



Article

The Effects of the Antecedents of "Buy-Online-Pick-Up-In-Store" Service on Consumer's BOPIS Choice Behaviour

Kihyung Kim[®], Sang-Lin Han *, Young-Yong Jang[®] and Yun-Chang Shin[®]

School of Business, Hanyang University, Seoul 04763, Korea; khykim2362@daum.net (K.K.); yyjangduddyd@hanyang.ac.kr (Y.-Y.J.); repion@hanyang.ac.kr (Y.-C.S.)

* Correspondence: slhan@hanyang.ac.kr

Received: 28 September 2020; Accepted: 10 November 2020; Published: 29 November 2020



Abstract: We studied the effect of the antecedents of the buy-online-pick-up-in-store (BOPIS) service on consumer's BOPIS choice and shopping behaviour. The convenience of BOPIS benefits retailers and consumers; therefore, we used online surveys of consumers and the unified theory of acceptance and use of technology 2 (UTAUT2) model. The results of the study show that performance expectancy, trust, compatibility with BOPIS shopping, hedonic motivation and social influence affected the behavioural intentions in omni-channel BOPIS. However, price value and effort expectancy were not considered to be important factors in choosing BOPIS shopping. A moderating effect of the different age generations was analysed in the model. The managerial implications and the limitations of the study are also discussed.

Keywords: BOPIS; UTAUT2; omni-channel; millennial cohorts

1. Introduction

An increasing numbers of retail companies are modifying and supplementing their multichannel shopping models due to the trends in tailored online shopping. Retail companies have realized in recent years that integrated channels can increase consumer value and operational efficiency, prompting them to focus on omni-channel retailing [1,2]. Nearly 70% of US shoppers have used buy-online-pick-up-in-store (BOPIS) more than once. Half say that they have made purchases online based on whether BOPIS was available. Adobe's December 2019 Holiday Shopping Trends report found that 37% more BOPIS orders were placed in 2019 than the year before [3].

Consumers who opt for the BOPIS service do not pay delivery costs and are able to collect their purchases quickly [4]. With the introduction of this feature, in the United States, in 2015 consumer preference for web ordering and delivery services fell by 7% compared to 2014, while the preference for BOPIS increased by 3% [5]. According to a United Parcel Service report, retailers received 45% of derivative purchase orders from consumers using the BOPIS service [6,7], and BOPIS consumers demonstrated 20% higher consumer loyalty than other consumers [7].

Previous omnichannel studies dealt with the channel mix [8], inventory management, and shopping channel migration of consumers [9]. Juaneda-Ayensa et al. [10] analysed omnichannel choice factors. However, the number of studies on the factors that drive consumers' BOPIS choices is insufficient. Factors that induce service choices are important in the consumer experience [11].

Therefore, the prime research question of our study is what promotes the choice of BOPIS choice and what leads to rejection of BOPIS? In the research on omni-channels, the behaviour of consumers who opt for the BOPIS service is understudied. This is the case even though the importance of BOPIS in the omni-channel model warrants taking a systematic research approach. With changing

Sustainability **2020**, *12*, 9989 2 of 15

lifestyles, consumption patterns reveal the demand for simplicity and convenience. The omni-channel BOPIS service is an advanced distribution form that responds quickly to lifestyle changes. The main consumers of BOPIS shopping are millennials [12]. Millennials are trend setters, social connecters, and omni-channel shopping leaders [13]. There are approximately two billion millennials worldwide and approximately 76 million in the United States. These cohorts spend an average of US\$ 85 a day, which is similar to a baby boomer's spending [14]. Unfortunately, scant research delves into the consumption behaviour of millennials and BOPIS shopping.

Therefore, we attempt to identify BOPIS users, identify their characteristics, analyse the key drivers of their behavioural intention and use behaviour for BOPIS, and investigate influential factors that may improve BOPIS services for consumers and distributors.

Thus, we studied the effect of omni-channel BOPIS service availability on consumer purchasing behaviour. Our purpose was to examine the relevant behavioural intention and use behaviour by modifying and extending the unified theory of acceptance and use of technology 2 (UTAUT2), a model borrowed from Venkatesh et al. [15]. We used the UTAUT2 model because the BOPIS service relies on mobile apps for ordering and pick-up [10]. The extended UTAUT2 is the most mature model for analysing consumer behaviours by accepting various consumer theories [10].

Understanding these aspects of the BOPIS service necessitates the development of a research model. Thus, we modified the variables of the UTAUT2 model to demonstrate the omni-channel BOPIS shopping characteristics and the millennial cohorts' lifestyle compatibility. In addition, we analysed the effect of the millennial cohorts on BOPIS shopping by multiple-group analysis. The previous behavioural intention model needs to offer new perspectives and possible explanations for the attitude–behaviour gap [16]. The UTAUT2 model does not account for the influence of reason against a behaviour on a consumer's choice of BOPIS service [16]. Therefore, we analysed the UTAUT2 model by adding Compatibility, Price value, and Trust as 'reason against' factors.

We found that performance expectancy and compatibility significantly affected the behavioural intention in an omni-channel BOPIS. Trust had a direct effect on actual use of the BOPIS service (that is, use behaviour). In addition, we analysed that the choice of BOPIS service for economic reasons was not made. We confirmed that 'reasons against behavioural' factors were important variables. The results of the multi-group analysis show that the millennial generation values were congruent with omni-channel BOPIS shopping and lifestyle.

Our study has important theoretical and practical implications because studying the drivers of BOPIS shopping behaviour can allow retailers to adopt different strategies in BOPIS consumer management that are aimed at increasing consumer satisfaction by offering an integrated shopping experience as well as trust management and a greater understanding of key consumers (millennials).

2. Literature Review

The purpose of this study was to analyse the transaction effects of consumers and distributors who use omni-channel BOPIS services. To this end, we added the variables of trust, price value, and compatibility with BOPIS shopping to the UTAUT2 model. In this section, we review the previous relevant research in the following order: omni-channel BOPIS, trust in e-commerce, millennial consumption values, and the UTAUT2 model.

Omnichannel retailing is the set of activities involved in a fully-integrated approach to commerce, providing shoppers with a unified experience across all channels or touchpoints. In an omnichannel environment, shoppers move freely among channels (online, offline, and mobile devices) [17]. Because the channels are managed together, the perceived interaction is under the brand [10]. Shoppers have begun to use online and offline platforms together in their purchasing processes leveraging the advantages of both channels. because this offers the consumers the same purchasing experience as offline channels [18,19].

Juaneda-Ayensa et al. [10] analysed omnichannel choice factors for Spanish customers of the store Zara using the UTAUT model, revealing that personal innovativeness and effort expectancy

Sustainability **2020**, *12*, 9989 3 of 15

were important factors. Mosquera et al. [12] studied the impact of smartphones in omni-channel shopping using the UTAUT model. The predictors of omnichannel usage that were found to be the most important were habits, performance expectations, and hedonic motivations. Millennials had a stronger positive effect on mobile usage habits and behavioural intentions than other generations.

Under the BOPIS, consumers then retrieve the purchased items at physical stores by presenting proof-of-purchase codes sent to their devices, or they collect items at specific locations, such as convenience stores. All of these arrangements come with several benefits: consumers have access to abundant information online; they can minimise the need to wait in checkout lines by picking up products in an efficient manner at their convenience; and they enjoy lower prices, mostly through avoiding delivery costs [18,19].

The majority of the previous BOPIS research was on retailer store operations. MacCarthy, Zhang, and Muyldermans, [20] found that order and pickup time management were significant factors of BOPIS. Fan et al, [21] stated that inventory management was important. Kim et al. [22] studied from the perspective of consumers, and they confirmed that the choice of BOPIS was influenced by location convenience and product types.

The BOPIS purchasing process not only provides convenience to customers but also provides pleasure. These things bring new experiences to customers. The concept of the consumer experience entails experiential marketing in which the purchase of goods and services is given an added value through moment-of-truth management [18,19].

According to previous studies on trust in e-commerce, trust in an online shopping mall is the belief that the shopping mall will perform to the extent the buyer expects [6]. Trust is important in e-commerce because there is no guarantee that e-commerce vendors will not be involved in harmful opportunistic behaviours, such as unfair pricing, inaccurate information delivery, privacy invasion, unauthorised use of credit card information, or unauthorised tracking of transactions. For these reasons, unlike in previous research on omni-channel purchasing behaviour, we included "trust" as a key research variable.

Millennial cohorts are the generation born between 1980 and 2000. This distinction differs among scholars. They are also called Gen Y [23]. Millennials' consumption value is the lifestyle that millennial cohorts pursue. Millennial cohorts are digital natives and shopping leaders [24].

To examine the effect of BOPIS on purchasing behaviour, we adopted UTAUT2, a model frequently used in research on the user acceptance of mobile technologies. To create this model, Venkatesh et al. [15,25] reviewed and synthesised aspects of the following models: the theory of reasoned action (TRA), the technology acceptance model (TAM), the motivational model, the theory of planned behaviour (TPB), the decomposed theory of planned behaviour, the combined TAM-TBP model (OTAM-CBT), the model of personal computer utilisation (MPCU), the innovation diffusion theory (IDT), and the social cognitive theory (SCT).

The authors' endeavour ultimately resulted in the creation of the unified theory of acceptance and use of technology (UTAUT), which incorporates performance expectancy, effort expectancy, social influence, facilitating conditions, behavioural intention, and use behaviour. UTAUT2 is an extension of the initial model that includes hedonic motivation, price value, and habit. The UTAUT2 model compared with the TAM model demonstrated an improvement in the variance explained for behavioural intention (from 56% to 74%) and use behaviour (from 40% to 52%) [15].

We held the view that "reason for" and "reason against" are dichotomous, which means that both factors can exist simultaneously. However, the UTAUT model is useful for explaining the "reasons for" but not enough to explain the "reasons against". Thus, by adding the behavioural reasoning theory (BRT, [16]), researchers took a new approach to understanding users' adoption of BOPIS by integrating factors, such as "reasons for adoption" and "reasons against adoption". Westaby [16] argued that there is a reason as an antecedence factor influencing the behavioural intention to cause action and that it affects the beliefs, values, and behaviour.

Sustainability **2020**, *12*, 9989 4 of 15

Reasons are specific cognitions connected to a behavioural explanation, whereas beliefs are not restricted to the context of behavioural explanations alone [16]. "Reasons against behavioural" means that I like it, but I will not buy it [16]. This study added the factors "reasons against behavioural" that are insufficient in the UTAUT model. In online shopping studies, "reasons against behavioural" factors include privacy risks [26,27], psychological discomfort, trust, perceived risk, and budget [28,29].

3. Conceptual Model and Research Hypotheses

In this study, we partially modified the UTAUT2 model as per Juaneda-Ayensa et al [10]. Trust and Compatibility with BOPIS (CB) were important factors in the BOPIS context because BOPIS transactions are web-based services—consumers are asked to provide their basic information, and they make repeated transactions on the platforms. Therefore, we emphasize trust and CB in our modified model. CB as a barrier factor is a variable in which facilitating conditions and habit are integrated. Trust and CB can be reasons against a behaviour for a consumer's choice of BOPIS service [16].

3.1. Antecedents of Behavioural Intention for BOPIS

The omni-channel approach is characterised by merging touch-and-feel information through the use of devices, like smartphones [9,30]. In our study, the performance expectancy was defined as the degree to which consumers believe that the use of BOPIS service will provide them with better benefits from their purchasing activities. BOPIS is expected to offer benefits through quick purchases and tailor-made services. Literature on m-commerce (mobile commerce) and omni-channels has pointed to performance expectancy as the antecedent with the largest effect on behavioural intention [8,31].

Effort expectancy, in our research, was defined as the degree to which consumers believe that the mobile application and related processes are easy to use. BOPIS is widely used among millennials and is more popular among women than in men. Anyone can easily and quickly learn how to use m-commerce and lockers. In the extant literature, scholars have argued that effort expectancy has a strong effect on behavioural intention [15,25].

Social influence, in our study, was defined as word-of-mouth activity in the BOPIS service where friends, colleagues, and family members express their appreciation for the convenience of BOPIS to one another. The advances in social media platforms have translated into a drastically larger influence of communities; social influence will, thus, have a strong effect on behavioural intention [32].

In IDT, Rogers [33] defined compatibility as the extent to which innovation is perceived to be consistent with the existing rights, current business practices, and past experiences of potential consumers. Individuals, or consumers, were more likely to choose innovation when it matched their past experiences, beliefs, and lifestyles [31]. When a consumer chooses a product or selects a shopping channel, the conflict is minimised if the compatibility matches.

Compatibility in our study was determined by the extent to which the BOPIS service was congruous with consumer lifestyles and whether internet services were available for BOPIS shopping [31]. This concept integrates facilitating conditions and habit in the UTAUT2 model. In Karayanni's [34] study, fitness variables had a significant effect on online shopping. Therefore, the CB will have a significant effect on behavioural intention [31].

In our study, hedonic motivation was defined as the extent to which consumers enjoy a BOPIS system [32]. If shoppers enjoy ordering on mobile devices and collecting their purchases at stores without waiting by simply showing the store personnel the code sent to their devices, the BOPIS system will be quickly adopted and implemented. Enjoying the BOPIS service will be a positive experience. This experience will motivate customers to re-use the BOPIS service. Previous studies have argued that hedonic motivation in the information and communications technology (ICT) environment accelerates the behavioural intention to purchase products using new systems [35]. Jensen [36] and Wen [37] extended the price value concept to the degree of price savings derived from the use of a new system. In our study, price value was defined as the belief that using BOPIS will save costs [36,37]. Chatterjee [38] argued that high-thrift consumers demonstrate a high behavioural intention toward

Sustainability **2020**, *12*, 9989 5 of 15

multichannel and omni-channel pick-up services. Utilitarian motivation is a crucial concept when purchasing through a BOPIS service [39]. Trust is presented as a crucial factor in e-commerce in TAM [40] and UTAUT [41] model analyses. Our study considered the following aspect of trust: technical trust in the BOPIS system. Without trust, the BOPIS service can never materialise as it involves advance payments that are not completed in-person. For this reason, online commercial transactions must demonstrate consistency and data integrity to build trust. In this manner, trust influences behavioural intentions and use behaviour [39,42].

Thus, we developed the following hypotheses, and Figure 1 illustrates our study model.

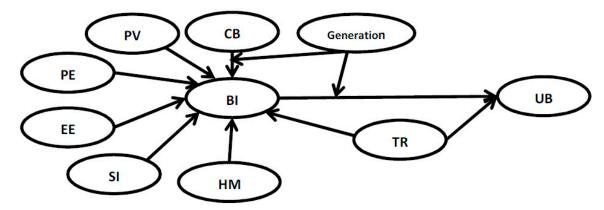


Figure 1. Study model. Notes: PE: Performance expectancy; EE: Effort expectancy; SI: Social influence; CB: Compatibility with buy-online-pick-up-in-store (BOPIS) shopping; HM: Hedonic motivation; PV: Price value; TR: Trust; BI: Behavioural intention; and UB: Use behaviour.

Hypothesis 1 (H1). *Performance expectancy toward the BOPIS service will have a positive effect on behavioural intention.*

Hypothesis 2 (H2). Effort expectancy toward the BOPIS application will have a positive effect on behavioural intention.

Hypothesis 3 (H3). *Social influence in the BOPIS service will have a positive effect on behavioural intention.*

Hypothesis 4 (H4). Compatibility with BOPIS shopping for the BOPIS service will have a positive effect on behavioural intention.

Hypothesis 5 (H5). *Hedonic motivation toward the BOPIS service will have a positive effect on behavioural intention.*

Hypothesis 6 (H6). *Price value in the BOPIS service will have a positive effect on behavioural intention.*

Hypothesis 7 (H7). Trust in the BOPIS service will have a positive effect on behavioural intention.

In this study, we used the modified UTAUT model to analyse which factors made consumers choose BOPIS. Figure 1 shows the hypothetical research model of the study.

3.2. Behavioural Use, Use Behaviour, and Trust

The argument that behavioural intention has an effect on actual behaviour has been explored in TRA, TAM, TPB, and UTAUT2. Effort expectancy (easiness), performance expectancy (usefulness), CB, social influence, price value, and hedonic motivation influence users' attitudes. Attitude, in turn, has an effect on behavioural intention, which then exerts significant influence on the actual use of

Sustainability **2020**, *12*, 9989 6 of 15

the system. Apart from these constructs, previous studies also found that innovativeness and trust have an effect [15,43,44]. In addition, a large corpus of literature on e-commerce has established a high correlation between behavioural intention and actual use.

In this study, we defined behavioural intention as the intention to use BOPIS continuously. Use behaviour is defined as the degree to which consumers actually use the BOPIS service. One-click purchasing is key to Amazon's success. In this service, users place their trust in Amazon and save their credit card number, payment information, and addresses in its system and complete orders with a single click. Trust is thus the most important factor among the antecedents of these repeated, long-term transactions. In this study, we hypothesised that trust would have an effect on use behaviour. Thus, we hypothesised the following:

Hypothesis 8 (H8). Trust in the BOPIS service will have a significant positive effect on use behaviour.

Hypothesis 9 (H9). The behavioural intention toward the BOPIS service will have a significant positive effect on use behaviour.

3.3. The Moderating Effect of Generation

Venkatesh et al. [15] argued that gender, age, and experience differentiated the effects on behavioural intention. Millennials have an advantage over other generations when learning to use Self Service Technology (SST) devices. Millennial consumers focus more on the message and expend more effort when providing information and using web technologies [45–49].

Millennials are a generation familiar with mobile shopping, seeking convenience in shopping, and collecting information through social networking services. They pursue pleasure and happiness and value shopping experiences over other generations. Millennial cohorts are information gathering social connecters, game changers, and trend setters [13].

Taking an omni-channel approach in retail is becoming more and more important as modern consumers expect a smooth user journey when browsing and shopping for products anytime, anywhere. Brands leverage new technologies and provide tools available to help them achieve effective omni-channel strategies. Therefore, the BOPIS service is focused on the younger generation and will be more influential. Hence, for optimised BOPIS shopping for the latest lifestyle changes, we expect that millennials cohorts are more influential than baby boomers or Gen Xers.

Thus, we developed the following hypotheses:

Hypothesis 10 (H10). *Millennials will have a positive effect of behavioural intention on use behaviour for retailers offering the BOPIS service.*

Hypothesis 11 (H11). *Millennials will have a positive effect of compatibility with BOPIS shopping on behavioural intention for retailers offering the BOPIS service.*

4. Methodology and Data

To identify the characteristics of BOPIS users and the factors affecting their choices, we conducted an online survey (survey questionnaire is found in the Appendix A) of men and women across Korea from November 7 to 17, 2019 through the marketing research firm Embrain (http://www.embrain.com). We randomly requested consumers who had experience using BOPIS at least once. The respondents were limited to those who had experience using BOPIS services in large shopping malls (e.g., department stores, Uniqlo, and Zara) within 6 months. We received surveys from 370 respondents and based on the data quality check, 12 were discarded. A total of 358 respondents were used in the final analysis.

The survey was conducted in Korean, and, with the help of a linguistic specialist in Korean and English, the linguistic error was minimized. We examined the nonresponse bias by comparing the

Sustainability **2020**, *12*, 9989 7 of 15

early and late respondents (mean comparisons repeated for the first 25%, 33%, and 50% versus the last 25%, 33%, and 50% of the respondents) for all variables being examined. No significant differences (p < 0.05) emerged in the survey.

The sample contained a slightly larger number of women (53.6%) than men (46.4%). In terms of age groups, the 30 to 39-year-old group was the largest at 31.6% followed by 40 to 49-year-olds (25.4%) and 20 to 29-year-olds (21.8%). Millennials (20 to 38-year-olds) [23] accounted for 51.4% of the sample. The respondents were found to have used mobile-based applications (63.4%) twice as often as personal computer platforms for shopping. The most preferred shopping channel was mobile-based online shopping (34.3%), followed by online shopping (30.2%) and omni-channel (combined) shopping (24%). Only 11.5% of the sample population was found to prefer offline shopping.

We analysed behavioural intentions and trust under UTAUT2 through the structural equation model and performed confirmatory factor analysis, path analysis, and correlation analysis. We also analysed the discriminant validity and moderating effects with multiple group analysis (i.e., comparing the chi-square difference with one degree of freedom of constrained and unconstrained models). We conducted the structural equation model analysis using AMOS 22.

4.1. Measurement of Variables

The antecedents of behavioural intention, use behaviour, and trust toward BOPIS under the UTAUT2 model were measured using a seven-point Likert scale, anchored from 1 = "strongly disagree" to 7 = "strongly agree." Table 1 illustrates the questionnaire items and references.

Name of Variable	No. of Questions	Definition in This Study and References
Performance expectancy	4	The degree to which consumers believe that the use of the BOPIS service will provide them with better benefits in purchasing activities [15,45].
Effort expectancy	4	The degree to which consumers believe that the mobile application and related processes are easy to use [15,25].
Social influence	3	The word-of-mouth activity in the BOPIS service, in which friends, colleagues, and family members express appreciation for the convenience of BOPIS to one another [15,25].
Compatibility with BOPIS shopping	3	The degree to which an innovation is perceived as consistent with the existing values, lifestyles, past experiences, and needs of potential BOPIS adopters [31].
Hedonic motivation	3	The extent to which consumers enjoy the BOPIS system [15].
rice value or saving	3	The belief that using BOPIS will bring about savings [19,37].
Trust	3	Includes, as constructs, technical trust in the BOPIS system [39,50].
Behavioural intention	3	The intention to use BOPIS continuously [15,45].
Use behaviour	4	The degree to which consumers actually use the BOPIS service [15,25].

Table 1. Questionnaire items and references for potential variables.

5. Empirical Findings

5.1. Verification of Reliability and Validity

We performed a confirmatory factor analysis to verify the validity of the variables measured in this study. The validity of the measurement model for each individually observed potential variable in the measurement scale was within the acceptable limits. All indicators belong to a respective construct, and standardised factor loadings showed 0.826–0.925. We measured the construct reliability

Sustainability **2020**, 12, 9989 8 of 15

(CR > 0.877), average variance extracted (AVE > 0.704), and the reliability of each questionnaire item (Cronbach's α > 0.889) and confirmed the consistency of the findings. The model fit was assessed and found to be satisfactory (CFI = 0.9, RMSEA < 0.05, CMIM/DF = 2.131) judging from the good fit indicated by the CFI and RMSEA values.

The average variance extracted versus shared variance method (AVE-SV) and the overlapping confidence intervals approach, are commonly used discriminant validity test methods in structural equation mode [48]. The discriminant validity is confirmed when the square root of the AVE value is larger than the value of correlation between the other constructs [51].

The correlation coefficients between the constructs below are the square root of AVE, which confirms the discriminant validity. The value of the correlation coefficient $\pm 2 \times$ standard error did not contain 1. The absence of the coefficient value of 1 in the correlation matrix suggests the presence of discriminant validity [52]. The results of the reliability and validity tests are shown in Tables 2 and 3.

 Table 2. Reliability and validity.

Variable		Standardised Coefficient	Unstandardized Coefficient	T-Value	SMC	Construct Reliability	AVE	Cronbach's α
	PE1	0.879	1		0.77	0.910	0.716	0.915
Performance	PE2	0.874	1.063	23.453	0.76			
expectancy (PE)	PE3	0.835	0.953	21.391	0.70			
	PE4	0.829	1.046	21.075	0.69			
	EE1	0.901	1		0.81	0.932	0.774	0.940
Effort	EE2	0.906	1.016	26.741	0.82			
expectancy (EE)	EE3	0.887	0.965	25.446	0.79			
	EE4	0.874	0.959	24.556	0.76			
Social influence	SI1	0.908	1		0.82	0.884	0.717	0.889
(SI)	SI2	0.873	1.03	19.433	0.76			
(31)	SI3	0.885	1.094	19.803	0.78			
Compatibility	CB1	0.859	1		0.74	0.899	0.778	0.915
with BOPIS	CB2	0.884	1.005	22.603	0.78			
shopping (CB)	CB3	0.914	0.091	23.769	0.83			
Hedonic	HM1	0.857	1		0.73	0.877	0.704	0.914
motivation (HM)	HM2	0.885	1.049	22.107	0.78			
mouvation (Thvi)	HM3	0.891	1.074	22.382	0.79			
	PV1	0.873	1		0.76	0.877	0.705	0.887
Price value (PV)	PV2	0.881	0.995	21.718	0.78			
	PV3	0.779	0.904	17.852	0.61			
	TR1	0.856	1		0.73	0.924	0.803	0.926
Trust (TR)	TR2	0.927	1.061	24.829	0.86			
	TR3	0.918	1.063	24.381	0.84			
Behavioural	BI1	0.881	1		0.78	0.919	0.792	0.936
	BI2	0.921	1.13	26.535	0.85			
intention (BI)	BI3	0.883	1.136	23.584	0.78			
	UB1	0.869	1		0.76	0.908	0.713	0.903
Use behaviour	UB2	0.897	1.063	20.683	0.80			
(UB)	UB3	0.892	1.018	21.390	0.80			
	UB4	0.925	1.05	17.798	0.86			

 $\chi^2 = 1967.3$; df = 923; p = 00; CMIN/DF = 2.131; TLI = 0.928; NFI = 0.891; CFI = 0.938; RMSEA = 0.050

Table 3. Correlation analysis and discriminant validity.

	M	SD	1	2	3	4	5	6	7	8	9
1	5.420	0.919	0.865								
2	5.408	0.969	0.787 ** (0.124)	0.838							
3	5.408	0.991	0.679 ** (0.126)	0.690 ** (0.132)	0.839						
4	5.995	0.931	0.464 ** (0.102)	0.592 ** (0.102)	0.587 ** (0.144)	0.896					

Sustainability **2020**, *12*, 9989 9 of 15

	M	SD	1	2	3	4	5	6	7	8	9
5	4.970	1.134	0.706 ** (0.124)	0.647 ** (0.142)	0.665 ** (0.142)	0.444 ** (0.124)	0.846				
6	5.273	1.088	0.692 ** (0.128)	0.664 ** (0.120)	0.641 ** (0.124)	0.483 ** (0.122)	0.726 ** (0.124)	0.879			
7	5.023	0.967	0.722 ** (0.126)	0.689 ** (0.102)	0.646 ** (0.118)	0.473 ** (0.112)	0.747 ** (0.126)	0.722 ** (0.140)	0.846		
8	5.291	1.069	0.713 ** (0.118)	0.702 ** (0.124)	0.610 ** (0.102)	0.484 ** (0.128)	0.710 * (0.108)	0.616 ** (0.124)	0.617 ** (0.118)	0.853	
9	5.149	0.971	0.660 ** (0.124)	0.730 ** (0.122)	0.759 ** (0.120)	0.478 ** (0.102)	0.716 ** (0.126)	0.688 ** (0.126)	0.671 ** (0.122)	0.147 ** (0.120)	0.838

Table 3. Cont.

Notes. ** p < 0.01; * p < 0.05; M, Mean; SD, Standard deviation; 1. Performance expectancy, 2. Effort expectancy, 3. Social influence, 4. Compatibility with BOPIS shopping, 5. Hedonic motivation, 6. Price value. 7. Trust, 8. Behavioural intention, and 9. Use behaviour; () is the standard error times; The value along the diagonal line is the square root of AVE.

5.2. Verification of Behavioural Intention and Trust Hypotheses

We verified the correlation between the constructs of this study using the structural equation model. The goodness of fit was CFI = 0.918, TLI = 0.908, and RMSEA = 0.061, which fulfils the generally recommended fit criteria for statistical analyses. We, thus, conclude that the model fit was satisfactory [53].

Table 4 demonstrates the standardised path coefficients, critical ratio (CR; t-value), and level of significance identified through the present structural equation model. The results show that the Performance expectancy, Social influence, compatibility with BOPIS shopping, Hedonic motivation, and Trust significantly influenced the Behavioural intention, supporting H1, H3–H5, and H7 with a positive effect all with a significance level at (p < 0.05). H8 and H9 were also supported, and H2 was not supported (see Table 4).

	Hypot	thesis		Standardised Coefficient	SE	Critical Ratio		Result
H1	PE	\rightarrow	BI	0.541	0.086	6.241	***	Supported
H2	EE	\rightarrow	BI	-0.116	0.055	-2.096		Not supported
H3	SI	\rightarrow	BI	0.151	0.076	1.997	*	Supported
H4	CB	\rightarrow	BI	0.122	0.027	3.377	***	Supported
H5	HM	\rightarrow	BI	0.109	0.043	2.539	**	Supported
H6	PV	\rightarrow	BI	0.011	0.051	0.231		Not supported
H7	TR	\rightarrow	BI	0.183	0.041	4.431	***	Supported
H8	TR	\rightarrow	UB	0.112	0.037	2.991	**	Supported
H9	BI	\rightarrow	UB	0.805	0.058	13.846	***	Supported

Table 4. Results of the path analysis.

Notes. *** p < 0.01; ** p < 0.01; * p < 0.05; $\chi^2 = 2344.502$; df = 955; p = 000; CMIN/DF = 2.455; TLI = 0.908; CFI = 0.918; NFI = 0.899; and RMSEA = 0.061. PE, Performance expectancy; EE, Effort expectancy; SI, Social influence; CB, Compatibility with BOPIS shopping; HM, Hedonic motivation; PV, Price value; TR, Trust; BI, Behavioural intention; and UB, Use behaviour.

5.3. Moderating Effect of Generation

To examine THE moderating effects, multigroup analysis was conducted to compare the chi-square difference (Δ chi-square) with one degree of freedom of constrained and unconstrained models. We analysed the moderating effect of generation, and the findings of this analysis are presented in Table 5. The comparison generation of path coefficients revealed that the effects of CB on behavioural intention and of behavioural intention on use behaviour were higher in millennials than in Gen B (Babyboomers), X by 0.04 and 0.02, respectively, and the differences determined through a χ^2 test, which compares the fit of constrained and free models, are $\chi^2=7.273$ and 11.373, respectively.

Sustainability **2020**, *12*, 9989 10 of 15

This value is above the critical value of 3.84, which indicates that this generation indeed had an effect on behavioural intention and use behaviour (see Table 5).

Unconstrained M	fodel $\chi^2 = 3608.566$	df = 1914 NPAR 340 χ^2 /df = 1.88 RMSEA 0.05 CFI 0.90 Millennials n = 184 Gen B N = 174 Critical Value 3.84				
H10	Supported _	Equality constrained model χ^2 = 3619.939 df = 1915 NPAR339 $\Delta \chi^2$ = 11.373 p = 0.001				
$BI \rightarrow UB$		Millennials Gen B-X	Standardised coefficient = 0.083, t = 12.075, p = 0.000 Standardised coefficient = 0.063 t = 9.443, p = 0.000			
Unconstrained M	odel $\chi^2 = 3567.406$	df = 1914 NPAR 340 χ^2 /df = 1.88 RMSEA 0.05 CFI 0.90 Millennials n = 184 Gen B N = 174 Critical Value 3.84				
H11	Supported _	Equality constrained model $\chi^2 = 3615.839 \text{ df} = 1915 \text{ NPAR339}$ $\Delta \chi^2 = 7.273 \ p = 0.007$				
$CB \rightarrow BI$		Millennials Gen B	Standardised coefficient = $0.073 \text{ t} = 2.225$, $p = 0.026$ Standardised coefficient = $0.035 \text{ t} = 4.306$, $p = 0.000$			

Table 5. Analysis of the moderating effect.

6. Discussion

The omni-channel BOPIS strategy merges touch-and-feel information through the use of devices, such as smartphones. BOPIS incorporates the effects of increased consumer experiences and interactions, on-demand services, and the expansion of SST to the entire purchasing process [9,30,54].

We analysed the effect of omni-channel BOPIS services on purchasing using the UTAUT2 model proposed by Venkatesh et al. [15]. We found that the antecedents of behavioural intention; that is, performance expectancy, trust, CB, hedonic motivation, and social influence, were characterised by their strong effect. This outcome is consistent with the findings of previous studies on e-commerce. Unlike previous studies, effort expectancy and price value were found to have no significant effect [48]. In some previous studies, effort expectations were not supported [55].

Consumers did not opt for the BOPIS service as a motivator for practical shopping. It takes time and money for the consumer to go directly to pick up the goods ordered. Retailers are not fully compensating for these costs. Trust has a strong effect on behavioural intention while behavioural intention and trust have a direct effect on actual use of the BOPIS service. In this study, 'reasons against behavioural' factors, CB and trust, were determined to be important.

We also attempted to determine whether Gen Y acts as a moderating effect in the analysis using the UTAUT2 model, and we found that Gen Y experienced a stronger effect than the other generations in terms of the "trust \rightarrow behavioural intention" path coefficient. We found that, overall, millennial consumers had more influence on omni-channel pick-up services.

7. Conclusions

A possible explanation for this result could be that people today seek more convenient BOPIS shopping in an environment similar to daily life habits, and BOPIS shopping is based on trust and pleasure. Understanding of the characteristics of the BOPIS service necessitated the development of a research model. Thus, we reconfigured and applied UTAUT2, a model borrowed from Venkatesh et al. [15]. This is the first application of the UTAUT2 with BRT to model BOPIS consumer purchase behaviour.

We are confident that this model is useful for characterizing BOPIS consumers. We also analysed BOPIS's suitability for the younger consumer lifestyle. We found the importance of trust, cost, and lifestyle factors, which is why BOPIS is a good service, but not commonly chosen; "I like it, but I will not choose BOPIS" was suggested by the behavioural reasoning theory (BRT, [16]). The theoretical, practical contribution or implications based on the results of this study are as follows.

Sustainability **2020**, *12*, 9989

First, as a theoretical contribution, the BRT theory was extended and provided the basis of the UTAUT2 with the BRT model. Trust, cost, and lifestyle factors can be reasons for not choosing BOPIS services. Retailers should understand why consumers do not choose BOPIS services and strive to recover these choice barriers and cope with the "reasons against behavioural" factors.

Second, the role of BOPIS is not to expand the moment of truth, it is to ensure the survival of offline stores. We found that the antecedents of behavioural intention; that is, performance expectancy, trust, CB, hedonic motivation, and social influence, were characterised by their strong effect. The trend toward, "Amazonization" (e.g., Amazon Go), is growing at a fervent pace. Amazon allows consumers to shop for products online and to pick up purchased products offline, which, in effect, transforms brick-and-mortar stores from shopping venues into warehouses.

Korean retailers are developing BOPIS services to address the inconveniences of door-to-door delivery, particularly for single households and office workers. Retailers must fully compensate consumers for their pickup costs. In this context, introducing a discount policy for Gen Y consumers—given their high influence—is expected to further drive demand. Retailers need to promote communities and forums for advocate consumers, who tend to be frequent buyers, and they need to cultivate more active consumer conversations with the help of these advocates.

In today's hyper-connected marketing environment, frequent advertisements may not be enough to deliver intended messages to consumers. Instead, consumer conversations could be what actually provides the necessary leverage in the digital era. Facilitating consumer conversations depends on the mobilisation and assistance of advocates rather than the company's direct actions [56].

Third, the analysis using the UTAUT2 model revealed that performance expectancy and hedonic motivation had a crucial impact on the purchasing process, but that effort expectancy did not. BOPIS users handle ICT devices (SST) well—that is, they wish to buy easily, conveniently, and at their desired time using abundant information.

Consumers experience excitement when they order online and receive products at offline stores without waiting. Consumers enjoy collecting their orders by entering a code at a designated booth as if they were playing a game. Building on the existing enthusiasm for these activities would be a positive step toward expanding customised consumer experiences that are tailored to individuals. All of these factors will influence the growth of the BOPIS service.

Finally, we found that trust had a substantial effect on the overall purchasing process. Trust refers to accepting the purchasing process, the retailers, and the integrity of the products being offered. BOPIS entails the exchange of authentication, payment, and delivery information necessary for purchase. This makes security and privacy protection highly important. The consumers' ability to exhibit trust toward retailers is positively affected when there is abundant and detailed current information available online to assist them in their purchasing process.

For example, inventory visibility is an absolute prerequisite for the BOPIS service. Trust was found to have an effect on continued behavioural intention and use behaviour. This implies that trust has a crucial role in turning one-time shoppers into highly loyal, long-term consumers. We are convinced that our research has practical implications for operators of omni-channel BOPIS services and shoppers looking for tips on wiser consumption. We look forward to continued and improved research on BOPIS.

8. Limitations and Future Research Directions

Along with the abovementioned academic and practical implications, our study has certain limitations. First, there are numerous factors that induce consumers to opt for BOPIS. However, we selected only some of these factors for the analysis. Selection bias may also be present in our study although we attempted to minimise the sampling errors by including as many companies as possible in the study sample. BOPIS is experiencing a rapid upsurge among retailers but with slight variations according to the types of service.

Sustainability **2020**, *12*, 9989

The respondents of our survey also used various types of BOPIS. However, the insufficient size of the sample may have compromised its representativeness. Second, we modified the UTAUT2 model proposed by Venkatesh et al. [15] when analysing the BOPIS purchasing process. This model should be further refined and updated to make it more suitable for BOPIS service analysis by developing variables that reflect BOPIS consumer characteristics.

Author Contributions: Conceptualization, K.K. and S.-L.H.; methodology and formal analysis, Y.-Y.J. and Y.-C.S.; writing and draft preparation, K.K.; supervision, S.-L.H. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. Survey Items

Performance expectancy

BOPIS shopping process with E-commerce websites

- I find BOPIS very useful in the purchasing process.
- Using BOPIS increases my chances of achieving things that are important to me in the purchasing process.
- Using BOPIS helps me accomplish things more quickly in the purchasing process.
- I can save time when I use BOPIS in the purchasing process.

Effort expectancy

BOPIS shopping process with E-commerce websites

- Learning how to use BOPIS applications is easy for me.
- My interactions with BOPIS applications are clear and understandable.
- I find BOPIS applications easy to use.
- It is easy for me to become skilful at using BOPIS applications.

Social influence

- People who are important to me think that I should use BOPIS shopping.
- People who influence my behaviours think that I should use BOPIS shopping.
- People whose opinions that I value prefer that I use BOPIS shopping.

Compatibility with BOPIS shopping

- I can use omni-channel BOPIS shopping through the web.
- I am satisfied with current BOPIS shopping at this stage because it is already a part of my daily life.
- BOPIS shopping reflects my personal lifestyle.

Hedonic motivation

- BOPIS shopping is fun.
- BOPIS shopping is enjoyable.
- BOPIS shopping is entertaining.

Price-saving orientation

- I can save money by examining the prices on different shopping channel E-commerce websites.
- I like to search for cheap travel deals on different shopping channel E-commerce websites.
- I can find a discount with BOPIS shopping.

Sustainability **2020**, *12*, 9989

Trust

- BOPIS shopping has integrity.
- BOPIS shopping is reliable.
- BOPIS shopping is trustworthy.

Behavioural intention

- I intend to continue using BOPIS shopping in the future.
- I will always try to use BOPIS shopping.
- I plan to continue to use BOPIS shopping.

Use behaviour

- I prefer to use BOPIS shopping first.
- BOPIS shopping meets my expectations
- BOPIS shopping is worth using.

References

- eMarketer. Buy Online, Pick up in-Store: The New Way to Shop. 2014. Available online: https://www.emarketer.com/Article/Buy-Online-Pick-Up-In-Store-New-Way-Shop/1010681/ (accessed on 10 November 2019).
- 2. Gao, F.; Su, X. Omnichannel retail operations with buy-online-and-pickup-in-store. *Manag. Sci.* **2017**, *63*, 2478–2492. [CrossRef]
- 3. Soncini, A. BOPIS Is the Next Wave of Ecommerce. Are You Ready? 2020. Available online: https://www.digitalcommerce360.com/2020/02/18/bopis-is-the-next-wave-of-ecommerce-are-you-ready-for-that/ (accessed on 15 October 2020).
- 4. Chatterjee, P. Multiple-channel and cross-channel shopping behavior: Role of consumer shopping orientations. *Mark. Intell. Plan.* **2010**, *28*, 9–24. [CrossRef]
- 5. Feinberg, E. How Retailers can Nail the 'Buy Online, Pickup in-Store' Experience. 2016. Available online: https://www.foresee.com/blog/how-retailers-can-nail-the-buy-online-pickup-in-store-experience/ (accessed on 8 May 2019).
- 6. Chen, S.C.; Dhillon, G.S. Interpreting dimensions of consumer trust in E-commerce. *Inf. Technol. Manag.* **2003**, *4*, 303–318. [CrossRef]
- 7. United Parcel Service. UPS Online Shopping Study: Empowered Consumers Changing the Future of Retail. 2015. Available online: https://www.pressroom.ups.com/pressroom/ContentDetailsViewer.page? ConceptType=PressReleases&id=1433180166893-264/ (accessed on 20 November 2019).
- 8. Wang, R.J.-H.; Malthouse, E.C.; Krishnamurthi, L. On the go: How mobile shopping affects customer purchase behavior. *J. Retail.* **2015**, *91*, 217–234. [CrossRef]
- 9. Verhoef, P.C.; Kannan, P.K.; Inman, J.J. From multi-channel retailing to omni-channel retailing: Introduction to the special issue on multi-channel retailing. *J. Retail.* **2015**, *91*, 174–181. [CrossRef]
- 10. Juaneda-Ayensa, E.; Mosquera, A.; Murillo, Y.S. Omnichannel customer behavior: Key drivers of technology acceptance and use and their effects on purchase intention. *Front. Psychol.* **2016**, *7*, 1117. [CrossRef]
- 11. Gong, Y.; Janssen, M. Demystifying the benefits and risks of Lean service innovation: A banking case study. *J. Syst. Inf. Technol.* **2015**, 17, 364–380. [CrossRef]
- 12. Mosquera, A.; Juaneda-Ayensa, E.; Olarte-Pascual, C.; Pelegrín-Borondo, J. Key factors for in-store smartphone use in an omnichannel experience: Millennials vs. nonmillennials. *Complexity* **2018**, 2018, 1–14. [CrossRef]
- 13. Thomas, V.; Azmitia, M.; Whittaker, S. Unplugged: Exploring the costs and benefits of constant connection. *Comput. Hum. Behav.* **2016**, *63*, 540–548. [CrossRef]
- 14. Fleming, J.H. Millennials Are Starting to Spend More. 2016. Available online: http://www.gallup.com/businessjournal/191837/Millennials-starting-spend.aspx/ (accessed on 10 November 2019).
- 15. Venkatesh, V.; Thong, J.Y.; Xu, X. Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *Manag. Inf. Syst. Quart.* **2012**, *36*, 157. [CrossRef]

Sustainability **2020**, *12*, 9989 14 of 15

16. Westaby, J.D. Behavioral reasoning theory: Identifying new linkages underlying intentions and behavior. *Organ. Behav. Hum. Decis. Process.* **2005**, *98*, 97–120. [CrossRef]

- 17. Melero, I.; Sese, F.J.; Verhoef, P. Recasting the customer experience in today's omni-channel environment. *UCJC Bus. Soc. Rev.* **2016**, 18–37. [CrossRef]
- 18. Brynjolfsson, E.; Hu, Y.J.; Rahman, M.S. Competing in the age of omnichannel retailing. *MIT Sloan Manag. Rev.* **2013**, *54*, 23–29.
- 19. Grewal, D.; Levy, M.; Kumar, V. Customer experience management in retailing: An organizing framework. *J. Retail.* **2009**, *85*, 1–14. [CrossRef]
- 20. MacCarthy, B.L.; Zhang, L.; Muyldermans, L. Best performance frontiers for buy-online-pickup-in-store order fulfilment. *Int. J. Prod. Econ.* **2019**, *211*, 251–264. [CrossRef]
- 21. Fan, C.; Liu, Y.; Yang, X.; Chen, X.; Hu, J. Online and offline cooperation under buy-online, pick-up-in-store: Pricing and inventory decisions. *J. Ind. Manag. Optim.* **2017**, *13*, 1–18. [CrossRef]
- 22. Kim, E.; Park, M.-C.; Lee, J. Determinants of the intention to use Buy-Online, Pickup In-Store (BOPS): The moderating effects of situational factors and product type. *Telemat. Inform.* **2017**, *34*, 1721–1735. [CrossRef]
- 23. Howe, N.; Strauss, W. Millennials Rising: The Next Great Generation; Vintage: New York, NY, USA, 2000.
- 24. Duffett, R.G. The influence of Facebook advertising on cognitive attitudes amid Generation Y. *Electron. Commer. Res.* **2015**, *15*, 243–267. [CrossRef]
- 25. Venkatesh, V.; Morris, M.G.; Davis, G.B.; Davis, F.D. User acceptance of information technology: Toward a unified view. *Manag. Inf. Syst. Quart.* **2003**, 27, 425–478. [CrossRef]
- 26. Gupta, A.; Arora, N. Consumer adoption of m-banking: A behavioral reasoning theory perspective. *Int. J. Bank Mark.* **2017**, 35, 733–747. [CrossRef]
- 27. Gupta, A.; Arora, N. Understanding determinants and barriers of mobile shopping adoption using behavioral reasoning theory. *J. Retail. Consum. Serv.* **2017**, *36*, 1–7. [CrossRef]
- 28. Diddi, S.; Yan, R.-N.; Bloodhart, B.; Bajtelsmit, V.L.; McShane, K. Exploring young adult consumers' sustainable clothing consumption intention-behavior gap: A Behavioral Reasoning Theory perspective. *Sustain. Prod. Consum.* **2019**, *18*, 200–209. [CrossRef]
- 29. Marriott, H.R.; Williams, M.D. Exploring consumers perceived risk and trust for mobile shopping: A theoretical framework and empirical study. *J. Retail. Consum. Serv.* **2018**, 42, 133–146. [CrossRef]
- 30. Lazaris, C.; Vrechopoulos, A. From Multi-Channel to "Omnichannel" Retailing: Review of the Literature and Calls for Research. In Proceedings of the 2nd International Conference on Contemporary Marketing Issues, (ICCMI), Athens, Greece, 20 June 2014.
- 31. Wang, M.; Cho, S.; Denton, T. The impact of personalization and compatibility with past experience on e-banking usage. *Int. J. Bank Mark.* **2017**, *35*, 45–55. [CrossRef]
- 32. Alalwan, A.A.; Dwivedi, Y.K.; Rana, N.P. Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *Int. J. Inf. Manag.* **2017**, 37, 99–110. [CrossRef]
- 33. Rogers, E.M. Diffusion of Innovations; Simon and Schuster: New York, NY, USA, 2010.
- 34. Karayanni, D.A. Web-shoppers and non-shoppers: Compatibility, relative advantage and demographics. *Eur. Bus. Rev.* **2003**, *15*, 141–152. [CrossRef]
- 35. Van Der Heijden, H.; Verhagen, T.; Creemers, M. Understanding online purchase intentions: Contributions from technology and trust perspectives. *Eur. J. Inf. Syst.* **2003**, *12*, 41–48. [CrossRef]
- 36. Jensen, J.M. Shopping orientation and online travel shopping: The role of travel experience. *Int. J. Tour. Res.* **2012**, *14*, 56–70. [CrossRef]
- 37. Wen, I. An empirical study of an online travel purchases intention model. *J. Travel Tour. Mark.* **2012**, 29, 18–39. [CrossRef]
- 38. Chatterjee, P. Causes and consequences of 'order online pick up in-store' shopping behavior. *Int. Rev. Retail. Distrib. Consum. Res.* **2010**, *20*, 431–448. [CrossRef]
- 39. Kim, M.-J.; Chung, N.; Lee, C.-K. The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. *Tour. Manag.* **2011**, *32*, 256–265. [CrossRef]
- 40. Pavlou, P.A. Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *Int. J. Electron. Commer.* **2003**, *7*, 101–134. [CrossRef]
- 41. Riffai, M.; 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]

Sustainability **2020**, *12*, 9989 15 of 15

42. Luo, X.; Li, H.; Zhang, J.; Shim, J. Examining multi-dimensional trust and multi-faceted risk in initial acceptance of emerging technologies: An empirical study of mobile banking services. *Decis. Support Syst.* **2010**, *49*, 222–234. [CrossRef]

- 43. Davis, F.D. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *Manag. Inf. Syst. Quart.* **1989**, *13*, 319–340. [CrossRef]
- 44. Davis, F.D.; Bagozzi, R.P.; Warshaw, P.R. User acceptance of computer technology: A comparison of two theoretical models. *Manag. Sci.* **1989**, *35*, 982–1003. [CrossRef]
- 45. San Martín, H.; Herrero, Á. Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. *Tour. Manag.* **2012**, *33*, 341–350. [CrossRef]
- 46. Sepehr, S.; Head, M. Understanding the role of competition in video gameplay satisfaction. *Inf. Manag.* **2018**, 55, 407–421. [CrossRef]
- 47. Voorhees, C.M.; Brady, M.K.; Calantone, R.J.; Ramirez, E. Discriminant validity testing in marketing: An analysis, causes for concern, and proposed remedies. *J. Acad. Mark. Sci.* **2016**, 44, 119–134. [CrossRef]
- 48. Vodanovich, S.; Sundaram, D.; Myers, M. Research commentary—Digital natives and ubiquitous information systems. *Inf. Syst. Res.* **2010**, *21*, 711–723. [CrossRef]
- 49. Van Der Heijden, H. User acceptance of hedonic information systems. *Manag. Inf. Syst. Quart.* **2004**, *28*, 695. [CrossRef]
- 50. Kim, D.J.; Ferrin, D.L.; Rao, H.R. A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decis. Support Syst.* **2008**, *44*, 544–564. [CrossRef]
- 51. Barclay, D.; Higgins, C.; Thompson, R. The partial least squares (PLS) approach to casual modeling: Personal computer adoption and use as an illustration. *Technol. Stud.* **1995**, *2*, 285–324.
- 52. Anderson, J.C.; Gerbing, D.W. Structural equation modeling in practice: A review and recommended two-step approach. *Psychol. Bull.* **1988**, *103*, 411. [CrossRef]
- 53. Wixom, B.H.; Watson, H. An empirical investigation of the factors affecting data warehousing success. Manag. *Inf. Syst. Quart.* **2001**, *25*, 17. [CrossRef]
- 54. Bodhani, A. Shops offer the e-tail experience. Eng. Technol. 2012, 7, 46–49. [CrossRef]
- 55. Zhou, T.; Lu, Y.; Wang, B. Integrating TTF and UTAUT to explain mobile banking user adoption. *Comput. Hum. Behav.* **2010**, *26*, 760–767. [CrossRef]
- 56. Kotler, P.; Kartajaya, H.; Setiawan, I. *Marketing 4.0: Moving from Traditional to Digital*; John Wiley & Sons: Hoboken, NJ, USA, 2016.

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).