

THE IMPACT OF AUGMENTED REALITY ATTRIBUTES ON BEHAVIORAL REACTIONS IN THE CONTEXT OF ONLINE SHOPPING: THE MODERATING ROLE OF SELF-EFFICACY

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The impact of augmented reality attributes on behavioral reactions in the context of online shopping: the moderating role of self-efficacy

Abstract

This research aims to study the impact of the attributes of augmented reality (interactivity, vividness, novelty) on the factors of the technology acceptance model (perceived usefulness, perceived ease of use) and their effects on consumer reactions. A quantitative survey was conducted with a sample of 300 women. The results obtained show that the attributes of augmented reality positively influence the attributes of technology acceptance (perceived usefulness, perceived ease of use). These attributes have a positive effect on the perceived trust to AR. The later has no effect on the proselytism. Furthermore, this study confirms the moderating role of high self-efficacy.

Keywords: Augmented reality, TAM attributes, trust, proselytism, self-efficacy

L'impact des attributs de la réalité augmentée sur les réactions comportementales dans le contexte de l'achat en ligne : le rôle modérateur de l'auto-efficacité

Résumé

Cette recherche a pour objectif d'étudier l'impact des attributs de la réalité augmentée (interactivité, vivacité, nouveauté) sur les facteurs du modèle de l'acceptation des technologies (utilité perçue, facilité d'utilisation perçue) et leurs effets sur les réactions des consommateurs. Une enquête quantitative a été menée auprès d'un échantillon de 300 femmes. Les résultats obtenus montrent que les attributs de la réalité augmentée influencent positivement les attributs de l'acceptation de la technologie (utilité perçue, facilité d'utilisation perçue). Ces attributs ont un effet positif sur la confiance des internautes envers la réalité augmentée. Cette dernière n'a aucun effet sur le prosélytisme. De plus, cette étude confirme le rôle modérateur de l'auto-efficacité élevée.

Mots clés : réalité augmentée, les attributs de la TAM, confiance, prosélytisme, auto-efficacité

Managerial Summary

The internet is the most developed technological invention in all over the world. With the Internet, it's possible to access almost any information, communicate with someone else in the world, and do much more. Dertrouzos (1997) considers that: « *The Internet is changing almost every aspect of our daily lives, from how we communicate, learn, and play, to how we shop, buy, and consume products and services* ». The global retail industry has been turned upside down from multi-channel retailing to omnichannel retailing (Park and Yoo, 2020). In the context of omnichannel retailing, consumers and retailers use internet or mobile connected shopping channels in order to buy or sell products online (Park and Yoo, 2020). The digital transformation generated by the intensification of the use of digital technologies, the advent of a new consumer, the flakiness of the borders between the real, the virtual and the omni-use of smartphones are encouraging brands to rethink their digital strategies by taking into account an approach centered on the customer and his experiences in a phygital environment (Batat, 2011). These new behaviors have contributed to the emergence of new digital marketing approaches in the various sectors of activity (retail, hotels, well-being, banks, etc.) which push companies to offer satisfying digital customer experiences on a functional, emotional and relational level (Batat, 2011). The augmented reality is a technology that allows real-time virtual elements to be integrated into a real environment.

However, this research aims to investigate the potential impact of augmented reality on customer's reactions within the technology acceptance model in the domain of retailing and the moderating effect of self-efficacy. Our results show that the augmented reality attributes influence positively the perceived usefulness and the perceived ease of use. Furthermore, findings of our study indicate the positive relationship between the TAM attributes and the trust. Moreover, the trust has no effect on the proselytism. Indeed, our research demonstrates the moderating role of self-efficacy in the relationship between the augmented reality and TAM attributes.

In addition, on the managerial level, this research permits to retailers to show the importance of the augmented reality as a strategy which favors the trust while ensuring the safety for consumers in order to improve behavioral reactions. It would also be important to set a goal of openness to new technologies such as augmented reality. AR applications appear to enhance the sensory richness of the experience and should therefore be viewed as a potentially valuable tool for creating effective interactions with consumers. Other managerial contribution is to exhibit that the implementation of the augmented reality as an increasingly strategy within sales and marketing tactics which were the proof for the perennity and the growth of their companies. The technology of augmented reality plays an important role in competitive advantage. The high degree of self-efficacy can be considered as a segmentation criterion.

The impact of augmented reality attributes on behavioral reactions in the context of online shopping: the moderating role of self-efficacy

Introduction

The augmented reality (AR) has become a relevant interactive tool technology in the marketing environment, increasingly used retail contexts and often developed in smart device formats applications (Javornik, 2016). Nevertheless, with the adoption of the ubiquitous smartphone, the attention of developers, retailers and consumers to augmented reality has considerably increased, many retailers are now implementing the augmented reality technology in their mobile applications (Dacko, 2017). In recent years, several major cosmetic brands have been offering new shopping experiences via mobile (Bastide, 2017). Through augmented reality applications, female consumers have the ability to preview the result of their future makeup application in real time. As an example, the most popular applications are: L'Oreal (Makeup Genius), Rimmel (Get the look), Sephora (Sephora to go) (Bastide, 2017). The AR is becoming extremely popular between companies and consumers (Yim, Chu and Sauer, 2017). In fact, the AR can be defined as “*the superposition of virtual objects (computer generated images, texts, sounds etc.) on the real environment of the user*” (Faust and al, 2012). AR is the same as virtual reality (VR) in order to improve and to increase the viewer’s experience (Yim, Chu and Sauer, 2017). In contrast to virtual reality, which electronically produces the image of the whole of real life, the AR creates an overlay superposition of the user in the electronically generated scenery (Milgram and al, 1994). Thereby, AR is more valuable than VR for both retailers and consumers in allowing customers to see various virtual products without physically testing them in stores (Verhagen and al, 2014). Thus, Javornik (2016) explains the potential of the use of augmented reality on customer behavior, the purpose of use and the experience. Drawing upon the anterior researches of Flavian, Gurra and Orus (2017), Yim, Chu and Sauer (2017), McLean and Wilson (2019), the augmented reality mobile applications have the ability to enhance both customer’s perceptions of usefulness and ease of use. Empirical studies on trust in the context of m-commerce show mixed results. Although, many authors (Oliveira, Faria and Abraham, 2014; Afshan and Sharif, 2016; Kumar, Adlakaha and Mukherjee, 2018; Zhou, 2018) show contrasting outcomes on the link between the customer’s perceptions of ease of use, usefulness and trust. Otherwise, many of research works have announced contradictory findings for the relationship between trust and behavioral intention (Koksal, 2016; Farah, Ahmad and Bashir, 2018; Hajiheydari and Ashkani, 2018). However, empirical studies (Park, Nam and Cha, 2012; Chung, Chen and Kuo, 2015; Yamaguchi and Takada, 2016) have found that the self-efficacy affects behavioral intention through the perceived ease of use in the context of mobile learning. Indeed, Abdullah, Ward and Ahmed (2016); Baki, Zauberman and Diehl (2018) reported the link between the self-efficacy and the perceived usefulness in the context of e-learning systems. In our knowledge, our research is the first one which has integrated the self-efficacy as a moderator variable in the relationship between the augmented reality attributes and the TAM attributes. According to Sarkar, Chauhan and Khare (2020), the mixed results are confusing for both practitioners and m-commerce researches and can be related to technology differences. The rationale for this investigation stems from the lack of research into the link between the trust and the proselytism and especially the moderating role of self-efficacy. In order to cover these gaps in the literature review, the following paper investigate the adoption of a new technology of augmented reality within the theoretical framework of technology acceptance model. The goal of this paper is fourfold. First of all, to identify the effect of AR attributes on TAM attributes, Secondly, to assess the impact of TAM attributes on trust towards the AR technology. Thirdly, to investigate the link between the trust and the

proselytism. Finally, to determine the moderating role of self-efficacy in the relationship between the AR attributes and TAM attributes.

1. Literature Review and hypothesis development

1.1 Definitions of Augmented Reality (AR)

From the literature review, we were able to define the concept of augmented reality. Azuma (1997) is the pioneer of this concept. “*An AR system supplements the real world with virtual (computer-generated) objects that appear to coexist in the same space as the real world. While many researchers broaden the definition of AR beyond this vision, we define an AR system to have the following properties: combines real and virtual objects in a real environment; runs interactively, and in real time and registers (aligns) real and virtual objects with each other*” (Azuma and al, 2001). Moreover, Mclean and Wilson (2019) recognize three attributes of augmented reality such as: (1) AR interactivity, the capacity to oversee what the user sees by the association of the real universe and the virtual universe. (2) AR vividness, the overlay of clear and full representation of the image in 3D. (3) AR novelty, the unique information of the user to combine the real world and the virtual world whenever an individual uses the AR applications. As a consequence, novelty is not referring to the newness of AR application, but instead novelty is a generic term referring to the new, unique and personalized content or stimuli experienced each time through the AR display. Due to the ubiquitous smartphone device, the augmented reality has appeared as a new technology available to m-retailers. Whereas, the AR is in its nascent stages in the consumer market, some innovative retailers have implemented the technology of AR in their mobile applications namely Sephora, L’Oréal, Nike, Adidas, Ikea (McLean and Wilson, 2016). In fact, according to Javornik (2014), “*in recent years, brands have been using and testing various AR apps in different contexts to examine the most suitable settings for their use. So far, AR used on smart devices and large interactive screens, either privately or publicly in retail are among the most common ones*”. Thus, the m-AR on smart devices enables a customer, for instance, to view a virtual product located in the environment (such as a virtual piece of furniture in a physical room) or to access further content by scratching a product logo or related image (such as a scanned magazine advertising that turns into a video on a tablet screen) (Javornik, 2014).

1.2 The effect of AR attributes on TAM attributes

The technology acceptance model (TAM) highlights that the perceived usefulness and the perceived ease of use as important factors of the acceptance of new technology (Papakostas and al, 2021). The perceived usefulness is the degree to which a person believes that using a particular system would strengthen its performance whereas the perceived ease of use is the degree to which the use of a technology will be effortless (Davis, 1989). The perceived usefulness and the perceived ease of use have become important variables in the comprehension of the use and the adoption of this new technology. According to Mclean and Wilson (2019), the sharpness and clarity of the product presentation translates into the vividness of the display of the real and virtual world, which is likely to generate the consumer's perception of ease of use. The utility of the unique content increases the purchasing performance of individuals resulting from task completion, shopping efficiency, and ease of product visualization (Mclean and Wilson, 2019). Due to this reasoning, we hypothesize:

H1: The augmented reality attributes (interactivity, vividness, novelty) through the retailer's mobile application positively influence the perceived ease of use.

H2: The augmented reality attributes (interactivity, vividness, novelty) through the retailer’s mobile application have a positive effect on the perceived usefulness.

1.3 *The effect of TAM attributes on trust*

As part of our research, the trust to the augmented reality is an added concept in the technology acceptance model. Although, very little researches are focused on the concept of trust in the technology acceptance model and especially in the context of augmented reality. Precedent studies (Nel and Boshoff, 2017; Kumar, Adlakaha and Mukherjee, 2018; Zhou, 2018) have tested the relationship between the perceived ease of use and trust in mobile system. In this sense, previous researches (Afshan and Sharif, 2016; Kumar, Adlakaha and Mukherjee, 2018) have suggested that the perceived usefulness is a significant factor that can affect consumer's trust in a mobile service. So the following hypothesis are proposed:

H3: The perceived ease of use positively influences the trust to the augmented reality technology.

H4: The perceived usefulness positively influences the trust to the augmented reality technology.

1.4 *The effect of trust on proselytism*

Matos and Rossi (2008) were the first to address the concept of word of mouth (WOM) and its impact on consumer behavior. Thus, the proselytism is inspired by the WOM notion. So, the construct of the proselytism is defined as: "*The tendency of the consumer to want to make adherence the others to its choice in their speaking about a brand*" (Cristau, 2003). Several studies (Ayeh, Au and Law, 2013; Fan and al, 2013) have tested the relationship between the trust in e-WOM source and the intention to follow e-WOM. In the context of this study, the trusting consumers to the experience of augmented reality tend to provide a positive WOM and demonstrate a willingness to influence others consumers. As part of our research, the proselytism is very relevant and interesting from the perspective of augmented reality application which is a new emerging tool in the context of retailing. In fact, the proselytism is characterized by a high level of trust. The consumer is likely to accept the influence of others through his experience. In addition, trustworthy consumers are people that use the technology of AR of retailers and their experience allows them to tell other people about the AR and motivate or stimulate others to use the same application of AR. So, proselytism is therefore freely and informal communication in favor of the m-AR retailing. As a consequence, the following hypothesis is formulated:

H5: The trust to the augmented reality positively influences the proselytism

1.5 *The moderating effect of self-efficacy between the augmented reality and the TAM attributes*

According to Venkatesh and Bala (2008), the self-efficacy is the degree of individual's confidence in their capacity to accomplish a specific task or job using a particular technology. With the prevalence of the concept of self-efficacy, the use of technology becomes a thing that is regarded as masterful (Winarno, Masud and Palupi 2021). In the using of technology, self-efficacy is a determinant of individual characteristics in the perception of ease of use of specific application (Winarno, Masud and Palupi 2021). In the same way, empirical studies (Park, Nam and Cha 2012; Chung Chen and Kuo, 2015; Poong, Yamaguchi S and Takada 2016) have shown that the self-efficacy influences behavioral intention through perceived ease of use of mobile learning. It was found that people with a high level of self-efficacy, as against those with a low level of self-efficacy, were more motivated in their efforts, perseverance and ability to learn how to use the technology (Liu and Huang, 2015). The integration of self-efficacy as a moderating variable is very relevant for our research which can enhance the capacity and the performance of using the augmented reality technology. As a whole, self-efficacy is one of the most valuable concepts for understanding the human cognition and the motivation of female

participants of using the AR applications. According to Suls and Wallstan (2008), self-efficacy is expected to play a role in the pre-intentional phase of technology adoption behavior. In the light of self-efficacy theory, low level of self-efficacy may inhibit the motivation to adopt a technology like the AR compared to high level of self-efficacy. Thus, the augmented reality attributes can improve the perceived ease of use and the perceived usefulness through the self-efficacy. So, the following hypothesis can be formulated as follows:

H6: The self-efficacy moderates the relationship between the augmented reality attributes and the TAM attributes

Figure 1: Conceptual model (see appendix 1)

2. Methodology

According to Bastide (2017), L'Oréal's MakeUp Genuis was the first application of AR to be created in the domain of cosmetics and beauty due to the motion of the catching feature integrated in the application and the front camera of mobile phone that allows customers to try virtually the cosmetic products on the face. The data is collected through a questionnaire which is administrated on line in social networks. A quantitative study was carried out with a sample of 300 female internet users since our product category (Oriflame make-up) is intended for women. These participants were first invited to download the application of Oriflame "the assistant make-up Oriflame" on their smartphones devices and they were asked to search cosmetic products using the augmented reality. Although, the "oriflame" is the pioneer to introduce the experience of augmented reality in the Tunisian context. After trying the AR function, they have to respond the questionnaire. This survey includes six constructs such as the augmented reality attributes, the perceived ease of use, the perceived usefulness, the trust to the AR, the proselytism, the self-efficacy and finally the demographic information. The AR attributes (interactivity, vividness, novelty) scale was assessed with fourteen items derived from previous researches by Yim, Chu and Sauer (2017). The perceived ease of use and the perceived usefulness were evaluated respectively with six items drawn from anterior study of Davis (1989). Indeed, the trust to the AR was estimated using five items derived from the scale of Pavlou (2003). Regarding the proselytism of AR, we opted for the scale of three items made by Cristau (2003). The latter measured a scale of self-efficacy based on four items used in Winarno, Masud and Palupi (2021). All items used in this research were developed on a five-point Likert type scale (1=strongly disagree and 5=strongly agree).

Table 1: Sample profile (see appendix 1)

3. Preliminary analysis

We will use SPSS 21 for data collection and especially the exploratory factor analysis. As regards the confirmatory factor analysis and the test of our hypotheses, we will choose Amos 18 software. A number of preliminary analyses were conducted before the structural equation modeling to test the hypothetical model. The reliability was assessed with the Cronbach alpha which reflects the internal consistency of the items belonging to each construct. In fact, the alpha coefficient for each variable exceeds the recommended level of 0.6 as shown in appendix 3. The exploratory factor analysis indicated that the KMO index for each variable are satisfactory which were close to 1 and the Bartlett's sphericity test is significant at a risk of 5% which leads to a good factorable solution. The results of CFA show that the reliability (Rho of Joreskog) for the overall constructs are above 0.7 and the values of convergent validity are greater than 0.5. Additionally, the CFA is performed in order to estimate the quality of structural

model. In fact, the results of the adjustment indices are satisfactory (CMIN/DF=2.494; RMSEA=0.068; RMR=0.052; GFI=0.928; AGFI=0.972; CFI=0.907; NFI=0.925).

4. Hypotheses testing

The structure equation modelling (SEM) leads to test hypothetical relationships. As can be seen in table 2 in appendix 1 all the research hypotheses are confirmed and significant because the student test is greater than 1.96 except the hypothesis which describe the effect of the trust on the proselytism is not significant. However, we conducted the multi-group analysis (MGA) in the estimation of moderating variable (self-efficacy). The multi-group analysis allowed comparison between paths assessing of high self-efficacy (n=216) and low self-efficacy (n=84). As shown in the table 3, the MGA indicates that the augmented reality significantly and positively influences the perceived ease of use and the perceived usefulness for high self-efficacy. The path coefficient highlights that the AR interactivity ($\beta=0.874$) and the novelty ($\beta=0.717$) have a more significant effect on the perceived ease of use of the AR feature for high self-efficacy. In contrast, the AR novelty is more important in influencing the perceived usefulness of the technology of AR for a high self-efficacy ($\beta=0.938$). This finding may be due to the appreciation of the different and unique information offered through the augmented reality for highly self-efficacy consumers.

Table 2: Hypothesis testing (see appendix 1)

Table 3: Test of the moderating role of self-efficacy (see appendix 1)

5. Discussion

This research presents the study of augmented reality attributes as a variable that allows to influence the perceived ease of use and the perceived usefulness. Also, our research highlights the relationship between the technology attributes and the trust to AR. This study identifies as well as the effect of the trust to AR on the proselytism. In addition, the self-efficacy is added as a moderating variable in the link between the AR attributes and the TAM attributes. With regard to the effect of AR attributes on the perceived ease of use and usefulness is confirmed, which coincides with previous studies likely Yim, Chu and Sauer (2017), Mclean and Wilson (2019), Papakostas and al (2021). Thus, the ability of the technology, the full and clear representation and the content displayed can enhance consumer's perceptions of ease of use and usefulness. Indeed, the link between the TAM attributes and the trust to the AR was found positive and significant. This verdict is in accordance with the proposal of Herzallah and Mukhtar (2016) who argue that the perceived ease of use and the perceived usefulness are considered to be a strong predictor of the trust to the technology. The perceived ease of use and the perceived usefulness providing through the ability of the technology, the sharpness of the representation and the unique content of the augmented reality can enhance the consumer's trust to the augmented reality. Using the AR features, the flexibility of interaction and the performance of shopping can engender the trustworthy of the technology. However, we did not find that the trust to AR has a significant effect on the proselytism. As a finding is not in line to Ayeah, Au and Law (2013); Fan and al (2013) who underline that the trust to the technology can affect e-WOM. Although, for our research, the trust to AR can't engender the willingness to influence others consumers and to talk about the experience of AR. The rejection of this hypothesis explain that the online consumers can not touch and tick the quality of the product and they are concerned more and more about the security of this experience. So, they are not willing to use this technology in the future and they are not able to develop a positive WOM. Finally, it was investigated that the self-efficacy has a moderating role between the AR attributes and the TAM characteristics. Our findings show that the interactivity, the vividness

and the novelty of AR can enhance consumer's perceptions of ease of use and usefulness through the high perceived of self-efficacy.

Conclusion, contributions, limitations and future researches

Our research objective was to determine the antecedents and behavioral outcomes of the trust through the augmented reality mobile applications. On theoretical implication level, we describe an explanatory model which includes both relevant technology characteristics and also the AR attributes (McLean and Wilson, 2019). A key finding of this research is that augmented reality function as a crucial factor on the TAM attributes, which in turns stimulate the customer's trust. Therefore, our theoretical framework is underpinned by the technology acceptance model in the context of augmented reality. Furthermore, our study extends the TAM by including other constructs such as the trust and the proselytism. Moreover, we have studied the link between the technology attributes and the trust to the technology which was poorly studied especially in the context of augmented reality. Concretely, this study is the first one to examine the effect of the trust on the proselytism in the domain of augmented reality technologies and the moderating role of self-efficacy. Although, on the managerial level, this present research allows to propose a new operational mode to marketing practitioners and retailers to take into account the technology of augmented reality in the context of online shopping and especially the retailer's mobile applications as a key to enhance the customer's perceptions of ease of use and usefulness. As well as, the usefulness and the ease of use of this technology enable marketers or m-retailers to enhance the trustworthy customers. However, the retailers should intensify their efforts to make aware of the usefulness and the conviviality of the AR to improve the proselytism. Indeed, retailers should put attention of vulnerability and the security risk of AR devices, they ought to ensure that consumers are secure and that the confidential data is preserved. Moreover, the augmented reality may consider an effective tool to promote brands or products and to maintain a relationship between customers and brands. This new technology permits to marketers and retailers to meet customer expectations. The results of this research can help retailers to take effective and successful marketing strategies. In addition, the high self-efficacy can be a segmentation criterion. Despite these contributions, there are some limitations that ought to be presented. The main limitation is related to the choice of a single product category (cosmetic products) for a target of women, which it makes impossible to generalize the results and reduce so the external validity. Indeed, other variables are not highlighted which will be relevant or useful in our conceptual model. Moreover, this research unfirms the impact of the trust to AR on the proselytism. This result is linked to the context of our research. For the continuation of this work, we suggest: the integration other variables in our conceptual model such as: satisfaction with the experience, brand commitment or loyalty. Also, it would be relevant to reproduce this work in other sectors likely the tourism, home equipment or other products for both men and women in order to realize the generalization of results. Lastly, future research should consider that a qualitative study is important to analyze in depth the impact of the technology of augmented reality on customer responses.

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Appendix 1:

Figure 1: Conceptual Model

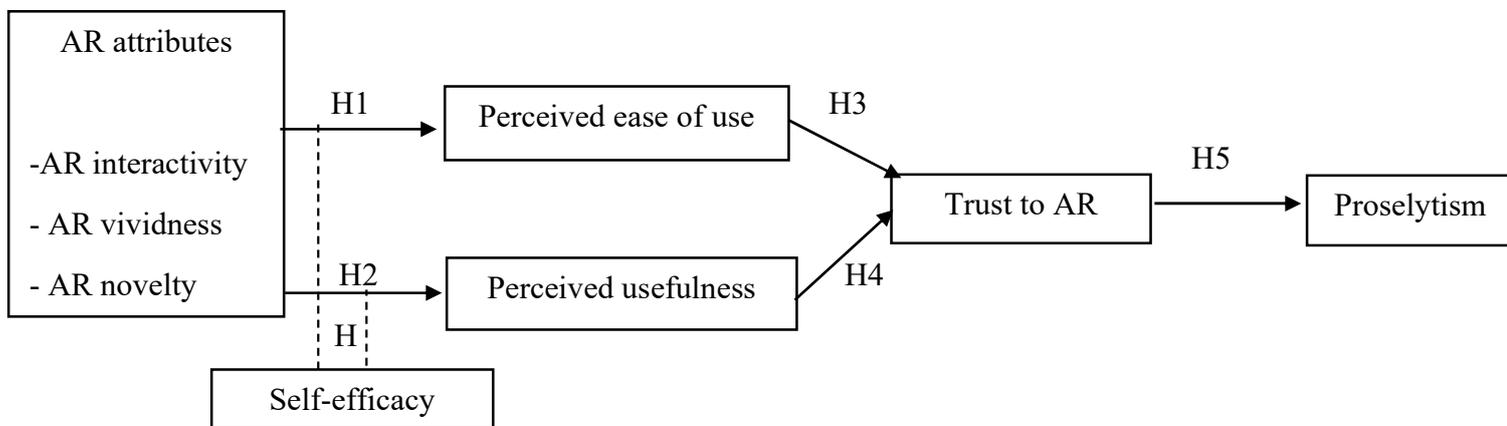


Table 1: Sample profile

Demographic variables		Frequency	Rate
Age	From 20 to 30	163	54.33%
	From 30 to 40	112	37.34%
	From 40 to 50	25	8.33%
Marital status	Single	170	56.67%
	Married	130	43.33%
Educational level	High school degree	100	33.33%
	College degree	19	6.33%
	University degree	181	60.33%

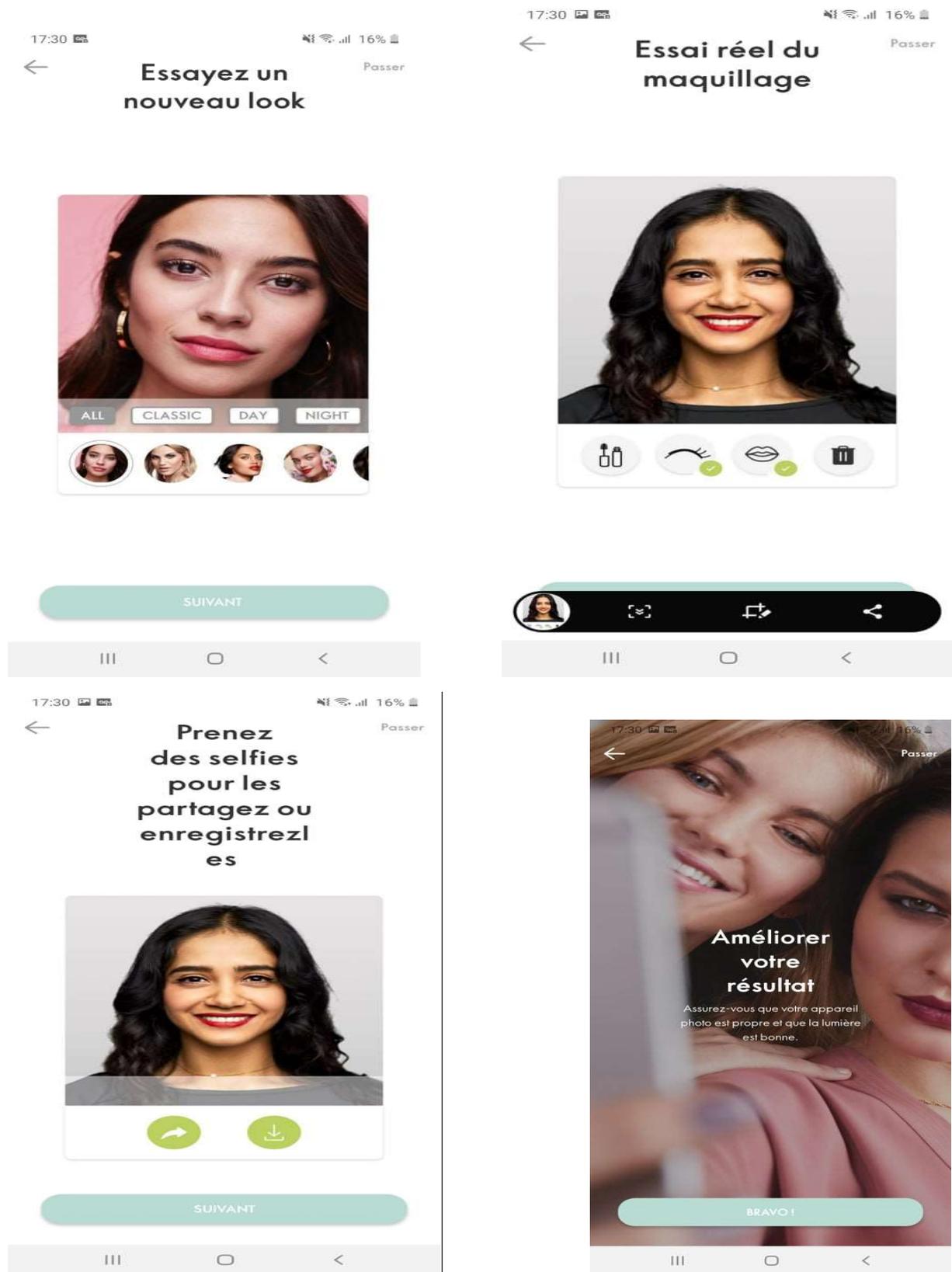
Table 2: Hypothesis testing

Paths	T value	P	Result
The perceived ease of use <-----AR interactivity	2.341	0.019	Supported
The perceived usefulness<----- AR interactivity	1.992	0.043	Supported
The perceived ease of use<-----AR vividness	4.903	0.000	Supported
The perceived usefulness<-----AR vividness	5.239	0.000	Supported
The perceived ease of use<-----AR novelty	3.363	0.000	Supported
The perceived usefulness<-----AR novelty	2.287	0.022	Supported
The trust to AR<-----the perceived ease of use	2.796	0.005	Supported
The trust to AR<-----the perceived usefulness	7.141	0.000	Supported
The proselytism<-----the trust to AR	0.227	0.821	Not supported

Table 3: Test of the moderating role of self-efficacy

Causal relationship	Std.coefficient		P value	
	Low	High	Low	High
Perceived ease of use <-----AR interactivity	0.043	0.874	0.566	0.000
Perceived ease of use <----- AR vividness	0.249	0.185	0.320	0.018
Perceived ease of use <----- AR novelty	0.084	0.717	0.191	0.000
Perceived usefulness <-----AR interactivity	0.075	0.204	0.525	0.000
Perceived usefulness <-----AR vividness	0.482	0.595	0.231	0.000
Perceived usefulness <-----AR novelty	0.133	0.938	0.187	0.000

Appendix 2: retailer's application of augmented reality (the assistant makeup Oriflame)



Appendix 3: scale of constructs

Construct	Authors	Items	Cronbach Alpha	Rho of Joreskog	Pvc
Augmented reality attributes	Yim, Chu and Sauer (2017)	Interactivity -I was in control of my navigation through the augmented reality technology -I had some control over the content of the augmented reality technology that I wanted to see. -I was in control over the pace to watch products. -The augmented reality technology had the ability to respond to my specific needs quickly and efficiently.	0.909	0.837	0.812
		Vividness - The visual display through the AR technology was clear. - The visual display through the AR technology was detailed. - The visual display through the AR technology was vague. - The visual display through the AR technology was vivid. -The visual display through the AR technology was sharp. - The visual display through the AR technology was well-defined.	0.827	0.792	0.754
		Novelty -Using the augmented reality feature offers something new each time. -Using the augmented reality feature offers unique information. -Using the augmented reality feature is something different each time. -Using the augmented reality feature offers specific content.	0.945	0.813	0.798
The perceived ease of use	Davis (1989)	-Learning to use the AR feature on the app is easy for me. -I find it easy to get the AR feature on the app to do what I want it to do. -My interaction with the AR feature on the app is clear and understandable. -I find the AR feature on the app to be flexible to interact with. -It is easy for me to become skillful at using the AR feature on the app.	0.809	0.769	0.765

		-I find the AR feature on the app easy to use.			
The perceived usefulness	Davis (1989)	-Using the AR feature on the app enables me to accomplish shopping tasks more quickly. -Using AR feature on the app enhances my shopping performance. -Using the AR feature on the app increases my shopping productivity. -Using the AR feature on the app enhances my shopping effectiveness. -Using the AR feature on the app would make it easier to shop. -I find the AR feature on the app to be useful.	0.819	0.863	0.792
The trust to AR	Pavlou (2003)	-I believe that AR technology will function as I expected. -I have a high degree of confidence that AR technology will be working when I need it. -I trust AR technology when my access to the internet is stable. -I think that the technology that supports the AR technology is secure all the time. -In my opinion, the AR technology is trustworthy.	0.919	0.884	0.827
The proselytism	Cristau (2003)	I like to speak about this experience with other people. -I told anecdotes on this experience with other people. -I explain to the others why they may find it beneficial to buy in this experience.	0.941	0.782	0.746
The self-efficacy	Winarno Masud and Palupi (2021)	-Confidence in finding information -The capabilities required to use the system -Helps access information easier - Improve quality	0.852	0.900	0.694