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Journal of Trade Science

ISSN 1859-3666

Volume 8

Number 3

September 2020

CONTENTS

Page

1. **Phuong, N.T.T.** - Factors affecting ERP application and its impact on accounting management: an empirical survey in Hanoi 3
2. **Trang, N. Q.** - The Effect of Accounting Information Quality on The Decision - Making Process of Vietnamese Enterprises 18
3. **Lan, M. T. and Anh, D.V.P.** - Factors Affecting Employer branding of Small and Medium Enterprises in Hanoi 33
4. **Dat, P. M and Hang, N. T. and Huan, N. V.** - The impacts of Foreign Direct Investment for economic growth in Thai Nguyen Province 48
5. **Dzung, P.T.T.** - Factors Affecting the Derivatives Investment Intention of Individual Investor: a Case Study in Vietnam 60
6. **Trang, D. T. T. and Hanh, T. T. T** - The Influence of Channel Integration Quality on Customer Engagement in Multi-channel Retail in Vietnam 72
7. **Ta-Lun Sung and Kai-Tang Fan** - Finding Vietnam's opportunities and challenges through patent analysis 83

THE INFLUENCE OF CHANNEL INTEGRATION QUALITY ON CUSTOMER ENGAGEMENT IN MULTI-CHANNEL RETAIL IN VIETNAM

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Received: 6th January 2020

Rivised: 25th February 2020

Approved: 2nd March 2020

Along with the dramatic growth of the technology at stores, multi-channel services have turned to omni-channel ones. Integrating effectively sales channels assists retailers to not only increase sales and optimise costs of supporting customers but also make them satisfied, loyal and more engaged with retailers. This study verifies the research framework of the impact of perceived quality of channel integration on customer engagement within the context of electronics and appliance specialist retail industry in Vietnam. The findings of the analysis conducted using PLS-SEM technique indicate the dimensions of channel integration quality positively affect customer engagement, both directly and indirectly through the variable of consumer empowerment. Furthermore, the empirical results imply a crucial role of customer perception of retail channel integration quality in increasing customer engagement, motivating their re-purchase intention and positive word-of-mouth behaviour.

Keywords: customer engagement, channel integration quality, multi-channel retailing, re-purchase intention, positive word-of-mouth.

1. Introduction

Retailers who employ the multi-channel model usually utilise multiple sales channels to acquire customers such as physical stores, social networks, websites, internet kiosks, mobile applications, etc. These channels are independent, which only focus on activities within a channel and channel managing object based on each channel. Meanwhile, with the cross-channel retail model, customers can use more than one channel with the same request. Unlike the two retail models above, omni-channel retail allows interactions and communications between channels such as physical stores, websites, telesales, e-commerce platforms and social media channels... These channels have the integration, without boundaries and managing objects are across different channels

(Verhoef et al, 2015). As more and more customers demand integrated purchasing experiences across channels, many retailers have turned to omni-channel retail in order to remain competitive advantages and this is an inevitable trend in the world.

On the other hand, retailing channel integration quality is related to the capacity to provide customers with seamless shopping experiences on channels (Sousa & Voss, 2006) and plays a central role in omni-channel retail. In this context, understanding customer engagement is very crucial since this strengthens the bond between retailers and customers; thus, leading to positive results for retailers. For instance, retailers who are able to acquire customers on various channels remain an average of 89% of their customers, while the figure for the oth-

ers is just only 33% (Seleh, 2015). Studies on the relation between channel integration quality and customer engagement in retail sector remain scarce. As one of the latest researches on this topic, Lee et al (2018) indicated that the aspects of retailing channel integration quality positively affect customer engagement; thence, resulting in their re-purchase intention and positive word-of-mouth. In Vietnam, this topic is still new, which has not been widely evaluated in terms of theory as well as practice. To be one of sectors widely implementing multi-channel retailing in Vietnam, the consumer electronics one accounts for 7 out of 10 biggest retailers in Vietnam and has high growth prospects thanks to transformation to this multi-channel business (Grant, 2018). Hence, research on effect of channel integration quality on customer engagement in the context of consumer electronics sector is meaningful and necessary. From these, the question proposed for this question is as the following: "How do customers' perception of retailing channel integration quality affect their engagement with retailers?". To answer this question, first, we summarize the theoretical basis of customers' perception of channel integration quality. Second, we verify and re-assess the measurements built on the synthesis of extant literature in an effort to propose framework appropriate for the context of Vietnam, discussing in research methodology and discussion sectors. Finally, we highlight the research contributions with the respect to academic as well as practical significances and point out some research limitations.

2. Literature review and research model

2.1. Channel integration quality

According to Sousa & Voss (2006), channel integration quality is defined as the omnichannel retailer's ability to provide customers with seamless shopping experiences across channels. This is the main and new service component of the multi-channel retailer. Accordingly, the multi-channel system provides a high level of integrated quality when customer experiences are seamless across channels. In this study, the concept of channel inte-

gration quality is defined from consumers' perspective, not from marketers' one. Therefore, customer perception of integrated retail channels (or channel integration quality for short in the whole of this study) is approached based upon Sousa & Voss (2006). In other words, channel integration quality, in this study, is customers' perception of the ability of offering them seamless and unified service experiences across various channels of retailers. The channel integration quality is determined by two dimensions. Firstly, channel service configuration includes breadth of channel service choice and transparency of channel-service configuration. Specifically, breadth of channel service choice refers to the fact that customers can freely access information and services from different channels to meet their needs, which is often considered as an important reason for customer commitment and engagement. On the other hand, transparency of channel-service configuration relates to the familiarity of customer with the attributes of all available channels. This implies that customers are aware of the existence of all available channels and are familiar with their attributes.

Secondly, integrated interactions refer to the consistency of interactions across channels, consisting of two sub-dimensions: content consistency and process consistency. Particularly, process consistency refers to the consistency of relevant and comparable process attributes across channels. Meanwhile, content consistency refers to the consistency of content provided by retailers across channels. Hence, both content and process consistency of interactions on different channels will create unified, trustworthy and consistent service experience for customers. Two dimensions of channel integration quality are presented in four sub-dimensions mentioned above. As a result, in our research, customers' perception of channel integration quality is analysed based upon their assessments of these four sub-dimensions. On the other hand, previous researches have proved that channel integration quality can significantly explain customers' perception and behaviour across multi-

ple channels. Many scholars agree that channel integration quality influences customers' rating of a company or brand and this leads to positive result for retailers. Specifically, Wu & Chang (2016) found that channel integration quality enhances the customer perceived values when shopping online. Research of Seck & Philippe (2013) points out that channel integration quality has positively impacted on customers' overall satisfaction. Meanwhile, Emrich et al (2015) find that fully integrated channel structure positively affects customers' perception of shopping benefits, leading to their higher repurchase intention. Finally, Herhausen et al (2015) demonstrate that channel integration improves service quality perceived by customers, reducing perceived risk and leading to their higher level of intention of search, purchase and willing to pay.

In addition, the importance of channel integration quality in creating seamless purchasing experience through multi-channel retail has also been consistently emphasised by scholars (Bianchi et al., 2016). Therefore, our research suggests that channel integration quality plays an important role in shaping customer engagement in the multi-channel retail context.

2.2. Customer engagement

Customer engagement is a concept that has been widely studied in the academia as well as in the practice, especially in the context of online brand communities (Chan et al, 2014; Hammedi et al, 2015) or other sectors such as websites (Demangeot & Broderick, 2016), physical stores (Barth, 2007). According to Vivek et al (2014), customer engagement reflects the intensity of an individual's participation in and connection with organizations' services and/or activities initiated by customers or by firms. Meanwhile, Brodie & Hollebeek (2011) define this concept as a psychological state which occurs by virtue of interactive customer experiences with a focal agent/object (for example: a brand). Furthermore, Mollen & Wilson (2010) confirm two aspects of customer engagement: the customers' cognitive and affective commitment to an active

relationship with the brand as personified by the website or other computer-mediated entities designed to communicate brand value. In most of these studies, the sense-making variable (such as website attributes, game customization, in-game social interactions...) is confirmed consistently influencing customer engagement. Nevertheless, researches on customer engagement in the context of multi-channel retailing are still scarce, especially researches associated with the variable of channel integration quality. With the trend of increasing in seamless shopping experience demands as well as the challenges of acquiring customers for multi-channel retailers, the research on specific effects of customer engagement within the context of multi-channel retailing is essential and significant. In this sense, our study approaches the concept of customer engagement suggested by Vivek et al (2014).

2.3. Research model and research hypotheses

Researches on channel integration quality are mostly concentrated on four aspects as mentioned above. Specifically, the work of Lee et al (2018) focuses on the impacts of channel integration quality on customer engagement, which in turn, leads to their re-purchase intention and positive word-of-mouth. Meanwhile, Shen et al (2018) indicate that not only does the quality of channel integration considerably influence the seamless experiences across channels perceived by customers but the internal experiences also reduce while the external ones enhance the continuance's impact perceived by customers on using multi-channel services. However, the research of Wu & Chang (2016) shows that among four aspects of multi-channel integration, the transparency of channel service configuration, process consistency and business ties positively impact online purchase intention through online hedonic value. According to these scholars, also, the effect of information consistency is not strong; the process consistency affects greatly online hedonic value in comparison with business ties; the impact of online convenience on online purchase intention is weaker than that of online monetary saving and

online hedonic value. The latest study of Zhang et al (2018) illustrates the marked mediating effect of customer empowerment on the relation between customers' perception of channel integration and their patronage intention. From these researches, thus, this study mainly combines the research con-

prospective customer's interactions and connections with a brand's or firm's offerings and/or activities. It consists of three dimensions. First, conscious attention refers to the degree of interest the person has or wishes to have in interacting with the focus of their engagement. Second, enthused participation refers to the zealous reactions and feelings of a person related to using or interacting with the focus of their engagement. Third, social connection refers to the enhancement of the interaction based on the inclusion of others with the focus of engagement, indicating mutual or reciprocal action in the presence of others.

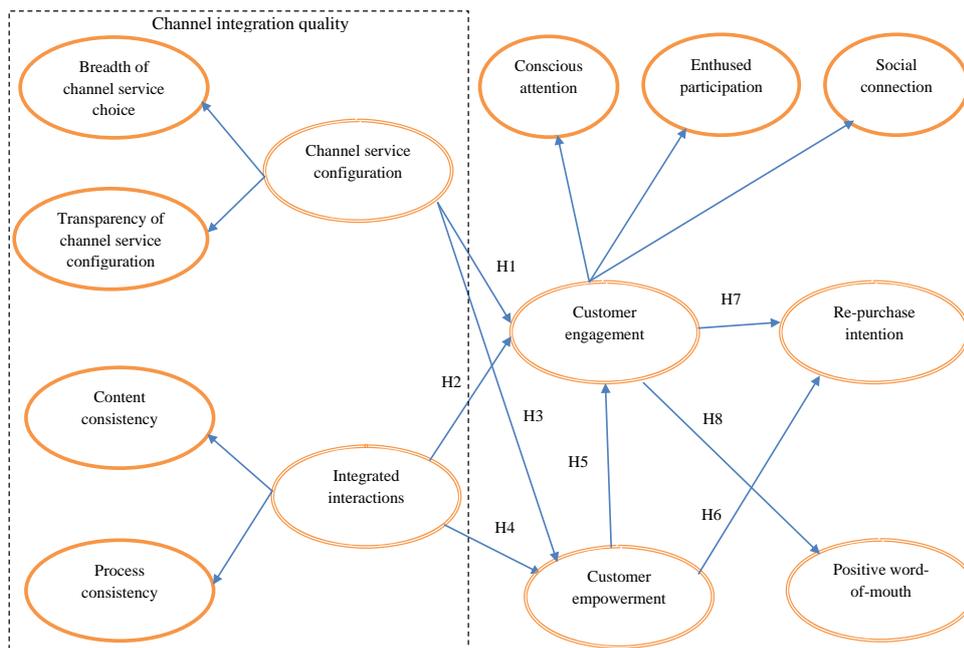


Figure 1: Proposed research framework

tributions from Lee et al (2018) and Zhang et al (2018), forming the basis for the research framework of the influence of channel integration quality on customer engagement in the context of consumer electronics sector in Danang, Vietnam. Particularly, we analyse in depth the effects of channel integration quality on customer engagement, that of customer empowerment and customer engagement on their re-purchase intention and positive word-of-mouth. Proposed research model is presented in figure 1 below.

2.3.1. Customer engagement and channel integration quality

According to Vivek et al (2014), customer engagement refers to the level of a customer's or

customers will invest personal resources into the relationship when the retailer provides values. In the context of multi-channel retailing, a customer would develop and maintain relationships with a multi-channel retailer, which are based on their assessment of the retailer's investment and the expected benefits from transactions between them. Hence, we proposed that when multi-channel retailers ensure channel integration quality throughout the purchasing journey, customers are more likely to engage with them and their offerings/activities.

Regarding channel integration quality perceived by customer (or perceived channel integration quality), this study follows the suggestion of Sousa & Voss (2006), including two dimensions: channel-



service configuration and integrated interactions as the followings.

Channel service configuration

Channel service configuration is mentioned as the available combination of service components and their associated delivery channels, manifesting through the “breadth of channel-service choice” and “transparency of channel-service configuration” sub-dimensions. In which, Breadth of channel service choice refers to the degree to which customers can choose alternative channels for a given service or can accomplish preferred tasks through an individual channel. Particularly, retailers are able to show superiority in channel-service configuration by allowing customers to place orders both online and offline. Therefore, they provide a valued exchange for customers in comparison with those who only allow orders to be placed either online or offline. In other words, customers will value the flexibility in choosing their preferred channels for a given shopping task and are likely to be displeased when forced to use only one particular channel (Bitner et al, 2002). The transparency of channel service configuration refers to the degree to which customers are aware of the available channels and services as well as the differences between such service attributes across channels. It means that consumers are familiar with the attributes of both online and offline channels. However, if consumers are unsimilar with the attributes of either online channel or offline channel, they are more likely to consider the channel service configuration less transparent (Kwon & Lennon, 2009). According to Bitner et al (2002), when retailers are unable to properly integrate their channels, customers are confused with the availability and difference of services across channels; such confusion imposes difficulties in their purchasing journey. Therefore, clearly showing the options for channel-service configuration can assist retailers to offer a valued exchange to customers. The complementary roles of the online and physical stores have been constantly highlighted. For instance, customers can research products

online, but go in-store to try the merchandise and solicit additional advice from sales representatives. The two channels complement each other and create a complete end-to-end experience for customers in each purchase. From the study of Hollebeek (2011), if customers perceive the flexibility of selecting from alternative retailing channels for a given shopping task, they are more likely to make reciprocated attempts and become more engaged with omnichannel retailers. In other words, a higher level of channel-service configuration (consisting of breadth of channel-service choice and transparency of channel-service configuration) will lead to a higher level of customer engagement. In the same vein of this, we propose the hypothesis H1 as the following:

H1: Customers' perception of channel service configuration positively affects customer engagement.

Integrated interactions

Integrated interactions refer to the consistency of interactions across channels, manifesting through the “content consistency” and “process consistency” sub-dimensions (Sousa & Voss, 2006). In which, the first dimension mentions the consistency of content provided by retailers across channels (Sousa & Voss, 2006). Content consistency allows customers to receive similar responses to an enquiry posted in either online or physical channels. Hence, offering consistent content (like content of prices, product specifications and warrant services) across channels allows retailers to provide a valued exchange to customers. Cox (2016) claims that content consistency is crucial in shaping a seamless shopping experience. Without consistent content available across channels, customers would easily get frustrated as they moved from channel to channel. Thus, content consistency helps remove friction in customers' shopping journey and shorten the transaction process, they will value it and become more engaged. Process consistency refers to the degree of consistency of relevant and comparable process attributes across channels, such as the feel, image, and delivery speed of services (Sousa & Voss,

2006). The work of Gilles (2015) points out that 59% of the respondents reported an inconsistent shopping experience while moving from one channel to another left them annoyed. As a result, retailers who offer or maintain process consistency across channels will provide a valued exchange to customers. For instance, a consistent visual aesthetic and unwavering experience across channels is the key to effective customer engagement because it offers instantly identifiable continuity (Boudine, 2016). According to Hollebeek (2011), if customers value the content and process consistency across channels which are brought about by the retailers, they will reciprocate with personal resources and become more engaged with the firms and their offerings/activities. The importance of consistency in engaging customers across channels has been studied in recent years (Boudine, 2016) and has been regarded as key to the provision of satisfactory customer experiences (Montoya-Weiss et al, 2003). Consequently, we argue that a higher level of integrated interactions (consisting of content consistency and process consistency sub-dimensions) will lead to a higher level of customer engagement. The hypothesis H2 will be developed as the following:

H2: Customers' perception of integrated interactions positively affects customer engagement.

2.3.2. Customer empowerment and channel integration quality

Consumer empowerment is defined as empowering someone with unequal abilities to manage or control others (Cattaneo & Chapman, 2010). On the other hand, according to Wathieu (2002), empowerment refers to allowing someone to do things on their own way. Mishra & Vishwas (2018) emphasize that empowerment is a positive state that occurs with increased control, and this is a multi-dimensional property applied in retail business. In the context of multi-channel retail, our research adopts the definition of consumer empowerment (this definition is used throughout this research) by Wathieu (2002) and Mishra & Vishwas (2018), which is defined as the extent to which customers

have control over their shopping processes. The findings from the work of Lee et al (2018) show that the limitation in their research is that they did not consider the impact of empowerment attribute in the relationship between channel integration quality and customer engagement. Meanwhile, Zhang et al (2018) highlight the mediating effect of consumer empowerment in the relationship between consumers' perception of integrated retail channels and their repurchase intention. Also, according to these scholars, with an environment where retail channels are well integrated, customers are more likely to be aware of the proactive control over the shopping process, gaining more trust and satisfaction with that retailer because of the amount of information provided in a complete, transparent and timely manner, supporting their decision-making. Combining these two researches, we propose that customers' perception of the channel integration quality can impact customer empowerment. Therefore, the hypothesis H3 and H4 are developed as the followings:

H3: Customers' perception of channel service configuration positively affects customer empowerment.

H4: Customers' perception of integrated interactions positively affects customer empowerment.

2.3.3. Customer engagement, customer empowerment, re-purchase intention and positive word-of-mouth

Customer engagement has been recognized as an ongoing firm- customer exchange that fosters positive transactional and non-transactional outcomes (Cambra-Fierro et al., 2013). Particularly, repurchase intention refers to the extent to which a customer will continue to purchase products from a firm (Chiu et al., 2009); whereas positive word-of-mouth refers to the extent to which a customer will communicate with other parties concerning the positive evaluations of products from a firm (Anderson, 1998). Through experimental researches in the context of omni-channel retailing, Cao & Li (2015), Zhang et al (2018) conclude that by increasing cus-

tomers' perception of channel integration activities, retailers try to remove the barriers limitations that exist in single channels as well as relinquish unilateral control of consumer's purchasing process for their own benefits. As a result, when the natural boundary of channels is removed, consumers will have more choice and freedom in making their own decisions; thereby, increasing the trust, satisfaction and repurchase intention toward retailers. Finally, this process is repeated over and over and forms the connection between the customer and the business. To supplement the limitation of Lee et al (2018), we believe that consumer empowerment can affect customer engagement and their repurchase intention toward the retailer. Furthermore, Butter & Marklan (2015) suggest that an engaged customer will act more than just purchasing behaviour. This means, when customers feel engaged to a business, they are willing to support business with behaviours like positive word of mouth, sharing experiences, participating in new product testing, etc. Specifically, in the context of multi-channel retailing, the relation between customer engagement, re-purchase intention and positive word-of-mouth has been verified by Chan et al (2014), Islam & Rahman (2016). From these arguments, we propose the hypotheses of H5, H6, H7, H8 as the followings:

H5: Consumer empowerment positively affects customer engagement toward retailer.

H6: Consumer empowerment positively affects their repurchase intention toward retailer.

H7: Customer engagement positively affects their repurchase intention toward retailer.

H8: Customer engagement positively affects their positive word of mouth about the retailer.

3. Research methodology

This research employs quantitative method with questionnaires built by using different scales from previous studies. Particularly, channel integration quality perceived by customers and customer engagement are adopted from Lee et al (2018); consumer empowerment is adopted from Wu & Chang (2016), Emrich et al (2015),

Herhausen et al (2015), Seck & Phillippe (2013); repurchase and positive word-of-mouth are adopted from Lee et al (2018).

The sample is collected from consumers who are above the age of 18 and living in Danang, Vietnam. They are people who either used to buy or usually purchase more than one channel from retailers of consumer electronics (for example: two or more channels among ones such as physical stores, websites, social networks, mobile...) for a period of 3 months from the date of purchase to the date of collecting sample. The survey is carried out on different groups of customers in term of gender, age, education levels in many areas of Danang city to achieve being representative of the chosen population studied. First, a pilot test was conducted on 20 consumers with the aim of adjusting indicators to be appropriate to Vietnamese shopping habits. Afterward, an official survey of 400 consumers is conducted under the co-ordination of 05 trained interviewers, collecting samples at physical stores which sell consumer electronics in Danang. After excluding invalid questionnaires which have the same answers for most questions in order to clean data, we finally obtained 396 valid copies out of a total of 400 ones collected from respondents.

To evaluate the quality of scales as well as to test the proposed research model, the partial least square (PLS) method implemented in Smart PLS 3.0 (version 3.2.8) is employed. This method is appropriate for the exploratory nature of this research since there is no prior study assessing the framework of these variables in Vietnam as well as on the world. Moreover, by employing a component-based approach, PLS analysis allows to examine both formative and reflective constructs (Rai et al, 2006). In this paper, customers' perception of channel integration quality and customer engagement are considered as high formative constructs, whereas other variables in the framework are measured as reflective constructs.

4. Empirical results and Discussions

4.1. Measurement model

To test the reliability of the scales, this study applied the recommendations of Hair et al. (2016) including Cronbach's alpha, composite reliability, convergent validity and discriminant validity. The results show that the scales achieve internal consistency when Cronbach's alpha and composite reliability (CR) are greater than 0.7. Then, to improve reliability, outer loadings validity less than 0.7 such as CA2 (0,441); CA6 (0,591); EP3 (0,673) will be omitted. Moreover, each construct's average variance extracted (AVE) value is all greater than 0,50. Therefore, the measurement model ensures convergent validity. Finally, the results of Heterotrait-Monotrait Ratio (HTMT) of correlations show that all correlation values between constructs are lower than the threshold value of 0,85. In addition, the Bootstrap procedure with 5000 subsamples indicates that the value 1 falls outside the confidence interval's ranges. Hence, the discriminant validity of measurement model is established. The table 1 below presents the results of assessing the validity and reliability of research's measurements.

Table 1: The results of assessing the validity and reliability of research's measurements

	Cronbach's Alpha	CR	AVE
Breadth of channel service choice (BC)	0.879	0.918	0.739
Transparency of channel service configuration (TC)	0.828	0.886	0.662
Content consistency (CC)	0.775	0.856	0.598
Process consistency (PC)	0.868	0.911	0.720
Conscious attention (CA)	0.939	0.957	0.847
Enthusied participation (EP)	0.753	0.843	0.573
Social connection (SC)	0.870	0.920	0.794
Consumer empowerment (CE)	0.781	0.851	0.533
Re-purchase intention (RI)	0.917	0.941	0.800
Positive word-of-mouth (WOM)	0.899	0.924	0.754

Table 2: The results of testing research hypotheses

Hypotheses	Research model					Conclusion
	Path coefficient (β)	Std.	T- value	95% confidence intervals	VIF	
H1	0.458	0.041	11.266***	[0.374; 0,535]	1.472	Accepted
H2	0.306	0.041	7.536***	[0.225; 0,386]	1.431	Accepted
H3	0.347	0.048	7.296***	[0.247; 0,434]	1.296	Accepted
H4	0.304	0.046	6.633***	[0.210; 0,392]	1.296	Accepted
H5	0.184	0.041	4.481***	[0.104; 0,264]	1.458	Accepted
H6	0.284	0.055	5.157***	[0.173; 0,387]	1.440	Accepted
H7	0.363	0.055	6.612***	[0.256; 0,468]	1.440	Accepted
H8	0.574	0.035	16.210***	[0.500; 0,638]	1.000	Accepted

4.2. Structural model

The criteria for evaluating the quality of

PLS-SEM model as well as the hypothesis testing steps in this study are based on the recommendations of Hair et al. (2017). First, the results of the variance inflation factor (VIF) are less than 4, allowing us to confirm that the collinearity between explanatory variables is not a serious problem in the structural model (Hair et al, 2016). It is, therefore, possible to continue the next steps of the evaluation.

As expected, the path coefficients related to the effects between variables in the research model are statistically significant at the 5% significance level. Notably, the Bootstrap test results with 5000 replicates show that the above coefficients are all different from 0. Therefore, it can be concluded that the hypotheses from H1 to H8 are supported on data. The results of path coefficient analysis are presented in Figure 2.

The results show that among the two dimensions of channel integration quality, channel service con-

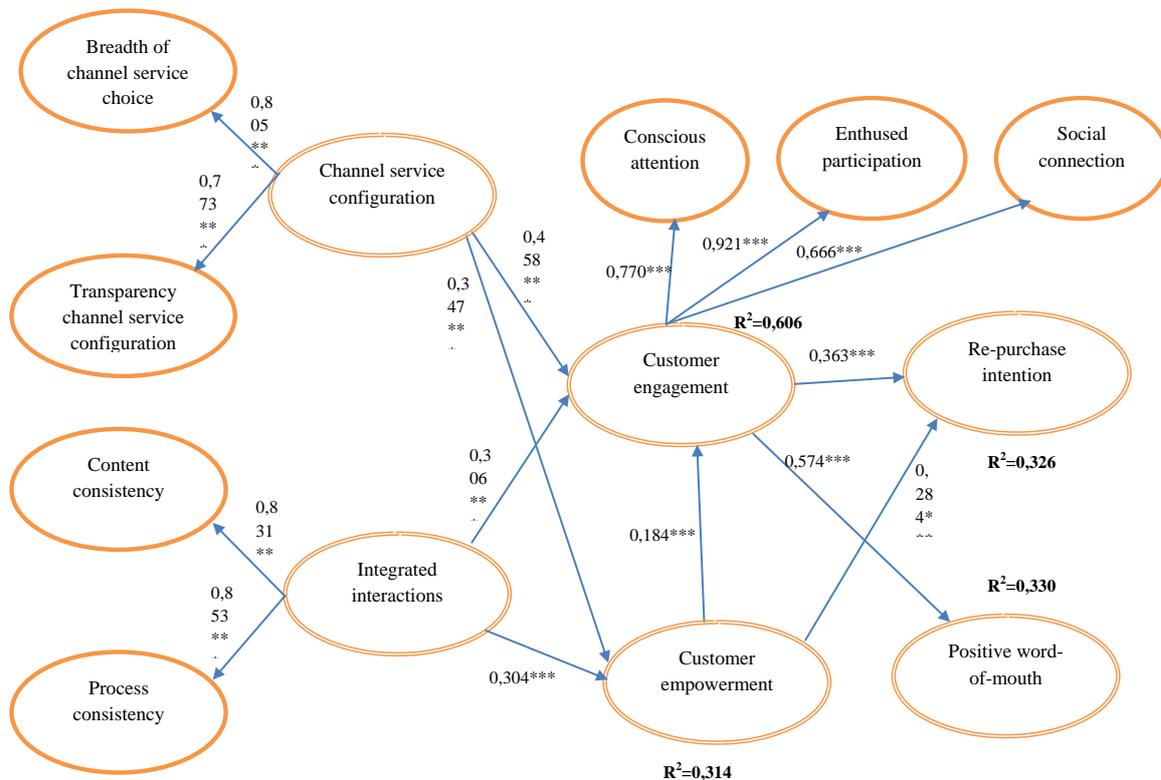
figuration more strongly affects customer engagement ($\beta = 0,458$) and consumer empowerment ($\beta = 0,347$) than that of integrated interactions ($\beta = 0,306$

và $\beta = 0,304$). Additionally, creating customer engagement has proved to be an important antecedent that leads to re-purchase intention ($\beta =$

$0,363$) and customers' positive word-of-mouth ($\beta = 0,574$). Finally, the findings also show that consumer empowerment contributes to customer engagement ($\beta = 0,184$) and enhances their re-purchase intention ($\beta = 0,284$).

Table 3: The result of mediator role at Percher & Hayer (2008)'s suggestion

Relationships	Indirect influence	95% confidence interval of indirect effects	p-value
Channel service configuration → consumer empowerment → Customer engagement	0,064	[0,036; 0,100]	0,000
Integrated interactions → Consumer empowerment → Customer engagement	0,056	[0,028; 0,093]	0,001
Channel service configuration → Consumer empowerment → Re-purchase intention	0,099	[0,054; 0,151]	0,000
Integrated interactions → Consumer empowerment → Re-purchase intention	0,086	[0,046; 0,136]	0,000
Channel service configuration → Customer engagement → Positive WOM	0,263	[0,207; 0,318]	0,000
Integrated interactions → Customer engagement → Positive WOM	0,176	[0,126; 0,230]	0,000



Note: * $p < 0,05$; ** $p < 0,01$; *** $p < 0,001$

Figure 2: Final PLS-SEM result

To test the predictive power of endogenous structures - which reflect the value of relationships, the study uses R-square values. The R^2 of customer engagement (0,606) is assessed to be significant. Meanwhile, the R^2 of consumer empowerment (0,314), re-purchase intention (0,330) are considered as average according to many researchers like Henseler et al. (2009), even as quite strong for researches on consumer behaviours at the suggestion's Hair et al (2016). Table 2 presents the results of testing research hypotheses.

This study also considers the mediating effects of consumer empowerment and customer engagement on other causal relations in the research framework. The proposals of Peacher & Hayes (2008) were employed with the results presented in Table 3. Accordingly, the analysis results allow conclusions that exist the mediating role of consumer empowerment in the relationships between channel integration quality and customer engagement. Specifically, zero does not appear in the result of the Bootstrap's confidence intervals and the specific indirect effect is statistically significant (Zhao & et al, 2010). Similar analyses also are conducted to confirm the mediating role of customer engagement and positive word-of-mouth.

4.3. Conclusion

From the empirical results presented above, there are four major noteworthy points which will be discussed in this section.

First, one of main research objectives is to assess the relation between customer perception of channel integration quality and customer engagement toward retailers, thereby improving their re-purchase intention and positive word-of-mouth. In general, the empirical findings are in line with the theoretical background and prior studies for the research context of multi-channel retail, especially the work of Lee et al (2018) for omni-channel retail in China. Particularly, when customer have positive feelings about the quality of channel integration activities at a retailer, this will directly drive their engagement toward that retailer. In addition, we also find an indi-

rect impact of consumer empowerment variable on the mentioned relation. This can be considered as the fulfilment of research gap in extant literature. It can be said that, in multi-channel retailing setting, retailers try to improve customers' perception of channel integration quality by empowering them in order to make them more confident, and make them control their shopping process, leading to enhancing customer engagement toward retailers.

Second, the direct relation between perceived channel integration quality and consumer empowerment is found in this study, which can be regarded as a noteworthy point in comparison with researches in the same area in Vietnam as well as on the world. Considering and assessing the mentioned relation were mentioned by Lee et al (2018) in their paper as future research suggestion. Particularly, the higher degree of customer perception of channel integration quality, the higher degree of consumer empowerment in their shopping processes.

Third, the empirical results not only indicate a direct impact of consumer empowerment on their re-purchase intention but also point out an indirect effect of consumer empowerment on the relationship between perceived channel integration quality and re-purchase intention. In fact, when consumers have the rights to control their shopping processes, especially in multi-channel retail, they are more likely to increase their re-purchase intention toward that retailer. Besides, by increasing perceived quality of channel integration, retailers try to empower consumers to take control of their shopping processes, resulting in improving their repurchase intention. This result implies the significance of consumer empowerment in the current multi-channel retailing setting on the world as well as in Vietnam- which has been attracting special attentions from many scholars like Zhang et al (2018).

Final, the role of creating customer engagement is highlighted in this study as to be proved as a vital antecedent influencing customers' re-purchase intention and positive word-of-mouth. It can be said that this is a notable contribution because once again

it confirms the significance of making customer engagement to retail enterprises, especially those with customer-oriented culture. Moreover, customer engagement plays a mediating role in the relation of positive perception of channel integration quality by customers and their positive word-of-mouth. In other words, when customers have good feelings about the quality of channel integration activities, they are more likely to be engaged with the retailer, and then, improving positive word-of-mouth about that retailer.

5. Conclusion and suggestions

5.1. Conclusion

From the theoretical aspect, this study achieves the goal of systematizing the theory of customer perception of channel integration quality in general, and in consumer electronics in particular. Specifically, we confirm that channel integration quality brings about customer engagement, leading to re-purchase intention and positive word-of-mouth. Furthermore, we verify the reliability and validity of concepts as well as the research model in the context of consumer electronics sector in Vietnam. Thereby, this study brings practical and managerial implications for multi-channel retailers in general and for consumer electronics sector in particular. However, this study also has some limitations of research scope, especially it only conducts the survey in Danang city as well as assess only for consumer electronics sector. Moreover, the research model did not consider the effects of other relevant variables such as physical store quality, online store quality, consumer cultures, demographic variables, .etc.

5.2. Suggestions

For retailers in general and consumer electronics retailers in particular, it is essential to assess customers' perception of channel integration quality. In other words, retailers should focus on consumers' reactions and experiences to enhance customer engagement, thus, improving repurchase intention and positive word-of-mouth, especially:

Integrated interactions have been found to have a stronger effect on customer engagement than

channel service configuration, especially for high-value digital products. This is because this type of products requires a high level of seeking and assessing information on alternatives, and therefore, having more interactions with retailers across channels. Without consistencies of content and process, customers could feel disappointed when they switch channel to channel and then, they can move to other retailers. Hence, retailers should maintain consistencies of content and process across channels to avoid any potential confusions for customers. For example, information on products and marketing should be synchronised across channels; employees should be instructed to follow standardised steps and business processes to ensure a consistent and professional responses to customers' requests; unified standards for product delivery, return, and exchange should be established and implemented across channels to enhance process consistency. Specially, the advertising through various means helps increase the transparency of channel service configuration. In particular, retailers can advertise their online stores via physical stores which many customers regularly visit.

Besides, retailers also provide the flexibility of channel service configuration choice for customers and allow them to complete a specific shopping task with a convenient but personalised channel. Moreover, the transparency of channel service configuration needs to be clarified for customers. For instance, customers can buy online and pick their orders at physical stores as well as retailers should provide them a well-integrated shopping experience across channels. ♦

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Summary

Cùng với sự phát triển nhanh chóng của công nghệ tại cửa hàng, dịch vụ đa kênh đang được

chuyển sang đa kênh tích hợp. Việc tích hợp hiệu quả các kênh bán hàng giúp nhà bán lẻ không chỉ tăng trưởng doanh số, tối ưu hóa chi phí phục vụ khách hàng mà còn khiến họ hài lòng, trung thành, gắn kết hơn với nhà bán lẻ. Nghiên cứu này kiểm chứng khung lý thuyết về ảnh hưởng của chất lượng tích hợp kênh bán lẻ cảm nhận đến sự gắn kết của người tiêu dùng trong bối cảnh ngành bán lẻ hàng điện tử tiêu dùng tại Việt Nam. Kết quả phân tích dữ liệu bằng mô hình PLS-SEM cho thấy tác động tích cực của các thuộc tính chất lượng tích hợp kênh, trực tiếp và gián tiếp ảnh hưởng lên sự gắn kết khách hàng thông qua thuộc tính trao quyền cho người tiêu dùng. Kết quả thực nghiệm còn ngụ ý vai trò quan trọng của chất lượng tích hợp kênh cảm nhận trong việc gia tăng sự gắn kết khách hàng nhằm thúc đẩy ý định mua lại và truyền miệng tích cực của họ.

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