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### *The Importance of Limited Self-Determination When M-Channel Migration Strategy Is Implemented*

**Keywords:** limited self-determination; channel migration; multichanneling; multichannel pricing; mobile app

**JEL:** M30; M31; M39

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#### **Abstract**

**Theoretical background:** Multichannel retailers can implement various migration strategies to induce consumers to use particular marketing channel. Some researchers indicated voluntary and forced customer E-channel migration strategies. Due to the negative consequences of a coercive strategy, a voluntary migration strategy is much more popular. Voluntary migration strategy provides multichannel shoppers a total freedom of their choice, whereas the incentive-based migration strategy uses some stimulus in order to convince buyers to use specific marketing channel. Encouraging the buyer to behave in a particular way may cause him/her a negative self-determination perception. Limited self-determination means consumer conviction that a certain action was taken as a result of marketing initiatives, prompted by the seller, and is not the result of their free and independent decision. A self-determined customer is convinced of entering into a relationship with the provider on their own initiative. In the context of channel-based price differentiation, it is about the consumer's belief that a specific purchase channel has been selected as a result of a solicitation by the seller. According to researchers, limited self-determination can have potentially negative impact on the intention to buy.

**Purpose of the article:** The presented research model refers to the customer intention to buy online (intention to stay there) in the multichannel context. Therefore, the aim of this paper is to contribute to existing literature on multichannel pricing and advance our understanding of factors influencing the customer intention to make a purchase in offline channel (to stay in a brick-and-mortar store) under the price pressure in mobile app. This study aims to investigate factors affecting the intention to purchase offline when m-channel migration strategy based on price incentives is implemented by the retailer. Special attention is devoted to the issue of limited self-determination in a channel-based price differentiation context.

**Research methods:** The data comes from a questionnaire survey carried out in 2021. This study is a quantitative study employing a scenario-based approach. The total sample size is 500, cosmetics was the product category which the questionnaire was prepared for. For the purpose of the research, a SEM (Structural Equation Modelling) analysis using AMOS 26 was conducted.

**Main findings:** This research extends the understanding of consumer limited self-determination and subjective knowledge and mobile app familiarity and its influence on the intention to buy offline when price incentives are provided in a mobile purchase app. Article adds to the existing literature on customer migration in a multichannel environment.

## Introduction

Recent advances in IT have empowered traditional retailers to convince their existing offline consumers to buy online by using incentives (Luo et al., 2020). Some researchers claimed that the Internet has become a mainstream purchase channel (Li et al., 2017). Mobile shopping application is better and better identifiable as a marketing channel different from conventional online channel (Singh & Jang, 2021). However, the analysis took into account many different criteria mostly related to the technical issues and their perception (Magrath & McCormick, 2013; Song et al., 2014; Gu et al., 2017; Li et al., 2020). Undoubtedly, mobile devices have disrupted the traditional dictum of retailing (Chopdar & Sivakumar, 2019). In today's world, most people keep their mobile devices constantly within arm reach throughout the day and night (Omar et al., 2021; Wang et al., 2015), it is "a constant companion to the consumer" (Ström et al., 2014, p. 1001). Mobile device is not just a technological gadget, it is growing in importance in the retailing environment and has the potential to change the paradigm of retailing (Shankar et al., 2010). As it is stated by Singh and Jang (2021), three marketing channels that create multichannel shopping environment – mobile app, conventional online and offline channels – differ in their perceived benefits and costs. As a result, each of these channels provides a unique value to customer. Kumar et al. (2018) emphasized the importance of mobile apps as a vital marketing stimuli in shaping customers' brand experience in e-commerce. Mobile apps are useful in increasing consumer stickiness as being the platform between retailer and buyers to create real-time interaction (Hsu & Tang, 2019). Fernandes and Barfknecht (2020) called today's consumer omnipresent consumer for whom mobile shopping applications have become a popular channel. Thakur (2018) indicated that the distinction of mobile app is connected with being more user-friendly and the possibility to enable retailers to take full advantage of mobile operating systems. Number of studies have made an attempt to better understand the

phenomenon of multichannel pricing and its potential consequences. In this research model, the author asks a question – what can determine consumer decision to remain in the offline channel despite the positive incentive in the mobile application? The intention to stay is well documented in the human resources literature (Barken et al., 2018; Cao et al., 2014; Shahid, 2018; Eketu & Edeh, 2015), this topic was also deepened in the context of human migration (Moon, 1995; Bansal et al., 2005; Whyte, 2017; Geurts & Lubbers, 2017). The presented research model refers to the customer intention to buy online (intention to stay there) in the multichannel context. Therefore, the aim of this paper is to contribute to existing literature on multichannel pricing and advance our understanding of factors influencing the customer intention to make a purchase in offline channel (to stay in a brick-and-mortar store) under the price pressure in mobile app.

### Literature review

Setting prices in a multichannel environment creates a significant dilemma for retailers (Homburg et al., 2019; Baker et al., 2018). Kaufmann et al. (2009) noted that the channel expansion brings several business problems in pricing such as unified pricing (price pressure from pure-online players) vs multichannel pricing (the risk of channel cannibalization). Implementing multichannel sales strategy seems necessary to survive in a highly competitive environment, however, it can create the risk of channel cannibalization (Kollmann et al., 2012). Research reveals that a multichannel strategy offers some positive consequences, as multichannel customers tend to buy more (Konus et al., 2014). However, one of the undesired consumer reaction to the channel-based price differentiation may be purchase abandonment (Bertrandie & Zielke, 2019).

Multichannel retailers can implement various migration strategies to induce consumers to use particular marketing channel. Trampe et al. (2014) indicated voluntary and forced customer E-channel migration strategies. Due to the negative consequences of a coercive strategy (Neslin & Shankar, 2009), a voluntary migration strategy is much more popular. Voluntary migration strategy provides multichannel shoppers a total freedom of their choice, whereas the incentive-based migration strategy uses some stimulus in order to convince buyers to use specific marketing channel (Trampe et al., 2014). Encouraging the buyer to behave in a particular way may result in a negative self-determination perception. Limited self-determination means consumer conviction that a certain action was taken as a result of marketing initiatives, prompted by the seller, and is not the result of their free and independent decision (Dholakia, 2006). A self-determined customer is convinced of entering into a relationship with the provider on their own initiative. In the context of channel-based price differentiation, it is about the consumer's belief that a specific purchase channel has been selected as a result of a solicitation by the seller. According

to researchers, limited self-determination can have potentially negative impact on the intention to buy (Vogel & Paul, 2015). In a presented research model, the author took into consideration the potential impact of the perceived limited self-determination caused by price incentive in a mobile app on the intention to stay in offline channel and finalize transaction there.

Therefore, the H1 hypothesis is proposed:

H1: *Perceived limited self-determination positively impacts offline purchase intention.*

According to Utkarsh et al. (2018), subjective knowledge is the individual's perception of their knowledge level regarding a specific product and it is based upon expertise, as well as experience and other factors (Donoghue et al., 2016). According to Rizkalla and Erhan (2020), subjective knowledge plays a bigger role in predicting customer behaviour compared to the other type of knowledge. Consumer knowledge is seen as a primary variable influencing the consumer behaviour (Utkarsh et al., 2018). However, the results about the relations between subjective knowledge and perceived risk and risk behaviour are rather unclear (Buratti & Allwood, 2019). The level of price knowledge is naturally related to the frequency of purchasing products (Busse et al., 2017; Samoggia, 2016). In the research model (Figure 1), subjective price knowledge was linked with customers intention to stay offline under the pressure of a price incentive offered in another sales channel (mobile app). The author believes that if customers have a strong price knowledge they will not be interested in changing their mind due to some price incentives – these customers probably already know such price options (lower price in a mobile app). A particular purchase decision is based on many different (price) information possessed by customers and changing this decision can be quite challenging. Customers knowledge reflects their confidence (Donoghue et al., 2016).

Therefore, the H2 hypothesis is proposed:

H2: *Subjective price knowledge positively impacts offline purchase intention.*

Verhoef et al. (2009) argue that prior customer experiences will influence future customer experiences. Also Klaus and Nguyen (2013) highlight the importance of the online customer experience on the overall customer experience and customer behaviour. Maity et al. (2012) noted that due to prior experience with the particular medium the interaction with the medium is easier to consumers. According to Melis et al. (2015), online environment becomes more important than offline when consumers get familiar with online stores. The level of customer familiarity with a brand, or its specific marketing channel is crucial, because consumers' prior knowledge about a familiar brand limits their level of uncertainty (Weisstein et al., 2016). The lack of familiarity reduces customer confidence in price estimates (Weisstein et al., 2016). In a presented research model, the author took into consideration the potential impact of the mobile app familiarity app on the intention to stay in offline channel and finalize transaction there as well as the impact on subjective price knowledge. The author deduces that if the consumers use a mobile purchase app, it means that

they know the prices also in this purchase channel and this ultimately shapes their better price knowledge.

Therefore, the H3 and H4 hypotheses are proposed:

H3: *Mobile app familiarity positively impacts subjective price knowledge.*

H4: *Mobile app familiarity negatively impacts offline purchase intention.*

Brand awareness is defined as the strength of the brand node or trace in memory, as reflected by the consumers' ability to identify the brand under different conditions (Huang & Sarigöllü, 2012). Brand awareness is like brand recognition or memory (Febriyantoro, 2020), it is a key business instrument that influences consumers' brand attitudes and choices (Du et al., 2020). Brand awareness is based on brand recognition and brand recall performance with the main goal of generating comprehensive knowledge about the brand (Latif et al., 2014). According to the researchers, the retailer brand awareness improves the brand trust (Hou & Wonglorsaichon 2016; Mourad et al., 2011; Aslam et al., 2019; Copeland & Bhaduri, 2020). Research indicates brand familiarity and product knowledge reduce consumers' perceived risk (Nepomuceno et al., 2014), well-known brands are evaluated more favourably than unknown brands (Weisstein et al., 2016). In a presented research model, the author took into consideration the potential impact of the retailer brand awareness on the intention to stay in offline channel and finalize transaction and on the mobile app familiarity. The author deduces that brand awareness may induce the consumer to use different marketing channels of that brand. What is important for proposed analysis, retailer brand included in the research approach (brand XXX) has a well-known mobile purchase application. Also if the retailer brand awareness improves the brand trust, thus, brand awareness creates brand trust towards different channels of this brand.

Therefore, the H5 and H6 hypotheses are proposed:

H5: *Retailer brand awareness positively impacts mobile app familiarity.*

H6: *Retailer brand awareness negatively impacts an offline purchase intention.*

## Research methods

The data comes from a questionnaire survey carried out in 2021. This study is a quantitative study employing a scenario-based approach. The total sample size is 500 (Table 1). Cosmetics was the product category which the questionnaire was prepared for. Due to the purpose of the study, the participation in the study was under the condition of the customer's experience in purchasing both in a brick-and-mortar store and in an online store – only people with such experience were included by the research company in the research sample.

**Table 1.** Characteristics of the research sample

Criteria	Categories	Percentage	Frequency
Gender	Female	60.0	300
	Male	40.0	200
Age (years)	18–24	15.6	78
	25–34	30.8	154
	35–44	31.8	159
	45–54	12.8	64
	55 or more	9.0	45
Household size (persons)	1	4.6	23
	2	13.4	67
	3	35.6	178
	4	28.2	141
	5	12.4	62
	6	5.8	29
Role in the household	Sole breadwinner	15.6	78
	One of the breadwinners	76.0	380
	Dependent on the family	8.4	42
Number of dependent children	None	33.4	167
	1	37.0	185
	2	22.0	110
	3	6.8	34
	4 or more	.8	4
Assessment of financial situation	Very bad	1.0	5
	Bad	5.4	27
	Neither bad nor good	41.6	208
	Good	46.4	232
	Very good	5.6	28

Source: Author's own study.

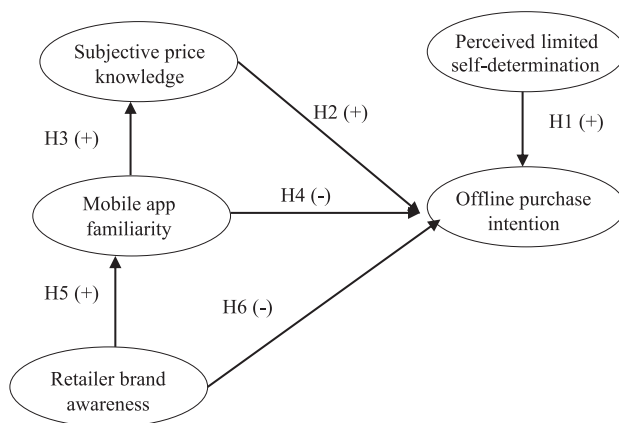
To investigate the impact of selected factors on intention to buy offline under the price pressure in another sales channel, the scenario-based approach were used in this study. According to researchers, there are some important advantages associated with scenario-based experiments (Kim & Jang, 2014). In the presented study, the participants completed the study online. Except for the last demographic part of the questionnaire, all questions were based on a 7-point Likert scale (1 – *strongly disagree*, 7 – *strongly agree*). The study was carried out by a research company, the author designed the study and established the structure of the sample in terms of significant characteristics on the cosmetics market (gender and age).

First, participants completed questions about three variables (subjective price knowledge, mobile app familiarity, store brand awareness). Next, participants read the scenario, and they were told that the study concerned the brand of the most popular cosmetics shop in Poland (XXX). Participants were told to imagine one particular shopping situation. The presented text said that a participant plans to buy a specific cosmetic (that he or she usually buys) and they have decided to buy it in a brick-and-mortar store of the XXX brand. It turned out that the chosen cosmetic

is available in the XXX mobile application at a lower price (the seller recommends to install the application and hence the information about the lower price). No other feature of the cosmetic (apart from the price) makes the offline offer different from the offer in the mobile application. The participant was asked to note the assumption that there are no delivery costs – click & collect option is available.

The assumption of buying a well-known product was important to eliminate the potential influence of factors such as the need of expert advice and experience the product. Participants were instructed to read the scenario as if they were at this brick-and-mortar cosmetics shop. After reading the scenario, participants completed questions about the rest of latent variables. At the end of the scenario, two items on realism check were provided. Finally, participants responded to several questions on some basic demographics. A realism check indicated that respondents perceived the scenarios as realistic ( $M = 5.30$ ).

For the purpose of the research, a SEM (structural equation modelling) analysis using AMOS 26 was conducted. Figure 1 shows the conceptual model. The CFA models were performed using a maximum likelihood estimation. Estimates presented relate to the standardized regression weights.



**Figure 1.** Conceptual model of the study

Source: Author's own study.

## Results

All items in latent variables were adapted from the literature (Table 2). In all variables, the statistics performed for reliability – the alpha Cronbach and composite reliability (CR) – are higher than the minimum value of .70 (Fornell & Larcker, 1981; Hair et al., 1998) (Table 3). In all cases, the variance extracted is higher than .50, and all items have enough convergent validity, since all the parameters are statistically significant.



The model fit is as follows: CMIN/DF 1.879, GFI .964, AGFI .947, RMSEA .042, NFI .955, TLI .972. The values indicate the adequate fit of the structural model. The parameter estimates for hypothesis testing are mentioned in Table 4. The research model explains 19.0% of the dependent variable (the intention to purchase offline). Figure 2 shows the research model.

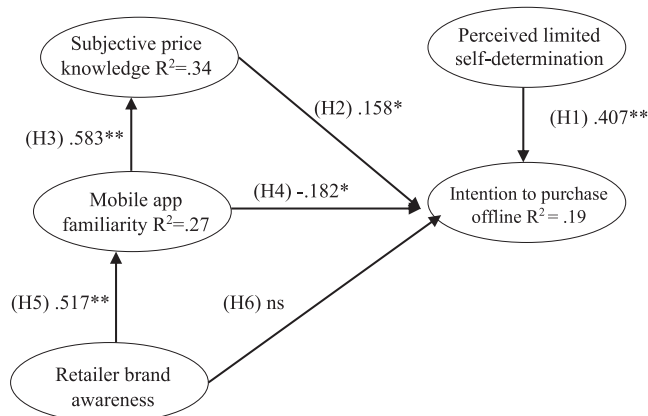


Figure 2. Research model

\*\**p* < .001; \* *p* < .05, ns – non significant

Source: Author’s own study.

Table 2. Selected measures of constructs’ reliability and validity

Latent variables	Cronbach’s alfa	CR	AVE
Subjective price knowledge (PK) adapted from (Mägi & Julander, 2005) PK1: I have a good knowledge of cosmetics prices PK2: When it comes to the prices of cosmetics, I know a lot about it	.745	.887	.796
Mobile app familiarity (AF) adapted from (Weisstein et al., 2016) AF1: I feel well informed about the rules of purchasing via the mobile application AF2: If I were to make purchases via a mobile application, I would not need any additional explanations AF3: I know the rules of purchasing through the mobile application	.788	.873	.700
Retailer brand awareness (BA) adapted from (Loureiro, 2013) BA1: I can recognize XXX stores among other cosmetics stores BA2: I am aware of the XXX brand presence on the cosmetics market BA3: I can recall the characteristic logo of the XXX brand	.806	.885	.720
Limited self-determination (SD) adapted from (Vogel & Paul, 2015) SD1: Due to the price differences, I feel that it is not my choice whether to buy cosmetics in an offline store or in a mobile app SD2: Due to the lower price, I really have no choice whether to buy the cosmetic in an offline store or in a mobile app SD3: Due to the lower price, I feel like I have to buy these cosmetics in the mobile app	.745	.854	.662



Latent variables	Cronbach's alfa	CR	AVE
Intention to buy offline (INT) adapted from (Bertrandie & Zielke, 2019) INT1: There is a good chance that I would buy cosmetics in the offline store of XXX brand INT2: Probably I would buy cosmetics in a drugstore of XXX brand INT3: I am going to buy cosmetics in the offline store of XXX brand	.912	.945	.850

Source: Author's own study.

**Table 3.** Discriminant validity and correlation between constructs

Dimensions		AF	BA	INT	PK	SD
Mobile app familiarity (AF)	AF	<i>.836</i>				
Retailer brand awareness (BA)	BA	.398	<i>.849</i>			
Intention to purchase offline (INT)	INT	-.095	-.097	<i>.922</i>		
Subjective price knowledge (PK)	PK	.446	.348	.038	<i>.892</i>	
Limited self-determination (SD)	SD	-.032	-.146	.362	.018	<i>.813</i>

The diagonal matrix (italic numbers) contains square root values with AVE for individual constructs, while numbers beyond the diagonal are the values of the correlation coefficients between the respective constructs.

Source: Author's own study.

**Table 4.** Verification of research hypotheses

Hypothesis	<i>p</i> value	Estimates	Acceptance or rejection
H1	.000	.407	Acceptance
H2	.020	.158	Acceptance
H3	.000	.583	Acceptance
H4	.016	-.182	Acceptance
H5	.000	.517	Acceptance
H6	.709	-.022	Rejection

Source: Author's own study.

## Discussions

As predicted, perceived limited self-determination was positively related to purchase intention in offline channel (path estimate = .407; *p* value = .000) supporting the first hypothesis. This relation implied that consumers who feel that the lower price in mobile app forces them to change the shopping channel have a strong intention to stay offline even though. The second hypothesis, which indicated that subjective price knowledge positively affects the offline purchase intention, was also supported (path estimate = .158; *p* value = .020). Thus, positive perception of price knowledge induces customers to stick to the their first decision. As predicted, the mobile app familiarity positively affects subjective price knowledge (path estimate = .538; *p* value = .000) supporting the third hypothesis. This means that mobile app familiarity improves customer price knowledge, probably due to the function of mobile app as a sales channel with its own price level. The more sales channel are known to cus-

toomer, the bigger is his/her price orientation/knowledge. The mobile app familiarity is negatively related to intention to purchase offline (path estimate =  $-0.182$ ;  $p$  value =  $0.016$ ) supporting the fourth hypothesis. This relation means that consumers who are familiar with the mobile purchase app are likely to change their mind and resign from purchasing offline due to the price incentives provided in mobile app. As predicted, retailer brand awareness positively affects mobile app familiarity (path estimate =  $0.517$ ;  $p$  value =  $0.000$ ) supporting the fifth hypothesis. According to this supported hypothesis, the better customer knows a retailer brand, the stronger is his/her mobile app familiarity as one of purchase channels. An insignificant direct relationship existed between retailer brand awareness and the intention to purchase offline (path estimate =  $-0.022$ ;  $p$  value =  $0.709$ ) rejecting the sixth hypothesis.

## Conclusions

This study aimed to investigate factors affecting the intention to purchase offline when m-channel migration strategy based on price incentives is implemented by the retailer. The responses obtained from multichannel shoppers in Poland were analyzed using structural equation modelling. This study makes the following contributions to the existing literature. First, proposed results offer a new dimension to the existing knowledge by establishing that perceived limited self-determination plays an important role in shaping the decision about purchasing offline, even a strong price pressure in mobile app. Perceived freedom of choice is important for buyers in a multi-channel environment. The feeling that the retailer is forcing them to change their mind strengthens them in their original decision. Consumers stick to the original decision, even though objectively it provides fewer benefits than buying through the suggested channel. Simplifying the essence of limited self-determination, consumers do not like being suggested what to do. According to the study, their reaction in such a situation is to maintain the original decision and not to follow the retailer's suggestion. Second, the results show the importance of mobile app familiarity in influencing subjective price knowledge that directly positively impacts intention to stay offline. Thus, disseminating new purchasing channels (each new channel's familiarity) contributes to changes in two areas – customer education that strengthens their (initial) purchasing decisions and the tendency to use a new purchase channel. In a presented model, the first effect (a positive impact on the subjective price knowledge) was weaker than the second one (a negative impact on the intention to stay). What is more, the retailer's brand awareness makes a mobile app familiarity even stronger. Therefore, the mobile application familiarity prompts customer to resign from planned offline purchases to a greater extent than it educates him/her about the channel-based price differentiation and strengthens the decision to finalize purchase offline. Overall, this research extends the theoretical understanding of consumer limited self-determination and subjective knowledge and new channel familiarity

and its influence on the intention to buy offline when m-channel migration strategy is implemented by a multichannel retailer. The author adds to the existing literature on customer migration in a multichannel environment (Trampe et al., 2014; Neslin & Shankar, 2009) taking into consideration mobile app as a purchase channel that gain popularity. Furthermore, from a theoretical point of view, this paper contributes to marketing literature that examine the concept of limited self-determination in a field of multichanneling. The author believes that the concept of limited self-determination is not yet fully exploited in a field of marketing. Finally, the study will help practitioners in understanding the differential effects of specific dimensions of consumer perception (limited self-determination, price knowledge and mobile app familiarity) on the propensity of consumers for finalizing the purchase in an initiated offline channel that is part of the multi-channel ecosystem.

Although the results of this study have useful implications, some limitations must be considered. First, the reported research focuses on one specific context (cosmetics). The author is aware that the outcomes of her research might be context dependent, so further research may extend the study of channel migration to other markets and channels. Second, the author took into consideration mobile purchase app due its growing popularity, however, this channel has its own specificity like any other channel (Singh & Jang, 2021). The results also might differ depending on whether situational factors played an important role (e.g. time pressure) in a specific situation. And, finally, the author identified the intention to purchase with the concept of intention to stay in the offline channel, however, the items used in the study were taken from the literature on the intention to buy and not (literally) the intention to stay in the offline channel, which is slightly differently defined in the literature (e.g. Johari et al., 2012; Shahid, 2018).

## References

- Aslam, W., Hussain, A., Farhat, K., & Arif, I. (2019). Underlying factors influencing consumers' trust and loyalty in e-commerce. *Business Perspectives and Research*, 8(2), 1–19. doi:10.1177/2278533719887451
- Bansal, H.S., Taylor, S.F., & James, Y.S. (2005). "Migrating" to new service providers: toward a unifying framework of consumers' switching behaviors. *Journal of the Academy of Marketing Science*, 33(1), 96–115.
- Baker, W., Benmark, G., Chopra, M., & Kohli, S. (2018). Master the challenges of multichannel pricing. *MIT Sloan Management Review*, 60(1).
- Barken, R., Denton, M., Sayin, F.K., Brookman, C., Davies, S., & Zeytinoglu, I.U. (2018). The influence of autonomy on personal support workers' job satisfaction, capacity to care, and intention to stay. *Home Health Care Services Quarterly*, 37(4), 294–312.
- Bertrandie, L., & Zielke, S. (2019). The influence of multi-channel pricing strategy on price fairness and customer confusion. *The International Review of Retail, Distribution and Consumer Research*, 29(5), 504–517. doi:10.1080/09593969.2019.1664611
- Buratti, S., & Allwood, C.M. (2019). The effect of knowledge and ignorance assessments on perceived risk. *Journal of Risk Research*, 22(6), 735–748. doi:10.1080/13669877.2018.1459795

- Busse, M.R., Israeli, A., & Zettelmeyer, F. (2017). Repairing the damage: The effect of price knowledge and gender on auto repair price quotes. *Journal of Marketing Research*, 54(1). doi:10.1509/jmr.13.0291
- Cao, L., Hirschi, A., & Deller J. (2014). Perceived organizational support and intention to stay in host countries among self-initiated expatriates: The role of career satisfaction and networks. *The International Journal of Human Resource Management*, 25(14).
- Chopdar, P.K., & Sivakumar, V.J. (2019). Understanding continuance usage of mobile shopping applications in India: the role of espoused cultural values and perceived risk. *Behaviour & Information Technology*, 38(1), 42–64.
- Copeland, L., & Bhaduri, G. (2020). Consumer relationship with pro-environmental apparel brands: Effect of knowledge, skepticism and brand familiarity. *Journal of Product & Brand Management*, 29(1), 1–14. doi:10.1108/JPBM-03-2018-1794
- Dholakia, U.M. (2006). How customer self-determination influences relational marketing outcomes: Evidence from longitudinal field studies. *Journal of Marketing Research*, 43(1). doi:10.1509/jmkr.43.1.109
- Donoghue, S., Van Oordt, C., & Strydom, N. (2016). Consumers' subjective and objective consumerism knowledge and subsequent complaint behaviour concerning consumer electronics: A South African perspective. *International Journal of Consumer Studies*, 40, 1–35. doi:10.1111/ijcs.12259
- Du, H.S., Dua, S., Xu, J., Tang, H., & Jiang, R. (2020). Repurchase intention in online knowledge service: The brand awareness perspective. *Journal of Computer Information Systems*, 174–185. doi:10.1080/08874417.2020.1759159
- Eketu, C.A., & Edeh, E.F.O. (2012). Social intelligence and employee intention to stay. *International Journal of Novel Research in Marketing Management and Economics*, 2(1), 27–34. doi:10.2139/ssrn.3480576
- Febriyantoro, M.T. (2020). Exploring YouTube marketing communication: Brand awareness, brand image and purchase intention in the millennial generation. *Business & Management*, 7. doi:10.1080/23311975.2020.1787733
- Fernandes, N., & Barfknecht, C. (2020). Keep customers coming back: Enhancing value and satisfaction in a mobile shopping application context. *Cogent Business & Management*, 7. doi:10.1080/23311975.2020.1788874
- Fornell C., & Larcker D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. doi:10.2307/3151312
- Gu, J., Xu, Y.(C.), Xu, H., Zhang, Ch., & Ling, H. (2017). Privacy concerns for mobile app download: An elaboration likelihood model perspective. *Decision Support Systems*, 94, 19–28. doi:10.1016/j.dss.2016.10.002
- Hair, J.F.J., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate Data Analysis*. Upper Saddle, NJ: River Prentice Hall.
- Homburg, Ch., Lauer, K., & Vomberg, A. (2019). The multichannel pricing dilemma: Do consumers accept higher offline than online prices? *International Journal of Research in Marketing*, 36(4), 597–612. doi:10.1016/j.ijresmar.2019.01.006
- Hou, Ch., & Wonglorsaichon, P. (2016). The relationship among brand awareness, brand Image, perceived quality, brand trust, brand loyalty and brand equity of customer in China's antivirus software industry UTCC. *International Journal of Business & Economics*, 8(1).
- Hsu, T.-H., & Tang, J.-W. (2019). Development of hierarchical structure and analytical model of key factors for mobile app stickiness. *Journal of Innovation & Knowledge*, 5(1), 68–79. doi:10.1016/j.jik.2019.01.006
- Huang, R., & Sarigollu, E. (2012). How brand awareness relates to market outcome, brand equity and the marketing mix. *Journal of Business Research*, 65(1), 92–99. doi:10.1016/j.jbusres.2011.02.003
- Geurts, N., & Lubbers, M. (2017). Dynamics in intention to stay and changes in language proficiency of recent migrants in the Netherlands. *Journal of Ethnic and Migration Studies*, 43(7), 1045–1060. doi:10.1080/1369183X.2016.1245608
- Johari, J., Yean, T.F., Adnan, Z., Khulida, J., Yahya, D., & Nassruddin, M. (2012). Promoting employee intention to stay: Do human resource management practices matter? *International Journal of Economics and Management*, 6(2), 396–416.

- Kauffman, R.J., Lee, D., Lee, J., & Yoo, B. (2009). A hybrid firm's pricing strategy in electronic commerce under channel migration. *International Journal of Electronic Commerce*, 14(1), 11–54.  
**doi:10.2753/JEC1086-4415140101**
- Kim, J.-H., & Jang, S.Ch. (2014). A scenario-based experiment and a field study: A comparative examination for service failure and recovery. *International Journal of Hospitality Management*, 41, 125–132.  
**doi:10.1016/j.ijhm.2014.05.004**
- Klaus, P., & Nguyen, B. (2013). Exploring the role of the online customer experience in firms' multi-channel strategy: An empirical analysis of the retail banking services sector. *Journal of Strategic Marketing*, 21(5), 429–422. **doi:10.1080/0965254X.2013.801610**
- Kollmann, T., Kuckertz, A., & Kayser, I. (2012). Cannibalization or synergy? Consumers' channel selection in online–offline multichannel systems. *Journal of Retailing and Consumer Services*, 19(2), 186–194.  
**doi:10.1016/j.jretconser.2011.11.008**
- Konus, U., Neslin, S.S., & Verhoef, P.C. (2014). The effect of search channel elimination on purchase incidence, order size and channel choice. *International Journal of Research in Marketing*, 31(1).  
**doi:10.1016/j.ijresmar.2013.07.008**
- Kumar, D.S., Purani, K., Viswanathan, S.A. (2018). Influences of 'appscape' on mobile app adoption and m-loyalty. *Journal of Retailing and Consumer Services*, 45, 132–141.  
**doi:10.1016/j.jretconser.2018.08.012**
- Latif, W.B., Islam, M.A., & Mohd Noor, I. (2014). Building brand awareness in the modern marketing environment: A conceptual model. *International Journal of Business and Technopreneurship*, 4(1), 69–82.
- Li, J., Konaş, U., Langerak, F., & Weggeman, M.C.D.P. (2017). Customer channel migration and firm choice: The effects of cross-channel competition. *International Journal of Electronic Commerce*, 21(1), 8–42. **doi:10.1080/10864415.2016.1204186**
- Li, X., Zhao, X., Xu, W.(A.), & Pu, W. (2020). Measuring ease of use of mobile applications in e-commerce retailing from the perspective of consumer online shopping behaviour patterns. *Journal of Retailing and Consumer Services*, 55. **doi:10.1016/j.jretconser.2020.102093**
- Loureiro, S.M.C. (2013). The effect of perceived benefits, trust, quality, brand awareness/associations and brand loyalty on internet banking brand equity. *International Journal of Electronic Commerce Studies*, 4(2), 139–158. **doi:10.7903/ijecs.1000**
- Luo, X., Zhang, Y., Zeng, F., & Qu, Z. (2020). Complementarity and cannibalization of offline-to online targeting: a field experiment on omnichannel commerce. *MIS Quarterly*, 44(2), 957–982.
- Maity, M., Hsu, M.K., & Pelton, L.E. (2012). Consumers' online information search: Gen Yers' finding needles in the internet haystack. *Journal of Marketing Channels*, 19(1), 49–76.  
**doi:10.1080/1046669X.2012.635370**
- Magrath, V., & McCormick, H. (2013). Marketing design elements of mobile fashion retail apps. *Journal of Fashion Marketing and Management*, 17(1). **doi:10.1108/13612021311305173**
- Melis, K., Campo, K., Breugelmans, E., & Lamey, L. (2015). The impact of the multi-channel retail mix on online store choice: Does online experience matter? *Journal of Retailing*, 91(2), 272–288.  
**doi:10.1016/j.jretai.2014.12.004**
- Mägi, A.W., & Julander, C.-R. (2005). Consumers' store-level price knowledge: Why are some consumers more knowledgeable than others? *Journal of Retailing*, 81(4), 319–329.  
**doi:10.1016/j.jretai.2005.02.001**
- Moon, B. (1995). Paradigms in migration research: Exploring 'moorings' as a schema. *Progress in Human Geography*, 19(4), 504–524. **doi:10.1177/030913259501900404**
- Mourad, M., Ennew, C., & Kortam, W. (2011). Brand equity in higher education. *Marketing Intelligence & Planning*, 29(4), 403–420. **doi:10.1108/02634501111138563**
- Nepomuceno, M.V., Laroche, M., & Richard, M.O. (2014). How to reduce perceived risk when buying online: The interactions between intangibility, product knowledge, brand familiarity, privacy and security concerns. *Journal of Retailing and Consumer Services*, 21(4), 619–629.  
**doi:10.1016/j.jretconser.2013.11.006**

- Neslin, S.A., & Shankar, V. (2009). Key issues in multichannel customer management: Current knowledge and future directions. *Journal of Interactive Marketing*, 23(1), 70–81.  
**doi:10.1016/j.intmar.2008.10.005**
- Omar, S., Mohsen, K., Tsimonis, G., Oozeerally, A., & Hsu, J.-H. (2021). M-commerce: The nexus between mobile shopping service quality and loyalty. *Journal of Retailing and Consumer Services*, 60.  
**doi:10.1016/j.jretconser.2021.102468**
- Rizkalla, N., & Erhan, T.P. (2020). Sustainable consumption behaviour in the context of Millennials in Indonesia – can environmental concern, self-efficacy, guilt and subjective knowledge make a difference? *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, 25(3).
- Samoggia, A. (2016). Healthy food: Determinants of price knowledge of functional dairy products. *Journal of Food Products Marketing*, 22(8), 905–929. **doi:10.1080/10454446.2015.1072867**
- Shankar, V., Venkatesh, A., Hofacker, C., & Naik, P. (2010). Mobile marketing in the retailing environment: current insights, and future research avenues. *Journal of Interactive Marketing*, 24, 111–120.  
**doi:10.1016/j.intmar.2010.02.006**
- Singh, S., & Jang, S. (2021). Search, purchase, and satisfaction in a multiple-channel environment: How have mobile devices changed consumer behaviors? *Journal of Retailing and Consumer Services*, 65,  
**doi:10.1016/j.jretconser.2020.102200**
- Shahid, A., (2018). Employee intention to stay: An environment based on trust and motivation. *Journal of Management Research*, 10(4). **doi:10.5296/jmr.v10i4.13680**
- Song, J., Kim, J., Jones, D.R., Baker, J., & Chin, W.W. (2014). Application discoverability and user satisfaction in mobile application stores. An environmental psychology perspective. *Decision Support Systems*, 59, 37–51. **doi:10.1016/j.dss.2013.10.004**
- Ström, M., Vendel, M., & Bredican, J. (2014). Mobile marketing: A literature review on its value for consumer and retailers. *Journal of Retailing and Consumer Services*, 21(6), 1001–1012.  
**doi:10.1016/j.jretconser.2013.12.003**
- Thakur, R. (2018). The role of self-efficacy and customer satisfaction in driving loyalty to the mobile shopping application. *International Journal of Retail & Distribution Management*, 46(3), 283–303.  
**doi:10.1108/IJRDM-11-2016-0214**
- Trampe, D., Konus, U., & Verhoef, P.C. (2014). Customer responses to channel migration strategies toward the e-channel. *Journal of Interactive Marketing*, 28, 257–270. **doi:10.1016/j.intmar.2014.05.001**
- Utkarsh, Sangwan, S., & Agarwal, P. (2018). Effect of consumer self-confidence on information search and dissemination: Mediating role of subjective knowledge. *International Journal of Consumer Studies*, 43. **doi:10.1111/ijcs.12482**
- Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L.A. (2009). Customer experience creation: determinants, dynamics and management strategies. *Journal of Retailing*, 85(1), 31–41. **doi:10.1016/j.jretai.2008.11.001**
- Vogel, J., & Paul, M. (2015). One firm, one product, two prices: Channel-based price differentiation and customer retention. *Journal of Retailing and Consumer Services*, 27, 126–139.  
**doi:10.1016/j.jretconser.2015.07.007**
- Wang, R.J., Malthouse, E.C., & Krishnamurthi, L. (2015). On the go: how mobile shopping affects customer purchase behavior. *Journal of Retailing*, 91(2), 217–234. **doi:10.1016/j.jretai.2015.01.002**
- Weisstein, F.L., Kukar-Kinney, M., & Monroe, K.B. (2016). Determinants of consumers' response to pay-what-you-want pricing strategy on the Internet. *Journal of Business Research*, 69(10), 4313–4320.  
**doi:10.1016/j.jbusres.2016.04.005**
- Whyte, L.J. (2017). Understanding the relationship between push and pull motivational factors in cruise tourism: A canonical correlation analysis. *International Journal of Tourism Research*, 19(3).  
**doi:10.1002/jtr.2129**