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Yu-Wei Hsu

Lesley A. Gardner

Ananth Srinivasan

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UNDERSTANDING INTENTION TO REPURCHASE ON AUCTION WEBSITES FROM USERS' IT RELIANCE

Yu-Wei Hsu, University of Auckland, New Zealand, y.hsu@auckland.ac.nz

Lesley Gardner, University of Auckland, New Zealand, l.gardner@auckland.ac.nz

Ananth Asuri Srinivasan, University of Auckland, New Zealand, a.srinivasan@auckland.ac.nz

ABSTRACT

Does the level of users' information technology (IT) reliance lead to differences in the motivation of their intention to repurchase on auction websites? This study identifies two seller service propositions that positively affect buyers' repurchase intentions either directly or indirectly and aims to make two important contributions. First, this study introduces the concept of service provision, which suggests that buyers' expectations of service and their perception of service provision around purchase has an impact on customers' intention to repurchase from the same online seller in auction website. Second, this study examines the impact of service provision on buyers' repurchase intention both directly and indirectly.

Keywords: auction website, repurchase intention, IT reliance, online service provision

INTRODUCTION

While many studies have investigated repurchase intention in the business to customer (B2C) context, there is a lack of knowledge related to buyers' repurchase intention from the same online seller in customer to customer (C2C) contexts such as internet auctions involving personal selling. This study aims to address this gap in the literature by trying to understand buyers' repurchase intention in personal auction websites. Sellers' reputation, website design and consumers' personal preference are commonly adopted factors to explain buyers' repeated purchase intention. While those factors are inherited from the service provision around purchase, this study investigates buyers' intention to repurchase from the same online seller on auction websites from services that online sellers provide.

Service proposition has been described as the relationships between sellers and buyers and can be regarded as an overview of the online shopping environment [32]. As an overview, it provides a guideline for buyers on an auction website, for instance, in the form of product presentation or seller evaluation. Past research has suggested that the expectation of online service provision is based on personal factors [20 ; 31 ; 33]. In order to assess whether buyers' personal preferences have an impact on sellers' service provisions around purchase, perceived service was proposed by Zeithaml et al. [32] as a construct to measure seller performance evaluation as determined by buyers' personal judgement. Business value and customer preference value are also considered, in addition to service provision in the context of trading environments. The level of knowledge in online shopping environment seems critical when studying buyers' intention to repurchase, particularly when considering buyers who adopt online shopping with different purposes. The level of information technology (IT) reliance is adopted to identify potential differences in buyers' motivation to repurchase. Therefore, the focus of this study is to empirically examine factors that influence buyers' repurchase intentions on personal online auction websites.

The next section of this article addresses the literature review and research hypotheses, followed by a description of the two empirical studies. The last section discusses the findings and implications of this study.

LITERATURE REVIEW

Auction Website and Intention to Repurchase

Auction websites are online trading mechanisms that facilitate trading among members and allow them to trade a product at a negotiated value [29]. Unlike B2C auction contexts where the site operators have control of the product offering and payment receiving, C2C auction site operators allow individuals and small businesses to manage their product listing and payment. For instance, there are C2C auction websites that allow sellers to customise their web page (Yahoo Auction, Taiwan), there are those that offer a secure trading functionality (Taobao), and there are those with the simplest static design which enables online trading (eBay, TradeMe). In the light of this diversity in C2C auction websites and the increased competition among sellers in different online trading environments, knowledge is needed about the sustainability of business models for auction websites. While many online sellers are ordinary people, the desire to attract and retain buyers leads to the adoption of alternative business models [29]. One example is the "feedback" mechanism, where previous trading partners (buyers) review and rate their trading experience [34]. A feedback mechanism is available on most auction websites to help buyers evaluate the trustworthiness of the seller. Insights into sales performance, however, are inconclusive. While Choudhury and Karahanna [5] suggested that the customer loyalty for auction websites based on vendor (online seller) depends on the collective review of the seller, little is known about mechanisms that drive such loyalty development process. Unlike sellers in B2C online trading platforms, the sellers on auction websites may not be registered as a company. These sellers intend to start a business, but lack an established brand and have a lower level of customer loyalty development. The few studies available on this topic have either focused on pricing strategies and customer attraction [13], the confirmation of product quality [3], or the trust relationship between sellers and buyers [7]. While an online seller with a strong business tie can reasonably control most of those factors, online sellers on auction websites depend on the seller's performance proposition, and have to rely on previous trading partners' evaluations. As expected service and perceived service reflect those factors, this suggests that both concepts will drive consumers' intention to repurchase from the same online sellers on an auction website.

Value Proposition for Auction Websites

Expectation of service provision. Consumers' expectations of service provision around purchasing products from auction websites is a combination of their shopping experiences in offline environments and the promises that the online seller has made [32]. The level of expectation of service provision on an auction website differs with personal experience, and may include people who have rich online shopping experiences through to those who avoid online shopping [24]. Drawing on SERVQUAL, Zeithaml et al. [32] identified five dimensions that influence an individual's perception of expected service provision. The five dimensions are tangibility, reliability, responsiveness, assurance and empathy which reflected consumers' referral, personal needs and past experiences. In addition, Schiffman, O'Casey, Paladino, D'Alessandro, and Bednall [23] reported that the level of expectation of service provision will be influenced by interaction with the sellers during the purchasing process. In addition, the examination of current purchasing experience will have direct impacts on the next purchase service expectation [24 ; 33].

Based on the level of expected service, researchers have identified factors that will affect the level of expected service, such as website usability, information quality, interaction with sellers and evaluation of sellers. These expectations can be divided into expectations of the products and expectations of the sellers. The expectation of the products is derived from the information that the seller provides to help customers understand the product in the form of pictures and text. The expectation of the seller is mainly derived from reviews from previous trading partners [34]. Bhattacharjee [3] suggested that the degree of expectation of the seller will impact the level of expectation of the products, especially for the first-time buyer. The level of expectation of the products will then influence the self-evaluation of a seller for a repeated buyer.

The concept of expected service is built on the literature describing how buyers perceive sellers they don't know well, as it mainly aims to understand how buyers judge sellers in evaluations, such as feedback and rating, which are derived from the sellers' past trading performance, with a primary focus on buyers' personal preferences. Feedback and rating, which has been described as the evaluation of a particular trading evaluation, thus primarily focuses on the product, and provides little information about expectations of service provision, and is thus conceptually different from expectation of service provision [29]. This is corroborated by empirical evidence. Previous studies have detected a positive correlation between the concepts, but also found evidence for their distinctiveness after examining items that SERVQUAL used to evaluate buyers' expectations of service provision [32 ; 33]. Recent studies support the conceptualisation of sellers' feedback as an outcome of expectation on service provision [10]. It has been empirically confirmed that there is a causal link between expected service and seller's reputation [10; 23]. Furthermore, a full mediational assessment of expected service between the concept's antecedents by Zhang [34] found that the extent to which buyers perceived the online seller as a business influenced their reputation with it. The concept of expected service can thus help ascertain the motives for reputation [34].

Other group concepts used in extant research, such as website design, only constitute one dimension of expected service and are, therefore, conceptually different [17]. It has even been suggested that website design might be a less important aspect of expected service [28], a notion that was supported by Hellier, Geursen, Carr, and Rickard [12], who noted that, for the particular case of well-known online stores (i.e., online stores that are launched by designer brands), it was a reputation for distinctiveness among sellers, and therefore the opposite of brand awareness and website design, that drove expectations of service provision. Other studies of online sellers referred to a strong trust relationship between buyers and online sellers, 'witness' or consciousness of kind, a characteristic that is regarded as the most important of the three traditional characteristics or markers of online shopping environments [24].

In view of the variety of different online seller concepts used in previous studies, the add-on value of expectation of service provision can be found in its use as a theoretical product involvement concept that helps to understand "customers' intentions when purchasing a particular product and the level of commitment of customers to purchase from a particular brand" over the last decade [25 ; 27]. Online auction websites differ widely in terms of purpose or size and may range from tight-knit business entities to loose aggregates of individual sellers. Expectation of service has not been applied to research on online auction websites. Häubl and Trifts [9] studied expected service from websites, with individuals judging online shopping environments based on the representation of their offline shopping experiences. Their findings suggested that the expectation of service depends strongly on the level of similarity between realities and virtualisation. The authors concluded that, in less-organised online selling, strong perceptions of expectation of service may be based mainly on the quality of enquiry responsiveness, whereas for well-organised online stores, expected service depended on the quality of information provided. The findings underline the importance of considering the concept of expected service in research on auction websites, as it extends the idea of sellers' trustworthiness, which has received considerable attention from researchers who focused on the relationship between buyers and sellers in the online context. The distinctiveness of highly regarded sellers could serve as an important service proposition for auction websites, and may thus be the key to a successful online business model.

Perception of service provision. Perceived service has been identified as an important service proposition for online shopping environments [23; 33]. The concept has been the subject of much debate and a variety of definitions have been developed. A common dominator is that perceived service essentially reflects the evaluation of product and services. This is central to the widely-used definition that was introduced by Bhattacharjee [3]. Research has confirmed that buyers use their personal preferences, and hence the perceived service endowed upon these online stores, to find products, exchange goods, or to establish reputation loyalty development [12 ; 20 ; 24]. Perceived service is often defined in term of attributes, such as product

and service quality examination [3], expectation and promise [21], reputation and switching cost [14], and interaction between buyers and sellers [2], which various studies have combined in different ways [10 ; 29]. While these dimensions differ conceptually, they are connected, as buyers from a given online shopping environment are willing to make repeated purchases from the same online seller, because they believe (i.e., empathy) that a similar level of online shopping experience (i.e. simulation and responsiveness) will be maintained by the online seller (i.e., reliability). In other words, product examination, which is safeguarded (i.e., assurance) by examining the products and service quality of online sellers, facilitates strong relationships between buyers and online sellers. In an online context, several studies have focused on perceived service as a driver of online shopping motivation. For instance, Loiacono et al. [17], who investigated how online users perceived website design, concluded that online perceived service can spur the usage of the website. Oliver [19] found that product presentation and interaction with online sellers all enhance the willingness to shop online, while trust only has a positive impact on online repurchase intention to an online seller with a greater brand awareness. Gronholdt, Martensen, and Kristensen [8] took a different outcome focus. They studied the impact of perceived service on the level of customer satisfaction, and how the level of satisfaction in turn influenced their preference for the online seller.

DEVELOPMENT OF HYPOTHESES

Direct Relationships

Expected service and intention to repurchase. Customers perceive online sellers with a higher level of expectation of service provision as reliable, trustable and predictable. These characteristics are generally highly valued by buyers [21]. Past research suggests an online seller with a higher expected service provision level serves buyers better than sellers with a lower level of expected service provision [34]. As buyers strive to find predictable and reliable online sellers on an auction website, they are likely to be motivated and willing to spend more time to understand an online seller [29], or as Dholakia [6] suggested, a higher level of product involvement will motivate consumers' repurchase intention. Drawing on this research, this study expected to find that buyers are searching for a trustable online seller when shopping in the internet context.

Hypothesis 1a: Higher levels of expected service are positively associated with increased customers' intention to repurchase.

Perceived service and intention to repurchase. Researchers have argued that confirmation of product quality is an important antecedent to the trust relationship established with an online seller [21]. Parthasarathy and Bhattacharjee [20] observed that a good product quality is the main driving force for online trading. The other perceived service dimensions, reliability and responsiveness, are regarded as post-sale services. The purpose of the post-sale service is to compensate for any disappointment after examining the product [15], which encourages buyers' willingness to undertake repeated purchases. It also lowers buyers' perceived level of uncertainty in online shopping. There are several dimensions to the notion of perceived service: the assurance dimension, which has been described as "supervision from a third party" [7], includes assurance about trading and suspension policies from the auction websites. The dimensions of simulation and empathy are more likely to drive repurchase intention as buyers receive the necessary information to support their repurchase decision-making. The reliability and responsiveness dimensions effectively minimise online shopping uncertainty, with extra insurance from the assurance dimension. The five dimensions ensure an on-going intention to visit an auction website, which according to Gronholdt et al. [8], may create "strong customer preference" and hence positively affect buyers' intention to repurchase. Therefore, this study hypothesises:

Hypothesis 1b: Higher levels of perceived service are positively associated with increased customers' intention to repurchase.

Indirect Relationships

Expected service and business value. Perceived business value or benefit has been defined as the perceived utility acquired through the product and service that the seller provides through a specific online shopping environment (e.g., based on the performance of competitors in a given online shopping environment). Perceived business value is reflected by shopping support, the add-on value of the product, and brand, which is obtained through product involvement and interaction between buyers and sellers [33]. Sellers perceived as high in the level of expected service due to high degrees of product quality, interaction, and shopping support service should deliver higher value for their buyers compared to online sellers with less expected service [4 ; 34]. As studies on expected service have associated high levels of expectation of service provision with positive product and service quality and brand, this study hypothesises a positive influence of expected service on perceived business value.

Hypothesis 2a: Higher levels of expected service are positively associated with increased business value.

Perceived service and business value. Among the benefits to be derived from perceived service that have been discussed most frequently in the literatures are (1) confirmation of information provided by sellers, friends and third parties, which may improve buyers' understanding of the product, an online seller and an online shopping context; and (2) confidence, which is strengthened by strong trust assurance and a positive interaction with an online seller [21 ; 34]. While such benefits are most frequently mentioned in the context of perception of service provision in offline situations (e.g., customer guarantee, customer service), informational and perceived business benefits have also been identified as an outcome of perceived service by Gronholdt et al. [8] in the context of online shopping. Therefore, this study hypothesises:

Hypothesis 2b: Higher levels of perceived service are positively associated with increased business value.

Expected service and consumer preference value. This study posits that the benefits and value to be derived from high levels of expected service will not only be restricted to the business sphere, but encompass consumer preference value (i.e., direct and indirect customer action intention) for buyers, as well. Previous studies suggest that buyers with a high expectation on service provision are more rely on online sellers who provide a positive trading experience than buyers with a low expectation on service provision [22]. Schiffman et al. [23] argue that the service provision exceeds buyers' expectation sends a message to the buyers that the seller will act in buyers' best interests and is willing to fulfil buyers' personal preferences. Moreover, a study by Dholakia [6] demonstrated that product involvement, which is representative of a high level of expected service, can have a favourable impact on consumer preference. The author attributed this positive effect partly to high levels of personal needs, product value, and loyalty to a brand (seller).

Hypothesis 3a: Higher levels of expected service are positively associated with increased consumer preference value.

Perceived service and consumer preference value. In the literature on buyers' personal preferences, it has been argued that trading experiences in online shopping environments can affect trust and reliability positively and negatively, which facilitates the exchange of personal preference that otherwise might be difficult to get hold of through monetary trading [30]. This study argues that confirmation of product and service quality, interaction and compensation and supervision from a third party will increase buyers' likelihood of realised consumer preference benefits. Hence, this study hypothesises that perceived service will have a positive impact on buyers' realised personal preference values.

Hypothesis 3b: Higher levels of perceived service are positively associated with increased consumer preference value.

Impact of the Level of Information Technology (IT) Reliance

This study argues that the level of information technology (IT) reliance in daily tasks (i.e., using the internet to participate in this research vs. a preference for a paper-based survey) is likely to affect the result of business and customer preference value on intention to repurchase from an auction website. Gefen et al. [7] showed that users with a lower level of IT reliance aimed to avoid or minimise uncertainty and tended to have a stronger customer preference value. For frequent IT users, on the other hand, business value is more likely to be realised. Other studies support this, stating that consumers are more likely to act loyally to a particular seller in a less familiar environment [19 ; 24]. Drawing on the characteristics of both types of IT reliance, Gefen et al. [7] suggested that online trading which consisted of money exchanges were associated with consumer preference value, whereas business value was more important for users who preferred add-on value when purchasing from the internet. Therefore, this study argues that the use of an auction website will differ depending on users' IT reliance. In particular, it is believed that users with a lower level of IT reliance relationships in auction websites will base their judgements on the fulfilment of a particular need, relative to highly IT-reliant users, who have already adopted IT to complete daily tasks. Buyers' relationships with online sellers are therefore likely to be interdependent, characterised by paying for not only the product, but for additional benefits. This was corroborated by Pavlou et al. [21] who concluded that offering the same level of service to reduce the difference between online and offline shopping did not drive the willingness to repurchase from the same online seller. IT-dependent users' intention to repurchase, on the other hand, may be based on shopping habits. In consumer decision-making models, business value has less impact on consumers with lower self-confidence in making decisions. IT-independent users' purchasing from an auction website will be more careful and considered than IT-dependent, and, therefore, characterised by the concepts of commercial activities. As trading partners anticipate future trading, but do not expect to receive monetary payment for their extra service provision around purchasing [13], it is expected that business value will be a strong driver on intention to repurchase for IT-dependent users, relative to IT-independent users. Furthermore, IT-independent users enjoy the consistency and reliability of online shopping experiences with the online sellers they are familiar with.

Hypothesis 4: Business value will have a more positive impact on intention to repurchase for IT-dependent users, compared to IT-independent users.

Hypothesis 5: Consumer preference value will have a more positive impact on intention to repurchase for IT-independent users, compared to IT-dependent users.

DATA ANALYSIS AND FINDINGS

Sample and Procedure

This research study was conducted among online buyers who have online trading experiences on auction websites but different levels of IT reliance. Online buyers who only adopt IT to perform particular tasks tend to have less confidence in internet-enabled activities; whereas online buyers who prefer to use the internet as a means to process daily tasks tend to have a higher level of trust of internet-enabled activities. The survey was sent to students who enrol in one of the universities in New Zealand during 2012 through an online survey invitation and a paper-based invitation over a period of four weeks. People who are invited to the survey can choice the way to participate in this research freely. The respond rate was 29.5% with a total of 1000 survey invitation sent to potential participants. After the omission of missing values, the sample consisted of 143 usable responses from the paper-based survey. There were more female respondents than male respondents (70% female and 30%

male). With regard to age, the distribution of the sample was skewed toward the lower age categories (86% were aged between 18 and 24 and 13% between age 25 and 35). Ninety-three percent of participants used TradeMe (an auction website in New Zealand) with a shopping frequency of between 1 and 3 times monthly and only 7% shop on TradeMe with a higher frequency (i.e., more than three times per month). Sixty-nine percent of participants were online buyers with at least one year of online shopping experience. The online survey received 154 valid responses. There were more female respondents than male respondents (60% female and 40% male). Sixty-two percent of the online survey participants were aged between 18 and 24, 34% of them were between 25 and 35. Ninety-two percent of participants preferred to use TradeMe as their trading platform. Although the majority of participants had a lower online shopping frequency (76% between 1 and 3 times monthly), 24% of them shop online with a higher frequency. Eighty-one percent of participants had at least one year of online shopping experience.

Measures

With the expectation of service and perception of service, measures were based on past studies and were adapted to fit the context of this study. The survey used 7-point Likert-type scales for all items, anchored by strongly disagree/agree. Expected service was measured by 18 items to understand what customers expected of online service provision in terms of simulation, empathy, reliability, responsiveness and assurance. Perceived service was measured by 15 items from the same 5 dimensions. The five dimensions are adapted from Zeithaml et al. [32]. Potential business benefits to be derived from auction websites were identified by browsing various auction websites. Based on buyers' activities on auction websites such as TradeMe, eBay, and others, 6 items were identified to capture the business value perception. With respect to diversity in sellers' goal, customers' personal preference and their motivation to repurchase from the same seller become increasingly important. Since customers' personal preference has been proposed as a key factor for business operation, 7 items were developed to measure consumer preference value. Buyers' intention to repurchase is measured by 6 items.

Measurement Model and Analysis approach

Partial least squares structural equation modelling (PLS-SEM) was employed. PLS aims to identify the correlation between variables to explain and predict outcomes [11]. The analysis was conducted with WarpPLS 3.0 software [16]. The five constructs are reflective measurements which aim to understand the construct from different perspectives. The two-step evaluation procedure is followed: the measurement model first, followed by an estimation of the structural model. In order to assess the psychometric properties of the multiple item scales, the measurement model was estimated by calculating individual indicator reliabilities, composite reliability (R), convergent validity and discriminant validity [11]. The measurement model was estimated with the PLS algorithm and bootstrapping procedure (999 samples). Combined loading and cross-loading was used to describe the convergent validity. Any item with a factor loading lower than 0.6 was removed to ensure each item contributed to the designed construct rather than other constructs [11]. Internal consistency was evaluated by examining the composite reliability (CR) score and Cronbach's α (CA) for each latent construct. The recommended threshold for CR and CA is 0.7. Discriminant validity is evaluated in two ways. First, each latent construct should have a higher square root of Average Variance Extracted (AVE) than any of the correlations involving the latent variable [11]. Secondly, each indicator is examined to ensure a factor loading is higher on the designed construct than all of its cross-loadings with other latent variables. While the results of the measurement model resemble the outcomes of principal component analysis, the path coefficient is calculated, as part of the structural model can be interpreted in a similar way as the β coefficient in an ordinary least squares regression. A structural model is specified in PLS and analysed by the PLS algorithm with bootstrapping procedures to obtain path coefficients, the associated p-value and R^2 coefficients of the constructs [11]. Evaluating the quality of the PLS model is similar to multiple regressions where the path coefficients and the relative R^2 are examined. Hair et al. [11] proposed that the acceptable threshold for the size of R^2 is 0.10 in general; however, the value of 0.20 is considered high in consumer behaviour study [26].

Model 1: Online Buyers with Lower Reliance on Internet Technologies

Items that are removed due to insufficient factor loading on the designed construct from model 1 are presented in the appendix. Internal consistency is not satisfied by an extremely low CA score for business value (Table 1).

Table 1. Composite Reliability (CR), Average Variance Extracted (AVE), Cronbach's α (CA), Correlations for model 1

	CR	AVE	CA	ES	PS	BV	CPV	IR
Expected Service (ES)	0.929	0.524	0.916	0.724				
Perceived Service (PS)	0.906	0.469	0.886	0.354	0.685			
Business Value (BV)	0.739	0.587	0.295	0.490	0.368	0.766		
Customer preference value (CPV)	0.859	0.550	0.794	0.184	0.388	0.331	0.742	
Intention Repurchase (IR)	0.835	0.561	0.737	0.495	0.313	0.410	0.229	0.749

Note: square roots of average variances extracted (AVE's) shown on bold.

However, the main problem is that business value only has two indicators. The construct, business value, is retained in this model since the two indicators are highly loaded on business value. The level of convergent validity is indicated by AVE. As shown in Table 1, perceived service has an AVE score lower than 0.5. As a lower AVE is often caused by confused factor loading, factor loadings were examined to ensure they were highly correlated with the designed construct. The indicators

showed high loading on the designed construct and low on other constructs. The internal consistency and convergent validity was acceptable with all indicators being highly contributed to the designed construct. The result for discriminant validity was satisfied. This assessment indicates that table 1 provides a reasonable level of reliability and validity of the reflective latent variable.

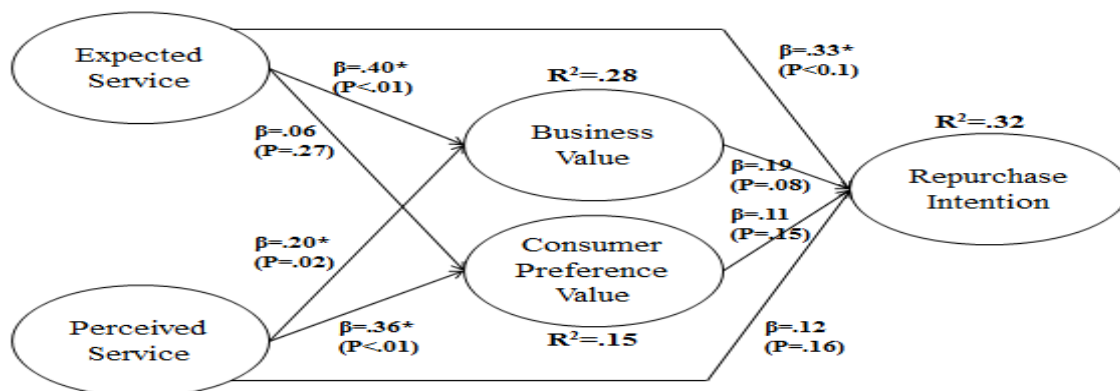


Figure 1. Influence of service provisions on intention to repurchase for online buyers with lower level of reliance in IT

The hypothesis-testing results are presented in Figure 1. In line with Hypotheses 1a and 1b, expected service and perceived service positively impacted users’ repurchase intention to the same seller in online auction websites. The impact from perceived service, however, was not significant. The estimation model confirmed Hypotheses 2a and 2b, which suggested that expected service and perceived service will positively impact users’ perception on business value. Business value accounted for by expected service and perceived service was $R^2 = 0.28$. A positive effect of expected service and perceived service for customer preference value (Hypotheses 3a and 3b) was expected, however, the impact from perceived service was non-significant. For customer preference value, expected service and perceived service accounted for a R^2 value of 0.15, which was considerably lower than that for business value. Business value had a positive impact on users’ intention to repurchase, but the impact was non-significant. The customer preference value positively influenced users’ intention to repurchase, but it was not significant. The combined variance in intention to repurchase explained by the model, including expected service, perceived service, and business and customer preference value resulted in a R^2 value of 0.32. While the predictive quality of the model slightly weakened when the indirect factors business and customer preference value were excluded ($R^2 = 0.28$), the effect size of this difference was weak. Observing the total effects (Table 2), it can be concluded that expected service contributes a significant part to intention to repurchase. Furthermore, the total effect of business value on intention to repurchase appears to be higher than the total effect of customer preference value.

Table 2. Total Effects on Latent Constructs on IR

	Model 1			Model 2		
	Total effect	P Value	Effect sizes	Total effect	P Value	Effect sizes
ExpSer -> IR	0.409	<0.001	0.204	0.169	0.090	0.080
PerSer -> IR	0.200	0.059	0.077	0.386	<0.001	0.206
BV -> IR	0.192	0.078	0.085	0.565	<0.001	0.399
CPV-> IR	0.107	0.154	0.029	0.165	0.018	0.080

Model 2: Online Buyer with a Higher Level of Reliance on Internet Technologies

All item loadings exceeded the threshold of 0.6 with a significant P value. The internal consistency and convergent validity of the measures proved satisfactory, as all CR scores exceeded the threshold of 0.7, and all AVE scores were higher than 0.5 (Table 3). Discriminant validity was satisfactory as well: first, the AVE score of each latent variable exceeded the construct’s squared correlation with any other latent variable [16]. Second, each indicator’s loading was higher than all of its cross-loadings with other latent variables. The reliability and validity for the reflective measurement model were thus supported.

The hypothesis testing result for model 2 is presented in Figure 2. In contrast to model 1, expected service and perceived service did not have a significant, direct impact on intention to repurchase. Hypotheses 1a and 1b for model 2 (Table 4) were thus rejected. The analysis result confirmed Hypotheses 2a and 2b, which suggested a positive impact of expected service and perceived service on business value. The explained variance in business value accounted for by expected service and perceived service was $R^2 = 0.42$. The positive effect of perceived service on customer reference value was confirmed, but the positive impact from expected service to customer preference value was not supported. Hypothesis 3a was rejected but accepted Hypothesis 3b. The explained variance in customer preference value by expected service and perceived service was $R^2 = 0.16$ (Figure 2). Business value had a strong and positive impact on users’ intention to repurchase. The customer preference value also had a positive and significant influence on users’ intention to repurchase. The combined variance in intention to repurchase explained by the model including expected service, perceived service, business value, and customer preference value, resulted in a R^2 value of 0.53. The predictive quality of the model deteriorated when the indirect factors business value

and consumer preference value were excluded ($R^2=0.31$), and the effect size of this difference appeared to be strong (0.22). When considering the total effects (Table 2), it can be concluded that the total effect of perceived service on intention to repurchase was somewhat higher than the total effect of expected service, which was not significant. Furthermore, the total effect of business value was significant and higher than the total effect of customer preference value, which was also significant.

Table 3. Composite Reliability (CR), Average Variance Extracted (AVE), Cronbach's α (CA), Correlations for model 2

	CR	AVE	CA	ES	PS	BV	CPV	IR
Expected Service (ES)	0.967	0.618	0.963	0.786				
Perceived Service (PS)	0.946	0.540	0.939	0.431	0.735			
Business Value (BV)	0.881	0.516	0.842	0.575	0.521	0.746		
Consumer preference value (CPV)	0.910	0.560	0.887	0.152	0.375	0.515	0.748	
Intention Repurchase (IR)	0.917	0.649	0.890	0.447	0.487	0.693	0.454	0.806

Note: square roots of average variances extracted (AVE's) shown on bold.

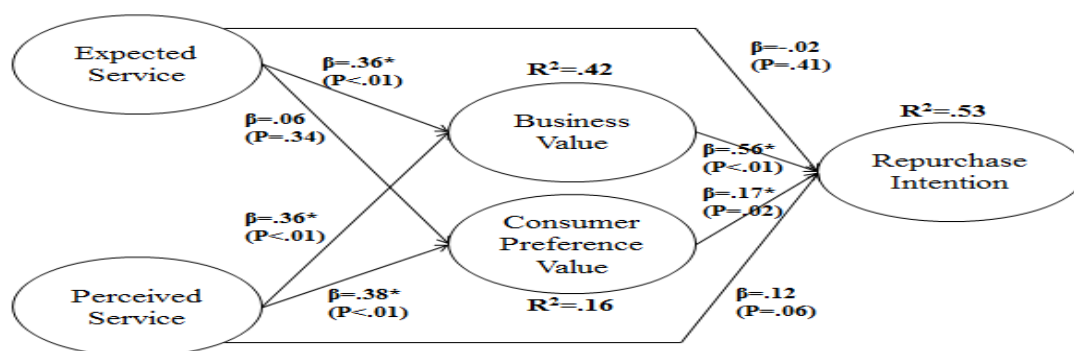


Figure 2. The impact of service provisions on intention to repurchase for online buyers with higher level of reliance in IT

The Level of IT Reliance and Perceived Value Propositions

To test Hypotheses 4 and 5, the analysis results of model 1 and model 2 were compared (Table 4). The impact of business value on intention to repurchase was moderated by participants' IT reliance so that business value was a more important driver for users who had a higher level of IT reliance ($\beta = 0.565$) than people with a lower level of IT reliance ($\beta = 0.192$). Hypothesis 4 was supported by this study. The comparison between the two studies suggests that customer preference value is a more important driver for IT-dependent users ($\beta = 0.165$) than IT-independent users ($\beta = 0.107$). Hypothesis 5 was rejected in this study.

Table 4. Hypotheses Testing - Path analysis (β , P Value)

Path	Model 1			Model 2		
	β	P value	Hypotheses	β	P Value	Hypotheses
H1a:ES -> IR	0.326	<0.001	Supported	-0.022	0.414	Rejected
H1b:PS -> IR	0.122	0.164	Rejected	0.122	0.063	Rejected
H2a:ES -> BV	0.402	<0.001	Supported	0.356	<0.001	Supported
H2b:PS -> BV	0.202	0.022	Supported	0.355	<0.001	Supported
H3a:ES -> CPV	0.057	0.265	Rejected	-0.060	0.336	Rejected
H3b:PS -> CPV	0.365	<0.001	Supported	0.379	<0.001	Supported
H4:BV -> IR	0.192	0.078	Supported	0.565	<0.001	Supported
H5:CPV -> IR	0.107	0.154	Rejected	0.165	0.018	Rejected

DISCUSSION AND IMPLICATIONS

The purpose of this study was to expand the understanding of viable value propositions for the types of users on auction websites and investigate how these can be translated into profits. This study identified that expected service and perceived service influenced users' intention to repurchase from the same online seller, either directly or indirectly. Moreover, whether perceived businesses and customer preference value can explain this intention depends on users' IT reliance, as well as on the type of the online sellers in auction websites. This study contributes to the academic literature in several ways. First, it adds insights to the literature on value propositions for auction websites expectation of service provision. By linking expectation of service provision to users' perceptions of increased business and consumer preference value as well as their intention to repurchase from the same online seller, the results confirm that the concept is an important value proposition for auction websites. Differences exist, however, dependent on users' IT reliance. Where users had a lower level of IT reliance (model 1),

expected service had a direct effect on users' intention to repurchase. In users with higher IT reliance (model 2), the expectation of service provision only seemed to increase intention to repurchase indirectly, through business value. Interestingly, a similar pattern also emerged for perceived service in model 2. Although the hypotheses regarding the direct effects of expected service and perceived service on intention to repurchase were not supported by model 2, the findings do seem plausible. As users with a higher level of IT reliance focus more on the add-on value that online sellers provide and develop, diverse preferences, including evaluation of service quality, may be less pronounced, which explain the lack of a direct effect on intention to repurchase. By extending the existing research on expected service which had been conducted primarily in the offline shopping environment [32] and B2C online shopping environment [3], this study demonstrated the viability of the construct in the C2C online setting.

Second, this study adds insight to the online academic debate about whether and when C2C online business models are successful [34]. While some researchers argue that it is almost impossible for online sellers to create business value from auction websites [18], others claim the nature of C2C online trading platforms is to ignore the importance of business value. So far, the focus has been on the feedback and rating mechanisms [29 ; 34]. This study extends insights by investigating the joint impact of expected service and perceived service as direct and indirect predictors of action in terms of website profit return. Interestingly, the results of model 2 suggest that, in the case of the higher level of IT reliance, the underlying logic for how business and customer preference values are realised might differ. As recommended by Gefen et al. [7], a higher level of understanding of auction websites may realistically help in realising the benefit that online sellers provide. These authors refer to this phenomenon as "self-learning" [1] and warn of possible backfire effects on perceived service, which may be reflected by the findings from auction websites. However, no such indication of back-fire effects on realised customer preference value was detected, in this study.

Finally, the results underscore the importance of considering users' IT reliance. The results of the study suggest that users with a lower level of IT reliance might be characterised by trading for products, mostly motivated by a higher level of expectation of online shopping, rather than perceived service, business value and customer preference value [3 ; 21]. In model 2, business and consumer preference value acted as more important drivers for users with higher IT reliance. In an auction website context, the findings for business value and consumer preference value align with the self-learning process, according to which customers' preference values are more important for behaviour, rather than environmental factors [19 ; 22]. Although, for auction websites, business value appeared to be more important for users with a higher level of IT reliance, it seems that the main goal of the platform is to offer users a safe and convenient shopping channel. More generally, it can be concluded that users with a higher level of IT reliance value the benefits that businesses provide (business value) and have a better understanding of their own preferences (consumer preference value). Such trade or self-learning processes, which are triggered by economic and non-economic benefits, seem to be accepted in a context that is driven primarily by effectiveness and convenience. This study provides preliminary evidence that users' level of IT reliance when using auction websites involves different business benefit perceptions, and therefore different customer preferences.

Managerial Implications

This study offers practical insights for online sellers on auction website who aim to retain customers by service provision around purchasing. In this way, online sellers may positively affect buyers' intention to repurchase not only from the same auction website platform, but the same online seller. The findings suggest that for online sellers who adopt auction websites with a profit generation purpose it seems advisable to generate business value and consumer preference values for users who have a higher level of IT reliance, and a higher level of expectation of service provision for users with a lower level of IT reliance. Online sellers should consider providing a service with better quality that leads to business value, such as offering quality products, caring customer service and a responsible attitude. For users with a lower level of IT reliance, however, it seems advisable to reverse the focus by maintaining a higher level of expectation of products and positive interaction between sellers and buyers, while developing a trust relationship to encourage future trading. However, as motivations to repurchase from the same online seller are likely to be reflected by the trading process rather than add-on values, these recommendations should be adopted with a clear understanding of the target customers. Online sellers in auction websites who aim to start their business from an online channel, such as Trade Me, should value both business benefits and consumer preferences for both types of online users. It should be noted, however, that the awareness of such benefits seems even more important for users with a higher level of IT reliance than users who are IT-independent.

Limitations and Future Research

The data was collected from online auction users in one university in New Zealand. Future study should apply the proposed model on different group of users in different countries to improve the understanding in the relationship between IT reliance and online auction repurchase behaviours. Future research should consider different auction websites, for example Yahoo Taiwan and Taobao, which are different from the one in this study in order to test the identified approach. Moreover, actual behaviour data could provide valuable insights, in addition to the intention to repurchase. As expected service, perceived service, business and consumer preference value only explained 32% of the variance for intention to repurchase from model 1, this suggests there are other factors to be explored for users with a lower level of IT reliance. Future research could also collect data by observing users' online shopping behaviours to identify other factors that may influence or motivate intention to repurchase.

REFERENCES

- [1] Ajzen, I. (1991) 'The theory of planned behaviour', *Organizational Behavior and Human Decision Processes*, Vol.50, No., pp. 179-211.
- [2] Ba, S., & Paviou, P. A. (2002) 'Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behavior', *MIS Quarterly*, Vol.26, No. 3, pp. 243-268.
- [3] Bhattacharjee, A. (2001) 'Understanding information systems continuance: An expectation-confirmation model', *MIS Quarterly*, Vol.25, No. 3, pp. 351-370.
- [4] Chernatony, L. d. (2006) *From brand vision to brand evaluation* (2nd ed.), Elsevier Ltd.
- [5] Choudhury, V., & Karahanna, E. (2008) 'The relative advantage of electronic channels: A multidimensional view', *MIS Quarterly*, Vol.32, No. 1, pp. 179-200.
- [6] Dholakia, U. M. (2001) 'A motivational process model of product involvement and consumer risk perception', *European Journal of marketing*, Vol.35, No. 11/12, pp. 1340-1362.
- [7] Gefen, D., Karahanna, E., & Straub, D. W. (2003) 'Trust and TAM in online shopping: An integrated model', *MIS Quarterly*, Vol.27, No. 1, pp. 51-90.
- [8] Gronholdt, L., Martensen, A., & Kristensen, K. (2000) 'The relationship between customer satisfaction and loyalty: Cross-industry differences', *Total Quality Management*, Vol.11, No. 4-6, pp. 509-514.
- [9] Häubl, G., & Trifts, V. (2000) 'Consumer decision making in online shopping environments: The effects of interactive decision aids', *Marketing Science*, Vol.19, No. 1, pp. 421.
- [10] Ha, H.-Y., Janda, S., & Muthaly, S. K. (2010) 'A new understanding of satisfaction model in e-re-purchase situation', *European Journal of Marketing*, Vol.44, No. 7/8, pp. 997-1016.
- [11] Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (1998) *Multivariate data analysis*, Prentice Hall.
- [12] Hellier, P. K., Geursen, G. M., Carr, R. A., & Rickard, J. A. (2003) 'Customer repurchase intention: A general structural equation model', *European Journal of Marketing*, Vol.37, No. 11/12, pp. 1762-1800.
- [13] Hinz, O., Hann, I.-H., & Spann, M. (2011) 'Price discrimination in e-commerce? An examination of dynamic pricing in name-your-own price markets', *MIS Quarterly*, Vol.35, No. 1, pp. 81-98.
- [14] Kim, H.-W., & Toh, D. E. S. (2006) 'Moderating the price sensitivity of online customers', *E-Commerce Technology, 2006, The 8th IEEE International Conference on Enterprise Computing, E-Commerce, and E-Services*, Retrieved from http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=1640268&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D1640268.
- [15] Kim, S. S., & Son, J.-Y. (2009) 'Out of dedication or constraint? A dual model of post-adoption phenomena and its empirical test in the context of online service', *MIS Quarterly*, Vol.33, No. 1, pp. 49-70.
- [16] Kock, N. (2012) *WarpPLS 3.0 User Manual*, Laredo, TX: ScriptWarp Systems.
- [17] Loiacono, E. T., Watson, R. T., & Goodhue, D. L. (2002) 'WebQual: A measure of website quality', *Marketing theory and applications*, Vol.13, No. 3, pp. 432-438.
- [18] Melnik, M. I., & Alm, J. (2002) 'Does a seller's eCommerce reputation matter? Evidence from eBay auctions', *The Journal of Industrial Economics*, Vol.50, No. 3, pp. 337-349.
- [19] Oliver, R. (1999) 'Whence consumer loyalty', *Journal of Marketing*, Vol.63, No., pp. 33-44.
- [20] Parthasarathy, M., & Bhattacharjee, A. (1998) 'Understanding post-adoption behaviour in the context of online services', *Information Systems Research*, Vol.9, No. 4, pp. 362-379.
- [21] Pavlou, P. A., Liang, H., & Xue, Y. (2007) 'Understanding and mitigating uncertainty in online exchange relationships: A principal - agent perspective', *MIS Quarterly*, Vol.31, No. 1, pp. 105-136.
- [22] Reichheld, F. F., & Schefter, P. (2000) 'E-loyalty: Your secret weapon on the Web', *Harvard Business Review*, Vol.78, No. 4, pp. 105-113.
- [23] Schiffman, L., O'Cass, A., Paladino, A., D'Alessandro, S., & Bednall, D. (2011) *Consumer behaviour*, Australia: Pearson.
- [24] Schiffman, L. G., Bednall, D., O'Cass, A., & Paladino, A. (2010) *Consumer behaviour* (5th ed.), Australia: Pearson Education.
- [25] Traylor, M. B. (1981) 'Product involvement and brand commitment', *Journal of Advertising Research*, Vol.21, No. 6, pp. 51-56.
- [26] Vock, M., Dolen, v. W., & Ruyter, d. K. (2013) 'Understanding willingness to pay for social network sites', *Journal of service research*, Vol., In press, No., pp.
- [27] Warrington, P., & Shim, S. (2000) 'An empirical investigation of the relationship between product involvement and brand commitment', *Psychology & Marketing*, Vol.17, No. 9, pp. 761-782.
- [28] Wells, J. D., Valacich, J. S., & Hess, T. J. (2011) 'What signal are you sending? How website quality influences perceptions of product quality and purchase intentions', *MIS Quarterly*, Vol.35, No. 2, pp. 219-238.
- [29] Wu, F., Li, H.-H., & Kuo, Y.-H. (2011), 'Reputation evaluation for choosing a trustworthy counterparty in C2C e-commerce', *Electronic Commerce Research and Applications*, Vol.10, No. 4, pp. 428-436.
- [30] Zeithaml, V. A. (1988), 'Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence', *Journal of Marketing*, Vol.52, No. 3, pp. 2-22.
- [31] Zeithaml, V. A. (2002) 'Service excellence in electronic channels', *Managing Service Quality*, Vol.12, No. 3, pp. 135-138.
- [32] Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990) *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press.
- [33] Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002) 'Service quality delivery through Web sites: A critical review of extant knowledge', *Academy of Marketing Science*, Vol.30, No. 4, pp. 362-375.

- [34] Zhang, J. (2006) 'The roles of players and reputation: Evidence from eBay online auctions', *Decision Support Systems*, Vol.42, No. 3, pp. 1800-1818.

APPENDIX

The measurement for each construct in both models:

(Those measurements removed from Model 1 are presented in *italic*).

Expected service. The website should be easy-to-use and user friendly; *The product/information should be easy to find*; The website needs to be fast loading and well organising; *Online sellers should provide detail product pictures to help customers in understanding the product*; The information related to the product should be useful and help me making judgment about the product; Online sellers should set up a special channel for any problem that customers have with their received orders; Online sellers should compensate to customers' satisfaction; *Online sellers should have guarantees/refund policy available to protect my benefits*; *Online sellers should take full responsibility to any problem that may occur with my order*; Online sellers should have the customers' best interest at heart; Online sellers should act as they promised; Online sellers should respond to my question with information which helps me with my decision making; Online sellers should respond to my request within a reasonable period of time; Online sellers will be consistently courteous with customers; With problems in my order, online sellers should respond to me satisfactory; *Online sellers should have a well-established post-sale service*; The auction website provider (Trademe) should provide a secure shopping environment; The order progress should be available online.

Perceived service. Their websites are easy-to-use and user friendly; The product and its related information are easy to find; *Their websites are fast loading and well organizing*; The pictures of product assist me in making decision; I can use those information related to the product to judge its quality; I can reach them easily if there has any problem in my order; They act responsibly when there is problem in my order; Their respond is useful and assist me in decision making; I receive their responds in reasonable period of time; They give special care to every customer's request; I am satisfied with their responds; *I shop with them because of their brand and reputation*; This online seller has a well-organised and caring post-sale service; *Shopping on auction websites is safe*; *I can track and trace my order progress*.

Consumer preference value. I can name those online sellers whom I often shop with; I save of those online sellers whom I often shop with into favourite; I will recommend my friends those online sellers whom I often shop with; I will browse the product listing of the online sellers I often shop with when I am bored; I would love to receive the latest news from online sellers I often shop with; If they have new listing products, I will make time to browse them; I will follow them on Twitter and/or Facebook if it is available; I will only turn to their competitor when they do not have the product I need.

Business value. I shop with particular online seller because I know they are reliable; *I will check online sellers' feedback before I make purchase*; *I will shop with online sellers who offer special services (e.g. fast delivery, credit payment.)*; I shop on auction websites as price comparison is easy and fast; *I shop on auction websites for bargain*; *I shop on auction websites because of convenience, time-saving and no geographic limitation*.

Intention to repurchase. I am willing to repurchase from the same online seller if the quality of product from last experience achieve my expectation; Due to special needs/products request (e.g. style, rarity of product), I am willing to repurchase from the same online seller; *I am not willing to repurchasing from the same online seller if there are unsolved complaints in their feedback*; *I am willing to make a repurchase with online sellers who have some bad feedback if they have a good reputation in general*; With similar product and service standards, I am more willing to make repurchases if the price is reasonable; I am willing to make repurchase from the same online seller only when they producing the product I like.