college graduates who are competent and have an entrepreneurial spirit. On the other hand, the economic crisis led to the number of jobs is not growing, and even decreases due to bankruptcy. Therefore, in order that the college is able to meet these demands, various innovations is required. One of them is learning innovations in build technopreneurship generation in today's information era [1]. In Indonesia, the creative economy is quite a role in national economic development though not many untouched by government intervention. According to data from the Creative Economy Study Team, the creative industry sub-sectors of Information Technology in 2014 has a Value Added Subsector (ADHB)

Rp. 8.610 billion or on average accounted for 0.11% of the total GDP added Subsector (ADHB) during 2010-2013 [2]. As for the labor force participation rate of the Creative Economy Employment sector by 0.58% during 2010-2013. In addition, this sector has a workforce subsector 67.888 workers with employment growth rate of the national average of 0.06% in 2013 [3].

Creativity and innovation in business become a matter to be considered and this can be obtained from the experience of interacting with the consumer to the product as well as the quality of the product itself. Each of the products or services produced will be qualified if they always learn from the symptoms of needs and desires of consumers who increasingly critical and educated [4]. Therefore to foster the innovation is necessary to create an environment that encourages capacity and ability to create local creative economy. Economic progress associated with the level of development of technical change which means the stage of technological mastery. Technical change vast majority are not codified and built on experience. Also are cumulative. Time mastery of this technology relies on the industrial sector and the accumulation process follows a specific trajectory [5].

The popularity of the Windows operating system made by Microsoft, can be seen riding the rapid sales of the iPhone, iPod, and iPad apple, as well as the spread of social networking sites Facebook and Twitter throughout the world. Of course, the opportunity to establish a business in the field of information technology is very large in an era like today. However, we must know in advance some of the main factors before starting a business in the field of information technology, such as: market feasibility, preferences, skills or familiarity, funds, raw materials, human resources, technology and personality [6].

As an effort to foster entrepreneurship in information technology, especially based creative industries through the use of software web development and educational games from the students, PKM entrepreneurship activities can be a solution to the growth of young entrepreneurs from the students who has a role to boost economic growth on the local scale, regional and international levels.

2. Method

Sustainable development is to create such sustainability into a form of advantages. In this context, Barney and Clark suggests VRIO models (Value, Rareness, Imperfect Imitability, and Organization) [7]. According to him, Sustainable Competitive Advantage can be obtained by performing continuous process of discovery that will continue to innovation. This process will run properly when first build the organization's core competencies, those are resources and capabilities. Business development that rely on nature, culture, and daily life of the community is a very closely in developing a sustainable business. UPI as the college has hosted a variety of entrepreneurial programs in an effort to increase the independence of his students that after graduating from college not be job seekers but can create jobs. Coaching methods compiled here are trying to synergize some coaching methods that already exist in the UPI.

Coaching is done by conducting a needs assessment regarding what training is needed by students in order to become entrepreneurs in the creative industries field of software technology. Then do the simulation in the form of business ideas competition. This competition aims to enhance student creativity in exploring creative and innovative ideas that give solutions to the problems that takes advantage of information technology. Further, training and coaching process is. To produce an entrepreneur, a phased approach that can be mentally stimulating entrepreneurship among the students, which is as follows:

The first stage of assistance, aims to make students understand deeply the business process, from the ability to identify and translate business opportunities into value-added superior, how it transformed the added value in the form of products or services, and can be consumed by the target customers. Analytical skills and creativity is trained in the process of this intervention. This stage we call the understanding entrepreneurial process.

The second stage of assistance, intended to allow students to learn how an entrepreneur running his business begins with making a business plan to convince a third party in order to finance its business; committed to what you want to achieve in the future to always be looking for ways to achieve those

goals; partnership with third parties; or sell some or all ownership in the business. Through this simulation, students are expected to feel the bitterness and sweetness of being an entrepreneur.

The third stage of assistance, was felt to be an entrepreneur. Start determining value through market research, translate added value into new product concepts and business concepts, then required to maximize entrepreneurship capital such as the competence of the group, funding access, and social capital among other immediate family, relatives, friends, and parents in order the risks failure when launching the business can be minimized.

The fourth stage of assistance, is the process of consolidation of the business and future business development plans. For the purpose of long-term, sustainability of the program establishment of a coaching program as an innovation house think tank for developing products and services of the creative industry technology entrepreneurs in software web development and educational games.

3. PKM Activities Entrepreneurship

3.1. Implementation Phase

3.1.1.   Phase 1: Preparation. At this stage the team offers to audience of students widely in the UPI (especially students of DPTE FPTK UPI) who have business skills. The students were mostly those who have a strong commitment to become an entrepreneur and have a basic competency in developing creative industries business based Web Development and Educational Games. At this stage, selected and netted a total of 35 DPTE students who have the desire to follow the PKM Technology training activities based creative industries in the field of software.

3.1.2.   Phase 2: Implementation of Entrepreneurship PKM Workshop. At this stage, all participants who are interested and have the potential of entrepreneurial technology-based creative industries are given training in how to design marketing business by utilizing e-marketing, the website designing of company profile that can be accessed widely by business partners and easier. As for instructors involved are Entrepreneurship PKM team. In addition PKM Team also assisted by some IT experts, Web Designer and Educational Games, Materials provided in this training are web development and educational games in learning through the use of information technology (technopreneur).

3.1.3.   Phase 3. Development and Assistance Phase. The participant's continously to be monitored their developments and Entrepreneurship PKM teams and instructors are intensively provide advisory services and technical assistance needed by the participants. In the expansion is positive for all groups because all of them can creatively develop its business profile through the website.

3.1.4.   Stage 4: Monitoring and Evaluation. Evaluation is done with direct discussions with students who fostered and also discussions with the PKM faculty team. What are the difficulties in implementing these activities and solutions to overcome them. Students also continues to provide valuable inputs to the faculty team that PKM entrepreneurial activity goes well. Follow-up of this activities are students' capacity enhancement training about the creative industry business field of software-based Web Development and Educational Games.

4. Results and Discussion

4.1. Overview PKMK Development Activity in 2016
Entrepreneurship training activities in IT fields that utilize web development and educational games can run smoothly and in accordance with the target planned. It can be seen from the seriousness and discipline of participants who did their best to be able to develop the training materials provided.

Product or entrepreneurial achievements of web design and educational games created and developed by participants in general are related to the fashion business, education, services, engineering and online selling (e-commerce). Products developed by some of the participants can be seen at the address specified, as follows :

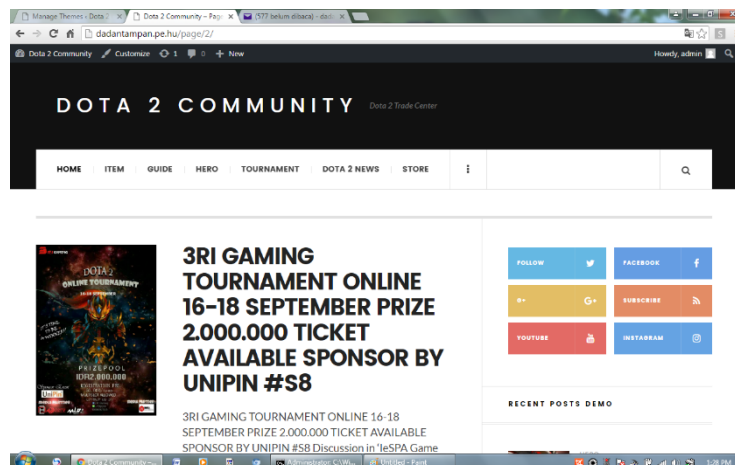1. http://electroclub.esy.es
2. http://karisma.pe.hu/
3. http://dadantampan.pe.hu/
4. http://rinilestriani.pe.hu/
5. http://sopyansm.pe.hu/

4.2. The Results of Student Entrepreneurial Development Web Based Development
1. (http://rinilestriani.pe.hu/)

Figure 1. The look of online selling blog in the fields of fashion

2. (http://dadantampan.pe.hu/)

Figure 2. The look of online game selling blog

3. http://sopyansm.pe.hu/
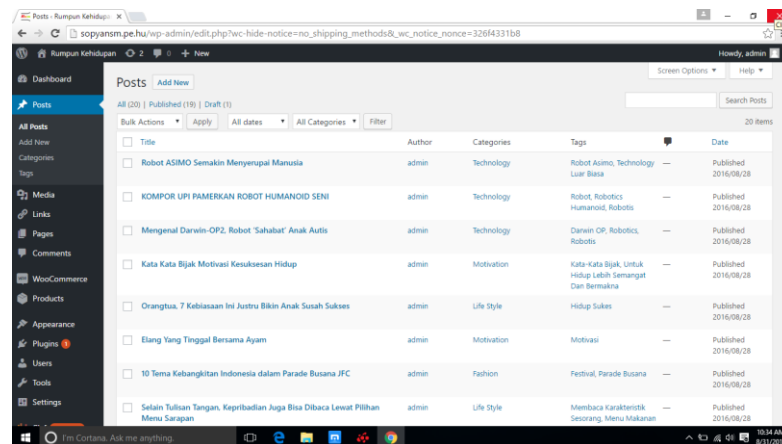
Figure 3. The look of online selling blog about robotic

4. http://karisma.pe.hu/
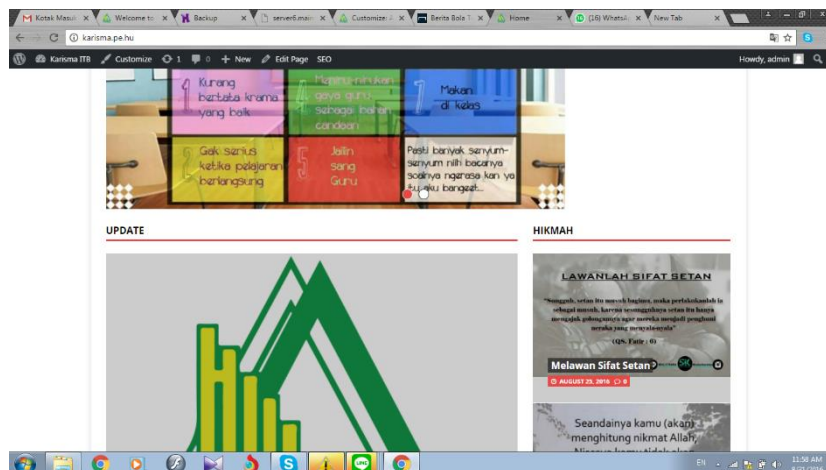
Figure 4. The look of educational blog

5. http://nuurmiftah.pe.hu/
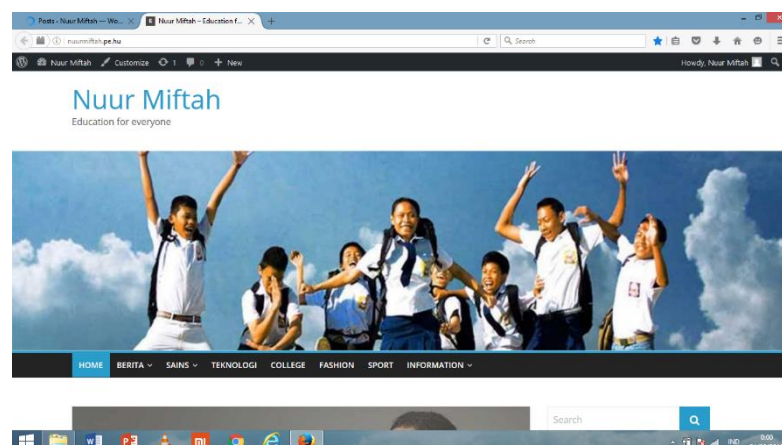
Figure 5. The look of educational blog

5. Conclusions

Based on the results of the implementation of the Community Service Activities (PKM) based entrepreneurship there are some conclusions that can be obtained, as follows:

1. Entrepreneurship fostering in the field of creative industries software to the utilization of web development and educational games can run smoothly and successfully, it is seen from the enthusiasm of those who follow these events and achievements generated by participants who have a high innovation.
2. Based on the student profile and based on the observation and mentoring activities, approximately 70% of students entrepreneurial UPI with various types of businesses, are already using and use the advantages of information and communication technologies, especially web development as one way for the promotion and marketing efforts.

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