



Article

Comparative Study of Service Quality on VIP Customer Satisfaction in Internet Banking: South Korea Case

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Abstract: For Internet banking to compete effectively with traditional brick-and-mortar banking, managers must identify the key determinants of customer satisfaction. While many studies exist on Internet banking, and there is a large base of marketing literature on customers' perceptions of luxury products, research on the service quality of luxury brands in Internet banking is scarce. Our study investigates service quality that exert influence on customer satisfaction with Internet banking most, along with the moderating role of customer type on the relation between service quality and customer satisfaction. The moderation analysis in our study is the test of difference between general customers and VIP customers which are created according to customer type. Using a web survey of 645 general and VIP (very important person) customers who use Internet banking systems, we examined the effects of fix factors that have an influence on service quality: usefulness, ease of use, and system security, reliability, responsiveness, and empathy. In the full sample, all factors that affect Internet banking quality also affected customer satisfaction significantly. Usefulness, ease of use, and system trust, responsiveness, and empathy are more important in VIP customer satisfaction than in that of general customers, while system security is a more important factor for general than for VIP customers. Our study results indicate that general and VIP customers differently perceive service quality that are relevant to customer satisfaction.

Keywords: VIP; Internet banking; customer satisfaction; service quality

1. Introduction

Banking depends largely on IT to provide convenient, reliable, and expedient services, and retain banks' demanding and discerning customers. Banks have enhanced investments in Internet services, decreasing automated teller machines (ATMs) and branch offices accordingly. To gain a competitive advantage, more financial institutions are attempting to understand factors that dictate customer satisfaction with online banking services so that they can devise strategic plans and capture market share better. Investments in Internet banking, also referred to as online banking, affect bank performance positively, and high bank performance affects the decision to invest in Internet banking. The implementation of e-banking projects has shown digital transformation's importance to contemporary organizations' survival in the digital economy [1,2].

The global luxury market continuously expands and because of the enormous market expansion fueled by the emerging markets like China and India, better insights on why customers purchase luxury products [3,4] has turned out to be a crucial research or business issue. The word "luxury" represents very high standard products or services. While there has been a number of IS (Information

Sustainability **2020**, 12, 6365 2 of 21

Systems) studies of Internet banking [5–14], factors affecting the satisfaction with or the adoption of Internet banking [13,15–21], and there is a large marketing literature on customer perceptions of luxury brands [22–25], research on luxury brands' service quality in the context of Internet banking is scarce. While many previous literatures have studied the interplay among the factors that drive adoption [8,26], those that distinguish different types of customers, i.e., general versus VIP customers, and the way customer type, which plays a role of moderating variable for customer satisfaction relates to satisfaction with banking services, are lacking. Our study purports to fill this void in previous literature. As the most important task for luxury brands' continued success is to provide value by delivering novel products to customers [22,23,25], this study applies the theories related to luxury brands to online banking, and studies the differences between general and VIP customers with respect to online banking service quality's effect on customer satisfaction.

The implementation of banking systems, which have become part of an ecosystem in which multiple actors, system elements, and settings provide ample and varied opportunities [27], demands examination of various service factors. Because customer relations management has a great influence on relationship quality, such as satisfaction and trust in e-banking [28], we investigated various factors of service quality and the way they affect general and VIP customer satisfaction with Internet banking services. Based on a web survey of general and VIP customers, we studied the moderating role of customer type on service quality and customer satisfaction. A discussion and implications of the results also are provided.

2. Theoretical Background

2.1. VIP Internet Banking Services

While luxury goods are difficult to purchase, they offer pleasure and comfort. Apart from functional utility, the consumption of such luxury goods confers prestige on people [29,30]. The understanding of luxury goods is still elusive because of significant customer's involvement, the effects of contexts and others' perception of their value [22,30–32]. While VIP subscriptions offer a steady revenue stream in social networks, the factors that lead users to participate in VIP services remain elusive [33,34].

Cheng et al. [35] examined the role of usefulness, ease of use, and security in Internet banking on the behavioral intention to use. Shah and Siddiqui [36] performed a case study to investigate the factors critical in adopting e-banking, such as customer service, resources availability, brand names, top management support integrated channels, e-channel marketing, security, and flexibility. Vatanasombut et al. [37] suggested a model in which commitment, shared value, and relationship benefits determine the continuance usage intention in online banking. Liao and Cheung [38] suggested that service quality attributes potentially affect consumer satisfaction with responsiveness, ease of use, usefulness security, and reliability. Lee [7] indicated that the usage intention for Internet banking is decided negatively by the risk of security, finance, and privacy and is determined largely by perceived usefulness and benefit, as well as attitude. Compeau and Wilson [39] suggested computer self-efficacy, and Lee and Jung [40] found that self-efficacy affects the usage of online banking in Korea. Yoon and Steege [14] indicated that openness to advanced technology, website usability, perceived security concern, and concerns about conserving nature resources affect Internet banking use. Martins et al. [8] used the unified theory of acceptance and use of technology (UTAUT) to study behavioral usage intention and actual usage of online banking. Chauhan et al. [41] investigate the factors affecting consumers' intention to adopt internet banking including consumer innate innovativeness, domain-specific innovativeness and perceived security risk.

Asia Pacific markets have undergone a rapid shift towards digital banking [42]. For instance, South Korea has 18 internet banking service providers (mobile banking service providers are also included) as of August 2020. Therefore, South Korea's internet banking users continued to grow in 2016–2020, coming to about 159.2 million as of end-2019 [43]. This means that the same person may count multiple times toward the sum according to the Bank of Korea.

Sustainability **2020**, 12, 6365 3 of 21

Internet banking provides standardized financial products and services that are comparable across different financial institutions and markets. Further, it increases profits through collaboration among different banks and the use of e-business services. Internet banking also improves customer relationship management by providing a range of types of information to customers and using marketing databases as tools to develop promotional and marketing strategies.

2.2. Service Quality in Internet Banking

For several decades since 1970's, measuring total quality management and applying it to tangible business facilities like manufacturing plants had been one of crucial factors for an emerging country to remain competitive [44]. However, after the introduction of the e-service concept powered by Internet since 1995, the quality of e-service is a significant factor in business competitiveness and performance and can be assessed only subjectively because of the difficulties created by the intangibility of service and the inseparable nature of consumption and production. Providing excellent quality service is highly important for customer satisfaction and market growth in Internet banking. In the context of the internet, e-service quality is described as a customer's overall judgement and evaluation on the quality of the services that is provided through the internet [45]. Previous studies suggest concepts and dimensions of e-service quality crucial for organizational performance. Carlson and O'Cass [46] posited that customers perceive several s-service quality dimensions which include delivery quality, outcome quality, and environment quality. Thaichon et al. [47] suggested that e-service quality is affected by information support network quality, privacy and security, and customer service. Namahoot and Laohavichien [18] further shows that service quality can include tangibles, security risk, reliability, assurance, and responsiveness. Dospinesc et al. [48] or Dospinesc [49] suggested the most important indicators that affect the expectations when using the bank card or e-wallet.

3. Research Model

This study focuses on the role of service quality for customer satisfaction in Internet banking. Customer satisfaction was posited as a dependent variable because customer satisfaction increases service reputation and reputation mediates the relation between satisfaction and loyalty in part [50]. Previous literature have shown that service quality enhances satisfaction and trust [51,52], as well as survival [53]. Customers' beliefs about the quality of online banking can influence satisfaction [13,16] and the adoption of Internet banking as a result [17,19,21]. Thus, this study proposed two hypotheses: (1) Internet banking service's quality affects customer satisfaction (H1), and (2) customer type exerts a moderating role in the relationship between service quality and customer satisfaction (H2).

We focus on the role of six factors of service quality for customer satisfaction: usefulness; ease of use; safety; reliability; responsiveness, and empathy. These factors were adapted from previous studies published by Parasuraman et al. [54,55] and George and Kumar [56] to show a theoretical background for service quality. Zhu and Chen [57] examined service fairness in predicting online customer satisfaction in the internet banking context. Namahoot and Laohavichien [18] further shows that service quality for increased usefulness can be important for behavioral intention to use Internet banking.

This study proposes usefulness, ease of use, and safety as important factors of service quality. Second, SERVQUAL, which Parasuarman et al. [54] proposed, is the service quality assessment model used most frequently. SERVQUAL includes five dimensions, as described above. This study also included three more factors: reliability; responsiveness, and empathy, and excluded tangibles and assurance, as they do not apply in the Internet banking context.

Useful service allows customers solving their issues and setting up relationship quality through B2C e-commerce [58]. Useful service may help customers have the complete benefits satisfactorily by matching their expectations. If banking service cannot be offered as suggested, it leads to undesirable experience discontinuing Internet banking use. If customers perceiving useful services, they continue

Sustainability **2020**, 12, 6365 4 of 21

their activities to more accomplish their task goals, which enhances their satisfaction with Internet banking service. Thus, service usefulness exerts a positive impact on customer satisfaction.

Hypothesis 1a (H1a). *Increased usefulness of Internet banking affects customer satisfaction positively.*

Perceived ease of use indicates the extent that customers perceive less difficulty in using Internet banking. In Internet banking, ease of use affects customers' behavioral usage intention. Internet banking reduces transaction costs, increases direct contact with customers, and increases convenience in banking transactions. Internet sites are not appealing and attractive if they are hard to use. Namahoot and Laohavichien [18] indicates that system tangibles which represent the physical surroundings and the environment that enables customers to feel cared for and the willingness of service providers making customers supported whenever they have some difficulties in using Internet banking as one of the important dimensions for service quality for internet banking. Convenience exerts a positive effect on engagement with retailing m-commerce application after continued retention [59]. Chauhan et al. [41] posited that perceived ease of use positively affects consumer attitude toward adoption of internet banking. Thus, when users perceive an ease in using Internet banking, they tend to have a more favorable attitude and are even more satisfied with the use of Internet banking than when they have difficulty in using Internet banking. Thus, Internet banking sites' ease of use can affect customer satisfaction positively, as it is related to user friendliness in the design of the interface and user functions.

Hypothesis 1b (H1b). *Internet banking's ease of use affects customer satisfaction positively.*

The safety of information systems or e-business also affects customer satisfaction. Internet banking is based on global networks and the safety of transactions is critical for its success. George and Kumar [56] studied the service quality of Internet banking and included items to measure the safety of access to Internet banking sites, and the provision of stable browsing services and transfer service. The intention to use internet banking is positively affected by perceived security [19]. Chauhan et al. [41] suggested perceived security risk has a negative effect on customers' intention to use internet banking. Their study indicated that delays in system response, system breakdown, errors, failure, and information leaks can cost banks' tremendous tangible or intangible losses. Thus, system security is related positively to customer satisfaction.

Hypothesis 1c (H1c). *Internet banking's system security affects customer satisfaction positively.*

Internet banking customers often complain about uncertainties in service. Online banking's trust depends on the perceived reliability and risk, and the extent to which it provides the service intended and ensures the safety of transactions. System reliability represents the extent to which a service platform is available on "anywhere" basis and an "any time" [60]. The reliability reflected in a SERVQUAL measure is still important in the e-business environment and leads to customer loyalty and increased customer satisfaction. Perceived risk has been supposed to affect the intention to use Internet banking service [15,21,41]. Rawashdeh, [20] supposed that perceived web privacy has an influence on behavioral intention to use Internet banking service. Namahoot and Laohavichien [18] posited that perceived risk plays a role of mediator variable between service quality and behavioral intentions to use internet banking. Marafon et al. [17] indicated that risk acceptance moderates the effect of risk perception on the intention to use internet banking. Our study considers systems trust based on perceived reliability and risk as one of service quality dimensions affecting customer's satisfaction. Thus, the following hypothesis was given:

Sustainability **2020**, 12, 6365 5 of 21

Hypothesis 1d (H1d). *Internet banking's system trust affects customer satisfaction positively.*

Responsiveness is defined as the extent that service is provided rapidly or work is processed swiftly and is a core factor that determines online banking's service quality. Perceived interactivity comprises an influential antecedent that creates consumers' affective involvement with mobile retail apps [61,62]. Amin [16] suggested that user friendliness and the efficiency of banking website are crucial aspects of service quality for internet banking, especially the extent that customers can complete a transaction swiftly on banking site affects customer satisfaction. Further, Amin indicated that customer satisfaction is greatly affected by site organization, which improves the extent that customers can have a quick access to the website of a banking site. Namahoot and Laohavichien [18] indicates that system responsiveness is one of important dimension for service quality for internet banking. Thus, system responsiveness is correlated positively with customer satisfaction:

Hypothesis 1e (H1e). Internet banking's system responsiveness affects customer satisfaction positively.

Customized service in cyberspace includes the provision of information that is configured specifically to satisfy individual preferences, which is an aspect of the marketing strategy to attract customers. Customers consider customized service an important benefit of a long-term relationship with companies. System empathy is based on the customization of service in online banking. The empathy of systems service should be provided to users by creating customized service, functionalities to capture user requirements, and a manual to support beginners [63]. Amin [16] indicated that customer satisfaction is affected by the extent that customers' personal needs have been met when using banking website information is provided according to customers' preferences. Namahoot and Laohavichien [18] indicates that system empathy, which can be understood as being facilitated from through customization, is an important dimension for service quality for internet banking. Therefore, empathy in service, which manifests in its customization, is related positively to customer satisfaction.

Hypothesis 1f (H1f). System empathy in Internet banking affects customer satisfaction positively.

The moderation analysis in our study is the test of difference between general customers and VIP customers which are created according to customer type. Consumers' perceived value of luxury brands influences consumer satisfaction [64] or consumption behavior [65]. For example, perceived compatibility was indicated as a crucial predictor of the degree to which people consider smartwatches useful and easy to use [66]. Firm's profitability is influenced by customer's satisfaction and loyalty from VIP and non-VIP customers [67,68]. As the most crucial task for the long-lasting success of luxury brands is to provide novel value and build strong customer relationships [22,23,25,69], this study applied the theories in luxury brands to Internet banking and examined the differences between general and VIP customers with respect to online banking service quality's effect on their satisfaction.

Hypothesis 2 (H2). The customer type (general vs. VIP) exerts a moderating role in the relationship between service quality and customer satisfaction.

Figure 1 presents the research model.

Sustainability **2020**, 12, 6365 6 of 21

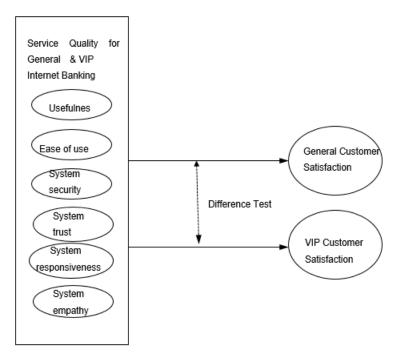


Figure 1. Research Model.

4. Research Methods

The operational definitions of the six factors of service quality are based on those of Parasuraman et al. [54,55] are presented as the service quality of customers who have experience with Internet banking.

Online banking's usefulness is the extent to which productivity and work performance increase relative to offline banking. The items of usefulness include reductions in transaction time and costs, provision of value added service or financial information, and benefits in interests.

Ease of use represents the extent that customers perceive that the usage of Internet banking is easy. Ease of use is indicated by the provision of sitemaps, the ease of search and moving to other menus, as well as learning.

Systems safety is a system's ability to offer uninterrupted service and protect personal or transaction information during online banking transactions. The items used to assess systems safety were adapted from those identified by George and Kumar [56]. These include safety in accessing the homepage and in transactions such as browsing and transferring, along with the security of individual and account details.

System trust is described as the extent that Internet banking provides the service intended. Thus, it reflects the service provider's credibility. In this paper, system trust was shown as a user's belief and trust in the Internet service provider's information, commitment to contracts, and security. The items used to assess systems include belief in information and security, and commitment to contracts in Internet banking.

System responsiveness is the extent that work is performed rapidly and conveniently. System responsiveness also reflects the speed of responses to customer complaints or requests. The items used to assess system responsiveness include rapid processing of tasks, suggestions of solutions to problems, and response to customer complaints.

System empathy is the extent that consumers are provided with high-quality, customized service. System empathy is reflected by providing financial information, customized information, and other value-added information to improve customer satisfaction. The items used to assess system empathy include personal care of customers and understanding and reflecting on customer demands. Table 1

Sustainability **2020**, 12, 6365 7 of 21

summarizes the definitions and items for the six factors of service quality, all of which were assessed following seven-point Likert scales.

Among the recent studies of user satisfaction, McKinney et al. [70] identified and measured the constructs for Web-customer satisfaction created at the stage of information search. Kohli et al. [71] examined the determinants of online consumer satisfaction, such as consumers' cost and time savings that influence the design/choice phases during the decision-making process. Doll et al. [72] tested instruments for end-user computing satisfaction and suggested 12 measurement items, including content, format, timeliness, ease of use, and accuracy which are invariant across, types of application, respondent positions, modes of development, and hardware platforms Customer satisfaction is representing a customer's satisfaction with Internet banking overall, satisfaction after comparing the bank with other banks, and the intention to reuse and recommend the bank to others. The items measuring customer satisfaction were: (1) satisfaction with Internet banking overall; (2) satisfaction after comparing the bank with other banks; (3) reuse intention, and (4) recommend intention for the bank to others.

Table 1. Items for variable.

Variables	Items	Sources				
	The usage goals are always accomplished using Internet banking of this bank.					
Usefulness	The value of using Internet banking of this bank is high.					
	Productivity is greatly improved using Internet banking of this bank.					
	The Internet banking of this bank provides much saving in time.					
	The financial information provided in the Internet banking of this bank is very useful.					
	The Internet banking of this bank provides much saving in the transaction fee.					
	It is easy to use various functions through Internet banking of this bank.					
	The usage procedures of Internet banking of this bank is very clear.					
Ease of use	It easy to become a skillful user of Internet banking of this bank.	[55,73]				
Ease of use	The Internet banking sites of this bank are composed of very user-friendly menus. I can easily search wanted service items in the Internet banking sites of this bank.					
	It is very easy to move into other menus in the Internet banking sites of this bank.					
	Internet banking maintains rapid and reliable access to the site.					
System security	Any transactions in the Internet banking of this bank are processed one time without errors or system breakdown.	[74–76]				
System security	The Internet banking site of this bank well protects users' transaction account information.	[/1/0]				
	The Internet banking of this bank maintains accuracy and protection of transaction data.					
	Users can trustfully use the Internet banking of this bank. The Internet banking of this bank can accurately perform the intended services by customers.					
System trust	The exposure of personal information is not believed to occur.	[55,77]				
	Users believe that the Internet banking of this bank ensures reliability.					
	When I use the Internet banking of this bank, there is little waiting time between my actions and the website's response.					
	The Internet banking of this bank enables fast processing of transactions.					
System responsiveness	The Internet banking of this bank enables fast responding to customers' complaints.					
	The Internet banking of this bank enables prompt processing with customers' requests.					
	The Internet banking of this bank instantly provides service to customers.					

 Table 1. Cont.

Variables	Items	Sources		
	Internet banking is much interested in individual customer.			
	Internet banking much understands and reflects customer requirements.			
	Internet banking solves customer with attention.			
Empathy	Internet banking provides a differentiated service.	[29,79,80		
	I am attached to the Internet banking of this bank.			
	I am bonded by the Internet banking of this bank.			
	I am connected with the Internet banking of this bank.			
	Overall, I am satisfied with this Internet banking experience of this bank.			
Satisfaction —	I strongly recommend the Internet banking of this bank to others.			
	I am likely to further use the Internet banking of this bank			
	I am satisfied with the Internet banking of this bank after being compared with others.			

Sustainability **2020**, 12, 6365 10 of 21

Data Collection

The survey items were reviewed with caution by eight practitioners who are managers of online banking and two Ph.D. students who specialize in IT. During the pretest of items, the consistency, appropriateness, and ease of understanding of items were evaluated. An Internet-based online survey system was used for collecting data. The target sample was 150,000 customers who use the Internet banking site in one of big 5 commercial banks in South Korea. The final random sample consists of 645 general and 645 VIP customers.

Partial least squares analysis (PLS) was utilized to assess the causal relations among research variables in the structural model. PLS is less sensitive to sample size than is the structural equation model and allows evaluation of both the structural and measurement model [81]. PLS is suitable to test causal effects in the initial theory development stage [82]. Table 2 shows the respondents' descriptive statistics.

	Categories	General C	Customers	VIP Cu	stomers	То	tal
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Gender	Male	397	30.8	441	34.2	838	65.0
	Female	248	19.2	204	15.8	452	35.0
	Total	645	50.0	645	50.0	1290	100
Age	Below 20	12	0.9	0	0	12	0.9
_	21-30	241	18.7	52	4	293	22.7
	31-40	237	18.4	258	20	495	38.4
	41-50	106	8.2	211	16.4	317	24.6
	Over 51	49	3.8	124	9.1	173	13.4
	Total	645	50.0	645	50	1290	100
Education	Middle or High school graduated	92	7.1	64	5.0	156	12.1
	College student	106	8.2	57	4.4	163	12.6
	College graduated	356	27.6	377	29.2	733	56.8
	Master or PhD degree	91	7.1	147	11.4	238	18.4
	Total	645	50.0	645	50.0	1290	100.0
Jobs	Students	63	4.9	10	0.8	73	5.7
	Housewives	61	4.7	82	6.3	143	11.2
	Private	317	24.6	299	23.2	616	47.8
	Public	34	2.6	33	2.5	67	5.2
	Owner of Business	42	3.3	80	6.2	122	9.5
	Specialty job	84	6.5	99	7.7	183	14.2
	Others	44	3.4	42	3.3	86	6.7
	Total	645	50.0	645	50.0	1290	100.0

Table 2. Descriptive statistics of respondents.

General and VIP customers are divided according to deposit level, but the details of the criteria are confidential and cannot be disclosed in the paper. The sample of general customers included more users that were male between age 21 and 40, working in private companies, and college educated (or current college students) than did the VIP group. The sample of VIP customers included more customers who were male, between 31 and 50 years old, working in private companies, and college educated or holding master's degrees than the sample of general customers. Table 3 presents the use traits of the Internet and Internet banking for both groups. A large portion of customers had used Internet banking for more than two years, 2–5 times per week, and spent at least two hours on the Internet daily.

Table 3. Usage characteristics of Internet and Internet banking.

Class		General Customers		VIP Customers		Total	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Period of	Less than 6 months	47	3.6	10	0.8	57	4.4
using	6 months-one year	105	8.1	24	1.9	129	10.0
Internet	One year-two years	128	9.9	43	3.3	171	13.3
banking	More than 2 years	365	28.4	568	44.0	933	72.3
	Total	645	50.0	645	50.0	1290	100
Number	1	169	13.0	116	9.0	285	22.1
of using	2–5	334	25.9	301	23.3	635	49.2
Internet	6–10	88	6.8	131	10.2	219	17.0
banking	11–15	23	1.8	41	3.2	64	5.0
per week	More than 15	31	2.5	56	4.3	87	6.7
•	Total	645	50.0	645	50.0	1290	100
Hours	Less than 30 minutes	57	4.4	92	7.1	149	11.6
spent	30 min-1 h	83	6.4	111	8.6	194	15.0
using	1–2 h	211	16.4	199	15.4	410	31.8
Internet	More than 2 h	294	22.8	243	18.9	537	41.6
per day	Total	645	50.0	645	50.0	1,290	100

5. Results

5.1. Measurement Properties

This study uses PLS in order to test the measurement properties of research variables. The reliability and validity of the measurements are assessed for all measures in this study using PLS. PLS is used to test the structural model and is more appropriate for testing causal relationships in the initial stage of theory development than for estimating the fitness of a full structural model [81]. Table 4 indicates the results of exploratory factor analysis. Items with low factor loading are excluded. All the factor loadings are greater than 0.6, which indicates convergent validity. Reliability is assessed using Cronbach's alpha along with composite reliability. For the entire sample and each subsample, the reliability measures are larger than the reliability cutoff of 0.70, and thereby indicated that our variables were reliable (Table 5). Validity represents the extent that measurement variables assess the concepts or attributes intended accurately. Convergent validity is evaluated using average variance extracted (AVE). Discriminant validity is examined through comparing the correlations among variables to the square root of AVE. The measurement model is analyzed for each subgroup and the full sample. For the complete sample and each subsample, the AVE exceeded 0.50. This indicates that our variables have convergent validity. With the square root of the AVE being greater than variables' correlation among each other, our variables also exhibited discriminant validity.

Table 4. Exploratory factor analysis.

(a) Subsample of General Customers							
Variables	Item	Factor Loading	Eigen Value	Percent of Variance Explained			
Usefulness (1)	USF1	0.702	2.12	52.9			
	USF2	0.840					
	USF3	0.565					
	USF4	0.773					
Ease of use (2)	EOU1	0.826	2.95	73.8			
	EOU2	0.893					
	EOU3	0.875					
	EOU4	0.839					
System security (3)	SS1	0.825	2.80	70.1			
, , , , ,	SS2	0.813					
	SS3	0.867					
	SS4	0.842					

Table 4. Cont.

System trust (4)	ST1	0.877	2.98	74.4
•	ST2	0.787		
	ST3	0.872		
	ST4	0.909		
System responsiveness (5)	SR1	0.666	2.98	74.5
	SR2	0.915		
	SR3	0.942		
	SR4	0.902		
System empathy (6)	SE1	0.932	3.39	84.6
1 3 . ,	SE2	0.946		
	SE3	0.925		
	SE4	0.876		
Customer satisfaction (7)	CS1	0.905	3.13	78.2
	CS2	0.905		
	CS3	0.901		
	CS4	0.823		

(b) Subsample of VIP Customers

Variables	Item	Factor Loading	Eigen Value	Percent of Variance Explained
Usefulness (1)	USF1	0.741	2.01	50.3
	USF2	0.700		
	USF3	0.652		
	USF4	0.740		
Ease of use (2)	EOU1	0.853	3.12	77.9
	EOU2	0.911		
	EOU3	0.895		
	EOU4	0.869		
System security (3)	SS1	0.834	2.96	74.0
3	SS2	0.860		
	SS3	0.885		
	SS4	0.862		
System trust (4)	ST1	0.896	3.07	76.6
•	ST2	0.799		
	ST3	0.904		
	ST4	0.899		
System responsiveness (5)	SR1	0.710	3.11	77.7
-	SR2	0.932		
	SR3	0.945		
	SR4	0.918		
System empathy (6)	SE1	0.927	3.30	82.6
	SE2	0.935		
	SE3	0.912		
	SE4	0.858		
Customer satisfaction (7)	CS1	0.920	3.17	79.3
	CS2	0.916		
	CS3	0.896		
	CS4	0.826		

Table 4. Cont.

(c) Total Sample							
Variables	Item	Factor Loading	Eigen Value	Percent of Variance Explained			
Usefulness (1)	USF1	0.721	2.06	51.5			
	USF2	0.780					
	USF3	0.605					
	USF4	0.753					
Ease of use (2)	EOU1	0.840	3.03	75.8			
	EOU2	0.902					
	EOU3	0.884					
	EOU4	0.854					
System security (3)	SS1	0.830	2.88	72.0			
	SS2	0.837					
	SS3	0.876					
	SS4	0.852					
System trust (4)	ST1	0.886	3.02	75.4			
•	ST2	0.792					
	ST3	0.887					
	ST4	0.905					
System responsiveness (5)	SR1	0.687	3.04	76.1			
	SR2	0.923					
	SR3	0.944					
	SR4	0.910					
System empathy (6)	SE1	0.929	3.35	83.6			
	SE2	0.941					
	SE3	0.919					
	SE4	0.867					
Customer satisfaction (7)	CS1	0.912	3.15	78.7			
	CS2	0.910					
	CS3	0.899					
	CS4	0.825					

5.2. Results and Discussion

The research model was tested using PLS, a powerful approach to investigating structural models involving multiple constructs with multiple indicators. Figure 2 and Table 6 show the test results for all research hypotheses for the entire sample and each subsample of general and VIP customers.

For the entire sample, all paths from the six factors to customer satisfaction are significant. The paths from usefulness and system responsiveness to customer satisfaction, however, were not significant in the subsample of general customers, while the path between ease of use and customer satisfaction in the subsample of VIP customers is not significant. This indicates that general and VIP customers perceive online banking service quality differently. Thus, hypotheses H1a, H1b, and H1e are supported in part, and hypotheses H1c, H1d, and H1f were supported fully. Regardless of customer type, the acceptance of hypotheses indicate that Korean Internet banking service is already widely diffused and customers consider service quality as important for their satisfaction, which supports the notion that culture and Internet access tend to affect the diffusion of Internet banking [11]. As the Korean culture of using Internet banking service is already established along with developed Internet access, service qualities are regarded as crucial for customer satisfaction.

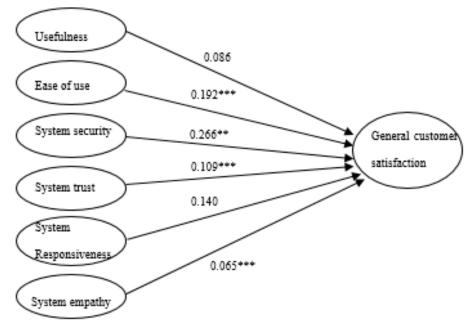
Table 5. Test of convergent and discriminant validity test.

Variables	Composite Reliability	Cronbach Alpha	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(a) The subsa	mple of genera	ıl custome	ers and VI	P custom	ers			
Usefulness (1)	0.829	0.87	0.748						
Ease of use (2)	0.933	0.91	0.638	0.776					
System security (3)	0.914	0.88	0.568	0.697	0.726				
System trust (4)	0.931	0.92	0.566	0.609	0.788	0.770			
System responsiveness (5)	0.928	0.91	0.632	0.683	0.753	0.718	0.765		
System empathy (6)	0.949	0.91	0.499	0.566	0.61	0.575	0.75	0.823	
Customer satisfaction (7)	0.950	0.92	0.587	0.679	0.742	0.702	0.71	0.592	0.826
	(b) The subsa	mple of genera	al custome	ers and V	P custom	iers			
Variables	Composite Reliability	Cronbach Alpha	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Usefulness (1)	0.801	0.88	0.702						
Ease of use (2)	0.934	0.90	0.659	0.779					
System security (3)	0.919	0.87	0.568	0.679	0.740				
System trust (4)	0.928	0.90	0.518	0.603	0.79	0.763			
System responsiveness (5)	0.932	0.89	0.578	0.685	0.738	0.669	0.774		
System empathy (6)	0.950	0.94	0.53	0.617	0.633	0.586	0.73	0.825	
Customer satisfaction (7)	0.938	0.93	0.624	0.698	0.718	0.672	0.709	0.636	0.793
		(c) Tot	al sample	!					
Variables	Composite Reliability	Alpha	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Usefulness (1)	0.917	0.87	0.827						
Ease of use (2)	0.933	0.90	0.650	0.778					
System security (3)	0.917	0.88	0.571	0.690	0.734				
System trust (4)	0.930	0.90	0.546	0.608	0.790	0.767			
System responsiveness (5)	0.930	0.90	0.609	0.685	0.747	0.695	0.770		
System empathy (6)	0.949	0.93	0.516	0.594	0.624	0.582	0.741	0.825	
Customer satisfaction (7)	0.945	0.92	0.606	0.689	0.732	0.689	0.710	0.614	0.811

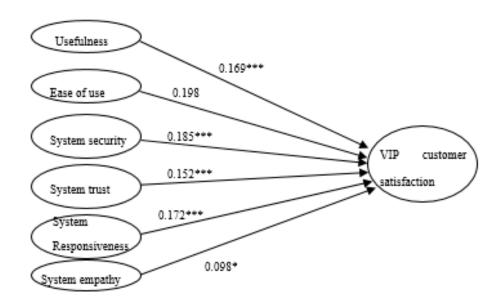
The diagonals indicate the square root of AVE.

Table 6. Test of path difference in subsamples * p < 0.05, ** p < 0.01, *** p < 0.001.

Path	Estimates	General Customers	VIP Customers
Usefulness → customer	Path coefficient	0.086	0.169
satisfaction	Standard deviation	0.074	0.054
	Size of subsample	645	645
	t-value of path difference	20.24 ***	
Ease of use \rightarrow customer	Path coefficient	0.192	0.198
satisfaction	Standard deviation	0.073	0.057
	Size of subsample	645	645
	t-value of path difference	1.65 *	
System security → customer	Path coefficient	0.266	0.185
satisfaction	Standard deviation	0.075	0.074
	Size of subsample	645	645
	t-value of path difference	21.28 ***	
System trust →	Path coefficient	0.109	0.152
customer satisfaction	Standard deviation	0.065	0.061
	Size of subsample	645	645
	t-value of path difference	11.61 ***	
System responsiveness →	Path coefficient	0.140	0.172
customer satisfaction	Standard deviation	0.087	0.068
	Size of subsample	645	645
	t-value of path difference	7.85 ***	
System empathy \rightarrow	Path coefficient	0.065	0.098
customer satisfaction	Standard deviation	0.077	0.056
	Size of subsample	645	645
	t-value of path difference	8.80 ***	



(a) The subsample of general customers



(b) The subsample of VIP customers

Figure 2. Estimation of structural model (* p < 0.05, ** p < 0.01, *** p < 0.001).

While there is a large marketing literature on customer perceptions of luxury brands [22,24], research on the service quality of luxury brands in the context of Internet banking is lacking. Our study provides insight to the studies on service quality of luxury brands in Internet banking by providing specifically how each dimension of service quality can be differently affecting customer satisfaction. Except for the path from system security to customer satisfaction, all path coefficients are higher for the subsample of VIP than of general customers. The other five factors—usefulness, ease of use,

Sustainability **2020**, 12, 6365 16 of 21

and system trust, responsiveness, and empathy—are more important to VIP customer satisfaction than to that of general customers.

The greater deposit by VIP customers indicate the importance for service quality perceived by VIP customers. The difference in general and VIP customers can be explained using the Commitment–Trust theory in online banking [37]. By depositing more money, VIP customers have higher relationship commitment than do general customers, as VIP customers assume that the relationship is more important and should be maintained. VIP customers are considered to have greater belief and trust in the information, commitment to contracts, perception of the higher cost of relationship termination, and greater benefits of the service relationship than do general customers because of the greater amount and frequency of transactions. VIP customers are likely to perceive greater benefits of banking service, such as usefulness, ease of use, and system trust, responsiveness, and empathy.

System security is more important to general customer satisfaction than to that of VIP customers. While VIP customers have a greater belief in online banking, general customers consider it important to receive the banking service without interruption and have their personal or transaction information protected during transaction processes through Internet banking. Many customers prefer Automatic Teller Machine (ATM) use because they perceive the Internet as an insecure channel. General customers likely purchase only when they believe that their transactions are safe. Thus, for general customers, service through the Internet should be perceived as secure and safe to satisfy these customers' expectations, whose transaction balances and amounts are smaller than those of VIP customers. After consumers believe that their transactions are safe, they are confident and are likely to become VIP customers by having more transactions with banks. The risk level that general customers will afford is more sensitive than is that of VIP customers. VIP customers appear already confident in systems security as they deposit more money than general customers and they are less sensitive to security issues.

6. Conclusions

6.1. Summary of Findings

As the most crucial factor in the long-term survival of luxury brands is providing customers with high quality service, this study investigated the moderating role of customer type or the differences between general and VIP customers with respect to the role of online banking service quality for their satisfaction. The moderation analysis in our study comprises the test of difference between general customers and VIP customers which are created according to customer type. The six factors of service quality are identified, which have an influence on customer satisfaction with Internet banking services: usefulness; ease of use, and system security, reliability, responsiveness, and empathy. In the full sample, all factors that influence online banking quality affected customer satisfaction significantly. Usefulness, ease of use, and system trust, responsiveness, and empathy were more important for VIP customer satisfaction than that of general customers, and system security was a more important factor for general than VIP customers. Our study results indicated that general and VIP customers perceive Internet banking service quality differently, and therefore, different variables influence customer satisfaction in each group.

6.2. Implications for Research

Various service factors are required to evaluate the implementation of banking systems, which have become part of an ecosystem in which multiple actors, system elements, and settings provide ample and varied opportunities [27]. As customer relations management has a crucial influence on relationship quality in e-banking [28], we suggested various factors of service quality and the way they affect general and VIP customer satisfaction with Internet banking services.

Although online banking services are offered widely as a strategic necessity to compete effectively in the bank industry, studies of the differential or moderating effects of customer type on perceptions

Sustainability **2020**, 12, 6365 17 of 21

of service quality in Internet banking are lacking. While there has been a number of IS studies of Internet banking [8,11,14], research on the service quality of luxury brands in the context of Internet banking is almost nonexistent. Studies that distinguish different types of customers, i.e., general vs. VIP customers, and the way customer type relates to satisfaction with banking services, are scarce. Accordingly, this study was designed to fill this gap in the literature. The study applied the theories of luxury brands [22,23,25] to online banking, and examined the differential roles of Internet banking service quality for customer satisfaction, as the Internet banking's continued success for VIP customers is to provide value by offering customers novel and high quality services. The results of our study provide an empirical foundation for further studies of Internet banking strategies. They also highlight six factors of online banking service quality that can be used as a basis to assess Internet banking service quality.

Future studies should consider other factors that influence service quality and thus determine customer satisfaction. In addition, as national circumstances, such as culture and Internet access, are likely to influence the diffusion of Internet banking [11], the results of this study will likely differ in different nations. Thus, to increase the ability to generalize the results, comparative studies in other nations would be useful. Further future research should consider the interrelationships among constructs considering those interrelationships in technology acceptance model [83]. Further, it is insightful to estimate differences between generations regarding Internet banking service quality which are natural. Further other sustainability issues like security of Internet banking can be more focused in future study.

6.3. Implications for Practice

To facilitate customer satisfaction, financial institutions can concentrate on improving the six factors of Internet banking quality we found important here—usefulness, ease of use, and system security, reliability, responsiveness, and empathy. In Korea, general customers are less satisfied than are VIP customers with respect to usefulness, ease of use, and system trust, responsiveness, and empathy of Internet banking, which demonstrates that in Korea, general customers receive fewer and less diverse service benefits than do VIP customers. Because VIP customers use banking services actively, their satisfaction with Internet banking is likely to be impacted more by its service quality. In Korea, bank management typically has a limited financial budget for services, and this strategy of segmenting general and VIP customers can be adopted to guide the provision of differential Internet banking services to each group. For example, banks may provide VIP customers an additional search engine for financial information or free cultural content that is not offered to general customers. VIP customers also may receive service in a real-time customized financial consultation to solve their financial issues anywhere and anytime using e-mail, a call center, Web chat, or personalized Web pages.

Thus, the impacts of ease of use and system responsiveness on customer satisfaction were stronger for VIP customers than for general customers, and this result showed that VIP customers are more sensitive to Internet banking's convenience in Korea. VIP customers already receive high quality service in person at bank branches. For example, separate private banking (PB) staff members typically serve VIP customers in a separate room. Hence, VIP customers expect not to wait in a long line for services in bank branches. General customers are accustomed to using Internet banking services and consider it routine to use online banking to process ordinary financial transactions. Therefore, in Korea, they are less sensitive to the inconveniences of Internet banking. It is necessary to devise a management strategy to induce VIP customers to use online banking and design Internet banking systems that increase the services' ease of use to increase these customer's satisfaction.

For general customers, management should implement secure Internet banking services by providing the proper security controls. It is important to ensure that general customers can access Internet banking promptly and reliably, and that transactions are processed without errors or system breakdowns. Further, Internet banking should protect and maintain transaction records accurately.

Sustainability **2020**, 12, 6365 18 of 21

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References

- 1. Goh, K.H.; Kauffman, R.J. Firm strategy and the Internet in U.S. commercial banking. *J. Manag. Inf. Syst.* **2013**, *30*, 9–40. [CrossRef]
- 2. Liu, D.-Y.; Chen, S.-W.; Chou, T.-C. Resource fit in digital transformation. *Manag. Decis.* **2011**, 49, 1728–1742. [CrossRef]
- 3. Keller, K.L. Managing the growth tradeoff: Challenges and opportunities in luxury branding. *J. Brand Manag.* **2009**, *16*, 290–301. [CrossRef]
- 4. Tynan, C.; McKechnie, S.; Chhuon, C. Co-creating value for luxury brands. *J. Bus. Res.* **2010**, *63*, 1156–1163. [CrossRef]
- 5. Im, I.; Hong, S.; Kang, M.S. An international comparison of technology adoption: Testing the UTAUT model. *Inf. Manag.* **2011**, *48*, 1–8. [CrossRef]
- 6. Lee, K.-W.; Tsai, M.-T.; Lanting, M.C.L. From marketplace to marketspace: Investigating the consumer switch to online banking. *Electron. Commer. Res. Appl.* **2011**, *10*, 115–125. [CrossRef]
- 7. Lee, M.-C. Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electron. Commer. Res. Appl.* **2009**, *8*, 130–141. [CrossRef]
- 8. Martins, C.; Oliveira, T.; Popovič, A. Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *Int. J. Inf. Manag.* **2014**, *34*, 1–13. [CrossRef]
- 9. Montazemi, A.R.; Qahri-Saremi, H. Factors affecting adoption of online banking: A meta-analytic structural equation modeling study. *Inf. Manag.* **2015**, 52, 210–226. [CrossRef]
- 10. Riffai, M.M.M.A.; Grant, K.; Edgar, D. Big TAM in Oman: Exploring the promise of on-line banking, its adoption by customers and the challenges of banking in Oman. *Int. J. Inf. Manag.* **2012**, *32*, 239–250. [CrossRef]
- 11. Takieddine, S.; Sun, J. Internet banking diffusion: A country-level analysis. *Electron. Commer. Res. Appl.* **2015**, *14*, 361–371. [CrossRef]
- 12. Tassabehji, R.; Kamala, M.A. Evaluating biometrics for online banking: The case for usability. *Int. J. Inf. Manag.* **2012**, 32, 489–494. [CrossRef]
- 13. Yoon, C. Antecedents of customer satisfaction with online banking in China: The effects of experience. *Comput. Hum. Behav.* **2010**, *26*, 1296–1304. [CrossRef]
- 14. Yoon, H.S.; Steege, L.M.B. Development of a quantitative model of the impact of customers' personality and perceptions on Internet banking use. *Comput. Hum. Behav.* **2013**, *29*, 1133–1141. [CrossRef]
- 15. Al-Ajam, A.S.; Nor, K.M. Challenges of adoption of internet banking service in Yemen. *Int. J. Bank Mark.* **2015**, *33*, 178–194. [CrossRef]
- 16. Amin, M. Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. *Int. J. Bank Mark.* **2016**, 34, 280–306. [CrossRef]
- 17. Marafon, D.L.; Basso, K.; Espartel, L.B.; Barcellos, M.D.; Eduardo Rech, E. Perceived risk and intention to use internet banking: The effects of self confidence and risk acceptance. *Int. J. Bank Mark.* **2018**, *36*, 277–289. [CrossRef]
- 18. Namahoot, K.S.; Laohavichien, T. Assessing the intentions to use internet banking: The role of perceived risk and trust as mediating factors. *Int. J. Bank Mark.* **2018**, *36*, 256–276. [CrossRef]
- 19. Patel, K.J.; Patel, H.J. Adoption of internet banking services in Gujarat: An extension of TAM with perceived security and social influence. *Int. J. Bank Mark.* **2018**, *36*, 147–169. [CrossRef]
- 20. Rawashdeh, A. Factors affecting adoption of internet banking in Jordan: Chartered accountant's perspective. *Int. J. Bank Mark.* **2015**, *33*, 510–529. [CrossRef]
- 21. Yadav, R.; Chauhan, V.; Pathak, G.S. Intention to adopt internet banking in an emerging economy: A perspective of Indian youth. *Int. J. Bank Mark.* **2015**, *33*, 530–544. [CrossRef]
- 22. Choi, E.; Ko, E.; Kim, A.J. Explaining and predicting purchase intentions following luxury-fashion brand value co-creation encounters. *J. Bus. Res.* **2016**, *69*, 5827–5832. [CrossRef]

23. Cristini, H.; Kauppinen-Räisänen, H.; Barthod-Prothade, M.; Woodside, A. Toward a general theory of luxury: Advancing from workbench definitions and theoretical transformations. *J. Bus. Res.* **2017**, 70, 101–107. [CrossRef]

- 24. Kang, Y.-J.; Park, S.-Y. The perfection of the narcissistic self: A qualitative study on luxury consumption and customer equity. *J. Bus. Res.* **2016**, *69*, 3813–3819. [CrossRef]
- 25. Shukla, P.; Banerjee, M.; Singh, J. Customer commitment to luxury brands: Antecedents and consequences. *J. Bus. Res.* **2016**, *69*, 323–331. [CrossRef]
- 26. Hanafizadeh, P.; Keating, B.W.; Khedmatgozar, H.R. A systematic review of Internet banking adoption. *Telemat. Inform.* **2014**, *31*, 492–510. [CrossRef]
- 27. Leonardi, P.M.; Bailey, D.E.; Diniz, E.H.; Sholler, D.; Nardi, B. Multiplex appropriation in complex systems implementation: The case of Brazil's correspondent banking system. *MIS Q.* **2016**, *40*, 461–474. [CrossRef]
- 28. Kuo, T.H. The antecedents of customer relationship in e-banking industry. *J. Comput. Inf. Syst.* **2011**, *51*, 57–66.
- 29. Shukla, P. Status consumption in cross-national context: Socio-psychological, brand and situational antecedents. *Int. Mark. Rev.* **2010**, 27, 108–129. [CrossRef]
- 30. Wiedmann, K.P.; Hennigs, N.; Siebels, A. Value-based segmentation of luxury consumption behavior. *Psychol. Mark.* **2009**, *26*, 625–651. [CrossRef]
- 31. Kastanakis, M.N.; Balabanis, G. Between the mass and the class: Antecedents of the "bandwagon" luxury consumption behavior. *J. Bus. Res.* **2012**, *65*, 1399–1407. [CrossRef]
- 32. Shukla, P. Impact of interpersonal influences, brand origin and brand image on luxury purchase intentions: Measuring interfunctional interactions and a cross-national comparison. *J. World Bus.* **2011**, *46*, 242–252. [CrossRef]
- 33. Bazi, S.; Filieri, R.; Gorton, M. Customers' motivation to engage with luxury brands on social media. *J. Bus. Res.* **2020**, 112, 223–235. [CrossRef]
- 34. Li, G.; Liu, H.; Li, G. Payment willingness for VIP subscription in social networking sites. *J. Bus. Res.* **2014**, 67, 2179–2184. [CrossRef]
- 35. Cheng, T.C.E.; Lam, D.Y.C.; Yeung, A.C.L. Adoption of internet banking: An empirical study in Hong Kong. *Decis. Support Syst.* **2006**, 42, 1558–1572. [CrossRef]
- 36. Shah, M.H.; Siddiqui, F.A. Organisational critical success factors in adoption of e-banking at the Woolwich bank. *Int. J. Inf. Manag.* **2006**, *26*, 442–456. [CrossRef]
- 37. Vatanasombut, B.; Igbaria, M.; Stylianou, A.C.; Rodgers, W. Information systems continuance intention of web-based applications customers: The case of online banking. *Inf. Manag.* **2008**, 45, 419–428. [CrossRef]
- 38. Liao, Z.; Cheung, M.T. Measuring consumer satisfaction in Internet banking: A core framework. *Commun. ACM* **2008**, *51*, 47–51. [CrossRef]
- 39. Compeau, D.R.; Wilson, T.D. Computer self-efficacy: Development of a measure and initial test. *MIS Q.* **1995**, *19*, 189–211. [CrossRef]
- 40. Lee, K.C.; Jung, N. Exploring antecedents of behavior intention to use Internet banking in Korea: Adoption perspective. *Int. J. E Adopt.* **2009**, *1*, 30–47. [CrossRef]
- 41. Chauhan, V.; Yadav, R.; Choudhary, V. Analyzing the impact of consumer innovativeness and perceived risk in internet banking adoption: A study of Indian consumers. *Int. J. Bank Mark.* **2019**, *37*, 323–339. [CrossRef]
- 42. Asian Banker, Mobile Banking Seen to Overtake Internet Banking. Available online: http://www.theasianbanker.com/updates-and-articles/mobile-banking-seen-to-overtake-internet-banking (accessed on 3 August 2020).
- 43. Internet Banking Transactions at New Record High in 2019. Available online: http://www.koreaherald.com/view.php?ud=20200412000286 (accessed on 3 August 2020).
- 44. Joseph, I.N.; Rajendran, C.; Kamalanabhan, T.J. An instrument for measuring total quality management implementation in manufacturing-based business units in India. *Int. J. Prod. Res.* **1999**, *37*, 2201–2215. [CrossRef]
- 45. Liao, C.-H.; Yen, H.R.; Li, E.Y. The effect of channel quality inconsistency on the association between e-service quality and customer relationships. *Int. Res.* **2011**, *21*, 458–478. [CrossRef]
- 46. Carlson, J.; O'Cass, A. Developing a framework for understanding e-service quality, its antecedents, consequences, and mediators. *Manag. Serv. Qual.* **2011**, 21, 264–286. [CrossRef]
- 47. Thaichon, P.; Lobo, A.; Mitsis, A. An empirical model of home internet services quality in Thailand. *Asia Pac. J. Mark. Logist.* **2014**, *26*, 190–210. [CrossRef]

Sustainability **2020**, 12, 6365 20 of 21

48. Dospinescu, O.; Anastasiei, B.; Dospinescu, N. Key factors determining the expected benefit of customers when using bank cards: An analysis on millennials and generation Z in Romania. *Symmetry* **2019**, *11*, 1449. [CrossRef]

- 49. Dospinescu, O. E-Wallet. A new technical approach. Acta Univ. Danub. 2012, 11, 84–94.
- 50. Bontis, N.; Booker, L.D.; Serenko, A. The mediating effect of organizational reputation on customer loyalty and service recommendation in the banking industry. *Manag. Decis.* **2007**, *45*, 1426–1445. [CrossRef]
- 51. Elliot, S.; Li, G.; Choi, C. Understanding service quality in a virtual travel community environment. *J. Bus. Res.* **2013**, *66*, 1153–1160. [CrossRef]
- 52. Rha, J.-Y. Customer satisfaction and qualities in public service: An intermediary customer perspective. *Serv. Ind. J.* **2012**, *32*, 1883–1900. [CrossRef]
- 53. Zhao, Y.L.; Benedetto, C.A.D. Designing service quality to survive: Empirical evidence from Chinese new ventures. *J. Bus. Res.* **2013**, *66*, 1098–1107. [CrossRef]
- 54. Parasuraman, A.; Zeithaml, V.A.; Berry, L.L. A conceptual model of service quality and its implications for future research. *J. Mark.* **1985**, *49*, 41–50. [CrossRef]
- 55. Parasuraman, A.; Zeithaml, V.A.; Berry, L.L. Refinement and reassessment of the SERVQUAL scale. *J. Retail.* **1991**, *67*, 420–450.
- 56. George, A.; Kumar, G.S.G. Impact of service quality dimensions in internet banking on customer satisfaction. *Decision* **2014**, *41*, 73–85. [CrossRef]
- 57. Zhu, Y.-Q.; Chen, H.-G. Service fairness and customer satisfaction in internet banking: Exploring the mediating effects of trust and customer value. *Int. Res.* **2012**, *22*, 482–498. [CrossRef]
- 58. Zhang, L.; Zhu, J.; Liu, Q. A meta-analysis of mobile commerce adoption and the moderating effect of culture. *Comput. Hum. Behav.* **2012**, *28*, 1902–1911. [CrossRef]
- 59. McLean, G. Examining the determents and outcomes of mobile app engagement—A longitudinal perspective. *Comput. Hum. Behav.* **2018**, *84*, 392–403. [CrossRef]
- 60. Akter, S.; D'Ambra, J.; Ray, P. Development and validation of an instrument to measure user perceived service quality of mHealth. *Inf. Manag.* **2013**, *50*, 181–195. [CrossRef]
- 61. Agarwal, R.; Karahanna, E. Time flies when you're having fun: Cognitive absorption and beliefs about information technology usage. *MIS Q.* **2000**, *24*, 665–694. [CrossRef]
- 62. Kang, J.-Y.M.; Mun, J.M.; Johnson, K.K.P. In-store mobile usage: Downloading and usage intention toward mobile location-based retail apps. *Comput. Hum. Behav.* **2015**, *46*, 210–217. [CrossRef]
- 63. De Wulf, K.; Schillewaert, N.; Muylle, S.; Rangarajan, D. The role of pleasure in web site success. *Inf. Manag.* **2006**, *43*, 434–446. [CrossRef]
- 64. Yoo, J.; Park, M. The effects of e-mass customization on consumer perceived value, satisfaction, and loyalty toward luxury brands. *J. Bus. Res.* **2016**, *69*, 5775–5784. [CrossRef]
- 65. Kastanakis, M.N.; Balabanis, G. Explaining variation in conspicuous luxury consumption: An individual differences' perspective. *J. Bus. Res.* **2014**, *67*, 2147–2154. [CrossRef]
- 66. Choi, J.; Kim, S. Is the smartwatch an IT product or a fashion product? A study on factors affecting the intention to use smartwatches. *Comput. Hum. Behav.* **2016**, *63*, 777–786. [CrossRef]
- 67. Chen, J.V.; Cheng, H.K.; Hsiao, H.J.V. Loyalty and profitability of VIP and non-VIP customers in the banking service industry. *Serv. Sci.* **2016**, *8*, 19–36. [CrossRef]
- 68. Vanani, I.R. Designing a predictive analytics for the formulation of intelligent decision making policies for vip customers investing in the bank. *J. Inf. Technol. Manag.* **2017**, *9*, 477–511.
- 69. Thomson, M.; MacInnis, D.J.; Park, C.W. The ties that bind: The strength of consumers' emotional attachments to brands. *J. Consum. Psychol.* **2005**, *15*, 77–91. [CrossRef]
- 70. McKinney, V.; Yoon, K.; Zahedi, F.M. The measurement of Web-consumer satisfaction: An expectation and disconfirmation approach. *Inf. Syst. Res.* **2002**, *13*, 296–315. [CrossRef]
- 71. Kohli, R.; Devaraj, S.; Mahmood, A. Understanding determinants of online consumer satisfaction: A decision process perspective. *J. Manag. Inf. Syst.* **2004**, *21*, 115–135. [CrossRef]
- 72. Doll, W.J.; Deng, X.; Raghunathan, T.S.; Torkzadeh, G.; Xia, W. The meaning and measurement of user satisfaction: A multigroup invariance analysis of the end-user computing satisfaction instrument. *J. Manag. Inf. Syst.* 2004, 21, 227–262. [CrossRef]
- 73. Lederer, A.L.; Maupin, D.J.; Sena, M.P.; Zhuang, Y. The technology acceptance model and the World Wide Web. *Decis. Support Syst.* **2000**, *29*, 269–282. [CrossRef]

Sustainability **2020**, 12, 6365 21 of 21

74. Buellingen, F.; Woerter, M. Development perspectives, firm strategies and applications in mobile commerce. *J. Bus. Res.* **2004**, *57*, 1402–1408. [CrossRef]

- 75. O'Cass, A.; Fenech, T. Web retailing adoption: Exploring the nature of Internet users Web retailing behavior. *J. Retail. Consum. Serv.* **2003**, *10*, 81–94. [CrossRef]
- 76. Ranganathan, C.; Ganapathy, S. Key dimensions of business-to-consumer websites. *Inf. Manag.* **2002**, *39*, 457–465. [CrossRef]
- 77. Barnes, S.J.; Vidgen, R.T. An evaluation of cyber-bookshops:The WebQualTM method. *Int. J. Electron. Commer.* **2001**, *6*, 11–30. [CrossRef]
- 78. Kim, S.; Stoel, L. Dimensional hierarchy of retail website quality. Inf. Manag. 2004, 41, 619–633. [CrossRef]
- 79. O'cass, A.; McEwen, H. Exploring consumer status and conspicuous consumption. *J. Consum. Behav.* **2004**, *4*, 25–39. [CrossRef]
- 80. Shukla, P.; Purani, K. Comparing the importance of luxury value perceptions in cross-national contexts. *J. Bus. Res.* **2012**, *65*, 1417–1424. [CrossRef]
- 81. Chin, W.W. The partial least squares approach to structural equation modeling. In *Modern Methods for Business Research*; Marcoulides, G.A., Ed.; Edison Lawrence Erlbaum Associates: Hillsdale, NJ, USA, 1998; pp. 295–336.
- 82. Howel, J.M.; Higgins, C.A. Champion of technological innovation. Adm. Sci. Q. 1990, 35, 317–341. [CrossRef]
- 83. Lai, P.C. The literature review of technology adoption models and theories for the novelty technology. *J. Inf. Syst. Technol. Manag.* **2017**, *14*, 21–38. [CrossRef]



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