

The Impact of Augmented Reality on Dimensions of Perceived Product Value: Trust Engineering in the Digital Age

A Sephora Case Study

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Abstract:

This study seeks to investigate the impact of augmented reality on perceived value and its role in enhancing consumer confidence in digital shopping at Saphora. The researcher relied on a descriptive analytical approach, and data was collected through a questionnaire distributed to 300 individuals. The study found positive results indicating the impact of augmented reality on the dimensions of perceived product value.

Keywords: augmented reality; functional value; emotional value; economic value; social value.

JEL Classification Codes: M3

1. INTRODUCTION

In the modern digital era, consumers do not just choose only physical products or a decent price when deciding to buy them. Instead, perceived value has a broad concentration of personal and practical rewards that customers anticipate in view of their investment (Micheletto

competitive digital landscapes with enormous options (Yang, 2024). The rapid development of e-commerce has put customers in a difficult situation by not being able to feel the product prior to buying it, as it

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influences their satisfaction and loyalty levels towards the brand (Joe, 2024). In this aspect, technological innovations such as augmented reality (AR) have proven to be capable of solving this problem. AR makes the shopping experience more engaging by allowing the virtual content to be integrated into the real-life environment of the user, as well as reducing the risks of online transactions (Dattatrai, 2025).

Digital marketing via augmented reality allows consumers to engage with commodities in a more lifelike and intimate manner, which increases the experience of purchasing a commodity by making it more significant and compelling (Shane, 2025). As an example, cosmetic try-on apps enable consumers to place cosmetics in the virtual environment before purchasing them, whereas home-design apps such as product placement enable users to see how a product would come out in the real world and make an informed choice (Gao, 2025).

Under this perspective, augmented reality is a value enabler that has the potential of influencing all facets of perceived value: practical, experiential, cognitive, and social. With these interactive applications, consumers can obtain precise information and a high level of sensory experiences that allow them to judge products more accurately, which leads to increased trust and satisfaction (Yang, 2024).

Augmented reality is a powerful strategic instrument of the digital era since it contributes to raising the perceived value of products and consumer confidence. By adopting this technology, companies will be able to achieve a sustainable competitive advantage in digital markets and increase consumer satisfaction and loyalty (Micheletto, 2025; Gu, 2024).

2. Research Problem

Although digital shopping technologies have made great progress, customers cannot easily benefit by examining products well before buying them. This has a negative effect on their satisfaction and brand loyalty. In contrast to most existing e-commerce platforms, current digital consumers require a shopping experience that will enable them to shop for information on the quality of the products and how it fits their unique needs and tastes (Guo, 2024). The lack of clarity in the presentation of the product is a

fundamental issue in business: how to generate something that actually means something, which will give a customer more confidence and increase the clarity and credibility of the purchase.

In that regard, despite the fact that certain businesses have already initiated the use of augmented reality technologies to improve the consumer experience, the effects of these technologies on perceived value and digital trust are not well studied, particularly within the context of the cosmetics industry, where sensory involvement and personal experience play a critical role (Schein, 2025). Therefore, there is a need for scientific research that examines the association between the application of augmented reality in digital marketing and the various aspects of perceived value and trust building. This research will be relevant to the creation of a theoretical and practical framework that will help firms develop better digital experiences to drive and grow consumer satisfaction and loyalty.

3. Research Hypotheses

1. There is a statistically significant effect between augmented reality and the functional value of products for the study sample.
2. There is a statistically significant effect between augmented reality and the emotional value of products for the study sample.
3. There is a statistically significant effect between augmented reality and the economic value of products for the study sample.
4. There is a statistically significant effect between augmented reality and the social value of products for the study sample.

4. Research Methodology

1. Research Type and Study Design

The research is based on the descriptive analytical approach to study the impact of augmented reality on the perceived value of products.

2. Study Population and Sample

The study population consists of all current Sephora digital platform customers in the study area, and a random sample of 300 individuals was selected.

3. Data Collection Tools

The study tool was an electronically distributed questionnaire, which included the following:

Demographic variables: age, educational level.

The first axis: Augmented reality, which includes 5 statements.

The second axis: Perceived product value, which includes 4 dimensions:

- Functional value, which includes 5 statements
- Emotional value, which includes 5 statements
- Economic value, which includes 5 statements
- Social value, which includes 5 statements

A 5-point Likert scale (1 = strongly agree, 5 = strongly disagree) was used to assess participants' responses to all statements.

5. Data Analysis

5.1 Primary Data:

- Educational level:

It is clear from the sample distribution table according to the educational qualification variable that the intermediate education category represents the highest category, followed by the University education category, then the Higher education category, and finally the High school or equivalent category.

Table 1. Sample distribution according to the educational level variable

Educational level	Frequency	Percent	Educational level	Frequency
High school or equivalent	11	3.8	High school or equivalent	11
intermediate education	184	61.3	intermediate education	184
University education	75	25	University education	75

- Age

The previous table for the sample distribution according to the age variable indicates that the majority of the sample was from the 25-less than 35 age group, followed by the 35-less than 45 age group, then the 45-less than 55 age group, then the less than 25 age group, and finally the over 55 age group.

Table 2 Sample distribution according to the age variable

Age	Frequency	Percent
Under 25 years old	12	3.8
25to under 35 years old	227	75.6
35to under 45 years old	43	14.4
45to under 55 years old	15	5
Over 55 years old	3	1.3
Total	160	100.0

5.2 Questionnaire topics

Axis 1: Augmented Reality (AR):

Table 3 the augmented reality axis

	Augmented Reality (AR)	Mean	STd.dev ation	Trend	Arrange ment
1	I use augmented reality to more accurately and clearly evaluate products before purchasing.	1.21	.576	Strongl y agree	4
2	Augmented reality tools (such as virtual makeup try-ons) allow me to simulate using a product as if I were actually experiencing it.	1.20	.512	Strongl y agree	5
3	Augmented reality makes it easier to choose the right product for me in terms of color, size, or shape.	1.24	.511	Strongl y agree	2
4	Using augmented reality makes the shopping experience more enjoyable and interactive for me.	1.26	.627	Strongl y agree	1
5	Augmented reality allows me to customize products or try on different styles based on my personal preferences before purchasing.	1.23	.501	Strongl y agree	3
Augmented Reality (AR)		1.2275	.47872	Strongly agree	

The previous table on the augmented reality axis shows that all phrases had arithmetic averages between (1.20 and 1.26), which indicates that augmented reality is considered an effective tool for improving the pre-purchase experience.

Axis 2: Perceived Product Value (Dependent Variable):

- Functional Value: Measures the practical utility and efficiency of the product.

Table 4 the functional value dimension

	Functional Value	Mean	STd.devation	Trend	Arrangement
1	I found that the products I tested through AR were exactly as I expected.	1.21	.584	Strongly agree	5
2	The AR experience helped me verify the quality of the products.	1.26	.659	Strongly agree	1
3	AR enabled me to use the product correctly.	1.23	.644	Strongly agree	2
4	The products I used after the AR experience were actually useful for what I was looking for.	1.22	.590	Strongly agree	4
5	The AR experience helped me make	1.23	.596	Strongly agree	3

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	a purchasing decision and reduce the possibility of making a mistake.				
Functional Value		1.2288	.56562	Strongly agree	

The previous table for the functional dimension indicates that all statements had low means ranging between 1.21 and 1.26, with a relatively low standard deviation, indicating that AR clearly enhances the practical value of products for consumers.

- Emotional Value: Measures the emotional impact on the purchase decision and self-confidence.

Table 5 the Emotional value dimension

	Emotional Value	Mean	STd.devation	Trend	Arrangement
1	I feel confident and comfortable when choosing products.	1.26	.687	Strongly agree	2
2	I feel excited when trying products virtually.	1.26	.607	Strongly agree	4
3	Augmented reality reduces my anxiety about purchasing products online.	1.24	.629	Strongly agree	5

4	I feel satisfied when purchasing through augmented reality.	1.26	.619	Strongly agree	3
5	Augmented reality makes the shopping experience more enjoyable.	1.27	.670	Strongly agree	1
Emotional Value		1.2575	.59701	Strongly agree	

The previous table on the emotional dimension of perceived value indicates that all statements had low arithmetic means ranging between 1.24 and 1.27, confirming that AR effectively contributes to enhancing the emotional dimension of perceived product value.

- Economic Value: Measures the balance between the direct and indirect benefits and costs of a product.

Table 6 the Economic value dimension

	Economic Value	Mean	STd.devation	Trend	Arrangement
1	The augmented reality experience saves me time and effort when choosing which products to purchase.	1.24	.612	Strongly agree	5
2	Augmented reality helps me reduce the	1.25	.664	Strongly agree	4

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	likelihood of product returns.				
3	I feel that the benefits I gain from augmented reality outweigh the product price.	1.25	.673	Strongly agree	3
4	Augmented reality makes it easier for me to make purchasing decisions.	1.34	.838	Strongly agree	1
5	Augmented reality improves financial investment when shopping online.	1.30	.799	Strongly agree	2
Economic Value		1.2763	.65890	Strongly agree	

The previous table on the economic dimension of perceived value indicates that the five statements had arithmetic means ranging between 1.24 and 1.34, confirming that augmented reality adds tangible economic value to consumers.

- Social Value: Measures the extent to which a product contributes to social status and identity expression.

Table 7 the Social value dimension

	Social Value	Mean	STd.devation	Trend	Arrangement
1	Augmented reality helps me easily share my experience with products.	1.14	.396	Strongly agree	5
2	Augmented reality enhances my social standing when I share my experience with others.	1.21	.477	Strongly agree	2
3	I can better express my personal and social identity.	1.21	.551	Strongly agree	1
4	Augmented reality helps me safely try out new looks before purchasing.	1.14	.396	Strongly agree	4
5	I feel confident in my choices after sharing my augmented reality experience with friends.	1.18	.428	Strongly agree	3
Social Value		1.1725	.38948	Strongly agree	

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The previous table on the social dimension of perceived value indicates that all statements received low averages ranging between 1.14 and 1.21, confirming that AR adds tangible social value to consumers.

6. Testing research hypotheses

- There is a statistically significant effect at a significance level of ($\alpha \geq 0.05$) of augmented reality on the functional value of products for the study sample.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.788 ^a	.621	.618	.21206
a. Predictors: (Constant), functional value				

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.628	1	11.628	258.579	.000 ^b
	Residual	7.105	158	.045		
	Total	18.734	159			
a. Dependent Variable: Augmented reality						
b. Predictors: (Constant functional value						

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.462	.046		9.976	.000
	functional value	.565	.035	.788	16.080	.000
a. Dependent Variable: Augmented reality						

The previous tables analyzing the impact of augmented reality on the functional dimension of perceived value indicate that there is a strong and positive impact of augmented reality.

- There is a statistically significant effect at a significance level of ($\alpha \geq 0.05$) of augmented reality on the emotional value of products for the study sample.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684 ^a	.467	.464	.25134
a. Predictors: (Constant), emotional value				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.753	1	8.753	138.551	.000 ^b
	Residual	9.981	158	.063		
	Total	18.734	159			
a. Dependent Variable: Augmented reality						
b. Predictors: (Constant), emotional value						

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.645	.048		13.545	.000
	emotional value	.415	.035	.684	11.771	.000
a. Dependent Variable: Augmented reality						

The previous tables analyzing the impact of augmented reality on the emotional value of perceived value indicate that augmented reality has a positive impact on enhancing consumers' emotional perception of products.

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- There is a statistically significant effect at a significance level of ($\alpha \geq 0.05$) of augmented reality on the economic value of products for the study sample.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.555 ^a	.308	.304	.28636
a. Predictors: (Constant), economic value				

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.777	1	5.777	70.448	.000 ^b
	Residual	12.957	158	.082		
	Total	18.734	159			
a. Dependent Variable: Augmented reality						
b. Predictors: (Constant), economic value						

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.754	.053		14.238	.000
	economic value	.319	.038	.555	8.393	.000
a. Dependent Variable: Augmented reality						

The previous tables analyzing the impact of augmented reality on the economic value of perceived value indicate that augmented reality has a positive impact on improving consumers' economic perception of products.

- There is a statistically significant effect at a significance level of ($\alpha \geq 0.05$) of augmented reality on the social value of products for the study sample.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562 ^a	.316	.311	.28486
a. Predictors: (Constant), social value				

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.912	1	5.912	72.860	.000 ^b
	Residual	12.821	158	.081		
	Total	18.734	159			
a. Dependent Variable: Augmented reality						
b. Predictors: (Constant), social value						

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.781	.049		15.880	.000
	social value	.293	.034	.562	8.536	.000
a. Dependent Variable: Augmented reality						

The previous tables analyzing the impact of augmented reality on the social value of perceived value indicate that augmented reality has a positive impact on enhancing consumers' social perception of products.

7. CONCLUSION

The study findings validate the initial premises, confirming that Augmented Reality (AR)—exemplified by Sephora’s digital ecosystem—stands as a transformative technological innovation that fundamentally reshapes consumer perceptions of product value. The empirical results highlight AR's profound impact across functional, emotional, social, and economic dimensions, reinforcing how tools like Sephora’s "Virtual Artist" effectively bolster consumer confidence and satisfaction. However, the study also identifies critical barriers even within industry leaders like Sephora, such as high integration costs, technical disparities, and the necessity for heightened consumer digital literacy. Consequently, the study advocates for integrated marketing and technological frameworks that mirror Sephora’s holistic approach. Such strategies are essential to enhance organizational readiness, maximize perceived value, and ultimately elevate the global digital consumer experience.

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