

# Travel insurance online intermediary platforms: factors of influence on behavioral intention and the role of innovation adoption type

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# TRAVEL INSURANCE ONLINE INTERMEDIARY PLATFORMS: FACTORS OF INFLUENCE ON BEHAVIORAL INTENTION AND THE ROLE OF INNOVATION ADOPTION TYPE

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## **Abstract**

*Despite the COVID-19 pandemic having disrupted the travel industry, travel insurance industry is expected to continue growth as more travellers become concerned with safety and opt to reduce risks where possible. The expanding travel insurance market drives growth of insurance intermediaries many of which provide their services online to better meet consumer needs. Not all are equally successful. The purpose of this paper is to understand which options provided by online intermediary platforms influence consumer readiness to purchase travel insurance via a platform and recommend it to others and how the influence of those options changes among different innovation adoption consumer types. The field research was conducted experimentally priming respondents with 16 different scenarios within which 4 chosen options varied on two levels each and then investigating respondents' behavioural intention by a questionnaire. The snowball sampling method was used and a total of 276 responses were collected. Results show that, consumers have a more favourable behavioural intention towards online intermediary platforms providing non-anonymised reviews than those providing anonymous reviews; ensuring convenient and safer payment methods than credit cards only; and giving an option to communicate via virtual assistants than e-mail or phone only. These platform options make a difference especially among innovators, early adopters, and early majority consumer types. The findings are useful for the online travel insurance intermediary platforms to help them increase their convenience and appeal to consumers, but also to insurance companies as a help in choosing adequate online sales distribution channels.*

**Keywords:** travel insurance, online intermediary platform, refund, review, chatbot

**JEL classification:** M31

## Introduction

The travel insurance industry records increase in sale. The global size of the travel insurance market was estimated at \$19 billion in 2019 and was projected to reach \$39 billion by 2027 (Goswami et al., 2020). Although COVID-19 pandemic has seriously disrupted travel industry and thus the natural growth of travel insurance industry; simultaneously, the pandemic increased consumer need for safety and risk avoidance giving path for travel insurance future growth. According to ValuePenguin as cited in DeMarco (2020), 40% of consumers are more likely to buy travel insurance for future travels due to the pandemic.

In addition to direct sales of travel insurance by the insurance companies, many intermediaries have emerged to compete. According to Goswami et al. (2020), the segment of insurance intermediaries has a dominant position in 2019 and would retain the lead in the years to come. Since one of the major consumer trends is seamless shopping across online and offline channels (Westbrook and Angus, 2021) and since already before the pandemic in 2018, 62% of global internet users had purchased some product online (Statista, 2020), it does not come as a surprise that insurance intermediaries provide their services online, while many are even born online as price comparison platforms (Robertshaw, 2012). Given the convenience online environment provides (Pham, et al., 2018), but in the same time reluctance among a portion of consumers to purchase online (Drake et al., 2016), the success of such online intermediary platforms is likely, but not granted. Especially since, traditionally, insurance industry heavily depends on personal sales (Tseng, 2011). The success of online intermediary platforms is conditioned on the appeal of a particular platform and the options it provides. The purpose of this research is thus to understand: *Which options provided by online intermediary platforms influence consumer readiness to purchase travel insurance via a platform and recommend it to others and how the influence of these options change among consumers different in terms of how fast they adopt innovations?*

## Previous research and hypothetical model

Travel insurance is an important risk reduction strategy when making a travel decision. It helps when an unexpected event or accident happen while traveling (Kerr and Kelly, 2019). It serves to buffer situations like medical expenses, private liability, personal accident, trip cancellation, loss of baggage, and similar (EIOPA, 2019). Due to its mainly short-term nature, travel insurances are often contracted via the insurance intermediaries whose role is expected to further grow (Goswami et al, 2020). A portion of these intermediaries represent online intermediary platforms. They provide plenty of advantages such as increased market transparency and customer convenience (Keller, 2018), comparison of different policies and insurers (EIOPA 2019) and reduce customer transaction costs (Yu and Chen, 2018).

Since the competition among online intermediaries grows, one of their main activities is making an online shop appealing and attractive to consumers. Generally, the factors which have a decisive influence over consumers to buy online can be grouped as follows: convenience, availability of information, availability of products and services, and cost-time efficacy

(Katawetawaraks and Wang, 2011). Along these lines, Pham et al., (2018), proved that access convenience (e.g., website always accessible), search convenience (e.g., user-friendly interface), evaluation convenience (e.g., sufficient information available), transaction convenience (e.g., flexible payment methods), and possession/post-purchase convenience (e.g., correct item delivery) all have a positive influence on repurchase intention in online shopping. Other big advantages of online shopping are the availability of a wide range of goods and services consumer can choose from (Khatibi and Ismail, 2006) and price comparison available online which enables consumers to save time and buy the product at the lowest price available (Lim and Dubinsky, 2004).

In the following text several concrete options that a travel insurance online platform can provide are discussed considering the conveniences proposed by Pham et al. (2018) and a hypothetical model is suggested.

First, acknowledging the importance of search and evaluation convenience, and taking into consideration that potential buyers cannot see the product in real life while online shopping, the online sellers usually provide more information on products (Lim and Dubinsky, 2004). One way to do that is using reviews describing the consumers' experiences while online shopping. Amron (2018) who studied the role of electronic WOM vs. traditional WOM in life insurance, found that electronic WOM (online reviews) has a positive and significant effect on trust (higher than traditional WOM does), and trust further influences buying decisions. A related study (Amron et al., 2018) found that electronic WOM influences subjective norms and further purchase intention. Similar results are expected when buying travel insurance. Indeed, Kerr and Kelly (2019) in their qualitative research found that most respondents find authentic reviews and referrals to be an important risk reduction attributes when buying travel insurance. Since there is no doubt that online reviews are important for consumers, researchers dug deeper and investigated the role of the type of reviewer. For example, Yang et al, 2017 found that reviews by reviewers who generally have more helpful votes for their reviews are considered more helpful by readers. Similarly, Munzel (2016) found that the amount of personal information disclosed by the reviewer impacts the readers' perceived trustworthiness directly and purchase intention indirectly. These gives arguments for the following hypothesis:

*H1: The consumers are more likely to purchase travel insurance via online intermediary platform and recommend the platform if it provides non-anonymous reviews than if it provides anonymous reviews.*

The second factor that was previously researched and found to influence purchases online is transaction convenience. According to WorldPay (2017) by 2021, half of all web transactions will be made via payment methods other than cash or credit cards, i.e., bank transfers, e-wallets, mobile phone payments, bank cheques and similar options that are preferred by the buyers due to their practical nature. Not only are these alternative methods preferred for its practicality, but also for its safety as credit cards are according to Insurance Information Institute (2020), very susceptible to identity theft. Due to the security provided by alternative payment methods, there is also greater trust in such forms of payment. According to Yu and Chen (2018) trusting the site has a positive impact upon online travel insurance purchase intention. The importance of alternative payment methods is also confirmed by Shopper's Mind (2017) claiming that e-wallets

namely PayPal and Alipay accounts are the most common ways of online payment in Europe. Although Tounekti et al. (2019) found PayPal was among the two most used payment method, but still behind Master card (and aggregately all secure payment methods combined, quite behind all credit and debit card methods), PayPal is perceived as having more benefits than Master card. This announces PayPal's and other convenient and secure method's future growth potential. Finally, Deufel et al. (2019) researched various online payment methods in 14 countries and found that 89% of consumers consider PayPal, while 74% consider credit cards as convenient or very convenient. Conversely, only 4% of consumers consider PayPal, while 11% credit cards as very insecure or insecure. Although the differences are not huge, they clearly lean in favour of PayPal. The above presented research leads to the following hypothesis:

H2: The consumers are more likely to purchase travel insurance via online intermediary platform and recommended the platform if it provides convenient and secure payment methods than if it provides credit card only payment method.

The further option that a platform can provide to be perceived as convenient is access to information and communication convenience. This is best achieved when communication is available around the clock (Katawetawaraks and Wang, 2011). Virtual assistants (chatbots) provide exactly this convenience. They have been studied in the insurance industry by Cardona et al. (2021) who found that there are several factors influencing user's intention to use chatbots when purchasing insurance, but the strongest is its perceived usefulness. While we found no previous research that compares consumer preference of virtual assistants versus traditional communication means like phone or e-mail, a lot of research points out a positive consumer attitude towards virtual assistants. For example, Soni and Tyagi (2019) conducted a research among millennials and found virtual assistants are an appreciated method of communication because of its novelty which satisfies millennials curiosity and availability 24 hours a day. Consumers use it while shopping online and would recommend it to other consumers. Furthermore, Yen and Chiang (2020) concluded that a well-designed virtual assistant increases trust in the assistant itself and the seller which further increases purchase intention. The previously presented research results provide arguments for the following hypothesis:

H3: The consumers are more likely to purchase travel insurance via online intermediary platform and recommend the platform if it provides communication with a virtual assistant than if it provides communication by e-mail or phone only.

The fourth option a platform can provide is related to post-purchase convenience. Post-purchase convenience is very dependent on product return options. Several studies show that money-back guarantee is important for purchase intention. For example, Chang et al. (2005) concluded that money refund option prompts the decision to buy. This kind of guarantee represents risk reduction measure, builds trust among consumers and creates a positive impulse during shopping. The same is confirmed by Zhao et al. (2019) who concluded that a money refund guarantee is an important factor to consumers when making an online purchasing decision.

While the presented research studied only money-back return, there are other return options such as exchange vouchers and they are assumed to be less appealing for consumers. This leads to the following hypothesis:

*H4: The consumers are more likely to purchase travel insurance via online intermediary platform and recommend the platform if it provides money refund option in case of finding a cheaper alternative than if it provides an exchange voucher.*

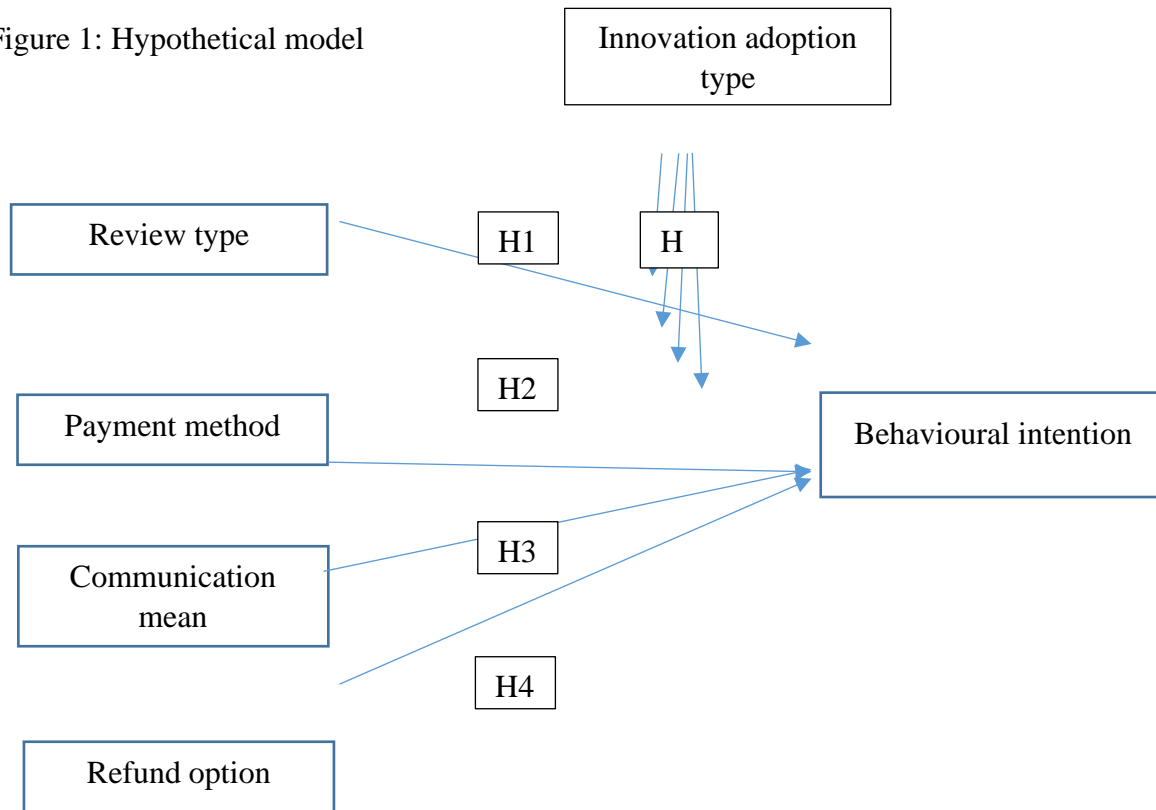
Finally, we believe the identified factors are important but not equally to different consumer types. That is, we believe that the diffusion of innovations theory (cf. Rogers, 2003), should be included in the model as Kaur and Quareshi (2015) advice. By defining the consumers in accordance with time they need to adopt an innovation, it is safe to conclude that the interest to accept an online platform varies. In the EU, most travel insurances are contracted as an add-on option for products and services sold by travel agencies, airline companies, banks, and similar or by insurance agents and brokers, while only a small percentage through online intermediary platforms (EIOPA, 2019). So, online intermediary platforms can be regarded as an innovation that have so far been adopted only by the innovators - the most innovative consumers of the five types that Rogers (2003) defines within the diffusion of innovations theory.

According to Diederer (2003) innovators are more technologically literate than the other consumer types and actively look for new information, willing to invest and try out new technologies, usually younger population with a higher income, very sociable, highly educated. We expect that due to their tendency to adopt innovations, innovators are likely to use an online intermediary platform regardless of the improvement options it offers, i.e., options are not expected to influence their behavioural intention. On the other hand, early adopters and early majority, the next two consumer types according to Rogers (2003), are expected to be under the highest influence of the aforementioned improvement options when it comes to their behavioural intention related to travel insurance online platforms. This is because according to Rogers (2003) they are characterized by caution, need for more information that they usually search online and thinking it through before adopting a new product. Finally, the last two groups to adopt innovation are the late majority and laggards who are according to Kotler (2014) indecisive and sceptic of new products, scared of technology, traditional and accept the innovation when it has become inevitable. They mostly have a lower level of education, belong to older demographics, and have lower financial fluidity. We believe, for them, no option would make a traditionally personal sales oriented industry like insurance is (Tseng, 2011) appealing in the online environment. By taking all the arguments into account, the following hypothesis is proposed:

*H5: The influence of the four identified factors on behavioural intention related to travel insurance online intermediary platform is going to be higher for early adopters and early majority than for the others.*

Figure 1 shows the hypothetical model.

Figure 1: Hypothetical model



## Methodology

The field research was conducted experimentally priming respondents with 16 different scenarios about purchasing a travel insurance on an online intermediary platform. The description of the hypothesized travel and the main points of the policy were always the same, but within the 16 scenarios, 4 observed factors varied on two levels each, as described in Table 1. Before distributing the questionnaire, 10 consumers were contacted to determine which kinds of payment methods other than credit cards and cash they are familiar with and use because payment methods are market specific and prior research was of limited use in that sense.

Table 1: The variants of concepts offered in scenarios

Factor	Level 1	Level 2
Review type	Anonymous reviews	Non-anonymous reviews
Payment method	Credit card	Convenient and secure payment methods (such as Paypal, Alipay, Google pay...)
Communication mean	Communication by e-mail or phone only	Chat in real time conducted on web page (chatbot)
Refund option	Option of issuing vouchers valid for 2 months to be exchanged for some other kind of insurance (household, car or similar) in case of finding a cheaper alternative	Money refunded in case of finding a cheaper alternative

Data were collected in Croatia using an online questionnaire and applying a convenient snowball method sampling. Based on 16 different scenarios, using three-item, five-point Likert scale, the respondents evaluated behavioural intention related to a travel insurance on an online intermediary platform. Behavioural intention was measured by items: *I shall contract travel insurance through this online platform, If I needed insurance again, I would buy it through this online platform, I would recommend this online platform to family and friends*, similar to items in Chang and Cheng (2021).

To categorize respondents into innovation adoption types, 20 items, 5-point Likert scale by Hurt et al. (1977, 2013) was employed. Although the scale was originally developed in 1977, it is still used today (e.g., Aldahdouh et al., 2020). Furthermore, the guidelines on how to interpret the score and categorise respondents into innovation adoption types were given only recently in Hurt et al. (2013). Finally, to ensure that we include only the respondents who are relevant for the study, we controlled whether they ever bought travel insurance when travelling on more risky / longer / faraway trips. According to US Travel Insurance Association (2006) these are the travels that people mainly buy travel insurance for.

## Results

A total of 276 responses were collected of which 45 who never bought travel insurance were excluded from the analysis. Table 2 shows demographic distribution across different scenarios. Generally, respondents are well distributed across groups and  $\chi^2$  or likelihood ratio tests show no significant results in most tests except for age distribution in anonymous versus non-anonymous groups and previous purchase frequency in money refund versus exchange voucher groups. So, the effects of these two factors need to be interpreted with some caution. Cronbach alpha for three-item behavioural intention scale was .944 showing high reliability among items, so this concept was calculated as an average of the three items.

Table 2: Demographic data of the sample depending on the variables



	REVIEW TYPE		PAYMENT METHOD		COMMUNICATION MEAN		REFUND OPTION	
	Anonymous review	Non-anonymous reviews	Credit Cards only	Convenient and secure payment methods	E-mail or phone only	Virtual assistant	Money refund	Exchange voucher
<b>INNOVATION ADOPTION TYPE</b>								
Innovators	36	42	41	37	35	43	34	44
Early adopters and early majority	55	53	53	55	54	54	58	50
Late majority and laggards	19	26	26	19	26	19	27	18
$\chi^2$ (sig.)	.587		.612		.386		.177	
<b>AGE</b>								
18-24	65	41	56	50	49	57	52	54
25-31	27	48	39	36	37	38	40	35
32-39	10	21	17	14	18	13	17	14
40-49	5	9	5	9	8	6	8	6
50 and more	3	2	3	2	3	2	2	3
Likelihood ratio (sig.) <sup>1</sup>	.003		.783		.752		.919	
<b>GENDER</b>								
Male	30	35	35	30	27	38	36	29
Female	80	86	85	81	88	78	83	83
$\chi^2$ (sig.)	.780		.718		.117		.462	
<b>PREVIOUS PURCHASE FREQUENCY</b>								
Rarely	29	26	32	23	27	28	35	20
Sometimes	33	24	35	22	32	25	23	34
Often	30	42	34	38	37	35	33	39

Always	18	29	19	28	19	28	28	19
$\chi^2$ (sig.)	.130		.110		.448		.041	

<sup>1</sup> Likelihood ratio is an alternative to  $\chi^2$  test when a cell is anticipated to result in less than 5 observations.

To test the hypotheses, a five-way between subject ANOVA for independent samples was applied. It is considered a robust test, not very sensitive to violations of assumptions (i.e., normality of distribution and homogeneity of variance) especially when compared groups consist of more than 30 respondents. As table 2 shows, all main effects compare groups of more than 30 respondents, while in the interaction tests, groups of late majority & laggards are smaller (i.e., 18 - 27 respondents). Despite robustness, since Kolmogorov-Smirnov test for normality of data and Leven's test of homogeneity of variance were both significant ( $p < .05$ ), showing that data is neither normally distributed nor variance displays homogeneity (Wilcox, 2002), all between-subject main effects were tested with a non-parametric alternative (Corain and Salmaso 2007), i.e., Kruskal-Wallis test (Allen and Seaman, 2007) with Mann-Whitney alternative to post-hoc tests and manually performed Bonferroni correction. Since, all non-parametric tests produced results equivalent to parametric tests, the results of the parametric ANOVA tests are displayed in table 3. Effect size is measured by partial  $\eta^2$  which is considered small if  $\eta^2 < .06$ , medium if  $.06 < \eta^2 < .14$  and large if  $\eta^2 > .14$  (Sawyer and Ball, 1981).

*Table 3. ANOVA for behavioural intention*

	Estimated Marginal Means (st. dev.) <sup>1</sup>				F	Sig.	Partial $\eta^2$
	All innovation types	Innovators	Early adopters & early majority	Late majority & laggards			
Anonymous reviews	2.79 (.86)				30.044	.000	.122
Non-anonymous reviews	3.40 (.83)						
Credit cards only	2.82 (.83)				24.490	.000	.102
Convenient and secure payment method	3.37 (.86)						
Virtual assistant	3.25 (.86)				7.306	.007	.033
E-mail or phone only	2.95 (.83)						
Exchange voucher	3.08 (.87)				.148	.701	.001
Money refund	3.12 (.83)						
Innovation adoption type		3.20 (.79) <sub>3</sub>	3.45 (.78) <sub>3</sub>	2.64 (.82) <sub>1,2</sub>	16.256	.000	.131
Anonymous reviews		2.85 (.78)	3.30 (.78)	2.23 (.79)			
Non-anonymous reviews		3.55 (.78)	3.61 (.78)	3.04 (.80)	2.225	.111	.020
Credit cards only		2.67 (.80) <sub>2</sub>	3.06 (.78) <sub>2</sub>	2.74 (.80)			
Convenient and secure payment method		3.73 (.78) <sub>1</sub>	3.85 (.78) <sub>2</sub>	2.53 (.79)	9.681	.000	.082
Virtual assistant		3.43 (.78)	3.72 (.78)	2.58 (.79)			
E-mail or Phone only		2.97 (.78)	3.18 (.78)	2.69 (.80)	2.861	.059	.026

Exchange vouchers		2.96 (.79) <sub>1</sub>	3.45 (.78)	2.82 (.79)	4.310	.015	.038
Money refund		3.44 (.79) <sub>1</sub>	3.46 (.78)	2.46 (.78)			

<sup>1</sup> Subscripted numbers display significant differences between groups. Groups are numbered 1-3 for the main effect of innovation adoption type and 1-6 (1-3 the first and 4-6 the second row) for the interaction tests.

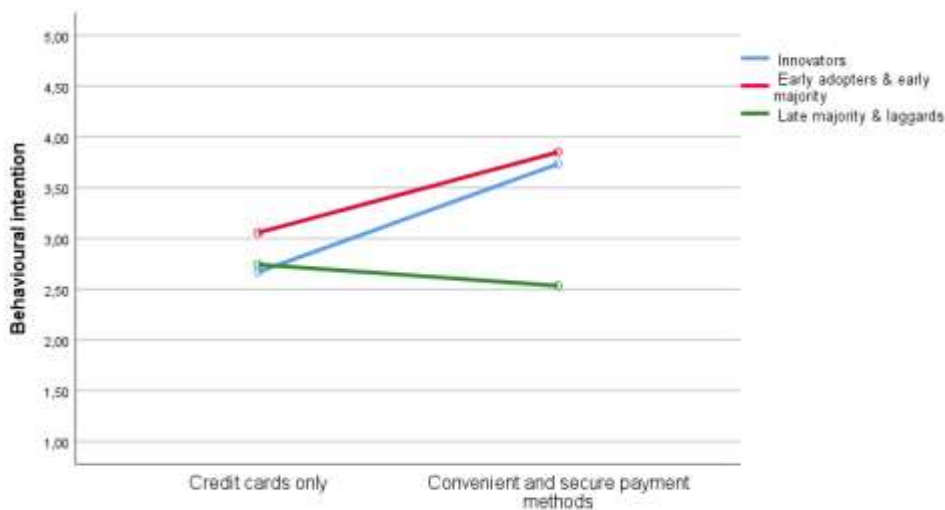
When it comes to main effects, ANOVA showed that review type ( $F(1, 216) = 30.04$ ;  $p < .001$ ;  $\eta^2 = .12$ ), payment method ( $F(1, 216) = 24.49$ ;  $p < .001$ ;  $\eta^2 = .10$ ), and innovation adoption type ( $F(2, 216) = 16.26$ ;  $p < .001$ ,  $\eta^2 = .13$ ) have a significant medium, while communication mean ( $F(1, 216) = 7.31$ ;  $p = .007$ ,  $\eta^2 = .03$ ) a significant small effect on behavioural intention. Refund option ( $F(1, 216) = .15$ ;  $p = .701$ ) does not have a significant effect on behavioural intention.

Specifically, respondents exposed to non-anonymous reviews display higher ( $M = 3.40$ ,  $SD = .83$ ) behavioural intention than those exposed to anonymous review ( $M = 2.79$ ,  $SD = .86$ ) which confirms H1. Respondents exposed to convenient and secure payment methods displayed higher ( $M = 3.37$ ,  $SD = .86$ ) behavioural intention than those exposed to credit cards only payment method ( $M = 2.82$ ,  $SD = .83$ ) which confirms H2. Respondents exposed to virtual assistants displayed higher ( $M = 3.25$ ,  $SD = .86$ ) behavioural intention than those exposed to e-mail or phone only communication mean ( $M = 2.95$ ,  $SD = .83$ ) which confirms H3. Respondents exposed to money refund do not displayed different ( $M = 3.12$ ,  $SD = .83$ ) behavioural intention than those exposed to exchange vouchers ( $M = 3.08$ ,  $SD = .87$ ) which does not confirm H4. Finally, innovators ( $M = 3.20$ ,  $SD = .79$ ) and early adopters & early majority ( $M = 3.45$ ,  $SD = .78$ ) have higher behavioural intention than late majority & laggards ( $M = 2.64$ ,  $SD = .82$ ) while the difference between the first two groups is not significant.

When it comes to interaction effects, ANOVA shows a significant effect of a medium size for interaction of innovation adoption type and payment method ( $F(2, 216) = 9.68$ ;  $p < .001$ ;  $\eta^2 = .08$ ) and a significant effect of a small size for interaction of innovation adoption type and refund option ( $F(2, 216) = 4.31$ ;  $p = .015$ ;  $\eta^2 = .04$ ) on behavioural intention. The other two interactions, namely innovation adoption type and review type ( $F(2, 216) = 2.23$ ;  $p < .111$ ) and innovation adoption type and communication mean ( $F(2, 216) = 2.86$ ;  $p < .059$ ) are not significant. The latter two tests do not support H5 when it comes to review type and communication mean. Given that SPSS does not provide post-hoc tests for interaction effect, manual post-hoc tests were performed using parametric one-way ANOVAs and non-parametric Mann-Whitney tests to test the effect of payment method and refund option on behavioural intention for each level of innovation adoption type. Parametric and non-parametric tests gave the equivalent results, so parametric tests are reported.

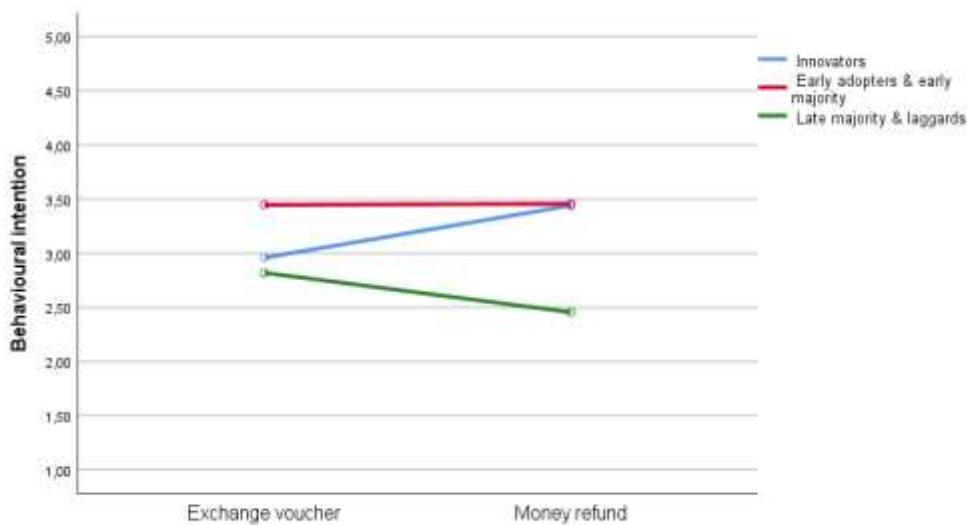
The effect of payment method on behavioural intention when testing at different levels of innovation adoption is significant for innovators ( $F(1,76) = 54.06$ ;  $p < .001$ ) and early adopters & early majority ( $F(1,106) = 17.63$ ;  $p < .001$ ) and not for late majority & laggards ( $F(1, 43) = 1.11$ ;  $p = .30$ ). Innovators and early adopters & early majority show higher behavioural intentions for convenient and secure payment methods ( $M = 3.73$ ;  $SD = .78$  for innovators and  $M = 3.85$ ;  $SD = .78$  for early adopters & early majority) than for credit cards ( $M = 2.67$ ;  $SD = .80$  for innovators and  $M = 3.06$ ;  $SD = .78$  for early adopters & early majority). This interaction effect is shown in Graph 1. The results partially confirm H5 related to payment method since the effect is as hypothesized for early adopters & early majority and late majority & laggards and not for innovators.

Graph 1. Interaction effect of innovation adoption type and payment method



Test of the effect of refund option on behavioural intention when testing at different levels of innovation adoption showed significant effect for innovators ( $F(1,76) = 17.16$ ;  $p < .001$ ) and not for early adopters & early majority ( $F(1,106) = .648$ ;  $p = .423$ ) nor for late majority & laggards ( $F(1, 43) = 2.09$ ;  $p = .156$ ). Innovators show higher behavioural intentions for money refund ( $M = 3.44$ ;  $SD = .79$ ) than for exchange vouchers ( $M = 2.96$ ;  $SD = .79$ ). This interaction effect is shown in Graphs 2. The results mainly do not provide support for H5 related to refund option since the effect is as hypothesized only for the late majority & laggards.

Graph 2. Interaction effect of innovation adoption type and refund option



## Discussion and conclusion

Previous research found that customers are motivated to purchase online because of the convenience such environment provides (Pham et al., 2018). It was thus the aim of this research to dig deeper into this conclusion and investigate which online intermediary platform options could provide convenience to consumers interesting enough to improve their behavioural intentions when it comes to purchasing travel insurance. Results demonstrate that consumers have a more favourable behavioural intention towards platforms: providing non-anonymised reviews than anonymous reviews; ensuring convenient and secure payment methods than credit cards only; and giving an option to communicate in real time around the clock via virtual assistants than via e-mail or phone only. These findings are in line with previous research (Munzel, 2016; Deufel et al., 2019, Yen and Chiang, 2020) and were predicted in the hypotheses.

The expectation that consumers will be more likely to show favourable behavioural intention towards a platform providing the possibility of a money refund in case of finding a cheaper alternative compared to an exchange voucher for another type of insurance, was not confirmed. There was no difference among the two options in the overall sample, however, innovators are more motivated by money refund than by exchange vouchers. Again, this was not anticipated. This shows that the effect of refund option is complex and requires a more detailed investigation, especially since some research (e.g., Han et al., 2017) found that consumers are more likely to opt for an exchange for another complementary product rather than for money refund.

Generally, the role of innovation adoption type is not as expected. According to our results, innovators are influenced by the studied improvement factors more than other consumer types. For innovators, all four options make a difference. On the other hand, for early adopters and early majority most identified factors (apart from refund option) play an important role, while for late majority and laggards the least factors make a difference.

The findings prove that consumers care how an online platform is designed. They are more likely to purchase from a platform and recommend a platform that is well thought of and offers more than only the basic and traditional options. Incorporating modern improvements into an online platform provides consumers with more convenience and builds trust consequently improving their behavioural intentions. Considering the findings, online intermediary platforms are recommended to first work on the improvement of the perceived trustworthiness of reviews presented on the web page, i.e., to provide non-anonymised reviews of their former consumers. Secondly, they are advised to improve communication with the clients by providing a round-the-clock availability through virtual assistants. The next improvement should be directed towards providing convenient and secure payment options to avoid interrupting the purchase due to the unavailability of the payment method preferred by the customer. It is necessary to enable payments by various payment methods especially those secure and simple like e.g., PayPal, Alipay, e-wallets. Finally, since money refunds cost firms money unlike exchange vouchers (Han et al., 2017), and since this improvement option is not very important to customers, online intermediary platforms are recommended to include the possibility of exchange for another type of insurance and not the money refund.

Limitation of this research is that there were a lot of younger respondents in the sample and slightly more younger respondents in the group exposed to anonymous than non-anonymous reviews. Future research should tackle those limitations and get directed towards discovering new factors of influence on behavioural intention related to the travel insurance online intermediary platforms and especially related to the differences among different innovation adoption types.

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## References

- Amron, A. (2018). Electronic and Traditional Word of Mouth as Trust Antecedents in Life Insurance Buying Decisions. *International Journal of E-Business Research*, 14(4), 91–103. DOI: 10.4018/ijebr.2018100106
- Amron, A, Usman, U, Mursid, A. (2018). The role of electronic word of mouth, conventional media, and subjective norms on the intention to purchase Sharia insurance services. *Journal of Financial Services Marketing*, 23, 218–225.
- Aldahdoh, T., Z., Nokelainen, P., Korhonen, V. (2020). Technology and Social Media Usage in Higher Education: The Influence of Individual Innovativeness, *SAGE Open*, 10(1), DOI: <https://doi.org/10.1177/2158244019899441>
- Allen, I. E. and Seaman A. (2007). Likert Scales and Data Analyses. *Quality Progress*, 40 (7), 64-65.
- Cardona, D, R, Breitner, M, H, Janssen, A, Guhr, N & Milde, J. (2021). A Matter of Trust? Examination of Chatbot Usage in Insurance Business. *Proceedings of the 54th Hawaii International Conference on System Sciences*. DOI: 10.24251/HICSS.2021.068
- Chang, M., K., Cheung, W. & Lai, V., S. (2005). Literature derived reference models for the adoption of online shopping. *Information & Management*, 42(4), 543–559. DOI: <http://dx.doi.org/10.1016/j.im.2004.02.006>

- Chang, K., C. & Cheng, Y., S. (2021). How online service recovery reviews influence behavioral intentions in the hospitality context: Regulatory focus and loss aversion perspectives. *Journal of Hospitality and Tourism Management*, 46, 440-455. DOI: 10.1016/j.jhtm.2021.01.014
- Corain, L. & Salmaso, L. (2007). A Non-parametric Method for Defining a Global Preference Ranking of Industrial Products. *Journal of Applied Statistics*, 34(2), 203-216. DOI: 10.1080/02664760600995122
- DeMarco (2020). 40% of Americans Canceled Summer Travel Due to Coronavirus Concerns. Retrieved from <https://www.valuepenguin.com/news/americans-cancel-travel-coronavirus>
- Deufel, P., Kemper, J. & Brettel, M. (2019). Pay now or pay later: a cross-cultural perspective on online payments. *Journal of Electronic Commerce Research*, 20(3), 141-154.
- Diederer, P., Van Meijl, H., Wolters, A., Bijak, K. (2003). Innovation adoption in agriculture: innovators, early adopters and laggards. *Cahiers d'Economie et de Sociologie Rurales*, 67, 29-50.
- Drake, P., R., Brady, M., K., Benedicktus, R., L. & Wilson, A., E. (2016). Feeling Close From Afar: The Role of Psychological Distance in Offsetting Distrust in Unfamiliar Online Retailers. *Journal of Retailing*, 92(3), 287-299. DOI: 10.1016/j.jretai.2016.02.001
- EIOPA (2019). Consumer protection issues in travel insurance: a thematic review. Retrieved from [https://register.eiopa.europa.eu/Publications/EIOPA\\_Thematic%20review%20travel%20insurance\\_Oct2019.pdf](https://register.eiopa.europa.eu/Publications/EIOPA_Thematic%20review%20travel%20insurance_Oct2019.pdf)
- Goswami, A., Borasi, P. & Kumar, V. (2020, July). Market research report. Travel Insurance Market Size, Share and Growth. Retrieved from Travel Insurance Market Size, Share and Growth | Analysis - 2027 (alliedmarketresearch.com)
- Han, Y., Chandukala, S., R. & Che, H. (2017). Exchange and refund of complementary products. *Marketing Letters*, 28(1), 113–125. DOI:10.1007/s11002-015-9393-7
- Hurt, H., T., Joseph, K. & Cook, C., D. (1977). Scales for the measurement of innovativeness. *Human Communication Research*, 4(1), 58–65. DOI: <https://doi.org/10.1111/j.1468-2958.1977.tb00597.x>
- Hurt, H., T., Joseph, K. & Cook, C. D. (2013). Individual Innovativeness (II). Measurement Instrument Database for the Social Science. Retrieved from <https://www.midss.org/content/individual-innovativeness-ii>
- Insurance Information Institute (2020). Facts + Statistics: Identity theft and cybercrime. Retrieved from <https://www.iii.org/fact-statistic/facts-statistics-identity-theft-and-cybercrime>
- Katawetawarak, C. & Wang, L., C. (2011). Online Shopper Behavior: Influences of Online Shopping Decision. *Asian Journal of Business Research*, 1(2), 66-73.
- Kaur, G & Quareshi, T, K. (2015). Factors obstructing intentions to trust and purchase products online. *Asia Pacific Journal of Marketing and Logistics*, 27(5), 758-783. DOI: 10.1108/APJML-10-2014-0146
- Keller, B. (2018). Virtual competition: Online Platforms, Consumer Outcomes and Competition in Insurance. *The Geneva Association*. Retrieved from Virtual Competition: Online platforms, consumer outcomes and competition in insurance | Research report | Geneva Association
- Kerr, G. & Kelly, L. (2019). Travel insurance: the attributes, consequences, and values of using travel insurance as a risk-reduction strategy. *Journal of Travel & Tourism Marketing*, 36(2), 191-2031–13. DOI:10.1080/10548408.2018.1506376
- Khatibi, A. & Ismail, H. (2006). E-Commerce: A Study on Online Shopping in Malaysia. *Journal of Social Science*, 13(3), 231-242. DOI: <https://doi.org/10.1080/09718923.2006.11892554>
- Kotler, P., Keller, K., L. & Martinović, M. (2014). *Upravljanje marketingom 12. izdanje*. Zagreb: Mate d.o.o.
- Lim, H. & Dubinsky, A., J. (2004). Consumers' perceptions of e-shopping characteristics: An expectancy-value approach. *The Journal of Services Marketing*, 18(6), 500-513. DOI: 10.1108 / 08876040410561839
- Munzel, A. (2016). Assisting consumers in detecting fake reviews: The role of identity information disclosure and consensus. *Journal of Retailing and Consumer Services*, 32, 96-108. DOI: <https://doi.org/10.1016/j.jretconser.2016.06.002>

- Pham, Q., T., Tran, X., P., Misra, S., Maskeliūnas, R. & Damaševičius, R. (2018). Relationship between Convenience, Perceived Value, and Repurchase Intention in Online Shopping in Vietnam. *Sustainability*, 10(1). DOI: 10.3390/su10010156
- Robertshaw, S. G. (2012). Online price comparisons sites: How technology has destabilised and transformed the UK insurance market. *Journal of Revenue and Pricing Management*, 11(2), 137-145. DOI: 10.1057/rpm.2011.5
- Rogers, E., M. (2003). *Diffusion of Innovations: Fifth Edition*. New York: Free Press.
- Sawyer, A., G. and Dwayne, A., B. (1981). Statistical Power and Effect Size in Marketing Research. *Journal of Marketing Research*, 18 (3), 275-90. DOI: <https://doi.org/10.1177/002224378101800302>
- Shopper's mind (2017). SHOPPER'S MIND 2017: Jedino istraživanje koje daje cjelovit uvid u kupovne navike online potrošača. Retrieved from <https://www.mirakul.hr/wp-content/uploads/2017/04/PR-istra%c5%beivanje-Shoppers-Mind-2017.pdf>
- Soni, R. & Tyagi V. (2019). Acceptance of Chat bots by Millennial Consumers. *International Journal for Research in Engineering Application & Management*, 4(10), 429-432. DOI: 10.18231/2454-9150.2018.1343
- Statista (2020). Digital buyer penetration worldwide from 2016 to 2021. Retrieved from <https://www.statista.com/statistics/261676/digital-buyer-penetration-worldwide/>
- Tounekti, O., Ruiz-Martinez, A. & Skarmeta-Gomez, A., F. (2019). Users supporting multiple (mobile) electronic payment systems in online purchases: An empirical study of their payment transaction preferences. *IEEE Access*, 8, 735-765. DOI: 10.1109/ACCESS.2019.2961785
- Tseng, L., M. (2011). Intra-role conflict and the selling decision: The case of Taiwan's life insurance industry. *International Journal of Conflict Management*, 22(4), 373-393. DOI: 10.1108/10444061111171378
- US Travel Insurance Association (2006). New Study Reveals Who Buys Travel Insurance Demand Triples; Higher Income, Education Play Roles. Retrieved from <https://www.ustia.org/new-study-reveals-who-buys-travel-insurance-demand-triples.html>
- Westbrook, G, Angus, A. (2021). Top 10 Global Consumer Trends 2021, Euromonitor International. Retrieved from <https://go.euromonitor.com/rs/805-KOK-719/images/wpGCT21EN-v0.8.pdf>
- Wilcox, R. (2002). Methodological article: Understanding the Practical Advantages of Modern ANOVA Methods. *Journal of Clinical Child and Adolescent Psychology*, 31 (3), 399-412. DOI: 10.1207/S15374424JCCP3103\_12
- WorldPay (2017). The Global payment Report. Retrieved from <https://worldpay.globalpaymentsreport.com/#/en>
- Yang, S., B., Shin, S., H., Joun, Y. & Koo, C. (2017). Exploring the comparative importance of online hotel reviews' heuristic attributes in review helpfulness: a conjoint analysis approach. *Journal of Travel & Tourism Marketing*, 34(7), 963-985. DOI: <https://doi.org/10.1080/10548408.2016.1251872>
- Yen, C. & Chiang, M. (2020). Trust me, if you can: a study on the factors that influence consumers' purchase intention triggered by chatbots based on brain image evidence and self-reported assessments. *Behaviour & Information Technology*, 1-18. DOI: <https://doi.org/10.1080/0144929X.2020.1743362>
- Yu, W, T. & Chen, T, J. (2018). Online travel insurance purchase intention: a transaction cost perspective. *Journal of Travel & Tourism Marketing*, 35(9), 1175-1186. DOI: <https://doi.org/10.1080/10548408.2018.1486781>
- Zhao, Z., Wang, J., Sun, H., Liu, Y., Fan, Z. & Xuan, F. (2019). What factors influence online product sales? Online reviews, review system curation, online promotional marketing and seller guarantees analysis. *IEEE Access*, 8, 3920-3930. DOI: 10.1109/ACCESS.2019.2963047