Economic Research-Ekonomska Istraživanja ›
Volume 33, 2020 - Issue 1

Open access

2,920 Views | 7 CrossRef citations to date | 0 Altmetric

Listen

Research Article

Identifying consumer's last-mile logistics beliefs in omni-channel environment

Mohammad Mahdi Zarei, Julian Chaparro-Pelaez & Ángel F. Agudo-Peregrina

Pages 1796-1812 | Received 31 Oct 2019, Accepted 20 Apr 2020, Published online: 13 May 2020

Cite this article https://doi.org/10.1080/1331677X.2020.1760914 Check for updates

We Care About Your Privacy

We and our 870 partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting "I Accept" enables tracking technologies to support the purposes shown under "we and our partners process data to provide," whereas selecting "Reject All" or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the ["privacy preferences"] link on the bottom of the webpage [or the floating icon on the bottom-left of the webpage, if applicable]. Your choices will have effect within our Website. For more details, refer to our Privacy Policy. Here

We and our partners process data to provide:

I Accept

Reject All

Show Purpose

Abstra

Over the logistics for consume e option over and nce, but very littl y, in Omni-channel tends to ident stics. Howev haviour (TPB) ap ire to obtain 280 sam e beliefs such as s studies, there are ssibility & Compara m for

guidance and assistance for practitioners to develop proper strategies for facilitating consumer's shopping journey, and ultimately, improving consumer's satisfaction.

Keywords: Last-mile logistics | consumer's shopping behaviour | delivery and return | theory of planned behaviour | salient beliefs | multi-channel shopper

1. Introduction

The establishment of e-commerce as a real alternative to stores –in 2014 online sales grew globally more than 20%, meaning up to almost $840 billion (Ben-Shabat et al., 2015) has contributed to two contrary movements for retailers. On the one hand, physical retailers have felt the pressure to include the online channel in their retailing strategy, offering their consumers a broader selection of shopping options (Cammiss, 2015). On the other hand, pure online retailers have decided to do the opposite: opening physical stores or cooperating with other retailers to include physical channels to the offer to let consumers be able to touch and feel the products before the purchase (Mehra, 2013).

During the early years of offering multiple channels, retailers operated those channels separate otential channel et al., 2012). By time w retailing strategy 15). This is an evolu ion of consume d brand experien Cummins et al

As a con h were simple (e radically complica p in the stores, p to this fact, many re i-channel environr Melacini

Article contents | Related research

retailers perspective (Wollenburg et al., 2018). However, these research endeavours are not able to address an effective and efficient last-mile logistics, specifically, from the consumer's point of view in omni-channel environment.

Given the lack of prior research, the challenge, is to understand what motives consumers to select different last-mile options. To do so, Theory of Planned Behaviour (TPB) is an appropriate theory for studying consumers' behaviour since TPB is known as an adequate explainer of human behaviour (Ajzen, 1991). Moreover, TPB is versatile in the sense that various constructs can be added to the model to improve its' predictive utility in a given behavioural context (Ajzen, 2015). Due to this fact, several studies have used TPB in order to show consumer's behaviour in multi-channel environment (Keen et al., 2004; Pookulangara et al., 2011). Thus, this study bases on the concept of salient beliefs from TPB to do an exploratory study and compare the results with previous studies using TPB basis in multi-channel contexts. By relying exclusively on factors from only previous studies, this study may fail to identify all factors in the Omni-channel phenomenon. Moreover, certain influences that were major driving factors in consumer's shopping behaviour in the past might have lost their potency with time.

For this, the study proposes the following framework. Section 2 provides a comprehensive review of the existing literature on consumers' shopping behaviour. Section 3 describes the methodology and the samples. Section 4 presents the results of the emp studies. Section 5 tations.

2. Lite

Accordin behavioural inter rest. Based on the of three compon evaluation of the beha ld or should not enga nal shortfalls and exte r).

Followin ponents is

Article contents | Related research

(AB) is set by attitudinal (behavioural) beliefs. Subjective norm (SN) is equated with normative beliefs. And perceived behavioural control (PBC) is formed by control beliefs (Francis et al., 2004). Hence, the basis of the theory is based on beliefs that play a major role in predicting intentions. Thereby, identifying these beliefs, especially salient ones, it is necessary to understand consumer's shopping behaviour.

2.1. Attitudinal beliefs

Attitudinal beliefs are an individual's positive or negative assessments for performing a specified behaviour (Ajzen, 2005). This assessment is a complex process and it is derived by consumer's motivation (Ajzen, 1991). According to Premkumar et al. (2008), Lee (2009), Pookulangara et al. (2011) all motivations can be categorized into hedonic, utilitarian.

2.1.1. Utilitarian motivations

Utilitarian motivation defines as 'mission-critical, rational, decision effective, and goal-oriented' (To et al., 2007). Utilitarian motivation shows that the shopping process is initiated by a mission and perceiving benefit relies on whether or not this mission is completed efficiently (Doong et al., 2012). In fact, consumers tend to seek instrumental value which it can be inferred that consumers form their attitude based on non-

Monetar ues such as

economi

2.1.1.1.

Conveni s such as

time, eff o reduce

costs in nvolved in

shopp rt –saving

effor mers seek

an alter ed product,

travelin mers tend

to elimi (Frasquet

et al., 2 atives and

ease of time

consume al., 2008)

Article contents Related research

2008). Time-saving is also included as a part of consumers' convenience orientation (Azhari & Bennett, 2015). Consumers seek a way to save more time and thereby perceiving more convenience in their shopping journey (Schröder & Zaharia, 2008) – e.g., by looking a way to have a less travel time, less time spent in purchasing (Chintagunta et al., 2012), shorter lead time for receiving (Modak & Kelle, 2019). Besides saving effort and time, Schröder and Zaharia (2008) add another dimension to convenience orientation as having a flexibility of selecting without any constraints. According to Jiang et al. (2013), consumers, by avoiding time and location constraints (e.g., opening hours, time flexibility in consumer's services, retailers' accessibility (i.e. website, physical stores)), obtain psychological benefits in the shopping process.

2.1.1.2. Perceived risk

Perceived Risk defined as 'possibility of bringing about misfortune or loss while uncertainty is associated with those things that are not able to be accurately known or predicted' (Lalwani et al., 2006), potentially inhibits consumer's actions (Gensler et al., 2012). Generally, perceived risk consists of: time, performance, financial and security/privacy (Chiu et al., 2014). According to M. C. Lee (2009) time/convenience risk refers to the loss of the time by making a bad purchasing decision. Consumers mostly perceive time risk in online purchases, due to not meeting their expectations (Liu and Wei, 200
time/cor
2009). It
an impo
receive t
consume
product
So that
beha
by avo
Chou et
channel;
percepti
mainten
to this,
risk. Fina

(Lee,
e risk acts as
iling to
08) find that
chased
hase online.
opping
ceived also
ording to
duct in one
able. This
es' services,
, 2014). Due
financial
ils to keep

consumers concern the possibility of losing sensitive information, such as usernames, passwords and credit card details while purchasing online. Hence, consumers are more likely to change their behaviour and look for a way to avoid this risk (Oomen & Leenes, 2008).

2.1.1.3. Economic goals

Unlike convenience and perceived risk, economic goals are those monetary costs which are perceived by consumers in the shopping journey. Consumers tend to balance very carefully the trade-off between costs and benefits of every decision. They achieve either by maximizing net benefits or minimizing the total costs derived from the shopping process (Balasubramanian et al., 2005). In the consumer's shopping journey, this trade-off of costs and benefits might be useful, unless consumer prefers to have exposure to sensory elements (Vilppula, 2016). Since in Omni-channel product's prices are equal in every channel; hence, economic goals are apart from product's price and it is more close to transaction costs such as transportation costs (Chintagunta et al., 2012). According to Chatterjee (2010), transportation costs play an important key factor in the consumer's shopping decision.

2.1.2. Hedonic motivations

Retuning the
importa ng attitudes
towards (2010) state
that hed tion
regardin g process'
(Babin e ng attitude.
Hedonic t that the
consum sumers or
not. tility of
purchas

2.2. Nc

Accordin make a
person p an be family,
friends, an be varied

Article contents Related research

context, prior studies clearly demonstrate the importance of these social influences such as friends, family, advertising, and Internet in determining a behaviour. However, the most frequently reported normative influences in marketing, has been friends and family (Priebe & Spink, 2011).

2.3. Perceived control beliefs

Ajzen (1991) proposes perceived control beliefs in the TPB to represent non-volitional actions. Control beliefs derive from perceiving the probability of the existence of certain facilitating or constraining conditions in which the behaviour may be effected, along with the perceived power over resources, skills, and opportunities for making the performance of the behaviour difficult or easy (Ajzen, 1991). Taylor and Todd (1995) decompose perceived control beliefs into facilitating conditions and self-efficacy.

2.3.1. Facilitating conditions

Facilitating conditions, which refer to 'the availability of resources needed to engage in a behaviour' represent passages or barriers of a consumer's behaviour (Taylor & Todd, 1995). In other words, facilitating conditions highlight the importance of the external resources needed, usually objective and independent of the person (Viswanath et al., 2003). In a marketing context, studies clearly show some of these external resources: availabil . According to Venka o accompl esource and plan to u 2015) consume r in faster available shopping behaviou ating conditi y of their mon mers have enough so can play an impo

Last but opping decision aman & Niraj, 20 consumer's shoppin he store or

Article contents | Related research

includes travel time, shopping time at the physical store, and waiting time in a queue in the case of in-store shopping (Chintagunta et al., 2012).

2.3.2. Self-efficacy

Self-efficacy refers to 'individual judgments of a person's capabilities to perform a behaviour' (Pookulangara et al., 2011). In a more simplified way, self-efficacy is about what an individual believes they can achieve by using their skills in certain circumstances. According to Monsuwé et al. (2004), consumers with a low self-efficacy level tend to act differently due to uncertain and uncomfortable feelings. In fact, low self-efficacy consumers show to be less likely to do complex tasks and prefer to go through a simple procedure that requires little knowledge (Monsuwé et al., 2004). On the other hand, higher self-efficacy consumers tend to be more confident in their ability to perform a behaviour (Dabholkar & Bagozzi, 2002), and they are more likely to engage in free-riding behaviour in different stages of consumer's journey (Chiu et al., 2011).

3. Methodology

By relyi aim to
understa which factors
influence Omni-
channel factors in
consume ith time.
Hence, t Behaviour
(TPB) pr o elicit all
beliefs i eliefs that
have kisting
literatu

To do so ch was
designe ntains
question liefs of the
decision For those
attitudin nbein

Article contents | Related research

behaviour. Similarly, for normative beliefs, the questions ask for the character who approves or disapproves of the behaviour. And lastly, according to Ajzen and Driver (1991), the questions capture control beliefs, the clue of identifying beliefs that makes behaviour to be easier or difficult. After determining the final questions, they were applied to three main delivery and return options proposed by Piotrowicz and Cuthbertson (2019) and four scenarios - delivery options when buying online, delivery options when buying offline, return options when buying online, and return options when buying offline.

After eliciting all consumers' beliefs, according to Ajzen (1991) selecting only those salient ones is vital. Therefore, Ajzen and Fishbein (1980) propose three rules for selecting salient ones. Francis et al. (2004) explicitly show that researchers only by using one of these three rules can identify 75% of salient beliefs. However, they state that by using all the three rules, non-salient beliefs might fall into the final result and produce an error. To avoid this error and thereby avoid biased or false predictions by the previous method, this study uses Herath (2010) method – Mean difference between cumulative (summing over the series of subordinate Mean beliefs) and foregone (subtracting cumulative Mean belief from the series of subordinate Mean belief) beliefs. This method can be 'strengthen by computing the product of the "belief strength" and "outcome evaluation" for each belief mentioned' (Herath, 2010). As a result of using this appr ost significa t beliefs fall into the esented in Appendi

3.1. Sa

To get th dered, becau r asked stude pite their relative l opportu nvenient and natu convenient and natu eople currently any retailer hoping t

Article contents Related research

Hence, the authors asked students who were in the classes or school hall to participate in the survey. The final sample comprised 280 undergraduate and master students despite the fact that Francis et al. (2004) suggested that a sample of 25 respondents is generally ideal for eliciting salient beliefs in TPB studies. Table 1 summarized the respondent's information in terms of age, gender.

Table 1. Demographic characteristics.

Download CSV Display Table

4. Results

To get the main result from the survey, twenty-five responses were randomly selected to develop the coding frame for each question (Herath, 2010). The coding system helped to categorize the respondents into: advantages and disadvantages beliefs (attitudinal beliefs), approval and disapproval part beliefs (normative beliefs); and eases and difficulties beliefs (control beliefs).

4.1. Att

The resu eliefs set in consume ine. Moreove espondents not only ned time-saving. H ttitudinal beliefs ntrast, the poss answers with only 1 re to have any influ the same time, 15 at apply to the shop s or searchin

The resu ain barrier

Article contents Related research

location delivery option, the main barriers were time risk for online shopping, and wasted time for offline purchases. Like the previous part, 12 participants answered some factors that depended on the channel instead of the delivery alternative.

Moreover, the result showed for location delivery consumers were manipulated more by attitudinal beliefs, making convenience as the main driver for this delivery option. However, time risk and wasted time emerged as two disadvantages that might force the shoppers to not choose home or work delivery. Regarding pick-ups and CDPs, shoppers, although they felt inconvenience due to effort, they preferred to try and feel the product in the store. Table 2 summarized the final set of attitudinal beliefs for attitude measurement for 'advantage' and 'disadvantage' questions, and it showed the most important beliefs for the final TPB model.

Table 2. Final set of salient beliefs for attitude measurement % per respondent.

Download CSV Display Table

4.2. Attitudinal beliefs in returns

In the re in their attitude points, either or ne most elicited s results, saving c espondent - 0.43 per m 8 respond

On t barrier to not sele or offline. Moreove , the main disadvar annel was the wast were not included

Pros and ne had more

Article contents Related research

negative beliefs such as time risk and wasted time might stop consumers to select this alternative. In addition, the result showed that at the same time, the effort was the main inhibitor for returning either in-store or CDPs. Table 3 summarized the final set of behavioural beliefs about returning alternatives.

Table 3. Final set of salient beliefs for attitude measurement % per respondent.

Download CSV Display Table

4.3. Subjective norm beliefs

In this section, 'Approve' and 'disapprove' questions were used to measure subjective norm: the individual's perception of social pressure created by surrounded people. The results showed that only a minority of participants –7.14 percent per respondent– did not answer any salient beliefs, but a large majority of participants answered friends and family. The findings also showed that, on average, participants had positive subjective norms with respect to increasing offline purchasing.

4.4. Control beliefs in delivery

Regardi e top of the final set s. Also, the result sh mer service' was the ues, informat not least, 18 respond t didn't apply t

More the main barrier o r online or offline cl were custome 0 percent per resp

Accordin easiest and

Article contents Related research

customer services for this location delivery option. Table 4 summarized the final set of control beliefs for delivery.

Table 4. Final set of salient beliefs for perceived behavioural control measurement % per respondent.

Download CSV Display Table

4.5. Control beliefs in returns

In return, participants stated having access to facilities and enough time as the most influential factors on their control beliefs of selecting returns from home or returning points. In contrast, packaging for return and carry the items were the lowest percentage with only 1 respondent –0.43 percent per respondent. Similarly, 13 respondents could not be classified into any categories.

The following findings showed that the participants in the online channel and returning to CRPs had enough time. This was followed by online channel and returning at stores and offline channels in pick up at in-store and CRPs. Like other sections, there were 16 respondents who could not be classified into any categories.

This imp asiest and the faste ractive control b narized the final set questions and it sh

Ta con

Downlo

5. Disc

Article contents Related research

This research aims to understand why consumers select different last-mile logistics options. To do so, it uses two approaches in order to capture all the information. Firstly, it uses previous studies in different contexts to detect some information and secondly, it uses a survey instrument from Theory of Planned Behaviour, to make sure this study covers all information.

Consistent with previous research, convenience in receiving and returning items is the most important salient attitudinal belief (e.g., Sarmah, 2015). Besides this result, inconvenience due to extra effort and time risk are the two most negative salient attitudinal belief, in compliance with previous literature (e.g., Schröder & Zaharia, 2008; Xu et al., 2011). Following these findings, there are some attitudinal beliefs that act as a double-edged sword at the same time. For instance, in pick up points, in-store or CDPs, either for collecting or returning items, consumers can feel convenience - due to having fewer problems and mental effort - while at the same time, they feel inconvenience - due to the extra effort for going to these points. The result also shows new beliefs such as 'Accessibility & Comparability of checking the order and other products', in determinant attitudinal belief for collecting items in the retailer's store. The elicitation of this factor might come from the specific product since apparel makes consumers feel the need for assessing the products at the store. On the other hand, the result also shows that, consumers do not select last-mile logistics due to their hedonic motivati nsumers perceive

Regardi ncers on consume vious research nd wishes of their members. Align wit ompletely men s elicited as a norm nily member was - e.g

Finally, a t, consistent with Jana e of access to facilit ss to facilities l beliefs, in

Article contents Related research

2012). Likewise, this study identified new salient control beliefs, 'Possibility of changing item' and 'Customer services' in the case of receiving at pick up points, which was not included by previous studies. Again, the elicitation of this factor might come from the specific product since apparel makes consumers feel the need for assessing the products at the store and their needs to the customer service.

These results bring interesting implications for managers. Since access to facilities shows to be one of the obstacles for consumers while choosing a delivery or return option, hence the first implication for managers is to use location planning for last-mile logistics and establish more collection points (e.g., In-store, CDPs). These collection points can be situated in areas within proximity to residences such as: post offices, public transport stations, convenience stores, schools, and workplaces. By doing so, consumers can choose to pick up their orders at the nearest and convenient place. According to Yuen et al. (2019), retailers also have to provide flexibility to consumers regarding the time of the day as well as a reasonable time to collect their orders. This action provides consumers an opportunity to reduce costs that are associated with waiting (Yuen et al., 2018). The second implication is to explicit the implicit benefits to consumers that delivery and return charges are only nominal in the shopping process. For example, retailers can show the difficulties in carrying heavy items on a rainy day and emphasize the ease of having heavy items delivered to the house (Morganosky & Cude, 20

s most

convenie

olutions &

Innovati

consumer

loyalty,

5.1. Co

Eliciting

g the

psych

heir actual

beha

n last-mile

logistics

rves as a

step sto

o overcome

the erro

revious

approac

sumer's

behaviou

otivations

are foun

s last-mile

Article contents Related research

facilities. Surprisingly, new beliefs such as ‘Accessibility & Comparability of checking the order and other products’, ‘Possibility of changing item’ and ‘Customer services’ are identified in the consumer’s last-mile logistics behaviour.

Moreover, understanding and eliciting consumer’s salient beliefs is not only an effective mechanism for predicting option-selection intention and behaviour for delivery and return, but also can assist practitioners in developing proper strategies for facilitating consumer’s shopping journey, and ultimately, improving consumer’s satisfaction. In addition, companies can meet consumer’s specific needs, and encourage positive beliefs among low-active populations in different delivery and return options. In this case, managers may use these findings to design proper delivery and return options regarding their special populations that target these beliefs in order to justify their strategies and overcome the delivery and return challenges. For instance, managers are encouraged to emphasize the advantages of choosing different channel options (e.g., improving pick-up points and increasing the number of locations), while also developing strategies for assisting consumers to overcome their perceived obstacles (e.g., distance, cost, time and using consumer supportive activities). In sum, the current research gives practitioners a very useful guide to employing a suitable last-mile logistics strategy in Omni-channel environment.

Finally, it is important to keep limitations in mind. The results obtained in this study are based on [redacted] udents. That is due to [redacted] and have higher e[redacted]rt study, individua[redacted]rovide response[redacted]e this problem[redacted]cognition of repeated[redacted]hat do not fall i[redacted]follow-up studies[redacted] or behaviou[redacted]

Supple[redacted]

Article contents | Related research

Download MS Word (50.2 KB) Supplemental Material

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

1. Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
Web of Science ® | Google Scholar

2. Ajzen, I. (2005). Attitudes, personality, and behavior. McGraw-Hill Education.
Google Scholar

3. Ajzen, ot ready to retire: Psychology Revie

4. Ajzen, havioral, norm havior. Le 13137

5. Ajzen, ocial behav
Goog

Article contents | Related research

6. Azhari, J. E., & Bennett, D. (2015). Omni-channel customer experience: An investigation into the use of digital technology in physical stores and its impact on the consumer's decision-making process. In XXIV AEDEM International Conference (pp. 1–2).
Google Scholar

7. Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: measuring hedonic and utilitarian shopping value. Journal of Consumer Research, 20(4), 644–656. https://doi.org/10.1086/209376
Web of Science ® | Google Scholar

8. Balasubramanian, S., Raghunathan, R., & Mahajan, V. (2005). Consumers in a multichannel environment: Product utility, process utility, and channel choice. Journal of Interactive Marketing, 19(2), 12–30. https://doi.org/10.1002/dir.20032
Google Scholar

9. Bell, D. R., Gallino, S., & Moreno, A. (2014). How to win in an omnichannel world. MIT Sloan Management Review, 56(1), 1–13.
Web of Science ® | Google Scholar

10. Ben-S retail e-comm http:// Comm e40409 .
Goog

11. Bo nline sho oach. Journa https:/

12. Camm

Article contents | Related research

13. Capper, T. (2014). Are delivery options part of your e-commerce strategy? http://onlineownership.com/delivery-options-part-e-commerce-strategy/.
Google Scholar

14. Chatterjee, P. (2010). Causes and consequences of 'order online pick up in-store' shopping behavior. The International Review of Retail, Distribution and Consumer Research, 20(4), 431–448. https://doi.org/10.1080/09593969.2010.504009
Google Scholar

15. Chintagunta, P. K., Chu, J., & Cebollada, J. (2012). Quantifying transaction costs in online/off-line grocery channel choice. Marketing Science, 31(1), 96–114. https://doi.org/10.1287/mksc.1110.0678
Web of Science ® | Google Scholar

16. Chiu, C. M., Wang, E. T. G., Fang, Y. H., & Huang, H. Y. (2014). Understanding customers' repeat purchase intentions in B2C e-commerce: The roles of utilitarian value, hedonic value and perceived risk. Information Systems Journal, 24(1), 85–114. https://doi.org/10.1111/j.1365-2575.2012.00407.x
Web of Science ® | Google Scholar

17. Chiu, I allenge for multic merce Resea https:/

18. Cho vice pr behavior. Journa https:/

19. Cumm mework in the co arch

Article contents | Related research

extensions. Journal of Research in Interactive Marketing, 10(1), 2–16. https://doi.org/10.1108/JRIM-12-2015-0094
Web of Science ® | Google Scholar

20. Combs, C. (2015). Omnichannel fashion term. Apparel Search. http://www.apparelsearch.com/terms/o/omnichannel-fashion.html.
Google Scholar

21. Dabholkar, P. A., & Bagozzi, R. P. (2002). An attitudinal model of technology - based self - service: Moderating effects of consumer traits and situational factors. Journal of the Academy of Marketing Science, 30(3), 184–201. https://doi.org/10.1177/009703020300300 1
Web of Science ® | Google Scholar

22. DHL Customer Solutions & Innovation. (2015). Omni-channel logistics: A DHL perspective on implications and use cases for the logistics industry (pp. 1–38). DHL Customer Solutions & Innovation.
Google Scholar

23. Dickin ment and social opean Journa https:/

24. Doong minants of in-fli onal Journal of

25. Franci Kaner, E. F. S., Sm the theory of pla). City Univer

Article contents | Related research

26. Frasquet, M., Mollá, A., & Ruiz, E. (2015). Identifying patterns in channel usage across the search, purchase and post-sales stages of shopping. Electronic Commerce Research and Applications, 14(6), 654–665. https://doi.org/10.1016/j.elerap.2015.10.002
Web of Science ® | Google Scholar

27. Gensler, S., Verhoef, P. C., & Böhm, M. (2012). Understanding consumers' multichannel choices across the different stages of the buying process. Marketing Letters, 23(4), 987–1003. https://doi.org/10.1007/s11002-012-9199-9
Web of Science ® | Google Scholar

28. Herath, C. S. (2010). Eliciting salient beliefs are critical to predict behavioural change in theory of planned behaviour. E-Psychologie, 4(3), 24–36.
Google Scholar

29. Huang, Y., & Oppewal, H. (2006). Why consumers hesitate to shop online: An experimental choice analysis. International Journal of Retail & Distribution Management, 34(4/5), 334–353. https://doi.org/10.1108/09590550610660260
Google Scholar

30. Janaki ... n what to buy, h ... ds market. Decisi ... 011.00335.x

31. Jiang, ... f online sho... htt...

32. Keen, ... s retailers. Journa... https:/...

Article contents | Related research

33. Kleijnen, M., de Ruyter, K., & Wetzels, M. (2007). An assessment of value creation in mobile service delivery and the moderating role of time consciousness. Journal of Retailing, 83(1), 33–46. https://doi.org/10.1016/j.jretai.2006.10.004
Web of Science ® | Google Scholar

34. 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. https://doi.org/10.1016/j.jretconser.2011.11.008
Google Scholar

35. Konus, U., Verhoef, P., & Neslin, S. (2008). Multichannel shopper segments and their covariates. Journal of Retailing, 84(4), 398–413. https://doi.org/10.1016/j.jretai.2008.09.002
Web of Science ® | Google Scholar

36. Kuisma, T., Laukkanen, T., & Hiltunen, M. (2007). Mapping the reasons for resistance to Internet banking: A means-end approach. International Journal of Information Management, 27(2), 75–85. https://doi.org/10.1016/j.ijinfomgt.2006.08.006

37. Lalwa sitivity to
uncer al
Distrib
https:/

38. La will come:
Transi stribution &
Logist 9-2016-0276

39. Lee, M n integration
of TAM mmerce

Article contents | Related research

Web of Science ® | Google Scholar

40. Lim, H., & Dubinsky, A. J. (2005). Determinants of consumers' purchase intention on the Internet: an application of theory of planned behavior. Psychology and Marketing, 22(10), 833–855. https://doi.org/10.1002/mar.20086
Web of Science ® | Google Scholar

41. Lin, C.-P., & Bhattacherjee, A. (2010). Extending technology usage models to interactive hedonic technologies: a theoretical model and empirical test. Information Systems Journal, 20(2), 163–181. https://doi.org/10.1111/j.1365-2575.2007.00265.x
Web of Science ® | Google Scholar

42. Liu, X., & Wei, K. K. (2003). An empirical study of product differences in consumers' E-commerce adoption behavior. Electronic Commerce Research and Applications, 2(3), 229–239. https://doi.org/10.1016/S1567-4223(03)00027-9
Google Scholar

43. Mehra, A. (2013). "Showrooming" and the competition between store and online retailers. Management Science, Forthcoming, 14(3), 1–37.
Goog

44. Melac stribution in
omni- al of
Physic
https:/

45. Me e delivery.
http://
Goog

46. Mikale ch intentions
on soc Research,
8(1), 5

Article contents | Related research

47. Modak, N. M., & Kelle, P. (2019). Managing a dual-channel supply chain under price and delivery-time dependent stochastic demand. European Journal of Operational Research, 272(1), 147–161. https://doi.org/10.1016/j.ejor.2018.05.067
Web of Science ® | Google Scholar

48. Monsuwé, T. P. Y., Dellaert, B. G. C., & De Ruyter, K. (2004). What drives consumers to shop online? A literature review. International Journal of Service Industry Management, 15(1), 102–121. https://doi.org/10.1108/09564230410523358
Google Scholar

49. Morganosky, M. A., & Cude, B. J. (2000). Consumer response to online grocery shopping. International Journal of Retail & Distribution Management, 28(1), 17–26. https://doi.org/10.1108/09590550010306737
Google Scholar

50. Okholm, H. B., Thelle, M. H., Möller, A., Basalisco, B., & Rølmer, S. (2013). E-commerce and delivery: A study of the state of play of EU parcel markets with particular emphasis on e-commerce. European Commission, DG Internal Market and Services.
Goog

51. Oome ection
strate onal
Federa

52. Piot Springer.

53. Pooku annel-
switch ing and
Consu 011.02.005

Article contents | Related research

54. Premkumar, G., Ramamurthy, K., & Liu, H. N. (2008). Internet messaging: An examination of the impact of attitudinal, normative, and control belief systems. Information & Management, 45(7), 451–457. https://doi.org/10.1016/j.im.2008.06.008
Web of Science ® | Google Scholar

55. Priebe, C. S., & Spink, K. S. (2011). When in Rome: Descriptive norms and physical activity. Psychology of Sport and Exercise, 12(2), 93–98. https://doi.org/10.1016/j.psychsport.2010.09.001
Web of Science ® | Google Scholar

56. Sarmah, T. (2015). Omni - channel retailing: The opulent blend. Journal of Arts, Science & Commerce, VI(3), 1–10.
Google Scholar

57. Schröder, H., & Zaharia, S. (2008). Linking multi-channel customer behavior with shopping motives: An empirical investigation of a German retailer. Journal of Retailing and Consumer Services, 15(6), 452–468. https://doi.org/10.1016/j.jretconser.2008.01.001
Google Scholar

58. Taylor heory of planne Journal of Resea https:/

59. To, P based on uti https:/

60. Venka Use of Inform 1), 157–178. https:/

Article contents | Related research

61. Vilppula, M. (2016). Consumer purchase journeys in multiple channels: A consumer-centric approach [Master's Thesis].
Google Scholar

62. Viswanath, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478. https://doi.org/10.2307/30036540
Web of Science ® | Google Scholar

63. Wollenburg, J., Holzapfel, A., Hübner, A., & Kuhn, H. (2016). Configuring retail fulfillment processes for omni - channel customer steering. International Journal of Electronic Commerce, 22(4), 540–575.
Web of Science ® | Google Scholar

64. Wollenburg, J., Hübner, A., Kuhn, H., & Trautrims, A. (2018). From bricks-and-mortar to bricks-and-clicks. International Journal of Physical Distribution & Logistics Management, 48(4), 415–438. https://doi.org/10.1108/IJPDLM-10-2016-0290
Web of Science ® | Google Scholar

65. Xu, J., for E-
comm nal
Confe ement
Scienc

66. Yuen, stomers'
inte and
Co
https:/

67. Yuen, f customers'
intent licy,
66(Ma

Article contents | Related research

68. Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. Computers in Human Behavior, 26(4), 760–767. https://doi.org/10.1016/j.chb.2010.01.013

Web of Science ® | Google Scholar

Download PDF

Related research

People also read | Recommended articles | Cited by 7

Article contents | Related research

Information for

Authors

R&D professionals

Editors

Librarians

Societies

Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Help and information

Help and contact

Newsroom

All journals

Books

Keep up to date

Register to receive personalised research and resources by email

Sign me up

Copyright

Accessibi

Registered
5 Howick Pl

or & Francis Group
orma business

Article contents

Related research