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Augmented Reality in Fashion Retail:

Platform-dependent Acceptance by Generation Z Customers

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ABSTRACT

Using the technology acceptance model, this article provides a comparison between the acceptance of augmented reality applications in stationary and mobile fashion retail. A quantitative online survey was conducted of a predominantly younger user group. Specifically, two fictitious scenarios were posed to the participants to investigate their opinions on the use of an augmented reality app. For the estimation of the model, a PLS-SEM approach has been implemented. The study reports on changes between a stationary and a mobile scenario and establishes that, in particular, the ease of use does not universally impact the attitude towards the technology. Additionally, it has been shown that the customer experience uniformly matters, i.e., in particular in the stationary scenario.

Keywords: Augmented Reality, Fashion, Mobile, Retail, PLS-SEM, Technology Acceptance

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1. Introduction

One of the megatrends influencing society and life worldwide is digitization, forcing companies in the fashion industry to adapt to new consumer behavior (Fuentes et al., 2017; Fuentes & Sörum, 2019; Hagberg et al., 2016). Due to the increasing growth of online retail, companies are relying on an omnichannel strategy that enables customers to seamlessly connect sales and communication channels (Hänninen et al., 2021; Mehn & Wirtz, 2018, p. 10). In addition, brick-and-mortar retail is changing from a point of sale to a point of experience that is geared to the needs and expectations of the customer (Knoppe & Wild, 2018, p. 18). In the context of "hybrid retail," the new role of the store builds on the advantages of stationary retail and expands them, creating customer experiences using digital tools (Metter, 2018, p. 61; Pedroni, 2012). One of these digital tools is augmented reality (AR) (Behr, 2018). AR offers various ways to engage and involve customers at both digital and analog touchpoints of the customer journey. This builds a unique customer experience and therefore loyalty to the company (Chylinski et al., 2020). The integration of AR is relevant for both stationary and online retail and offers benefits for the customer and the company.

The literature has been addressing the advantages and disadvantages of the introduction of AR technologies (Boardman et al., 2020; Hinsch et al., 2020) for some time. Nevertheless, it is just as relevant for the implementation of AR to know how willing consumers are to use the new technology. For this purpose, Davis' Technology Acceptance Model (TAM) or successor models have often been applied in the literature, which examine factors that explain

the emergence of acceptance (Dolphin et al., 2025). While several studies on the adoption of AR solutions in different scenarios have been conducted (Holdack et al., 2022; Plotkina & Saurel, 2019), to date, no direct comparison of AR adoption in two different retail channels has been conducted. In light of this research gap, the present study addresses the question of how the acceptance of augmented reality differs between stationary and mobile retail and which factors influence acceptance, respectively.

The COVID-19 pandemic disrupted retail, stationary, and digital in multiple ways (Sgroi, 2022; Shankar et al., 2021). Thus, this study offers additional insights into the perception of AR in the context of the new normal in retail. The article by Holdack et al. (2022), though published after the pandemic, focuses on the times before the pandemic and on the special case of AR glasses.

AR as a technology and its implementations in marketing have been broadly discussed in the literature (Berman & Pollack, 2021; Bulearca & Tamarjan, 2010) as well as with a focus on mobile marketing (Scholz & Duffy, 2018). Its increasing relevance in retail is based on differentiation as the main factor (Hinsch et al., 2020). In a market that is increasingly confronted with interchangeable product ranges and saturated consumers, it is essential for a company to stand out from the competition to remain successful in the market in the long term (Rusnjak & Schallmo, 2018, p. 1; Wedel et al., 2020). There are various possibilities for successful differentiation, with Rauschnabel et al. (2022) giving an introductory overview on the use of AR in marketing. Considering the importance of the customer's experience, this study includes a focus on customer experience in the context of AR. This sentiment holds true since the earliest studies on the use of AR in marketing go back about two decades (Azuma, 1997; Zhang et al., 2000), and similar to recent ones (Scholz & Duffy, 2018; Scholz & Smith, 2016), stress the experiential and engagement factors of AR approaches.

In addition to optimizing the customer experience, another advantage of AR in retail can be seen in the simplification of decision-making (Gallardo et al., 2018). The use of AR applications in retail enables customers to see virtual products in their environment or on them for the first time, e.g., virtual try-ons, which influences the decision-making process and the final purchase decision. In addition to the visualization of the product, it is also possible to display product information that simplifies the purchase decision. For example, information about fit, color alternatives, or customer ratings can be displayed when trying on clothes virtually in the store. Companies also have the opportunity to exploit cross-selling potential by displaying additional items of clothing as possible combinations (Chylinski et al., 2020).

Virtual mirrors are currently the most common AR application in stationary fashion retail (H.-Y. Kim et al., 2017). They offer an opportunity to enhance the customer experience through interactivity and reduce waiting times in the lines to fitting rooms (Boardman et al., 2020).

Another possible application of AR at the point of sale can be via mobile device integration (Dacko, 2017). After downloading a fashion company's or a retailer's app, customers can scan shop windows or locations within the store and add virtual elements to their surroundings.

Augmented reality can also improve the customer's shopping experience in e-commerce. The most common application is the virtual try-on of products in a company's online store. For this, the customer must be using a device equipped with a camera, which is why mobile commerce is the most suitable use of the technology.

The advantage of a virtual try-on is not only in testing the product but can also reduce the return rate, as customers can form an impression of the products in advance.

According to Barta et al. (2021), the comparison of a mobile case with a stationary case might be of particular interest. Their study revealed that the use of mobile devices, in their case, in comparison to desktop PCs, leads to flow experiences. Those in consequence result in a higher willingness to spend money online, which in the current context would translate into a more pronounced attitude towards use and thus acceptance of the technology.

Concluding, Khoshroo and Irani (2024) and Dolphin et al. (2025) provide two recent reviews of the literature on the use of augmented reality and its adoption by customers in the context of fashion retail. Following the assessment by Dolphin et al. (2025), almost a thousand articles have been published on the topic over the last two decades. Among this corpus of articles, only singular articles take a comparative perspective.

While existing studies allow for the establishment of an order of relevance of different types of applications, this study remains the only one to consider two different types of applications in a comprehensive analytical model. From a practical point of view, it thereby provides practitioners with decision support when discussing focal points of their digitalization and, in particular, AR strategy. Combining two types of applications into a comprehensive model allows for this study to differentiate which effects are application-specific and which effects are of a more universal nature.

The motivation and construction of this model is detailed in the following second section, while the results of the model estimation are presented in the third section. The fourth section concludes by discussing practical applications as well as limitations of this study.

2. Methodology and Methods

2.1. The Technology Acceptance Model in AR Research

Several studies have used the TAM (Davis, 1986; Davis et al., 1989; Venkatesh & Bala, 2008) or related models to study AR applications in retail over the years, with Rese et al. (2017) and Chen et al. (2021) providing a detailed overview of the literature. Table 1 provides a first insight into considered studies focusing on the acceptance of AR in fashion retail, differentiating between TAM-based and non-TAM studies. As stated above, currently the number of comparable studies has increased to several hundred (Dolphin et al., 2025) that all implement some modified version of the TAM (Khoshroo & Irani, 2024) or the successor model, the UTAUT or UTAUT2 (Akther et al., 2025). Table 1 illustrates as well the predominance of these two models in the early studies on this topic. In some cases these approaches are merged with other models or expanded beyond the traditional scope (Mollel & Chen, 2025).

Table 1 Studies on AR Acceptance in Fashion Retail

Publication	Research Model	Focus
Lee et al. (2006)	TAM	App
J. Kim and Forsythe (2008)	TAM	App
Domina et al. (2012)	TAM	App
Poncin and Mimoun (2014)	-	Magic Mirrors
T.-L. Huang and Liao (2015)	TAM	Try-On

Publication	Research Model	Focus
Stoyanova et al. (2015)	-	App
H.-Y. Kim et al. (2017)	TAM	Magic Mirrors
Cho and Kim (2019)	UTAUT	App (FAR)
Plotkina and Saurel (2019)	TAM	App
Perannagari and Chakrabarti (2020)	-	Impact Factors
Holdack et al. (2022)	TAM	Smart Glasses

Table 1 illustrates that already several studies exist that consider a broad spectrum of applications. Considering the cited studies as well as studies from furniture retail (Rese et al., 2014; Rese et al., 2017) or tourism (Y.-C. Huang et al., 2019), all of them assume a single-platform perspective. In this regard, the current study adds to the existing literature by comparing, for the same group of participants, the acceptance of an AR technology in a stationary environment versus a mobile environment.

Considering the more complex aim of this study, additional impact factors are considered. Rese et al. (2017) supplemented the basic TAM with the variables "perceived informativeness" and "perceived enjoyment", two aspects considered crucial for this analysis, considering the relevance of customer experience discussed before. Although not based on the TAM, Rauschnabel et al. (2019) analyze customer-perceived benefits from the use of AR technologies, and Irshad and Rohaya Bt Awang (2016) consider how users perceive the ease of use of these technologies.

Following Diamantopoulos et al. (2012), only single-item scales are implemented for each of the relevant constructs of the model. While it simplifies the measurement process, it offers the advantage of reducing the cognitive burden on the participants, increasing the quality of the sample, a critical aspect in smaller samples.

In summary, the model in Figure 1, based on the TAM 3 and the study by Rese et al. (2017), is used as the basis for the current study. The figure already contains the assignments of the research hypotheses and research questions motivated in the succeeding section.

2.2. Research Design and Hypotheses

It is essential for companies in the fashion industry to accept the diversity of retail channels and to take a differentiated look at the use of AR in all of them. Against this background, the following research question forms:

To what extent does the willingness to use AR technologies in the fashion industry differ in stationary and mobile retail?

This question will be investigated using Davis' technology acceptance model (Venkatesh & Bala, 2008). The question on the participants' intention to use ("I would tell my friends and family about the technology") was replaced by the more appropriate three-step variant, adding, ("If you were in a fashion store that offered such technology, would you use it?" / "If you were on a fashion website that offered such technology, would you use it?"). Regarding scale design, this study follows Rese et al. (2017). They construct their research instrument by implementating the scales by Venkatesh and Davis (2000) and expanding it with the scales used by Ahn et al. (2004), Hausman and Siepke (2009), and Porter and Donthu (2006), as well as results from interviews.

H1: The intention to use AR solutions can be explained using the design of the TAM 1.

- *H1a and H1d: The perceived ease of use has a positive impact on the perceived usefulness (H1a) and on the attitude towards use (H1d).*
- *H1b and H1c: The perceived usefulness has a positive impact on the intention to use (H1b) and the attitude towards use (H1c).*
- *H1e: The attitude towards usage has a positive impact on the intention to use the AR solution.*

Subsequently, the role of external variables is investigated. Rese et al. (2017) measure a significant correlation between the perceived pleasure as a hedonic factor that the user feels when interacting with the augmented reality app and the resulting perceived usefulness. The positive effects reported by Rese et al. (2017) can similarly be found in Plotkina and Saurel (2019) or J. Kim and Forsythe (2008), who are among those studies considering the hedonic aspect of usefulness.

This positive relation between perceived enjoyment and usefulness can furthermore be motivated by the results of Plotkina and Saurel (2019). They in turn refer to Hilken et al. (2017) and Javornik et al. (2016) as motivation for the relation between perceived hedonistic enjoyment and the purchase intention. Holdack et al. (2022) furthermore refer to the original publication by Davis et al. (1989) to motivate the effect of perceived enjoyment. Considering an offline context, J. Kim and Forsythe (2008) and Pantano and Di Pietro (2012) state the entertainment value of an AR application as a driver of the attitude towards use. This gives rise to hypothesis H2.

H2: The perceived enjoyment has a positive effect on the perceived usefulness of AR solutions.

Furthermore, Rese et al. (2017) report a positive relationship between perceived information content as a functional utility factor of AR and perceived usefulness. This stems from the idea that useful product information helps the user to get an impression of the product and thus simplifies the purchase decision (Chylinski et al., 2020). Pantano and Di Pietro (2012) and Poushneh (2018) state that via additional information and support, uncertainty and doubts can be alleviated. Hypothesis H3 can be deduced from these arguments.

H3: The perceived information content has a positive effect on the perceived usefulness of AR solutions.

While discussed in the literature in a different context, i.e., tourism (Y.-C. Huang et al., 2019), customer experience has not yet been considered in acceptance studies in the context of fashion and, in particular, AR applications in fashion. In contrast to H.-Y. Kim et al. (2017), who use the construct of perceived entertainment, the use of perceived enjoyment in studies like Plotkina and Saurel (2019) or Holdack et al. (2022) overlaps with the concept of customer experience. This concept, however, covers aspects aside from the mostly positively connoted perceived enjoyment or entertainment. Augmented reality lends itself to retail primarily because it offers customers an experience in the store or online that surprises and fascinates them. This raises the question of how perceived benefits change if the customer does not value an experience when buying clothes.

Alluding to results from experience marketing in the fashion industry, studies like Duncker and Perret (2022) or Dangelico et al. (2022) indicate that a positive customer experience leads to a more positive perception of the product and thus a higher perceived usefulness.

Accordingly, research question F1 is raised: whether users who value an experience when using AR applications while buying clothes perceive a higher benefit from them.

F1: Does the personal importance of the customer experience have a direct positive impact on the perceived usefulness of AR solutions?

Figure 1, aside from illustrating the research design, summarizes the research hypotheses to be tested and the yet unconsidered research question F1.

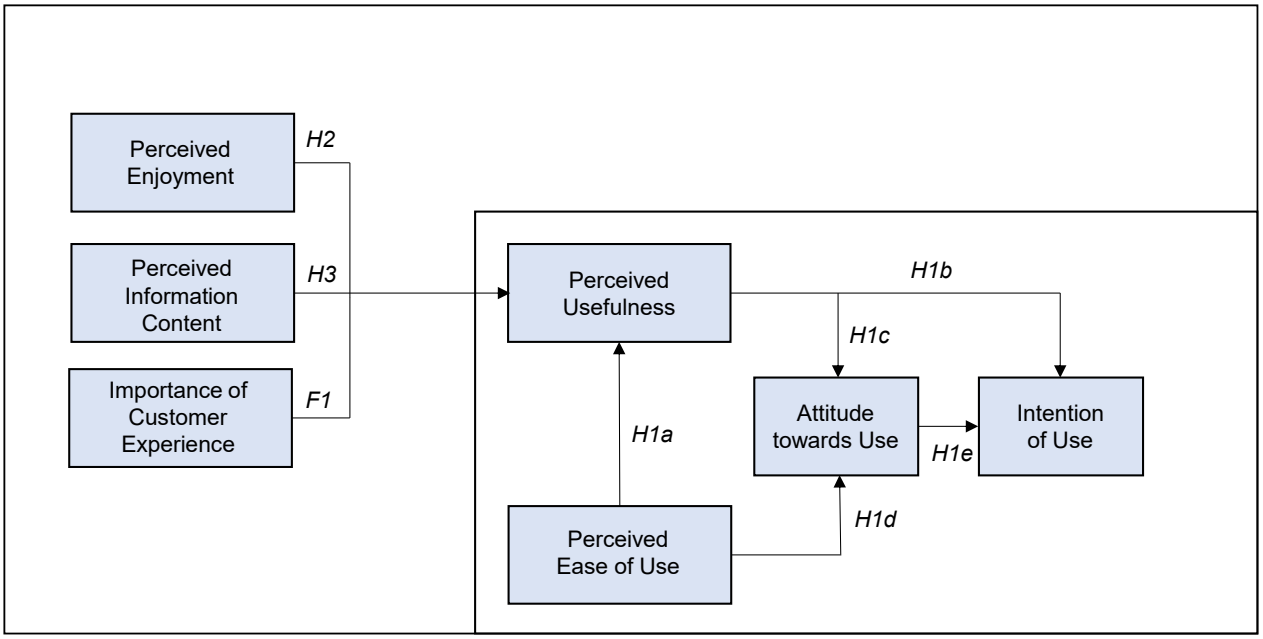

Figure 1. Implemented Research Design

2.3. Questionnaire Construction

The questionnaire implemented in the context of this study consisted of three main parts: an introductory part, a TAM part, and sociodemographic questions.

After assuring informed consent, the introductory part considers the participants' previous experience with AR as a technology and respective applications, i.e., their familiarity and the depth thereof. Assuming that only a modest share of participants has, if at all, a profound understanding of AR as a technology, after the introductory part, they are presented with a working definition of AR. This allows for the assumption that while some participants might have superior knowledge of the technology, all participants have at least a basic understanding thereof.

The main part asks the questions relevant for testing the TAM. Participants are confronted with two scenarios on the use of an AR app. The scales used in this regard originate from the original study by Rese et al. (2014). For use in the questionnaire, they were translated to German to make filling it in more convenient for the German audience. To assure a higher attention span of the participants, a shorter questionnaire has been constructed using only single-item-scales; a procedure valid in respective situations (Diamantopoulos et al., 2012).

The final part of the questionnaire finishes with collecting sociodemographic information about the participants, i.e., gender, age, and educational background. The study has been approved by the ethics committee of the International School of Management and is listed under number K-2025-JP-15.

3. Empirical Results

3.1. Description of the Data Set

170 participants took part in the survey. After cleaning the data set, i.e., removing incomplete questionnaires, there were 135 complete data points that met the prerequisites for a more in-depth study.

Even though the sample is rather young, i.e., a median age of 21.55 years and predominantly female (60%), more than half of the participants did not know what augmented reality was (51.5%), roughly two-thirds if adding those who were unsure. Thus, the sample reflects the German society (Game, 2020) regarding previous experience with AR technologies and applications. It also places the study well within the research space of current comparable studies (Mollel & Chen, 2025).

To test the supplementary research question F1, two items were surveyed on a five-point Likert scale. Cronbach's alpha shows that the items do not measure a common construct. Thus, both questions were included as individual constructs.

The results of a PLS-SEM estimation are summarized in Figure 2. While the PLS-SEM estimation is especially suitable in the presence of latent variables, its main advantage can be found in the presence of multiple interactions, i.e., moderation and mediation effects. Due to its non-parametric nature, it is also less vulnerable to outliers and non-linear relations. In the context of this study, the R package seminr has been used in R 4.4.2. Since the PLS-SEM estimator is a non-parametric estimator, it does not report significance levels. To approximate significance levels, using bootstrapping with 5,000 repetitions, standard errors and thus t-scores are approximated.

For each link between two constructs, three values are reported. The first value describes the results for the stationary scenario, while the second value describes the results for the mobile scenario. The third value describes the results for the pooled scenario using answers for both scenarios and including as well a dummy variable differentiating between the two base scenarios.

For F1, the two sets of values represent the two items measuring the customer experience construct.

The significance levels, reported in the form of asterisks, result from the approximated t-scores, i.e., *** significant at the 0.1% level, ** significant at the 1% level, and * significant at the 5% level.

Next to the constructs of perceived usefulness, attitude towards use, and intention to use, R^2 statistics are reported, indicating the share of the explained variance of the dependent variables.

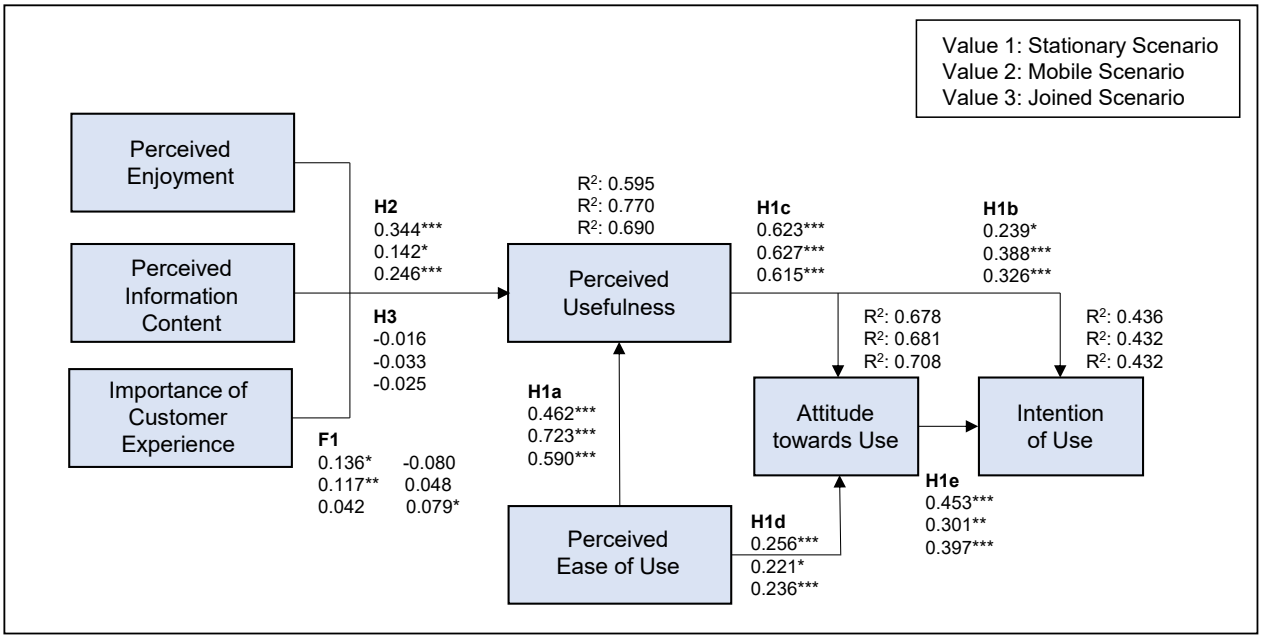

Figure 2. PLS-SEM Results Summarized

** $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.*

3.2. Estimation of the Model and Testing the Hypotheses

Considering the overall model quality, the R^2 statistics, as in the studies by Venkatesh and Davis (2000), Venkatesh and Bala (2008), and Rese et al. (2017), are above 0.6 for five out of six links regarding the perceived usefulness and the attitude towards use. Regarding the intention to use, they are still consistently larger than 0.43. Thus, they indicate a strong explanatory power of the overall model, thereby giving an ex-post justification of the choice for the TAM and the use of single-item constructs.

H1: The intention to use AR solutions can be explained using the design of the TAM 1.

The regression results, as summarized in Figure 2, show that significant relationships exist between all variables introduced in the base model for each of the three scenarios. Opposed to the findings by Rese et al. (2017), ease of use reports a significant effect on perceived usefulness in both the stationary and mobile scenario.

In summary, all sub-hypotheses H1a through H1d are retained.

Relating to earlier arguments, the results of this study can thus be expanded beyond the fictitious character of the realized scenarios. However, in contrast to the study by Davis et al. (1989), the results indicate that the frame in which AR applications are used matters.

H2: The perceived enjoyment has a positive effect on the perceived usefulness of AR solutions.

Figure 2 shows the results of the regression analysis of the factors that affect perceived usefulness. Here, perceived enjoyment has a positive effect on perceived usefulness in both the stationary and mobile scenarios. It is thus concluded that hypothesis H2 is fulfilled. The result is in line with the findings of Rese et al. (2017) for both channels and follows the general discussion of Venkatesh and Bala (2008). They also coincide with the results found by Plotkina and Saurel (2019) and, in turn, Hilken et al. (2017) and Javornik et al. (2016). Insofar as enjoyment and entertainment can be equalized, they also replicate those results found by J. Kim and Forsythe (2008) and Pantano and Di Pietro (2012).

Since the effect is stronger for the stationary scenario, retailers need to take care that their in-store AR offers are easy to use and are perceived as a positive experience by the customers. This also illustrates that in-store AR apps are considered an enjoyable add-on that might have practical side effects, while with mobile shopping, they are attributed with more pragmatically practical characteristics.

H3: The perceived information content has a positive effect on the perceived usefulness of AR solutions.

Perceived information content has no significant effect on perceived usefulness in any of the two retail formats; thus, hypothesis H3 has to be rejected, and the results of this study are opposed to those of Pantano and Di Pietro (2012) and Poushneh (2018).

F1: Does the personal importance of the customer experience have a direct positive impact on the perceived usefulness of AR solutions?

Considering that customer experience has been measured via two disjunct constructs, the results indicate that only the first one has a significant impact. The first construct resulted from a question on the relevance of fashion companies creating an experience for customers per se. The second construct resulted from a question about whether venues are preferred where the customer experience is more pronounced. Summarizing, the participants believe that customer experience matters, but they would not select a particular venue because of the experiences they offer. This is a first indicator that customer experience is continuously becoming a hygiene factor in retail, independent of the type of platform.

Due to the overall weak results, it comes as no surprise that this aspect has up to now not been considered in the literature.

3.3. Stationary and Mobile Retail in Comparison

First, it can be pointed out that the mobile case did not consistently report stronger relations and higher R^2 statistics than the stationary case, as might have been concluded from the results by Barta et al. (2021). Nevertheless, the effect of the ease of use on the attitude to use the technology is more pronounced in the mobile situation, indicating that good AR apps, as in easy to use, might lead to higher attitudes towards their use.

Additionally, at the end of the questionnaire, the participants were asked in which retail format they would prefer to use AR. The responses clearly show that AR would most likely be used in a mobile environment, with 61%. 24% of participants said they would use AR in both deployment locations, while only 7% would prefer to use it in offline retail.

Further evaluation of the data showed that in the stationary scenario, the simplicity of use and the fun factor of AR in particular stood out as positive, with all other factors being rated moderately worse and thus rather neutral. However, the best ratings were also given for ease of use and enjoyment. It can also be seen that the information content was rated marginally better in the mobile scenario than in the stationary one. An important finding is as well that the use of AR in mobile commerce is considered more value-creating and meaningful, which also explains the increased willingness to use it.

In the third, the pooled scenario, the dummy variable (0 for the stationary scenario and 1 for the mobile scenario) has a significant effect on all constructs except the perceived use and the perceived information content. Thus, there exist not only differences between the stationary and mobile scenarios regarding the links between constructs and the mechanisms involved in the process of accepting AR applications. The results rather indicate that there are significant differences between the constructs across the two scenarios per se.

From a more practical perspective, this underlines the argument that fashion companies should always develop AR solutions platform-specific.

4. Conclusions

4.1. Significant insights and Recommendations to Practitioners

The results for the first research hypothesis H1 indicate that even in post-COVID retail scenarios, the insights gained by studies like Rese et al. (2017) and others still hold. The ease of use of AR technologies, however, seems to have lost part of its relevance, especially in the stationary case. Following Barta et al. (2021), the still significant result for the mobile scenario might simply be due to the higher flow-inducing potential of mobile applications. The simplest of reasons for this change might be that over the last few years, customers in general became more adept in the use of these new technologies. Where AR technologies before the COVID-19 pandemic could still be considered attractors and success factors for fashion retailers, now they are hygiene factors that customers see as basic services.

For future research, it might therefore be of particular interest to consider in more detail the usability issue of AR applications on different levels. At the same time the potential reason for a loss in relevance as well as the question whether a loss in relevance actually occurred and is neither a statistical artifact nor a particularity of the sample can be analyzed.

The weak results for research question F1 indicate a significant difference between the stationary and the mobile case concerning the relevance of the customer experience. They ask whether customer experience as well has become a hygiene factor instead of being a success factor. The insignificance and very low effect size in the mobile case seem to indicate, partially contrary to Barta et al. (2021), that a positive experience will not impact the intention to use the technology more. A potential conclusion from this result might be that mobile users already see AR applications as standard mobile services, whereas in the stationary case they still offer a novelty, which, when first encountered, shapes the customer’s perception thereof more strongly.

Assuming that the company's target group will welcome the use of AR, it needs to decide on the concrete benefits an AR application should offer their customers. Based on the results of this as well as other previous studies, a distinction could be made between functional and hedonic benefits. Accordingly, it needs be evaluated whether AR actually influences the customers' purchase decision. It needs to be established for example, AR applications should allow customers to virtually try on products in the online store, or whether it should exclusively offer an experience. An example for an experience could be, by allowing the customer to scan the shop window of a store and experience the products in a new way using AR. The results of the study indicate that the acceptance of AR is higher in mobile commerce, which is why the use of AR could be simplified there.

Translating the study results into business strategies, pilot prototype projects should be launched. In these prototypes only a smaller number of products can be tried on with AR either in an online application or stationary installation. In this way, the company can measure the performance of AR in its own company and, in particular, work out whether the use of AR applications also leads to higher sales figures. While this study considers AR applications as a monolithic entity, multiple small-scale applications will help the particular store to determine which particular type of application is particularly suited for their customer base. It will help in determining which types of applications are viewed as more useful. With

a strong and significant impact on the perceived usefulness, these results will help in developing applications that increase the customer experience and thus lead to higher sales.

Additionally, as discussed in multiple studies (Bernardes et al., 2018), an attitude-behavior gap persists in the results. Even though the results by Dunn et al. (2021) indicate that it might be rather small for AR, measuring it for a concrete situation is still imperative. A company-based case study can offer more detailed insights into whether online-offline differences persist for the particular company and based those new results, develop their AR strategy more customer-centric.

The positive effect of customer experience in the stationary case and the results from studies like Holdack et al. (2022) motivate a strategy where companies provide customers with AR glasses that provide additional information and offer shopping basket functionalities. These could offer not only the same experience as applications but will leave customers still integrated into the real environment so they can continue to communicate with friends. Similar to handheld scanners they might also alleviate the shopping process and thus drive sales.

4.2. Limitations and Outlook

The TAM is an established model of acceptance research. Despite all its successful applications, Bagozzi (2007) rightfully criticizes the simplicity of the model. In addition, the TAM was originally designed for use in organizational studies, which may make its application in other areas difficult or even restrict it (Schreiber, 2020, p. 102). Consequently, the study might be repeated using a more sophisticated model like an expanded UTAUT2 design.

Another criticism lies in the model's methodology. Studies that use the TAM measure variables in the context of an empirical survey in which respondents provide a self-assessment. This limits the validity of the results in that actual use of the new technology is not verified (Groß, 2017, p. 62). In the literature, this discrepancy is also known as the attitude-behavior gap (Ajzen & Fishbein, 1977), with Hassan et al. (2016) and Bernardes et al. (2018) highlighting that empirical studies consistently document this gap for fashion retail, mostly focusing on sustainable consumption. For an AR mobile game on sustainability, Dunn et al. (2021) can show that attitude and behavior are strongly linked.

Analytically, it would be conceivable to expand the study, analyzing the results as a function of different persona characteristics. This would allow differences in acceptance to be determined as a function of generational affiliation. Those in turn would be beneficial for the formulation of recommendations for action and would allow a company to evaluate AR technology against the background of its target group.

To reduce the cognitive workload of the subjects, only a single question was asked for each variable in the TAM. At this point, the different concepts could have been further clarified by resorting to broader scales, even though the results of this study already attest that the model structure and selected constructs have high explanatory power.

In light of the fact that the preferred place of use of augmented reality in the sample is clearly mobile retail, it is important to question the reasons why stationary retail performed worse. AR is currently still rarely found in stationary retail in the fashion industry; this additional novelty may have influenced participants in answering, since unknown phenomena per se are met more critically than known, with the participants trying to avoid ego-depletion (Tyler & Burns, 2009). This is underlined by this study resorting to fictitious scenarios.

However, the main limitation of the study is that the acceptance of AR was surveyed using fictitious scenarios. Thus, while it was measured how the participants felt about the scenario, actual usage was not considered. For this reason, it would be essential in future studies to conduct a field experiment with AR technologies in fashion stores. Here, customers could try out the technology directly and subsequently compare it with AR in mobile retail. By applying the technology in practice, a higher external validity could be achieved.

Last, future research could investigate the acceptance of AR in different price segments of the fashion industry. Thus, it could be explored to what extent the potential of AR differs from discount to luxury fashion companies. This would have the advantage that recommendations for action could be formulated in a more differentiated and segment-related manner.

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