A new model for click-and-mortar loyalty

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Abstract

The retail industry today faces a tremendous challenges and unique opportunities with a potential impact on surviving in a business model that includes the internet. Although increasing numbers of researchers and practitioners are interested in the customer loyalty of bricks-and-mortar retail or e-tailing, few of them have been spent on studying specific customer loyalty for click-and-mortar retail marketing trend. In this research, a model based on integrated construct perspective is developed to solve the problem. It is assumed that when customers go shopping in click-and-mortar store, their learning hierarchy process is more integrated orientation. In other words, whether a loyal customer would repurchase a product in click-and-mortar environment is determined by the procedure of integrated perception, integrated emotion, and integrated behavior.

Keywords: retail, click-and-mortar, loyalty, learning hierarchy process, bookstore.

1. Introduction

The retailer today faces a tremendous challenges and unique opportunities with a potential impact on surviving in a business model that includes the internet. As the marketer takes a more customer centric approach and focuses on the consumer rather than the channel integration, many of the traditional retailers fade away. The key, then, is better understanding the click-and-mortar customer and what drives them to buy from a single channel or from multiple channels. Unfortunately, most of marketing academicians have been treating online and offline business as separate entities, but that is not corresponding to modern retail marketplace. In our point of view, click-and-mortar retailers need to build their customer perception integrated infrastructure for the long-term, and take more concentration on market changing indicate that bringing both online and offline customer feeling in-house is the only way to retain relationships across multiple channels. These could be proved as "Key findings of CRM" [17] and proved by several aforementioned literatures as following descriptions:

■ 83 percent of online buyers would like to be able to return online purchases at offline stores while 59 percent said that they would like to order a product online and pick it up at an offline store [17].

■ Customers want to know whether click-and-mortar retailers can track customers' transactions across all

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channels [17].

■ Poor online customer services provided from an e-tailing will drives 70 percent online buyers to spend less money at that merchant's offline store [17].

■ Internet is primarily used as an instrument for information searching rather than as a route to purchase products [50].

■ Customers prefer to search for product information online, but making their purchases at brick and mortar stores [9][19].

By considering above survey and studies, it is inarguably that online and offline environments present synthetic entity with shopping experiences even when the same products can be purchased. Besides, Gulati and Garino (2000) have descript that success in the new economy will go to those who can execute click-and-mortar strategies that bridge the physical and virtual worlds. Hence, building a well-developed evaluation model for click-and-mortar retail is an important task. Several previous researches have studied related filed about click-and-mortar. Sautter et al. (2004) proposed the e-tailing atmospherics extending framework by introducing the concept of click-and-mortar environment. Keen et al. (2004) examined the structure for consumer preferences to decision-making process from one of retail format (store, catalog, or internet), their result showed that customer have a preference for the internet as a retail shopping alternative. Clarke and Flaherty (2004) discussed the transforming a traditional brick-and-mortar store into click-and-mortar with a small business and pointed out where does it failure resulting from. Ganesh (2004) discussed the customer preference factor in a multi-channel environment, and the results indicated that multi-channel integration would improve customer loyalty and retention. Although, their findings are interesting, the research scenario did not take the consumer's learning hierarchy process [44] into consideration. Besides, though existing literatures provide insight into how important factors about click-and-mortar, we do not have a complete integrated construct based on customer perspective and their feature list, especially for perceived loyalty click-and-mortar customer in environment. Therefore, the purpose of this research is to build a well-developed loyalty evaluation model base on learning hierarchy process and integrated construct perspective. Our results could be have practical implications for managers as they can direct their limited organizational resources to improve the specific click-and-mortar construct and work to provide consumers with more value through services which will consequently improving online and offline standards of quality and performances. The research conceptual model is as following figure 1.

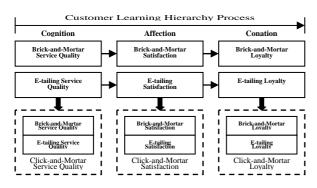


Figure 1. The Research Conceptual Model

2. Literature review

2.1 Learning hierarchy process

In this research, we adapted the learning hierarchy process. Such customer mental process conception could be empirical proved by Choi et al. (2004), the importance of learning hierarchy process involvement stems from its role in hierarchy of effects theory. In order to better assess this role, it is important to understand how the hierarchy developed overtime. Here is a brief overview:

1. Early Development: St. Elmo Lewis proposed the first effects model, the AIDA, in 1898. The AIDA model, which stands for attention, interest, desire, and action, described the sequential process that consumers must go through in order to make a purchase. By 1925 the model became so prevalent, it was estimated that ninety percent of the persons engaged in selling were influenced by either the AIDA model or one of its variations [6].

2. Modern Development: The hierarchy of effects theory was marked by the work of Lavidge and Steiner (1961). They maintained that advertising persuasion was a long-term process and felt that measurement of immediate sales should not be used to evaluate the effectiveness of advertising messages. Lavidge and Steiner's model, actually named "the hierarchy of effects" was composed of six steps: awareness, knowledge, liking, preference, conviction, and purchase. Later, these six steps became more popularly known as "cognition," "affect," and "conation." It is important to note that, even though other variations of the hierarchy of effects were developed during this period, all these models followed the cognition-affect-conation sequence.

3. Challenges and Defenses (Involvement Period): Concerns posed by Palda (1966) over the lack of experimental evidence to support the hierarchy of effects stirred a new developmental phase in the theory. Palda's challenge was soon followed by Ray's insightful suggestion that perhaps there were alternate orders to the hierarchy of effects (1973). More precisely, Ray suggested that there were three orders about customer decision making. They are: cognition-affect-conation, conation-affect-cognition and conation-cognition-affect.

2.2 Cognition in service quality

Service quality is usually invisible and more difficult to be evaluated than other physical qualities. Measuring service quality seems to pose difficulties for service providers because of the unique characteristics of service: heterogeneity, intangibility, inseparability and perish-ability [7]. Similarly, it was also traditionally defined as the degree of discrepancy between customers' normative expectations for the service and their perceptions of the service performance. Perceived service quality is then interpreted from the differences in degree and direction between perceptions and expectations [39]. However, the generalizibility of the dimensions of SERVQUAL across different industries is questioned [43], and current discussion among marketing academics and practitioners suggest that in order to accurately access service quality in different industry settings, modifications of the SERVQUAL scale may be needed [12]. Therefore, in our point of view, how can we take advantage of SERVQUAL as a generalized scale to measure electronic related industries with human interaction component as well as click-and-mortar store? By previous reasons, the service quality of this research is separated by offline service quality and online service quality in order to measure click-and-mortar environment accurately.

2.3 Affection in satisfaction

For many years academicians have studied customer satisfaction in physical retail environment or virtual retail involves environment that face-to-face and face-to-machine interactions with customers [5][52]. However, with multi-channel interface serving as the primary point of customer contact for many firms, researchers and managers are now interested in exploring customer satisfaction in click-and-mortar settings [36][40]. Oliver (1997) have defined satisfaction as the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with a customer's prior feelings about the consumer experience. Besides, Anderson and Srinivasan (2003) defined e-satisfaction as the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm, but we do not take the same identical with them. Because of the click-and-mortar settings are oriented toward to integration with human and machine interactions at the same time. Prior studies have examined antecedents and behavioral outcomes of satisfaction in an offline or online setting but rare studies explore whether the findings hold for increasingly important click-and-mortar settings. Therefore, in this research, click-and-mortar satisfaction is defined as the complimentary satisfaction including physical and virtual environment. We propose:

H1. Online satisfaction has a positive impact on offline satisfaction.

H2. Offline satisfaction has a positive impact on online satisfaction.

2.4 Conation in loyalty

To know intimately that a loyal customer is more likely to find the service encounter and the overall experience with a service provider more satisfying than a non-loyal customer. However, it is widely recognized by academics and practitioners that purchasing through an online store is different from traditional store environments [3], let alone in click-and-mortar environment. With Oliver's (1997) research that loyalty is a deeply held commitment to repurchase a preferred product or service consistently in the future, thereby causing repetitive same brand purchasing. Oliver suggests that ultimate customer loyalty is a function of perceived product superiority, personal fortitude, social bonding, and their synergistic effects. Thus Oliver considers both behavioral loyalty (i.e. purchase) and attitudinal loyalty (i.e. fortitude) components in his conceptualization of the lovalty construct. Further, the use of both attitude and behavior in a loyalty definition substantially increases the predictive power of loyalty [41]. Surprisingly, some scholars proved that no matter offline or online loyalty they are no difference and some were proved they are not equal. Reichheld & Scheffer (2000) claimed that there are no differences in fundamental economics of customer loyalty between online and offline business and Shankar et al. (2003) claimed that loyalty is higher when the service is chosen online than offline. Consequently, we defined click-and-mortar loyalty as a complex loyalty will mutually influence both offline and online.

H3. Offline loyalty has a positive impact on online loyalty. *H4.* Online loyalty has a positive impact on offline loyalty.

2.5 The relationship between service quality and satisfaction

The most widely known and discussed scale for measuring service quality is SERVQUAL, but Janda et al. (2002) claimed that service quality should not only focus on model of overall service quality, but also industry-specific service quality. Therefore, Westbrook (1981) suggested that two broad categories of retailer-related experiences are important to the customer. They are: (1) in-store experience and (2) experiences related to merchandise. Furthermore, Brady and Cronin (2001) also discussed a third order service quality comprised of interaction quality, physical environment quality and outcome quality. In other words, all theses offline categories are related to two perspectives: One is environment quality which represents customer perception of the comfort about the tangible feature from service provider [22]. Another one is product quality which represents customer perception of expected standard to product excellence [2].

On the other hand, system quality describes the measures of websites as information processing system.

Information quality is likely to help customers to compare purchasing products, enhancing purchasing enjoyment and taking better purchase choices [2]. Prior studies stressed the importance of information quality, and frequently used measures in the website environment are the content quality [42]. Therefore, system quality and information quality are still important measures in the web context. In contemporary marketing field, numerous retail researchers identified that offline service quality has a positive affection on physical satisfaction [13][16][52] not to come singly but in pairs, that e-tailing researchers also identified that online service quality has a positive affection on online satisfaction[18][32][53]. Hence we propose:

H5. Product quality has a positive impact on offline satisfaction.

H6. Environment quality has a positive impact on offline satisfaction.

H7. System quality has a positive impact on online satisfaction.

H8. Information quality has a positive impact on offline satisfaction.

2.6 The relationship between satisfaction and loyalty

Satisfaction has often been regarded as an antecedent of loyalty for various service providers. It is also verified in the retail field that store satisfaction has a positive relationship with store loyalty [33]. Besides, Juhl et al. (2002) utilized the European Customer Satisfaction Index (ECSI) model for measuring customer loyalty in retail environment and proposed: The loyalty measure is a well-known proxy for economic results, and therefore, the estimated measure of customer satisfaction will be a forward looking indicator of economic performance. Therefore, we expect:

H9. Offline satisfaction has a positive impact on offline loyalty.

Because of electronic businesses is only a mouse click away in e-tailing settings, so it is important that managers understand how to build customer loyalty in online markets. Besides, some scholars pointed out that online satisfaction will positive influence online loyalty in the e-tailing environment [4][26][48]. Hence, we expect:

H10. Online satisfaction has a positive impact on online loyalty.

Customer satisfaction is fundamental to marketing concept, which holds that satisfying customer needs is the key to generating customer loyalty. Satisfaction has been studied extensively in offline retail environment, often as the single most important construct that determines subsequent customer behavior. It is no surprise then, that most of the recent research in the online retail environment has also evidenced customer satisfaction as fundamental to establishing customer loyalty [48]. However, the relationship between customer satisfaction and customer loyalty are more complex in click-and-mortar environment than single channel environment. According to ForeSee Results's 2004 survey showed that nearly 40% of multi-channel customers prefer to use the website for browsing and researching their purchases. Besides, nearly 59 percent of multi-channel customers that they would like to order a product online but pick it up at an offline store [17], and hence the gap between online/offline satisfaction and loyalty is still alarming. Up to these points, in this research we expect that no matter offline or online satisfaction and loyalty are mutually fuel each other. We propose:

H11. Online satisfaction has a positive impact on offline loyalty.

H12. Offline satisfaction has a positive impact on online loyalty.

Figure 2 displays the framework that drives our conceptual development. In general, we argue that service quality, satisfaction and loyalty have the mutually causality influence both offline and online. As the figure indicates, we theorize that this has major strategic consequences in click-and-mortar operation.

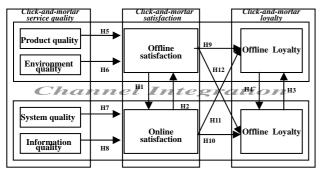


Figure 2. Proposed model and causality

3. Empirical study

It was decided to investigate empirically the roles of service quality, satisfaction both online and offline as determinant of customer loyalty to a click-and-mortar bookstore. The market for click-and-mortar bookstore is significant, and is likely to grow as the internet generation ages and the average age of the population increases. In many parts of the world it is already an extremely popular industry: for instance, Barnesand & Noble Bookseller in America (www.barnesandnoble.com), Oxford Bookstore India (www.oxfordbookstore.com), in Kinokuniya Booksotre in Japan (www.kinokuniya.co.jp), Arthursbooks in Malaysia (www.arthursbooks.com), SNP Bookstore in Singapore (www.myepb.com), Kingstone Bookstore in Taiwan (www.kingstone.com.tw), Eslitebooks in Taiwan (www.eslitebooks.com) and so forth, all these click-and-mortar bookstores are best famous in each country. The trend of click-and-mortar bookstore integration grows rapidly all over the world.

3.1 Subject and data collection

To carter for this multi-channel trend, Kingstone bookstore was chosen for the study. Because of its

popularity among the products available online also have well-known physical storefront while other pure electronic bookstores are not correspond to this topic of the research. To collect the customer perception data, we set an online survey website that was hyperlinked to the target click-and-mortar bookstore in its discussion group. The unit of analysis in this study is the individual customer who has experience with purchasing books at Kingstone click-and-mortar bookstore in Taiwan. The respondents were instructed to answer all the items based on their experience when purchasing that particular click-and-mortar bookstore. Respondents were asked to mark their answers to each of the items using the 1 to 5 Likert scales on which the anchor for 1 was "strongly disagree" and for 5 "strongly agree". A total of 184 usable responses were collected with a response rate of 86 per cent. Most of the respondents were female, constituting 54.9 per cent of the sample. This gender split appears suitable given that a recent survey by the FIND (2003) indicated that young females 20 to 30 years old as typical shoppers of online shopping in Taiwan. Descriptive statistics of the respondent profile is shown in following table 1.

Table 1. Descriptive statistics of the respondent profile

Measure	Items	Frequency	Percentage	
Gender	Male	83	45.1	
	Female	101	54.9	
Age	Below 20	2	1.1	
	20-29	162	88.1	
	30-39	17	9.2	
	Over 40	3	1.6	
Occupation	Student	87	47.3	
	Self-employee	21	11.4	
	Specialist	36	19.6	
	Education	16	8.7	
	Service	24	13.0	
Education	Senior	6	3.3	
	Bachelor	125	67.9	
	Master	53	28.8	
Salary	Under 10,000	101	54.9	
	10,000~20,000	14	7.6	
	20,000~30,000	31	16.8	
	Over 40,000	38	20.7	

3.2 Measurement development

The measure items for the research construct were derived from single channel retailing literatures. They were developed and validated instruments for measuring both online and offline characteristics in the click-and-mortar environment. These sample items were initially assessed by expert including MIS professor, website designer and bookstore manager. They were asked to evaluate the items and make changes to eliminate repetitive items, non-customer oriented items and sub-attributes of higher level attributes. After evaluation, 34 items remained as following description: Environment quality was measured with 4 items adapted from Fullerton (2005). Product quality was measured with 4 items, System quality was measured with 4 items and Information quality was measured with 4 items all these three constructs were previously used by Ahn et al. (2004). Offline satisfaction was measured with 5 items and Offline loyalty was measured with 4 items these two constructs were previously employed by Wong (2004). Online satisfaction was measured with 5 items and online lovalty was measured with 4 items both of them were previously used by Ribbink et al. (2004). With the establishment with the content validity prior to administering the survey, a pilot test was conducted among 55 graduate students to pre-test for the item content and its reliability. Consequently, we dropped 6 items due to low reliability scores and re-specified some wording to clarify the meaning of items which was suggested by the result of pilot test. The resulting questionnaire consisted of 28 items to measure the 10 latent variables. All items and its operationalized definitions of the questionnaire are shown in table 2 and table 3.

Table 2. Definition of research constructs

Constructs	Definition	References
Environment quality	Customer perception of the comfort about the tangible feature from service place.	Brady & Cronin (2001) Fullerton (2005)
Product quality	Customer perception of expected standard to product excellence.	Jarvenpaa & Todd (1997) Ahn et al. (2004)
System quality	Customer perception of degree to reliability and efficiency in using website.	Ranganathan & Ganapathy (2002) Ahn et al. (2004)
Information quality	Customer perception of the quality of the information provided from website.	Lin & Lu (2000) Ahn et al. (2004)
Offline satisfaction	Customer evaluated for one-time consumption or ongoing consumption, focused on product or service.	Oliver (1997) Wong (2004)
Online satisfaction	Customer satisfaction with an online store.	Ribbink et al. (2004)
Offline loyalty	Customers will make more purchases as compared to less loyal customers.	Baldinger and Rubinson (1996) Wong (2004)
Online loyalty	Customer's favorable attitude toward an electronic business, resulting in repeat purchasing behavior.	Anderson & Srinivasan (2003) Ribbink et al. (2004)

Internal consistency reliability is a statement about the stability of individual measurement items across replications from the same source of subject. The Cronbach alpha coefficient was conducted to measure reliability of the items. As shown in table 3, all constructs reliability coefficients were acceptable ranging from 0.86 for online loyalty to 0.71 for system quality. Indicates all the reliability were greater than 0.6, the lowest acceptable

threshold suggested by Hair et al. (1998).

Table 3. Items	of	research	constructs	and	reliability

Constructs	Items (anchors: strongly disagree/strongly agree)	Alpha		
System quality	 The website is easy to search for a book I want. The website is easy to navigate its content provided. When click the link, I nee not wait for a long time. The website provides transaction security scheme. 	0.710		
Information quality	 The website provides complete book information. The website provides accurate book information. The website provides particular book information. The website provides update book information. 	0.826		
Environment quality	 Reading environment is the best in its industry. The store layout gives me deeply impression. 			
Product quality	 The store sales many kinds of books. The store sales the new publication books. 	0.718		
Offline satisfaction	 I feel pleased when shopping at Kingstone bookstore. I feel satisfied when shopping at Kingstone bookstore. I am interested rambling in Kingstone bookstore. I feel enjoyment when I am in Kingstone bookstore. 	0.832		
Online satisfaction	 Compared to others, the website let me feel satisfy. The service provided consists with my expectation. Overall I am satisfied with the website service provided. 			
Offline loyalty	 I say positive things about the bookstore to my friend. I would recommend the bookstore to my relatives. I would encourage my friend to buy in this boostore. I consider Kingstone my best choice in the future. 	0.826		
Online loyalty	 I recommend the website to who seek my advice. Compared to others, the website is my first choice. I will keep buying from the website in the future. I suggest my relatives to buy in this website. 	0.869		

3.3 Validity of measurement 3.3.1 Construct validity

In this study, we conducted Straub's (1989) processes of validating instruments to examine construct validity in terms of discriminant and convergent validity. Discriminant validity is the degree to which measures of different concepts are distinct. The discriminant of each research construct was computed by principal component analysis with VARIMAX rotation. The results shown in table 4.

Table 4. The discriminant and convergent validity

Constructs	Item	Eigenvalue	loading	Item to total correlation	Variance explained	Cumu lative
Independent	IQ1	4.91	0.807	0.673	21.350	21.35
variables	IQ2		0.736	0.664		
Information	IQ3		0.869	0.676		
quality	IQ4		0.590	0.489		
System	SQ1	1.29	0.568	0.450	17.591	38.94
quality	SQ2		0.697	0.547		
	SQ3		0.783	0.623		
	SQ4		0.781	0.607		
Product	PQ1	1.18	0.808	0.637	16.831	55.77
quality	PQ2		0.719	0.654		
Environment	EQ1	1.09	0.739	0.663	13.338	69.11
quality	EQ2		0.893	0.692		
Mediate	OFSA1	3.10	0.717	0.688	38.339	38.33
variables	OFSA2		0.808	0.703		
Offline	OFSA3		0.879	0.774		
satisfaction	OFSA4		0.837	0.671		
Online	ONSA1	1.90	0.859	0.727	33.133	71.47
satisfaction	ONSA2		0.861	0.719		
	ONSA3		0.883	0.728		
Outcome	ONLA1	4.60	0.820	0.694	35.905	35.90
variables	ONLA2		0.785	0.658		
Online	ONLA3		0.777	0.655		
loyalty	ONLA4		0.727	0.701		
Offline	OFLA1	1.96	0.665	0.668	33.711	69.61
loyalty	OFLA2		0.839	0.629		
	OFLA3		0.842	0.585		
	OFLA4		0.625	0.612		

Note: IQ = Information quality, SQ = System quality, PQ = Product quality, EQ = Environment quality, OFSA = Offline satisfaction, ONSA = Online satisfaction, ONLA = Online loyalty, OFLA = Offline quality

At the part of independent variables, the confirmatory factor analysis extracted four distinct factors. They are information quality, system quality, product quality and environment quality. Factor loading for all variables were over than 0.56 that indicates no cross-construct occurred and have well discriminant validity. To sum, the four estimated factors accounted for 69 per cent of total explained variance. Besides, in order to validate the appropriateness of factor analysis, we conducted Bartlett's test of sphericity and Kaiser-Meyer-Olkin measure of sampling adequacy. Here, Bartlett's test of sphericity $\chi^2_{66} = 866$, P < 0.001 indicates that the correlation matrix has significant correlations among at least some of the variables, and KMO = 0.865 showed acceptable sampling adequacy. To keep step with independent variables, mediate variables also measured with the same method. We applied the second factor analysis to investigate the distinction among the mediate variables. They are offline satisfaction and online satisfaction. As shown in table 4, factor loading for the two variables were greater than 0.7 with no cross-construct come about and two investigated variables accounted for 71 per cent of total explained variance. In addition. Bartlett's test of sphericity and Kaiser-Meyer-Olkin measure of this two variables were $\chi^2_{21} = 565, P < 0.001, KMO = 0.731$. The last factor analysis result of outcome variables were $\chi^2_{28} = 796$, P <0.001, KMO = 0.856, all these results indicate well discriminant validity. For examining convergent validity, we employed item-to-total correlation analysis in order to ensure that multiple items to measure the same construct are in adequacy. Computing the correlation of each item to the sum of the remaining items, items whose item-to-total correlation score was lower than 0.4 will be rejected for further analysis. The result shows all items were greater than 0.4 and indicates well convergent validity, as shown in table 4.

4. Conclusion and managerial implications

Click-and-mortar marketing is a topic of significant interest to consumer marketers. Managing for competitive advantage in the click-and-mortar environment means that retailer involved with integrated channel investment decisions must consider how they will manage the customer interactions across click-and-mortar. The proposed model can help retailers to identify the likelihood that whether customers purchasing behavior are different between offline and online. It can also assist the retailer increase the probability of click-and-mortar environment by addressing the factors driving channel uncertainly.

5. Limitations and future research

Although our research findings provide meaningful implications for click-and-mortar environment, our research have several limitations. First, the use of specific type of click-and-mortar retail store may lack of generality. Future research should replicate these finding from both within or across various industries, as larger generality sample would reflect more precisely breadth of understanding. Second, customer's perception were collected on self-report questionnaire survey it may accuse nature of bias. Future research could obtain customer perception from actual customer behavior by transaction database in order to diminish the bias with self-report data. Third, the model develop in this study is just a first step toward an understanding of the click-and-mortar loyalty. Each of the major predictor constructs may needs to be examined to assure the strength of their relationship with click-and-mortar loyalty.

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