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Value co-creation effects on transaction cost, relational capital, and loyalty of hair salon customers: Results and implications of a Ghanaian study

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This study aimed to examine customer relational capital, transaction cost, and loyalty with value co-creation in the Ghanaian hair-dressing business sector. Participants were 455 female hair-dressing customers (mean age = 2.56 years, SD = 1.07 years, age range 22 to 68). Respondents completed existing measures of value co-creation, relational capital, transaction cost, and customer loyalty. The data was analysed by performing structural equation modelling using SmartPLS. The findings show that value co-creation enhances customer relational capital, transaction cost, and loyalty. The findings further show that relational capital significantly influences loyalty, while transaction cost did not. The findings of this study imply that value co-creation is of competitive advantage, influencing relational capital and customer loyalty. Relational capital with customer transaction cost is important to customer-oriented value co-creation in the hair-dressing industry.

Keywords: loyalty, relational capital, transaction cost, value co-creation

Introduction

Customer loyalty is of importance to the competitive business environment through lowering the cost involved in attracting and serving new customers (Ndubisi, 2006). Accordingly, loyal customers repurchase products or services and recommend the product or service to their acquaintances (Gee et al., 2008). As a result, loyal customers help firms to generate more profit (Agrawal et al., 2012; Chepurna & Rialp Criado, 2018; Opata et al., 2019), through value co-creation (Martínez-Cañas et al., 2016; Opata et al., 2019). Value co-creation with customers results from social activity made possible through interaction and collaboration (Aarikka-Stenroos & Jaakkola, 2012; Grönroos, 2008; Lusch & Vargo, 2014). It results in stronger reciprocity norms, greater trust, and bounded solidarity between a business enterprise and its customers (Granovetter, 1985). This value co-creation effect, which is made possible through interactions, create relational capital.

Although research on customer value co-creation has shown that value co-creation translates into customer loyalty (Cossío-Silva et al., 2016; Opata et al., 2019), we could not identify any studies on how transaction cost and relational capital relate with value co-creation. Hypothetically, customer participation in value co-creation would increase customer transaction cost or create relational capital. Meuter and colleagues (2005) postulate that it is more difficult to evaluate a service once the transaction costs increase. In addition, value co-creation is contextual (Neghina et al., 2017) in that different industries have a different make-up and the findings from one industry and country may demand modification in other sectors. We aimed to address this gap in the literature with evidence from the hair-dressing salon business in the developing country of Ghana.

In Ghana, hairdressing is a source of employment and livelihood for many as it has relative low start-up cost (Oda, 2005). Further, women find hair-dressing to be a flexible job whereby they can take care of their homes while working (Oda, 2005). Yet, despite the significance of the hair-dressing industry to the Ghanaian economy, the industry has received relatively low study.

Hair-dressing saloon service qualities

Hair-dressing is characterised by long servicing times which allows for a lot of interaction between the service provider and the customer (Liston-Heyes & Neokleous, 2000). It demands the presence of the customer throughout the entire service process. Customers are directly involved in the entire design of the product as they give their preference and instruction for a hairstyle. In some instances, a simple hairstyle can take a long time to complete due to uncertainty of the customer and increased conversation with the stylist (Letts, 1996). Uncertainty can lead customers to be highly selective in their choice of service providers as there is a fear of poor service such as damaged hair or higher than market value pricing. This increases customer transaction cost because of the long interactions. It also increases relational capital as customers socialise with the service provider. This might have implications for customers' attitudinal and behavioural loyalty.

There is a lack of research evidence on how customer participation translates into relational capital and transaction cost. This study aims to fill this gap in the evidence by exploring customer participation in value co-creation vis-à-vis customers transaction cost with a hair-dressing salon service. Secondly, we aim to find

out if customer participation in value co-creation results in relational capital. Thirdly, we aim to explore the link between customer participation, value co-creation, and customer loyalty. Lastly, we intend to find out the moderation effect of transaction cost and relational capital between value co-creation and customer loyalty.

Customer participation in value co-creation and transactional cost

With value co-creation, the customer is an active participant in the entire service/product development process through the exchange of knowledge and other operant resources (Lusch & Vargo, 2006; Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004, 2016). The concept of value co-creation is premised on the fact that there is an exchange of information and knowledge between actors, one of which is the customer who must be an active participant (Lusch & Vargo, 2014). With value co-creation, a business is essentially using customers as a source of competence and, as such, putting them to work (Prahalad & Ramaswamy, 2004). Co-creation cannot happen in a vacuum as it involves the interaction of the service provider and customers.

Transaction cost is about mechanisms that ensure the efficiency and equitability of economic exchanges (Coase, 1937; Rindfleisch, 2019; Wang & Yu, 2019). Transaction cost can be influenced by fees, commissions, time, and distance. Although most customers go to the salon with a fair idea of the type of hairstyle they want, there are some who have little or no idea of the hairstyle that fits them; thereby increasing the time they spend at the salon. Further, hairdressers are very chatty with their customers, thereby increasing the time customers spend at the salon (Liston-Heyes & Neokleous , 2000). Thus, transaction costs may result in customers moving to a new provider based on their personal definition of reasonable or acceptable costs.

Relationship between value co-creation and relational capital

Relational capital is developed with each other through a history of interactions (Nahapiet & Ghoshal, 1998). It is characterised by trust, respect, shared history, and friendship. In the hairdresser-customer context, relationships are built based on respect, trust, and close interaction through the sharing of information and ideas, benefitting not just the customer, but the hairdresser as well in the form of loyalty. Customers' desire to establish long-term relationships with service providers', especially in hair-dressing, cannot be over emphasised largely due to the uncertainty of the service outcome. In as much as a customer is able to find a service provider who meets his/her expectations, the customer will be eager to continue doing business with the service provider so that the chances of receiving poor quality service elsewhere is avoided.

Relationship between value co-creation and customer loyalty

Loyal customers who engage in repurchase from the same manufacturer or seller can recommend the product or service to their acquaintances (Agrawal et al., 2012; Opata et al., 2019). Literature classified loyalty into two categories, behavioural and attitudinal (Khan, 2009). Behavioural loyalty relates to customers' behaviour towards a product or service and is measured by customers' repeated purchases. Attitudinal loyalty, on the other hand, relates to the differences in customers' emotions towards a product or service. Attitudinal loyalty is measured by customers' willingness to recommend the product or service to their acquaintances. Attitudinal loyalty results in positive word-of-mouth by the customer, but not necessarily repurchases (Khan, 2009). For the purpose of this study, we combine both behavioural and attitudinal loyalty as one construct by picking two items each that measure behavioural and attitudinal loyalty. Studies (Opata et al., 2019; Chen & Wang, 2016; Cossío-Silva et al., 2016)) have shown that customer participation in value co-creation results in customer loyalty.

Hair-dressing industry in Ghana's work context

In Ghana, the hair-dressing industry is saddled with keen competition as the start-up capital is very low and there is no barrier to entry (Oda, 2005). In almost every 'corner' in Ghana, there exists a hair-dressing salon. To gain competitive advantage, strategies aimed at retaining existing customers and improving customer loyalty are of great importance. There is a high customer participation in the service delivery process of hair-dressing as the service cannot be provided in the absence of the customer (service inseparability). Customers are directly involved in the entire production and delivery process as they offer valuable advice and information to the service provider. This is value co-creation where customers provide operant resources during the service production (Lusch & Vargo, 2006, 2004, 2016). A hairstyle may be personalised (Liston-Heyes & Neokleous, 2000), with high uncertainty of the service outcome, so that the service provider is always soliciting the opinion of the customer. For the best personal results, customers spend a lot of time at the salon, strengthening relational capital with the service provider (Oda, 2005).

Goal of the study

The study aimed to explore customer participation in value co-creation vis-à-vis customers' transaction cost. Further, the study aimed to find out if customer participation in value co-creation results in relational capital. Third the study aimed to determine the linkages between customer participation, value co-creation, and customer loyalty. Lastly, we intended to test the moderation effect of transaction cost and relational capital between value co-creation and customer loyalty. The following hypotheses were tested as shown in Figure 1:

- H1: Customer participation in value co-creation significantly influences their transaction cost.
- H2: Customer participation in value co-creation positively and significantly improves on relational capital.
- H3: Customer participation in value co-creation significantly and positively influences customer loyalty.

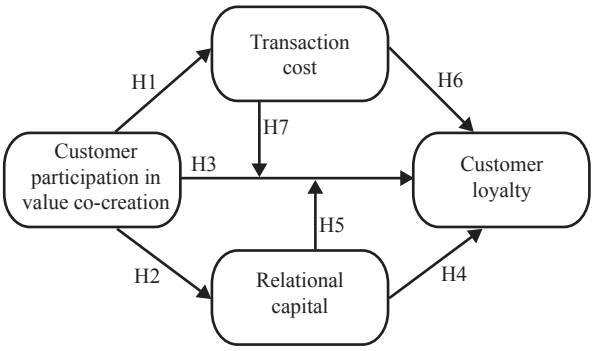

Figure 1 Summary of the proposed relationship among the constructs

- H4: Relational capital that customers develop with the service provider significantly and positively influences their loyalty to the service provider.
- H5: Relational capital has a positive moderation effect on customer participation in value co-creation and customer loyalty.
- H6: Transaction cost influences customer loyalty.
- H7: Transaction cost has a moderation effect between customer participation in value co-creation and customer loyalty.

Method

Participants and setting

Participants were 455 individual female customers of 88 hair and beauty salons in Ghana. The customers ranged between 22 and 68 years of age. In terms of education, 8% had an education below high school, 23% had high school education, and 69% had at least a bachelor's degree. With respect to occupation, 28% were self-employed, 55% were employees in varied industries, 4 % retired, and the remaining 13% were students.

Measurements and scale reliabilities

The participants responded to measures of value co-creation, relational capital, translational cost, and customer loyalty (as described below). All the variables were measured on a seven-point- scale ranging from 1 = strongly disagree, to 7 = strongly agree.

Value co-creation

We adapted five items from Kimmy and colleagues' (2010) scale to measure customers' time spent sharing information and ideas. This is a measure of the needs and efforts the customers invest during the service delivery process. This includes the level of participation, deciding how they want the hairstyle to be, and suggestions they provide to the service provider. The reliability of scores from the value co-creation measure was 0.885.

Relational capital

We adapted 5 items from Kale and colleagues' (2000) scale to measure relational capital. The relational capital measure comprises of level of trust, mutual respect, personal interactions, friendship, and reciprocity. We dropped reciprocity based on the advice of the experts contacted and the interviews with the Ghanaian hairdressers. The experts argued that, in the context of the Ghanaian hairdressing customer, the issue of reciprocity lies in the fact that customers pay for services rendered to them. In the present study, the reliability of scores from the relational capital measure was 0.932.

Transaction cost

Following the work of Lazerson and Lorenzoni (1999), we developed 4 items to measure transactional cost or customers' level and extent of interaction with the service provider, time spent in discussing the style the customer wants, long queues, and customers seeking a second opinion about the service they receive. In the present study, the reliability of scores from the transactional cost measure was 0.920.

Customer loyalty

Based on previous studies (Bettiga et al., 2018; Chen & Wang, 2016; Opata et al., 2019), we created a customer loyalty measure by combining both behavioural and attitudinal loyalty as one construct, selecting two items each that measure loyalty. These items relate to customers' rebuying intentions and recommendations to friends and acquaintances. In the present study, the reliability of scores from the customer loyalty measure was 0.967.

Procedure

The ethics committee in the School of Management and Economics, University of Electronic and Technology, China approved of the study. Participants individually consented to take part in the study. They received a cover letter highlighting the purpose of the study and assurances confidentiality of their data. Questionnaires were administered at the salons and took approximately twenty (20) minutes to complete.

Data analysis

To analyse the data, we used Smart PLS 3.0 (developed by Ringle et al., 2015) to perform structural equation modelling (SEM). PLS has the ability of modelling latent constructs under conditions of non-normality and with data ranging from small to medium (Hair et al., 2013). Checking for skewness and kurtosis confirmed that the data did not violate normality of distribution assumptions recommended by Kline (2011). To perform SEM, a two-stage analytical procedure was followed. First, the measurement model was assessed by checking for validity and reliability of the measures. Second, the structural model was assessed by performing a 5 000-sample bootstrapping. We also checked for common method variance bias following suggestions by Podsakoff and colleagues (2003). Moreover, we utilised collinearity VIF in SmartPLS to assess common method bias by connecting all the variables to a single variable. There is method bias if the VIF is greater than 3.3 at the factor level (Kock, 2015). We did not violate the assumptions of common method bias since none of the VIFs are greater than the 3.3 recommended**.**

Table 1. Validity and reliability of constructs

Constructs	Items	Loadings	Alpha	AVE	CR
Value co-creation	CPVCC1	0.832	0.885	0.686	0.916
	CPVCC2	0.807			
	CPVCC3	0.883			
	CPVCC4	0.836			
	CPVCC5	0.779			
Relational capital	RC1	0.921	0.932	0.952	0.831
	RC2	0.917			
	RC3	0.920			
	RC4	0.888			
Transaction cost	TC1	0.900	0.920	0.831	0.952
	TC2	0.908			
	TC3	0.893			
	TC4	0.890			
Customer loyalty	CL1	0.944	0.967	0.090	0.976
	CL2	0.952			
	CL3	0.962			
	CL4	0.957			

Measurement model

The measurement model was assessed by checking for reliability and validity measures (previously reported). This was done by examining the factor loadings of the items, the Cronbach Alpha, the Composite Reliability (CR), and the Average Variance Extracted (AVE). The Cronbach Alpha measures show if the items are related. Hair and colleagues (2006) recommend that the Cronbach alpha of the constructs should be higher than 0.7. As indicated in Table 1, the values for all the Cronbach alphas of the constructs all exceeded the recommended 0.7. This indicates a high internal consistency. The values for average variance extracted and composite reliability also exceeded the recommended 0.5 for the average variance extracted and 0.7 for the composite reliability (Bagozzi & Yi, 1988; Hair et al., 2013).

To ensure that the constructs were not measuring different things and did not relate in anyway, we checked for discriminant validity of measures. One benefit of discriminant validity is that it promotes uniqueness in the construct measurement (Hair et al., 2013). To achieve discriminant validity, the constructs under consideration must have low values with other constructs (Fornell & Larcker, 1981). As per Fornell and Larcker (1981) and as shown in Table 2, discriminant validity was achieved as the values for each construct was higher than its corresponding co-efficient. Although the Fornell and Larcker (1981) criterion is widely accepted for checking discriminant validity, it has shortcomings as identified by Henseler and colleagues (2015) who suggested that discriminant validity is better detected when accessed by the heterotrait-monotrait (HTMT). Further, Henseler and colleagues (2015) proved that there is a discriminant validity problem if HTMT value is closer to one (i.e. 0.90), while other researchers such as Kline (2011) and Clark and Watson (1995) suggested 0.85. Table 3 shows that the HTMT values are not above the 0.90.

Table 2. Discriminant validity assessment using Fornell and Larcker criterion

Constructs	1	2	3	4
Customer loyalty	**0.954**			
Transaction cost	0.761	**0.898**		
Relational capital	0.823	0.796	**0.912**	
Value co-creation	0.764	0.761	0.817	**0.828**

Table 3. Discriminant validity assessment using Heterotrait-Monotrait (HTMT)

Constructs	1	2	3	4
Customer loyalty	–			
Transaction cost	0.805	–		
Relational capital	0.865	0.860	–	
Value co-creation	0.824	0.838	0.887	–

Structural model

Following recommendations by Hair and colleagues (2013), we performed a bootstrap with 5 000 samples to assess the structural model. Bootstrapping addresses the problem of non-normal data distribution. We evaluate the model's predictive relevance by using Q^2 (Geisser, 1974) and following the blindfolding procedure (Tenenhaus & Vinzi, 2005). We achieve predictive relevance of the model as the results show values greater than zero. Further, we assessed the R^2 of the structural model. The R^2, which is also called the coefficient of determination, is the proportion of variance in the dependent variable that is explained by the independent variable. Cohen (1988) suggested that an R^2 greater than 0.26 indicates a substantial model. The R^2 values were all higher than the recommended values of 0.26. Customer participation in value co-creation explains 58% of variance in transaction cost (R^2 = 0.580) and 66.7% of variance in relational capital (R^2 = 0.667). Value co-creation, transaction cost, and relational capital explain 75.9% of the variance in customer loyalty (R^2 = 0.759).

Table 4. Summary of hypotheses test results

Hypothesis	Path	Beta	*t*	*p*	Decision	f^2
H1	Value co-creation -> Transaction cost	0.762	27.762	< 0.000	Supported	1.386
H2	Value co-creation -> Relational capital	0.817	32.91	< 0.000	Supported	2.013
H3	Value co-creation-> Customer loyalty	0.452	9.894	< 0.000	Supported	0.043
H4	Relational capital -> Loyalty	0.249	4.396	< 0.000	Supported	0.048
H5	Value co-creation 8*Relational capital->Loyalty	0.283	5.61	< 0.000	Supported	0.062
H6	Transaction cost -> Loyalty	0.083	1.825	0.068	Unsupported	0.008
H7	Value co-creation*Transaction cost-> Loyalty	0.056	1.075	0.283	Unsupported	0.002

Henseler and colleagues (2009) explained that f^2 measures the strength of each predictor variable in explaining the endogenous variable. Cohen (1988) suggested 0.02 (small), 0.15 (medium), and 0.35 (large) as guidelines for effect size. Following Cohen (1988), we assessed f^2. As shown in Table 4, apart from the moderating effect of transaction cost on value co-creation in predicting loyalty which shows a small effect size 0.02, all the other predictions show a large effect size. The f^2 results shows that the exogenous variable (value co-creation) has a large effect on the endogenous variables (relational capital and transaction cost).

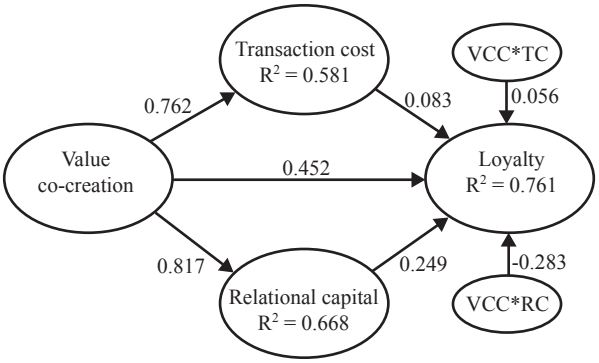

Figure 2. Structural model results

Results

Figure 2 and Table 4 show the results of the inner model of the structural model. We consider the results by hypothesis.

Value creation effects

The results show that customer participation in value co-creation positively and significantly influenced transaction cost (β = 0.762; p <0.001), supporting hypothesis 1. Value co-creation also significantly and positively influenced relational capital (β=0.817; p<0.001) giving credence to hypothesis 2. Additionally, hypothesis 3 was supported since value co-creation significantly and positively influenced loyalty (β = 0.452; p < 0.001). The results further show a significant relationship between relational capital and loyalty (β = 0.249; p < 0.001). However, no significant relationship between transaction cost and loyalty was found since the *t*-value is less than 1.9 (β = 0.083; p = 0.068); thus, hypothesis 6 was not supported.

Relational capital moderation

We applied the PLS product-indicator approach to perform moderation analysis. The product indicator approach assesses the interaction term by adding an extra latent variable in the structural model to represent the product of the independent and the moderating variable (Henseler & Fassott, 2010). Following procedures suggested by Henseler and Fassott (2010), we performed bootstrapping of 5 000 samples. In our study, we hypothesised that relational capital would have a moderation effect on the relationship between value co-creation and loyalty. To assess this effect, we multiplied value co-creation (predictor) and relational capital (moderator) to create an interaction construct. As shown in Figure 2 and Table 4, the path co-efficient showed a significant effect (β = −0.283; p < 0.001). These results supported hypothesis 5.

Transactional cost moderation

We hypothesised that transaction cost would moderate the relationship between value co-creation and loyalty. To assess this, we again multiplied value co-creation (predictor) and transaction cost (moderator) to create the second interaction construct. The path co-efficient, the *t*-value, showed an insignificant value of 1.075, far less than the 1.9 recommended. This result means hypothesis 7 was not supported.

Discussion

The findings of this study suggest that customer participation in value co-creation is a relevant driver of relational capital. This is evidenced by a high interaction and involvement between the customer and the service provider. Relational capital is fostered by high interaction, mutual trust, and respect (Nahapiet & Ghoshal, 1998). The relational capital is the type of personal relationships people have developed with each other made via interactions (Brymer & Hitt, 2018; Taheri et al., 2017). Relational capital is important for business competitiveness with the co-creation of value with customers.

Second, our findings indicate that customer's participation in value co-creation has a significant influence on customers' transaction cost. This is likely explained by the fact that as customers are involved in long interactions with the service provider, offering their opinions and suggestions, their transaction cost increases (Guo et al., 2008; Wang & Yu, 2019). Extended transactional cost may hurt a business's fortunes if customers perceive time spent for a service as excessive. This implies that the service

provider might lose a chunk of its revenue because of the disloyal customers.

Although value co-creation has been reported in previous studies as an antecedent to customer satisfaction (Frempong et al., 2018; Hunt et al., 2012; Opata et al., 2019) and customer loyalty (Chen & Wang, 2016; Cossío-Silva et al., 2016), efforts aimed at reducing customers' transaction cost with hair-dressing are in need of further study. This would include factors such as the effect of long queues, information search, and bargaining times.

Third, our findings confirm those of previous studies (Chen & Wang, 2016; Cossío-Silva et al., 2016; Opata et al., 2019) to the effect that customer participation in value co-creation is an immediate antecedent to customer loyalty. Loyal customers are willing to revisit the service provider and recommend the service provider to their acquaintances (Gee et al., 2008). Reichheld (1993) postulated that because of the length of relationship between the service provider and the customer, loyal customers generate more profit. Attracting and maintaining customers in this competitive business environment goes a long way in achieving competitive advantage.

Managerial implication

This study has managerial implications. First, we propose that business firms should utilise strategies aimed at reducing customers' transaction cost during value co-creation as it has a negative effect on customers' loyalty. Service providers must seek to reduce customers' waiting time, bargaining time, interaction time, and other issues that increase customers' transaction cost. Tyagi (2004) reported that reduction in customers' transaction cost benefited the seller/service provider. Second, issues such as mutual trust, respect, openness, and positive interaction between the customer and the firm are important to increasing relational capital (relational capital in this study has been found as a strong antecedent to customer loyalty). Third, customer participation in value co-creation must be encouraged though customer motivation and customer empowerment. This is because customer involvement in the creation of value is a major antecedent to customer loyalty. In the long run, this will help business firms and organisations achieve competitive advantage.

Limitations of the study and suggestions for further research

First, the study considered just one actor in the value co-creation process, which is the customer, and overlooked other equally key actors, in this case the service providers (hairdressers). Co-creation of value involves the participation of multiple actors. Second, since the study argued that co-creation is contextual, the conceptual model used in this paper may or may not apply in other markets.

Despite these limitations, this study contributes to the existing literature on customer participation in value co-creation in several ways. First, the study showed that value co-creation is an antecedent to relational capital, transaction cost, and customer loyalty. Second, our study findings contribute to literature by showing that relational capital significantly influences loyalty. Future research should investigate the interactional roles that various actors play in the context of co-creation of value.

Conclusion

Our findings suggest that relational capital does not only influence customer loyalty, but also that relational capital is an immediate antecedent to loyalty. Factors that influence relational capital such as interactions with customers and building mutual trust and respect, must be encouraged. We propose that organisations – in their attempt to increase customer loyalty through value co-creation – should consider ways to reduce customers' transaction costs. Further, business firms need to cultivate good relationships with their customers' through their participation in value co-creation as relational capital is a significant antecedent of customer loyalty.

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