VALUE CO-CREATION DIMENSIONS: THEIR EFFECT ON SATISFACTION OF COOPERATIVE MEMBERS

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ABSTRACT

Value co-creation is a crucial component in the service industry and pivotal to the growth and survival of organizations. The rationale is based on the belief that value is created by both the organizations and the customers. Notwithstanding its magnitude, little is done to delve into the subject matter in cooperatives in the context of developing markets. The present study attempts to investigate the relationship between value co-creation dimensions and satisfaction of cooperative members in Sarawak. A quantitative approach using self-administered survey was adopted. A total of 300 copies of the questionnaire were distributed to cooperative members in Sarawak and 274 usable copies were subsequently collected. Multiple regressions analysis was conducted to assess the effect of value co-creation dimensions on members' satisfaction. The findings indicate that relating, ethical, developmental and concerted joint actions have positive effect on members' satisfaction, where developmental joint actions is found to be the strongest influence dimension. The study thus highlights the practical importance of learning culture among service providers and cooperative members, and lays the foundation for future studies.

Keywords: Value Co-creation Dimensions, Members' Satisfaction, Cooperative

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INTRODUCTION

Creating value for customers is a crucial element today. According to Gronroos (2008), value creation is a process the customers go through when obtaining the products or services. According to Vargo, Maglio & Akaka (2008), since value creation may increase customers' wellbeing, it has become a key ingredient in strategic marketing. It has been increasingly adopted and studied in the field of Service Dominance (S-D) logic, which has been influential in reinforcing the development of marketing research. The key concept within this field is value co-creation, a notion which highlights that value is not solely created by the service providers for the customers. Rather it is a creation by both parties throughout the time of interactions.

The basis of S-D logic is that organizations, markets and society at large are fundamentally concerned with exchange of services (Vargo & Lusch, 2004). Given the fact that exchange takes place during interactions and process of transaction, it involves both the providers and the recipients. Hence, building consensus around the conceptualization of value co-creation becomes increasingly important in research as the conception of value co-creation has been considered as research priority by the Science of Service (Ostrom, 2010). Since Vargo's (2004) seminar article which introduced the premises of the Service Dominance (S-D) logic, more than 890 articles uses "co-creation" in their titles. However, such extant literature is marred by conceptual confusion and ambiguity. Most of the discussions around this field focus on identifying the dimensions in value co-creation. With a better conceptualization, the understanding of value co-creation could eliminate ambiguities regarding the locus of value co-creation, dimensions, actors, as well as the interrelations in the process of value co-creating activities and outcomes.

Past studies have looked into value co-creation in service interactions. Gronroos (2012) conceptualizes value co-creation as "joint collaborative activities by parties involved in direct interactions, aiming to contribute to the value that emerges for one or both parties." Several key dimensions have been identified, such as individuating joint actions, relating joint actions, empowering joint actions, ethical joint actions, developmental joint actions and concerted joint actions (Karpen, 2012). In addition, variables that are closely associated with value co-creation are also determined, such as satisfaction, trust, and commitment in relationships (Ballantyne, 2006). In line with the context of cooperatives' business development, the co-creation principle is seen as relevant and pivotal to its service operations which intensely involve both service providers and cooperative members.

The Cooperative Societies Act, 1993, Subsection 4 (1), defines the primary society as a body consisting of individuals to increase the economic interests of its members in accordance with cooperative principles. The Institute of International Cooperative Alliance (ICA) Congress in Manchester in 1995 declared the cooperative core values and principles listed in the Cooperative Identity Statement succinctly as 'an autonomous association of people, joined voluntarily to meet their needs and aspirations together in the field of economic, social and cultural organizations through a jointly owned and democratically controlled. As such, the present study comes to recognise the relevance and practicality of value co-creation among cooperative members. It

uses a model based on value co-creation in service interaction. Hence, the objective of this study is to investigate the relationship between the dimensions in value co-creation toward cooperative members' satisfaction. The key element for the dimension of value co-creation were adapted in this study including individuating joint actions, relating joint actions, empowering joint actions, ethical joint actions, developmental joint actions, and concerted joint actions (Karpen, 2012).

REVIEW OF LITERATURE

Value Co-creation

In the early 2000s, management scholars began to suggest that the locus of economic value creation was shifting from the organization's research and development department to the interactions between the organizations and the customers (Pralahad, 2004). Such transition and development gives birth to value co-creation. The term denotes that the production of value which takes place increasingly through the interactions between the organizations and customers is the outcome of collaboration in manufacturing products and services. The co-creation paradigm in S-D logic thus raises two important questions for which conceptual clarity and practicality is needed.

Moving the locus of value creation from exchange to use in a given context indicates transforming the understanding of value from one that is based on organization output to one that is based on processes which integrate resources. Such move is fundamental for the development of service science, which aims to focus scientific attention on the problems associated with innovating services and enhancing service provisions (Chesbrough & Spohrer, 2006; Spohrer et al., 2006). The only article to date that addresses value co-creation dimensions from S-D logic perspective is that of Karpen (2012). The conceptual article, which is based on an in-depth literature review and S-D logic expert interviews and surveys, identifies six types of value-creating interactions or joint actions between service providers and customers, namely individuating joint actions, relating joint actions, empowering joint actions, ethical joint actions, developmental joint actions, and concerted joint actions. Since the present study adopts these dimensions, each of these joint actions is explained in the following paragraphs.

Relating Joint Actions

Any interaction involves a relational element. While relating joint actions can be seen as a necessary condition for interactions to occur (Ballantyne, 2006), it is also part of the value cocreating activity. This supports the notion that relationship marketing has been widely acknowledged as a significant source of customer value (Gronroos, 2012). While discussing an organization's relational interaction capability, relating joint actions is defined as "an organization's ability to enhance the connection of social and emotional links with customers and other value network partners" (Karpen, 2012:25). Hence, it is aimed at establishing or enhancing a social and emotional connection between employees and customers within a service interaction.

Individuating joint actions

At the organizational level, individuating joint actions is described as "an organization's ability to understand the resource integration process, contexts, and desired outcomes of individual customers and other value network partners" (Karpen, 2012:25). Individuating joint actions can include activities such as explaining personal preferences, consumption history, previous service experiences, individual hierarchy of needs or preferred means of interacting, and the desired outcome of the interaction for customers.

Empowering joint actions

Joint activities are built on the premise that participants have the power to influence the outcome of the interaction. At the organizational level, empowering joint actions is defined as "the ability to enable its customers and other value network partners shape the nature and content of exchange" (Karpen, 2012:28). Therefore, empowering joint actions is seen as collaborative actions aimed at negotiating the power to influence the outcome of the interaction among service employees and customers when service interaction takes place.

Concerted joint actions

Collaborative actions aimed at the synchronization between service employees and customers is labelled as concerted joint actions. At the organizational level, concerted joint actions is described as "an organization's ability to facilitate coordinated and integrated service processes with customers and value network partners" (Karpen, 2012:30). Such interaction capacities include adapting participants' behaviors to one another, engaging in movement coordination, and establishing agreements and coordination in service interactions.

Developmental joint actions

An organization's developmental join actions is defined as the "ability to assist customers and other value network partners' knowledge and competence development" (Karpen, 2012:29). Such interaction capacities are composed of actions aimed at improving the customers' and employees' operant and operand resources during service interactions. While operant resources are tangible in nature and include products being exchanged (Vargo, 2004), operant resources are intangible, including knowledge, skills, and networks (Vargo, 2008).

Ethical joint actions

Ethical joint actions is also regarded as collaborative action aimed at setting fair, honest, and moral guidelines between interacting participants. Successful interactions require that both service providers and customers are working together towards a shared goal and hold no conflicting or hidden agendas, personal gains as fundamental basis to collaboration. Therefore, it is surmised that value co-creation involves a certain degree of transparency, integrity, and shared risk (Randall, 2011).

Customer satisfaction with Co-Creation

Yi (2013) suggested a typology of different definitions to characterize satisfaction as the result of a process consumption experience. According to Frederick (2006), satisfaction is seen as a final state. This state is distinct from the process leading to its formation. The co-creation process offers various social benefits for customers. Customers can, for instance, enhance their social status through being recognized as a valuable information source by other stakeholders. Additionally, active participation in communities with persons sharing the same interests enhances communication skills and creates social contacts and enjoyment (Karpen, 2012). Such concept is emphasized in the present study so as to determine whether an increased satisfaction with their co-creation performance always benefits the company. Satisfaction with the cocreation performance is understood as the satisfaction with the customers' participation in the creation of the service offering, such as the recommendations the customers make. It can be argued that when customers are satisfied with their own co-creation performance, they are more willing to spend additional money for the service purveyed to them.

Research Framework and Hypothesis Development

Research framework of the present study is developed based on studies done by Karpen (2012), Yi (2013) and Neghina (2014). As mentioned in the literature review, six dimensions pertaining to value co-creation are adopted in the present study, and they are joint actions from the relating joint actions, individuating joint actions, empowering joint actions, ethical joint actions, concerted joint actions and developmental joint actions.

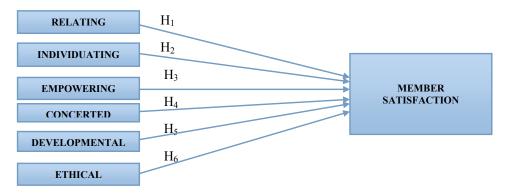


Fig 1: Research Framework based on Karpen et al. (2012), Yi (2013) and Neghina (2014)

In accordance to the research framework, six directional hypotheses are formulated to address the research problems and objectives. The objective of the study is to investigate the relationship between the dimensions in value co-creation toward cooperative members' satisfaction. These hypotheses are stated as follows:

- *H*₁ There is positive relationship between relating joint actions and cooperative members' satisfaction
- H_2 There is positive relationship between individuating joint actions and cooperative members' satisfaction
- H_3 There is positive relationship between empowering joint actions and cooperative members' satisfaction
- H_4 There is positive relationship between concerted joint actions and cooperative members' satisfaction
- $H_{\rm s}$ There is positive relationship between developmental joint actions and cooperative members' satisfaction
- $H_{\rm 6}$ There is positive relationship between ethical joint actions and cooperative members' satisfaction

METHODOLOGY OF STUDY

In light of the research problem and objectives, a quantitative approach using survey questionnaire was adopted in the present study. A non-probability sampling technique was adopted instead of probability sampling technique as there is no way to estimate the probability of any one person being included in the sample of a large population, and no assurance is given that each person has a chance of being included (Maxfield & Babbie, 2011). This is due to the confidentiality of information and disorganize of respondent database in the cooperative. Purposive sampling technique was used to sample the cooperative members in Sarawak. It involves selecting individuals who can offer 'useful manifestations of the phenomenon of interest' (Patton, 2001:40). The questionnaire consisted of three parts, namely demographic profiles, value co-creation dimensions and members' satisfaction. It was prepared in both English and Malay languages to ensure the respondents were comfortable with the questionnaire and could comprehend the questions and statements. The scale of measurement was 5-point Likert scale, ranging from strongly disagree to strongly agree.

After pre-test was done, 300 copies of questionnaire were distributed among the cooperative members who attended training programs at the Cooperative College of Malaysia in April until July 2015. A total of 285 copies were subsequently returned but 274 copies were found usable. Such response rate suggests that non-response bias was not an issue in data collection and analysis process. Moreover, the sample size was also deemed adequate for regressions analysis (Sekaran, 2000). Since non-probability sampling technique was used and normal data distribution could not be ascertained, G-Power analysis was performed, with the effect size of f square 0.15, α error prob. of 0.05, and power of 0.8 to test the statistical power in the study with six predictors or independent variables. The result shows that the sample size was adequate. Hence, the data were keyed in into Statistical Package for the Social Sciences (SPSS) version 20 for descriptive and regressions-analysis.

FINDINGS AND DISCUSSIONS

Demographic Profile

Table 1 shows the demographic profile of 274 members of cooperatives. Out of the 274 respondents, a total of 130 respondents (47.4 percent) were male members while 144 respondents (52.6 percent) were female members. The age group of 21-30 (32.5 percent) and 31-40 years old (29.2 percent) account for the biggest sample. Majority of the respondents (42.7 percent) hold a position as an ordinary members.

Variable		Count	Percentage
Gender	Male	130	47.4
	Female	144	52.6
Age	20 and below	10	3.6
	21-30	89	32.5
	31-40	80	29.2
	41-50	37	13.5
	51 and above	58	21.2
Position	Board Members	99	36.1
	Internal Auditor	14	5.1
	Representative	6	2.2
	Committee Members Members Staff	17 117 21	6.2 42.7 7.7

Table 1: Demographic Profiles

Descriptive and Reliability Findings

Table 2 shows the results for mean value and standard deviation for each item of the variables under investigation. All variables satisfy the requirements for data consistency represented by Cronbach alpha values greater than 0.70 (Nunally, 1978).

Variables	Items	Mean I = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree	S.D.	Alpha	
	REL1	3.588	0.776		
	REL2	3.945	0.732		
Relating Joint	REL3	3.883	0.761	0.903	
Actions	REL4	3.920	0.742	0.903	
	REL5	3.934	0.782		
	REL6	3.745	0.848		
Individuating Joint Actions	IND1	3.880	0.810	0.745	
	IND2	3.964	0.755		
	IND3	3.974	0.713		
	IND4	3.858	0.815		
	EMP1	3.624	0.857		
Empowering Joint	EMP2	3.869	0.739	0.808	
Actions	EMP3	3.880	0.758		
	EMP4	3.818	0.841		
	CON1	3.934	0.800		
Concerted Joint	CON2	3.905	0.806	0.834	
Actions	CON3	3.807	0.805		
	CON4	3.741	0.762		

Table 2: Reports of Means, Standard Deviations and Reliability

Variables	Items	Mean 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree	S.D.	Alpha	
	DEV1	3.620	0.844		
	DEV2	3.737	0.773		
Developmental Joint Actions	DEV3	3.850	0.687	0.865	
	DEV4	3.737	0.682		
	DEV5	3.832	0.776		
Ethical Joint Actions	ETH1	3.828	0.748		
	ETH2	3.836	0.788		
	ETH3	3.810	0.785	0.882	
	ETH4	4.157	0.717	0.882	
	ETH5	3.880	0.739		
	ETH6	3.953	0.742		
	SAT1	3.945	0.766		
Satisfaction	SAT2	3.741	0.781		
	SAT3	3.723	0.845	0.903	
	SAT4	3.675	0.803	0.905	
	SAT5	3.923	0.774		
	SAT6	4.044	0.750		

Note: S.D. indicates standard deviation and alpha indicates Cronbach alpha in reliability test

Multiple Regressions Findings

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Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.850ª	.722	.715	.34476	
a. Predictors: (Constant), Relating, Individuating, Empowering, Concerted, Developmental, Ethical					

Table 3: Regression Analysis (I)

Table 3 shows the Adjusted R Square of 0.715, meaning that 71.5 percent of the variance in the cooperative members' satisfaction can be explained by the six value co-creation dimensions. This is an indication of strong predictive or explanatory capacity of the model.

		Coefficients ^a							
		Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.				
	В	Std. Error	Beta						
(Constant)	.005	.155		.034	.973				
RELATING	.131	.055	.133*	2.482	.014				
INDIVIDUATING	.061	.058	.055	1.052	.294				
EMPOWERING	.039	.058	.038	.666	.506				
CONCERTED	.203	.058	.204*	3.516	.001				
DEVELOPMENTAL	.370	.066	.348*	5.632	.000				
ETHICAL	.195	.064	.184*	3.027	.003				
a. Dependent Variable: Satisfaction									
	(Constant) RELATING INDIVIDUATING EMPOWERING CONCERTED DEVELOPMENTAL ETHICAL	Model Cod B B (Constant) .005 RELATING .131 INDIVIDUATING .061 EMPOWERING .039 CONCERTED .203 DEVELOPMENTAL .370 ETHICAL .195	Model Coefficients B Std. Error (Constant) .005 .155 RELATING .131 .055 INDIVIDUATING .061 .058 EMPOWERING .039 .058 CONCERTED .203 .058 DEVELOPMENTAL .370 .066 ETHICAL .195 .064	Model Coefficients Coefficients B Std. Error Beta (Constant) .005 .155 RELATING .131 .055 .133* INDIVIDUATING .061 .058 .055 EMPOWERING .039 .058 .038 CONCERTED .203 .058 .204* DEVELOPMENTAL .370 .066 .348* ETHICAL .195 .064 .184*	Model Coefficients Coefficients T B Std. Error Beta .034 (Constant) .005 .155 .034 RELATING .131 .055 .133* 2.482 INDIVIDUATING .061 .058 .055 1.052 EMPOWERING .039 .058 .038 .666 CONCERTED .203 .058 .204* 3.516 DEVELOPMENTAL .370 .066 .348* 5.632 ETHICAL .195 .064 .184* 3.027 a. Dependert Variable: Satisfaction				

Table 4: Regression Analysi	is ((II)	
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* p < 0.05 (one-tail)

Table 4 shows the findings of significant value for each path relationship between value cocreation dimensions and members' satisfaction. According to Sekaran (2006), the significant below p < 0.05 is generally accepted conventional level in social science research. As such, all dimensions are found to have significant and positive relationship with members' satisfaction except for individuating and empowering joint actions. Hence, only H₁, H₄, H₅ and H₆ are supported.

The estimation of standardized beta value indicates the amount of effect that each value cocreation dimension has on members' satisfaction (Sekaran, 2006). Based on standardized coefficients of which relationships are significant, developmental joint action has the highest beta value followed by concerted, ethical and relating joint actions. Thus, developmental joint action is perceived as the most pivotal factor which contributes to members' satisfaction in the cooperatives in Sarawak. This is likely due to the fact that developmental interaction process is regarded as a rewarding process since both service employees and customers perceive the process as a learning process. From the employees' standpoint, they seek to provide better service and attempt to make progress. From the customers' perspective, the developmental aspect of value co-creation makes them willing to be part of the service process to ensure a smoother process and more desirable outcome. The findings correspond to literature pertaining to customer learning (Hibbert, 2012), and bottom-up learning for service employees (Ye, 2012). Thus, it can be surmised that developmental joint action, where learning and improvement are central to the interactions, is critically important to ensure members' satisfaction in the context of cooperatives in Sarawak. Relating, ethical and concerted joint actions are also found to be significant, implying that social and emotional connection between service employees and members, the trust between them, and the coordination during interaction process are crucial to satisfaction. As past study suggest that when the self-efficiency of customers increases, the amount of engagement in the service process is not seen as a cost any longer, but something that contributes to customer value (Van Beuningen, Ruyter, & Wetzels, 2011).

However, empowering joint actions and individuating joint actions were found to be not significant in this study. Participants do not have high expectation of the empowerment and individuating joint actions by cooperative. Due to empowerment and individuating joint actions is no longer in the hand of single participant, the power to influence the outcome of interaction that will give benefit to overall goal become difficult to both participants and cooperatives, where it is considered a means of explaining the changing relationships between service providers and customers, in which customers are increasingly taking charge of their value creating activities. Therefore, empowerment and individuating joint actions among members and cooperative should be linked together as to create more values for their future success.

MANAGERIAL IMPLICATIONS AND CONCLUSION

It is imperative to translate the findings and discussions into managerial implications so as to help the cooperative movement in Sarawak, facilitate service improvement and maximize business performance. The present study has underscored the relationship between value co-creation dimensions and members' satisfaction, and more specifically, the effect of each dimension on satisfaction. Hence, it helps the cooperative movement and the management personnel to consider how value co-creation, particularly developmental, relating, ethical and concerted joint actions, could be incorporated into the cooperatives and exemplified through the culture and operations. This is to ensure members are satisfied with the service and would be willing to continue to use the service.

Notwithstanding its magnitude, the study is limited in several areas which underline the need for future research. Instead of using satisfaction as the outcome variable, members' loyalty and their repeated usage could be modelled as outcome variables whereas satisfaction as mediator. Moreover, the length of membership which is very much related to service usage rate, knowledge and familiarity of the service could be incorporated in the framework to provide more comprehensive understanding of the value co-creation and members' satisfaction. Furthermore, the six dimensions of value co-creation could be modelled as formative measurement to avoid erroneous judgment and conclusions due to model misspecification and sampling strategy. Finally, it would be beneficial to conduct a qualitative study on the subject matter so as to delve into value co-creation and other variables of interest in a pragmatic manner not only in Sarawak but in the context of developing markets.

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