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Motivations for Value Co-creation in Higher Education Institutions Using Online Platforms: Case of Idea Bank

Nabil Hasan*, Azizah Abdul Rahman, Faisal Saeed

Faculty of Computing, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

*Corresponding author: nhs1426@yahoo.com

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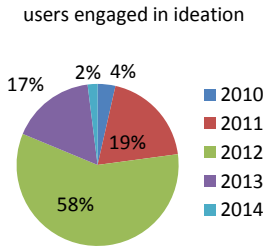
Graphical abstract



Abstract

The involvement of stakeholders in value creation is one of the successful marketing techniques. It helps to introduce a very clear view of understanding the stakeholder's needs, thought and suggestions. Stakeholder engagement in value creation will highlight the fact that new ideas for developing services or products will help to meet customer's needs and expectations. Ideation is one of the most important strategies that lead to development of such services, enhancing service quality and innovation. Motivation for generating ideas from stakeholders in Higher Educational Institutions (HEIs) through online interaction platforms is one of the challenges that needs further exploration, because of human differences in the nature of motivation and mindset. Universiti Teknologi Malaysia (UTM) idea bank online platform is adopted as a case study in this research paper. The main aim of this study is to identify the factors that encourage stakeholders in HEIs to be continuously involved in value co-creation through available online platforms. Interviews with sample of active stakeholders have been conducted using open end questions. In addition, observation on idea bank website and analyzing the archive and website history is considered. The initial results identify three areas of motivations for value co-creation in HEIs: organizational motives, online platform characteristics, individual motives. Results and implications for this case study will help HEIs such as universities achieve better global market positioning, to differentiate themselves among others, and to develop stakeholder's competencies.

Keywords: Value co-creation in HEIs; online platforms; stakeholder involvement

1.0 INTRODUCTION

It is undeniable that the current high competition among Higher Education Institutions (HEIs) force providers in this sector to struggle to find ways for better positioning and better ways to differentiate themselves from others. This essentially drives provider's attempt to offer and find ways to maintain high service quality, satisfaction-creating service experiences in the HEIs market. One of the existing viewpoints recommend that the stakeholders should be engaged as an active co-producer of the university experience [1]. Innovative stakeholders can be a valuable asset during the development process and this can be achieved through value co-creation activities. The World Wide Web is one of the internet applications that had emerged in early stage for many organizations as a tool for mass communication that facilitated value co-creation process [3]. Unfortunately, researches on value co-creation in service systems and in the scope of what are the factors that lead stakeholders to be highly engaged in the process of co-creating value in HEIs, and how this engagement can be sustained through effective technology platforms is still in the immature stage [4]. In this research, UTM idea bank online platform is selected as case study to represent one of the reputable HEIs in Malaysia. The main issues to be explored are the factors that motivate UTM stakeholder to participate in value co-creation taking into account HEIs technological capability that guarantee such useful interaction to occur.

2.0 ADOPTING CUSTOMER ORIENTATION IN THE HIGHER EDUCATION SECTOR

The perception of customer involvement in the service segment is not entirely new; what is new however, is the recognition that the educational institution only provides partial input into the customer's experience [1]. It is therefore vitally necessary to empower HEIs stakeholders to take part in a co-creation [1]. Regarding this latter point co-creation requires, motivation, skill, and involvement, and builds the stakeholder's experience, which in turn clarifies the perceived value they have for the HEI [3]. Viewing students and staff in HEIs as customers by involving and engaging them in interaction through online platforms can provide feedback and an interpretative process which results from shared experience [2]. However, other study indicates that only a few businesses and organizations are utilizing customer feedback for improving their business processes [5]. Businesses usually use customer generated knowledge only to understand the profile of

their customers, which helps enhance the effectiveness of their customer's targeting and marketing campaigns and for monitoring and protecting their online reputation. Nevertheless they fail to use customer knowledge as a resource [6].

2.1 Importance of Motivating and Involving Stakeholders Through Online Platforms

Some researchers have emphasized that one of the reasons for the failure to utilize customer knowledge and experience as a resource is the lack of skills and competencies using Web 2.0 tools or even traditional web applications in effective ways. In addition there is a lack of studies that focus on the impact of web applications and customer involvement on outcome and success of value co-creation. There is also there is a need to study the factors that motivate customers to get involved in value co-creation. Fitzpatrick *et al*. (2013) argue that companies thus lose the opportunity for increasing their competitive advantages [1]. HEIs as a very important service sector will face the same problem if they are far from such adoption of value co-creation activities. Some researchers suggested that organizations need to address issues such as enhancing the technological skills and competencies of staff, use more appropriate CRM metrics as well as use mechanisms to identify usage of web platforms [5]. Despite the existing quantity and quality of research in web technologies used in such education field, there is still much to learn about how to manage consumer knowledge. There is a significant need to understand how relationships and interdependencies among operant resources could be better managed for future value-creation [1].

2.2 Theoretical Foundations

This study is drawn from two theories; the service dominant logic (S-D), and the use and gratification (U&G) theory. Service Dominant Logic (S-D) is a marketing theory which suggests an alternative approach to value creation based on value-in-use in contrast to traditional value-in-exchange [8, 9]. In (S-D) value creation is about integration of resources and sharing of competences between parties for their mutual benefit, thus it is a combined effort of many parties, but should be customer-driven [8, 9, 10]. According to Vargo and Lusch based on (S-D) theory perspective, "value is created by customers when resources are used, hence the term value-in-use". The essential principles of S-D logic perspective can be summarized as follows [11], [12], [13], [14]:

1. Customers represent the intermediaries of value in the service provision–either directly in interaction with the provider or through service interaction.

2. "Competitive advantage is based on operant resources, the co-creation of service and the sharing of collaborative competence. This advantage is achieved by engaging customers and value-network partners [11].

3. S-D logic emphasizes the dynamic development of relationships through which various forms of interaction and value creation can emerge over time.

4. The creation of value is a phenomenological concept determined by and in the context of the resource integrators.

Uses and Gratification framework of Katz *et al. (1974)* was formed to describe the motivations for customers to participate in virtual or online customer environments [15]. The Uses and Gratification framework of Katz *et al.* (1974) identified only four types of benefits that individuals can derive from media usage [16]. Cognitive benefits, social integrative benefits, personal integrative benefits and hedonic. By combining these motivations with other related motivations in the context of HEIs, a complete overview of the motivations for stakeholder to participate in co-creation can be formulated.

3.0 UTM IDEA BANK BACKGROUND

UTM idea bank was established in June 2010 at Universiti Teknologi Malaysia by web unit to encourage UTM staff, students and alumni as well as other interested parties to propose ways to improve various aspects of the university and enhance its achievements. It is one of the efforts made to inspire a creative and innovative culture in the UTM community through continuous contribution of constructive ideas to the university for ongoing betterment of the university in all respects. UTM idea bank is a website that operated as a platform for ideation and allowed targeted users to participate and post their ideas and thoughts. It has six categories in which ideas put forward will be classified. These categories are: general, academic, research, university commercialization, services & facilities, and student life [7]. UTM Idea bank website represents one of the internet interaction platforms that engage UTM stakeholders to participate in generating ideas that lead to value co-creation with UTM, which is the main concern of this research case study.

3.1 Evaluation of UTM Idea Bank Stakeholder's Engagement

Through the observation on UTM idea bank website records, analyzing web archive and website history, it is clear that most of the ideas posted by users during past three years were focused in two categories: general ideas and service & facilities categories. The lowest number of ideas posted were mostly in commerce and other categories as shown in Figure 1. Nevertheless, the main concern is shown in Figures 2 and 3 which indicate some important observations that lead to the confirmation of some research gaps such as the low involvement of stakeholders in ideation process and the discontinuity of stakeholder participation.

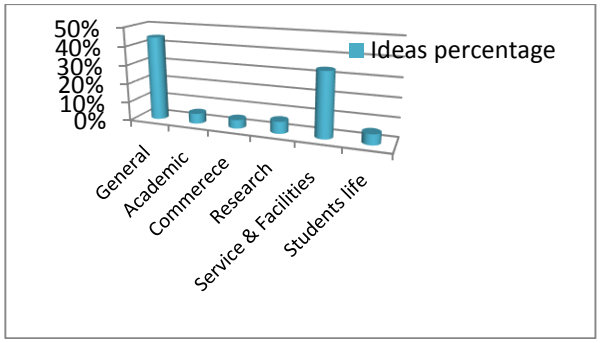


Figure1 Level of participation and ideas posted for each category

Figure 2 shows the user's yearly participation by posting their own ideas and suggestions. It is clear that sharing ideas has gradually increased since idea bank website was established in 2010. UTM stakeholder's participation in terms of ideation activities was observed between 2011 to 2012, after which user participation sharply decreased and continue dropping between 2012 and 2013.

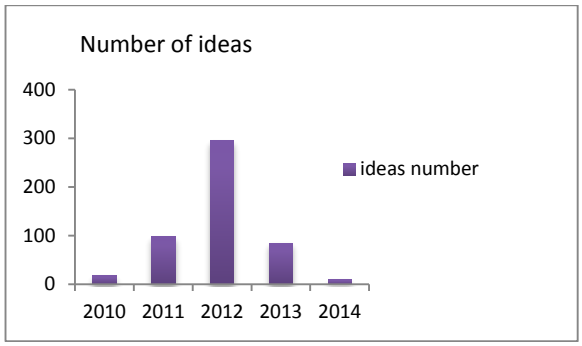


Figure 2 Level of yearly ideas participation

By observing the user's reluctance to be involved in ideation process that lead to value the co-creation task, it is inevitable that investigation into the factors that motivate users and UTM citizens to be highly engaged in value co-creation process and continue their contribution by sharing their knowledge and experiences through UTM idea bank online platform be undertaken, and to explore the reasons behind low engagement and low idea participation.

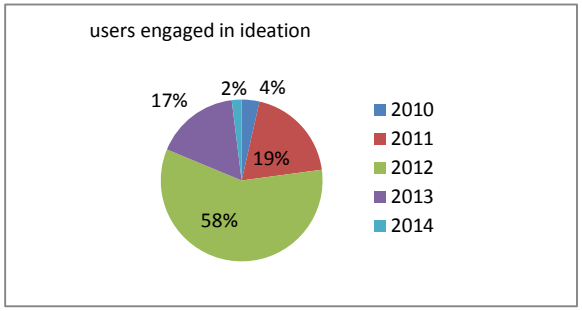


Figure 3 Level of yearly users engagement in ideation

Figure 3 shows the percentage of users who were engaged in ideation for the past four years, and how high was their level of engagement at certain period of time especially at the beginning stage. Then this engagement becomes very low after certain period of time. Figure 3 shows yearly users were engaged in ideation and value co-creation which is further evidence indicating there is a problem with sustaining user engagement in ideation and value co-creation. Such phenomenon encourage the conduct this research, to further explore the motivational factors that would keep users engaged in ideation and value co-creation and how such engagement and participation can be sustained through an effective online interaction platforms.

4.0 METHODOLOGY

UTM idea bank is selected as preliminary case study to explore related stakeholder's motivational factors for value co-creation. Then after qualitative exploration through conducting interview with both UTM idea bank internal stakeholders and providers as outline in Table 1, the constructs are defined and the initial framework is drawn at this stage. The quantitative approach will then be adopted as main method for this further research to test constructs after validating them and analyzing the results to understand the relationship among factors.

Table 1 Research operational framework for Phase 1

Case Study Selection (February 2014 – May 2014)			
	Task	**Purpose**	**Process**
1.1	Case selection	To select Suitable HEI as preliminary study	Sending application to the targeted HEIs unit with clear explanation about the research study.
1.2	Obtaining Access	To access the chosen HEI unit to conduct the case study	Accessing approval and arranging for interview.

4.1 Case Units of Analysis

Clearly defining the unit of analysis in case study and major entities involved in research helps to retain consistency between research purposes and the collection and analysis of data. Thus in regard to this case study, the unit of analysis will be first: stakeholders as individuals represented by employees which include senior and academic staff and students who have participated in value co-creation in UTM idea bank. Second: organizational, represented by UTM idea bank provider. Third: the technology platforms in relation to value co-creation.

4.2 Data Collection and Analysis

Data is collected through 3 phases as shown in Figure 4. In phase 1, interview with UTM idea bank administration as "provider" has been conducted based on the research background and literature review. This phase is conducted to explore motivation factors that cause co-creation of value with UTM stakeholders from the provider's prospective. Then it is to explore to what extent UTM idea bank website is visible and effective for continuous participation in ideation and value co-creation. In phase 2 a sample of unstructured interview questions is conducted individually with some UTM idea bank users (internal stakeholders), to further explore motivation factors from stakeholder perspective, leading to co-creation of value through UTM idea bank online platform. In Phase 3 the outcome constructs explored in the previous two phases will be validated and used as solid base to develop the research survey questionnaire in the future study.

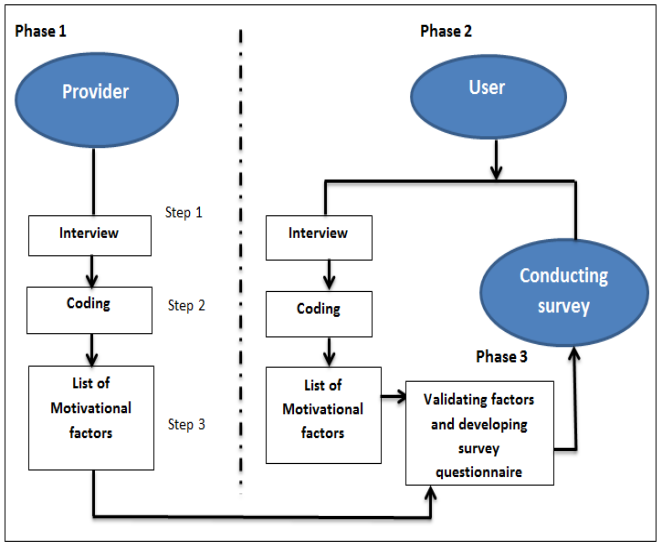


Figure 4 Research data collection frame work

After collecting data from the interview, initial and open coding is applied according to qualitative analysis process for the interview. Qualitative analysis process is adopted from Gibbs, G. R., (2010), coding, Alan Bryan's stages of qualitative analysis [17], as shown in Figure 5.

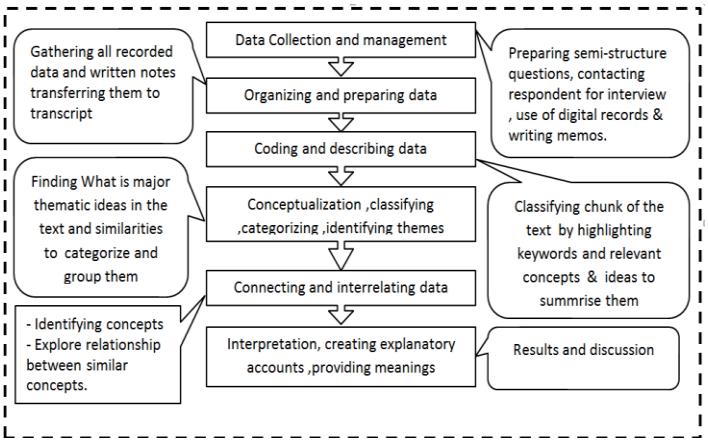


Figure 5 Qualitative analysis process

4.3 Coding Provider's Interview (Initial Finding 1)

In this part, the interview with the UTM idea bank administration (provider) is conducted, then coded according to the qualitative analysis process and shown in Table 2. The interview questions were designed and introduced to the provider according to the collection of factors gathered from previous related studies. A table has then been designed to make relations between findings that were coded with building blocks. The code "PF" is short for Provider's Factor that was explored during the interview in Phase 1. As clearly shown in Table 2, eight factors were initially identified and explored to be accounted as motivation or demotivation factors stated by name in column three.

4.4 Interviewing Sample of Users–UTM Idea Bank "Stakeholder" (Phase 2)

Individual interviews have been conducted with group of idea bank users who have participated in ideation and are familiar with UTM idea bank website. The purpose of this interview is first to explore related motivational factors that stimulate users to be engaged in ideation and participate in value co-creation, and to validate factors that have been found in the previous literature studies. Second to observe user's view of related factors behind continuous or discontinuous engagement in ideation and value co-creation through idea bank online platform. The code UF is short for User's Factor that was explored during interview in phase 2. Sample of interview and coding is shown in Table 3 to clarify how factors from user's perspective were initially identified and explored to be accounted as motivation factors. Then these factors are stated in the last column as named in some previous studies. However, most of the motivation factors mentioned in previous literature reviews for value co-creation were mostly applied in production context rather than service context.

Table 2 Coding providers' responses

Code	Interviewee's answer "Script"	Recognized Motivation	Related construct according to literature
PF1	*" Recognizing users by officially assembling and ceremony "* *" and giving them a certificate presented by vice counselor "*	Firm Recognition and support	Organizational factor Firm recognition (Jeppesen & Frederiksen, 2006), (Lerner & Tirole,2002), (Bagozzi, 1995; Bettencourt, 1997)
PF2	*" We usually Reward winners with token of appreciation"* *"And sometimes certificates and souvenir are given"*	Financial rewards and compensation	Organizational factor Financial reward Füller, (2006); Hoyer *et al*., (2010)
PF3	*" We provide Online Platform usually for each category of UTM citizen and outside UTM"* *" and promote for that even clerk can post and win."* *"We do not limit it for certain sector"*	Open innovation culture	Organizational environmental Factor (Sigala, 2012b)
PF4	*" Our VC and top management call for UTM citizen engagement"*	Firm leadership style	Organizational factor On Firm leadership style Ursula S. Grissemann (2012) Prakash(2013).
PF5	*"UTM idea bank provide an easy access for any participants wish to share their ideas "*	Technology platform well designed	Technical Factor Nambisan ,Robert A. Baron (2009)
PF6	*" Through our current observation word of mouth, , user well reputation and recognition by their friend encourage them to post their ideas in UTM idea bank"*	Reputation	Social Integrative Benefits Füller (2006); Hoyer *et al*., (2010); Katz, Blumler and Gurevitch, (1974); Nambisan and Baron (2009), (Füller 2010
PF7	*"Up to this moment we do not have any specific written web policy and regulation regard of Intellectual property"*	Lack of written web policy and regulation	Organizational factor Hoyer *et al* . p.289 (2010)
PF8	*" UTM idea bank currently haven't include any high appealing web features or multimedia as it is applied in social network"*	Lack of virtual and social media appeal	Technical and hedonic Factor (Fuchs/Schreier 2011), (Sigala, 2012b).

Table 3 Coding user interviews

Code	Interviewee's answer Script				Recognized Motivations according to Interviewee's number	Construct according to literature and theories
	Interviewee 1	**Interviewee 2**	**Interviewee 3**	**Interviewee 4**		
UF1	*establishing hand rail in DSI that can help elderly people to walk safely during crowd so offering such idea defiantly enhancing my experience and I Feel something must be done to help people walk safely*	*Experience is one of the things that encourage me to contribute my ideas which I feel from the field that I work that my idea could solve problem or improve service.*	*What motivate me more to participate in Ideation is enhancing my knowledge about service and better performance.*	*My past experience of sharing idea at my workplace motivates me to also share idea in this Idea Bank of UTM.*	1 √ 2 √ 3 √ 4 √ - Experience - Skill - Knowledge - Competencies	**Benefits Learning factor** (Fuller, 2010) (Deci, 1975; Ryan &Deci, 2000),
UF2	*the happy mood that I got when I feel my idea will help or solve problem of others I enjoy to share something that can cause benefits to others*	*I will be more happy and encouraged if I can provide an Ideas that solve certain problem,*	*For me maybe enjoyment deriving from problem solving, motivate me for idea generation because I can also create relationship through sharing ideas*	*I am happy to participate as it gives equal opportunity to all staff in voicing their opinion to improve the organizational performance.*	1 √ 2 √ 3 √ 4 √ - Happiness - Enjoyment	**Hedonic factor** (Nambisan& Baron, 2009). (Lakhani and Wolf, 2003)
UF3	*Giving an ideas Offer me satisfaction from helping design or offering better service*	*I want to be satisfying from helping design or offering better service or products*	*For me satisfaction results from helping design or offering better service or products lead me to create value or post idea*		1 √ 2 √ 3 √ 4 Generating personal Satisfaction	**Personal factor** (Welser, Gleave, Fisher, & Smith, 2007). Fuller (2010), (Jeppesen & Frederiksen, 2006).

■5.0 RESULTS AND DISCUSSION

Based on the interviews conducted with both UTM idea bank stakeholders and providers to explore motivations that keep stakeholders involved in value co-creation, there are several factors that have an impact on stakeholder engagement in value co-creation. These motivations are summarized in three major classifications for value co-creation in HEIs: First are organizational motives that come from provider side, represented by (a) firm leadership style (b) firm clear and fair policy (c) firm support and recognition (d) financial rewards (e) adopting open innovation culture. Second are an online platform characteristics, represented by: (f) permanent & easy access (g) platform well designed (h) Social media usage. Third are individual motives represented by: (i) personality factor (j) hedonic benefits (k) learning benefits (l) psychological factor (m) socio-demographic factor.

In addition, it is clearly observed that some of these motivation factors have different degree of impact on participation in value co-creation. Moreover, some of these factors were clearly declared and repeatedly mentioned by both providers and stakeholders, some are implied and others need to be investigated further. An initial conceptual model is drafted in Figure 6. To give a general view about these motivational factors.

■6.0 CONCLUSION

Value co-creation is a vital component that ensures stakeholder engagement for sustainable development and better community transformation. In this preliminary case study, the outcome can be signified in a number of motivational factors that have been identified from three different perspectives in the context of HEIs. These perspectives are: provider related motivational factors, internal stakeholder related motivational factors and online platform characteristics. In addition, an initial conceptual model has been established as a basis for the future empirical investigation.

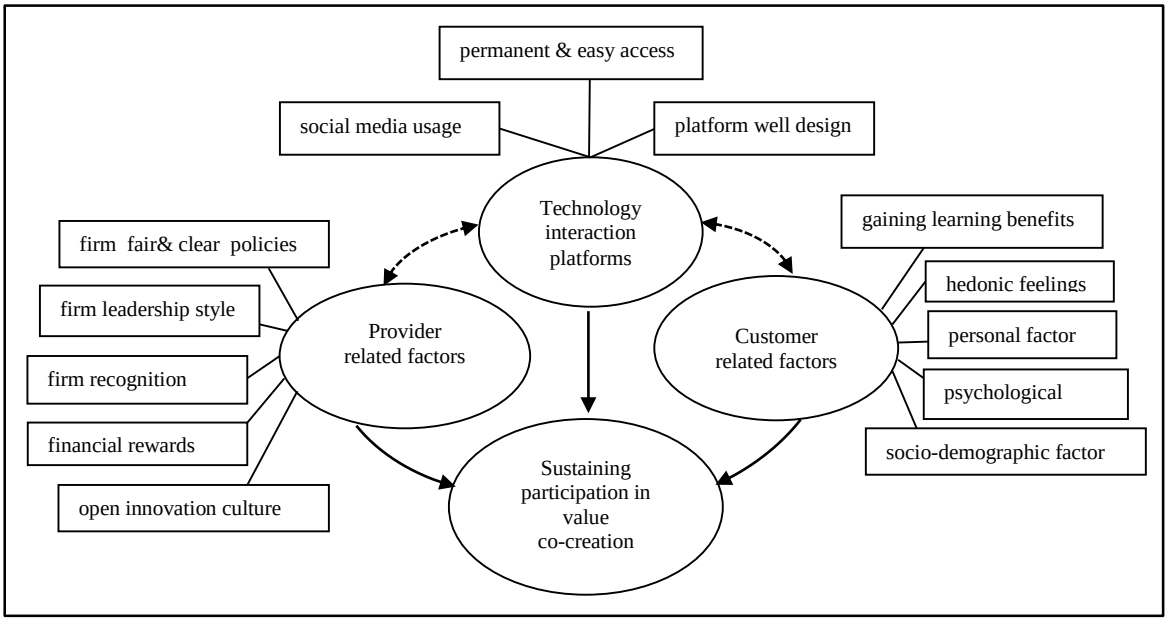


Figure 6 An initial conceptual motivational model

As a result, well understanding of these motivations for value co-creation in HEIs using online platforms will help higher education institutions achieve better globally market positioning and will help to differentiate themselves among other HEIs competitors. However, involving knowledgeable HEIs' stakeholders in value co-creation through any means of technology platform needs to comprehensively understand these motivations that guarantee such fruitful involvement to occur and how such stakeholder engagement can be maintained in a sustainable manner. This study in the current stage attempts to qualitatively explore the motivational factors that will draw guidelines for HEIs, to introducing a future holistic motivational model to be utilized and implemented by in the context of higher education institutions. This model is aimed to be quantitatively tested on several other higher education institutions in Malaysia.

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References

[1] Jana Lay- Hwa. B. 2011. Co-creating Value in Higher Education: The Role of Interactive Classroom Response Technologies. *Asian Social Science*. 7: 11.
[2] Carvalho & Mota. 2010. The Role of Trustin Creating Value and Student Loyalty in Relational Exchanges Between Higher Education Institutions and Their Students. *Journal of Marketing for Higher Education.* 20(1): 145–165. DOI:10.1080/08841241003788201.
[3] Adeleke, E. 2013. Value Co-creation in Malaysian Public Service. PhD Thesis. UniversitiTeknologi Malaysia, Ph.D. Thesis.
[4] Golooba, M. 2013. Service Value Co-Creation in Research & Innovation Practices in Higher Education Institutions in Malaysia
[5] Sigala. 2013. Web 0.2 and Customer Involvement in Co-creation. Book, Chapter3. 35.
[6] Lidija. 2013. Enhancing Knowledge in Web 2.0 Platforms: Applying a CoI Framework. Modul University, Austria.
[7] UTM Idea Bank Website
[8] Vargo, S. L., Maglio, P. P., and Akaka, M. A. 2008. On Value and Value Co-Creation: A Service Systems and Service Logic Perspective. *European Management Journal.* 26: 145–152.
[9] Vargo, S. L. and Lusch, R. F. 2004. Evolving to a New Dominant Logic for Marketing. *Journal of Marketing.* 68: 1–17.
[10] Vargo, L. S. and Lusch, R. F. 2008. Service-dominant Logic: Continuing the Evolution. *Journal of Academy Marketing Science.* 36: 1–10.
[11] Maria, T., Dimitris, P., & Garyfallos, F. 2014. Value Co-Creation and University Teaching Services. The Case of Teachers' Evaluation Process. 3(2).
[12] Vargo, S. L. 2007. On A Theory of Markets and Marketing: From Positively Normative to Normatively Positive. *Australasian Marketing Journal (AMJ).* 15(1): 53–60.
[13] Vargo, S. L. and Lusch, R. F. 2008. From Goods to Service(S): Divergences and Convergences of Logics. *Industrial Marketing Management.* 37(3): 254–259.
[14] Vargo, S. L. and Lusch, R. F. 2008. Service-dominant Logic: Continuing the Evolution. *Journal of the Academy of Marketing Science.* 36(1): 1–10.
[15] Katz, E., Blumler, J.G., &Gurevitch, M. 1974. Utilization of Mass Communication by the Individual. In: The Uses of Mass Communications: Current Perspectives on Gratifications Research. Beverly Hills, CA: Sage. 19–32.
[16] Hofste. 2013. What are the Motivations for (European) Customers to Participate in Online Co-Creation? University of Twente.
[17] Gibbs, G. R. 2010. Coding Part 1: Alan Bryman's 4 Stages of Qualitative Analysis. [Web Video]. Retrieved from http://www.youtube.com/watch?v=7X7VuQxPfpk&feature=list_other&playnext=1&list=SP14E49EDF20613008.