

AUGMENTED REALITY: ITS INFLUENCE ON PURCHASE INTENTION THROUGH THE MEDIATION OF CONSUMERS' CONTROL ON SKINTIFIC CUSHION PRODUCTS ON TIKTOK (A SURVEY OF GENERATION Z IN BANDUNG CITY)

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ABSTRACT

This study investigates how augmented reality (AR) shapes purchase intention among Generation Z consumers of Skintific cushion products in Bandung City, with particular attention to the role of consumers' control as a mediating variable. Employing a quantitative survey design, data were obtained from 400 Generation Z respondents who had engaged with Skintific's AR features, selected through purposive non-probability sampling. Analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM). Results reveal that AR exerts a meaningfully positive influence on both consumers' control and purchase intention, while consumers' control independently predicts purchase intention as well. The study further establishes a significant indirect effect, confirming that consumers' control mediates the AR–purchase intention relationship. These outcomes suggest that AR strengthens the sense of agency consumers experience during virtual product interactions, subsequently driving their willingness to buy. For Skintific, the findings offer actionable insights for crafting technology-driven marketing initiatives tailored to Generation Z. Rather than treating AR merely as a digital novelty, brands should position it as a strategic tool to foster immersive brand encounters, deepen consumer engagement, and cultivate long-term loyalty within the competitive beauty landscape.

Keywords: Augmented Reality; Purchase Intention; Consumers' Control; Beauty Products; Skintific

INTRODUCTION

According to market intelligence data from [Compas.co.id](https://www.compas.co.id), the Fast Moving Consumer Goods (FMCG) sector in Indonesia recorded significant growth momentum, most notably in the Beauty & Care segment, which led the e-commerce market during the first semester of 2024 by commanding a 54.4% share of the total IDR 47.8 trillion. This expansion signals heightened consumer interest in beauty and personal care, driven largely by Generation Z, leveraging social media platforms as their primary channel for product discovery and purchasing decisions.

An internal preliminary study on Skintific Cushion products found that roughly 67.3% of respondents gravitated toward rival brands, pointing to a relatively weak purchase inclination for this product. This pattern underscores the need for differentiated, technology-enabled marketing strategies. Augmented Reality (AR) stands out as one such approach, offering potential buyers the opportunity to virtually experience products before purchasing, thereby building confidence and stimulating buying interest.

A body of prior research (Wang et al., 2022; Whang et al., 2021; Yim et al., 2017) consistently affirms that AR raises purchase intention by delivering interactive experiences that amplify consumers' perceived control. For Generation Z — a cohort defined by deep digital fluency — the value of immersive, personalized shopping encounters is especially pronounced, making AR a compelling vehicle for cultivating stronger consumer–brand connections.

Against this backdrop, the present study examines the extent to which AR influences Purchase Intention among Generation Z consumers of Skintific Cushion products on TikTok in Bandung City, with Consumers' Control considered as the mechanism through which this influence may operate.

Augmented reality operates by superimposing digital content onto a user's physical environment, producing a hybrid perceptual space that merges real and virtual stimuli (Yim et al., 2017). Cipresso et al. (2018) note that AR-based interfaces function analogously to real-world objects, processing inputs and outputs in real time rather than in isolation. This capacity to embed virtual elements within the tangible world is enabled by display technologies that render both physical and digital layers simultaneously (Khan et al., 2019).

Purchase intention denotes the forward-looking inclination of consumers to acquire a product or brand, emerging from deliberate evaluation and cognitive appraisal (Budimansyah & Widodo, 2021). It spans a wide range of motivational and psychological processes that orient individuals toward buying behavior even before they formally engage with the market (Ade Candra & Kerti Yasa, 2022). Nusantara & Pardede (2023) characterize it as a personal resolve to pursue a specific brand after careful deliberation, while Kotler & Keller (2016) link it to accumulated brand experience and the consumer's aspiration to own and utilize the product.

The proliferation of new media technologies has shifted consumers from passive recipients to active participants in value co-creation, granting individuals greater agency over their interactions with products and

brands (Whang et al., 2021). Within this context, Consumers' Control is understood to comprise two interrelated dimensions: behavioral control and cognitive control (Whang et al., 2021). Behavioral control captures how confident consumers feel in their capacity to shape or direct a given situation. Cognitive control, on the other hand, pertains to an individual's ability to anticipate and make sense of sequential events during a task or experience (Whang et al., 2021). When consumers have access to real-time product information — as facilitated by AR — they are better equipped to process and evaluate their options, thereby strengthening their cognitive control over the purchasing process.

The overarching aim of this study is to map how AR, Consumers' Control, and Purchase Intention interrelate among Generation Z consumers of Skintific Cushion products in Bandung City, with particular focus on the mediating role that Consumers' Control plays in the pathway from AR to Purchase Intention.

Online and mobile shopping environments inherently amplify consumer uncertainty, as shoppers have limited ability to physically examine products before committing to a purchase (Whang et al., 2021). This elevated perceived risk in digital contexts, relative to conventional in-store experiences, stems largely from the challenge of reliably assessing product attributes through a screen (Whang et al., 2021).

H1: Augmented Reality has a positive and significant effect on Purchase Intention.

AR equips consumers with the ability to access detailed virtual product information on demand, closing the informational gap that typically characterizes online shopping (Whang et al., 2021). Research has confirmed that enabling consumers to visually simulate product usage via mobile devices substantially raises their intention to purchase (Flavián, 2019). By granting shoppers the ability to experience products virtually before buying, AR effectively bypasses the constraints of traditional online product evaluation and enriches the decision-making process (Hilty, 2020).

Within digital commerce settings, behavioral control reflects the perceived fluency with which a consumer can navigate and act during an online interaction (Whang et al., 2021). AR heightens this form of control by immersing users in an active product experience — enabling them to visualize the product on themselves in real time — which substantially lowers the cognitive effort required for product evaluation. This elevated sense of behavioral agency translates into greater purchasing confidence (Whang et al., 2021), as consumers who can freely interact with virtual product representations are better positioned to make aligned purchase decisions.

H2: Consumers' Augmented Reality experience influences the level of Consumers' Control.

H3: Consumers' Control has a significant effect on Purchase Intention.

Engaging with AR during online or mobile shopping enables consumers to develop more accurate expectations about product performance, which in turn strengthens their willingness to purchase (Whang et al., 2021). As digital ecosystems continue to evolve, consumer empowerment through greater autonomy and control has emerged as a central theme in understanding how emerging technologies reshape market behavior.

H4: Consumers' Control facilitates the connection between Augmented Reality and Purchase Intention.

METHOD

A quantitative approach with a descriptive-verification design was adopted in this study. The target population comprised Generation Z consumers between the ages of 15 and 28 residing in Bandung City who had prior experience using AR features for Skintific beauty products. Using purposive non-probability sampling, 400 participants were recruited. Primary data were gathered through a structured digital questionnaire utilizing a five-point Likert scale. To examine both the direct paths and the mediating mechanism among variables, the study applied Partial Least Squares–Structural Equation Modeling (PLS-SEM) as the analytical framework.

RESULTS AND DISCUSSION

PLS-SEM analysis of the collected data confirms that AR exerts statistically significant effects on both Consumers' Control and Purchase Intention, with Consumers' Control acting as an intermediary in the AR–Purchase Intention relationship.

Table 1. Coefficient of Determination (R²)

Variable	R ²	R ² Adjusted
Consumers' Control	0.358	0.356
Purchase Intention	0.465	0.463

Source: Processed Data, 2025

The R² statistic assessed the proportion of variance each endogenous construct explains. Table 1 shows an R² adjusted of 0.356 for Consumers' Control, indicating that AR accounts for 35.6% of its variation. The R² adjusted for Purchase Intention is 0.463, meaning AR and Consumers' Control together explain 46.3% of its variance — a moderate but meaningful level of model fit.

Table 2. Effect Size (f²)

Relationship	f ²	Effect Strength
AR → Consumers' Control	0.557	Large
AR → Purchase Intention	0.233	Medium

Consumers' Control → Purchase Intention	0.123	Small
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Source: Processed Data, 2025

Table 2 presents f^2 values, which gauge the practical magnitude of each predictor's contribution. AR demonstrates a large effect on Consumers' Control ($f^2 = 0.557$) and a medium effect on Purchase Intention ($f^2 = 0.233$), while the influence of Consumers' Control on Purchase Intention is comparatively small ($f^2 = 0.123$).

Table 3. Path Coefficients

Relationship	Original Sample (O)	T-Statistics	P-Values	Result
AR → Consumers' Control	0.598	8.571	0.000	Significant
AR → Purchase Intention	0.441	4.659	0.000	Significant
Consumers' Control → Purchase Intention	0.320	3.401	0.001	Significant

Source: Processed Data, 2025

All Q^2 values exceed zero, affirming adequate predictive relevance for both endogenous constructs. As detailed in Table 3, every proposed path is statistically significant and directionally positive at the 95% confidence threshold.

Table 4. Specific Indirect Effect

Relationship	Original Sample (O)	T-Statistics	P-Values	Result
AR → Consumers' Control → Purchase Intention	0.191	3.051	0.002	Significant

Source: Processed Data, 2025

This confirms that AR shapes purchase intent through both a direct experiential pathway and an indirect one mediated by enhanced consumer control.

The empirical results confirm that AR exerts a strong and statistically significant positive effect on Consumers' Control. The sensory richness and interactivity embedded in AR allow users to manipulate virtual product representations in real time, generating a palpable sense of mastery and self-direction throughout the online shopping journey. Generation Z consumers — accustomed to navigating immersive digital experiences — tend to interpret this enhanced control as a form of personal empowerment, which bolsters trust and analytical confidence in product evaluation. These findings align with Whang et al. (2021), who argued that AR-enabled gains in behavioral and cognitive control are instrumental in lowering the decisional uncertainty inherent to online purchasing.

When consumers feel a greater degree of agency in their AR-mediated interactions — customizing, inspecting, and virtually testing a product — their conviction that the product matches their needs intensifies, producing higher purchase motivation. Flavián et al. (2023) support this, demonstrating that AR reduces cognitive dissonance by enabling richer mental simulations of product use, thereby elevating purchasing confidence.

The sensory properties of AR — particularly its vividness and responsiveness — activate emotional engagement and render products more tangible to online shoppers, reducing perceived purchase risk and fostering brand attachment. This resonates with Yim et al. (2017), who identified vividness and interactivity as the two primary mechanisms through which AR amplifies purchase intent in digital commerce.

The partial mediation result positions Consumers' Control as a meaningful conduit between AR and Purchase Intention. This dual-channel structure reveals that AR elevates purchase intent not only through the immediate experiential richness of the virtual environment, but also through the psychological empowerment it confers — consumers who feel greater agency over a virtual product interaction develop stronger purchasing intentions as a consequence.

Synthesizing the findings, it becomes clear that AR's value extends well beyond its novelty as a technology — it functions as a psychologically meaningful tool that builds consumer confidence through perceived control. For Skintific specifically, these results point to the strategic imperative of investing in richer, more personalized AR functionalities. By prioritizing interactivity, visual fidelity, and platform responsiveness on TikTok, the brand can deepen consumer immersion, strengthen credibility, and convert digital curiosity into committed purchase behavior.

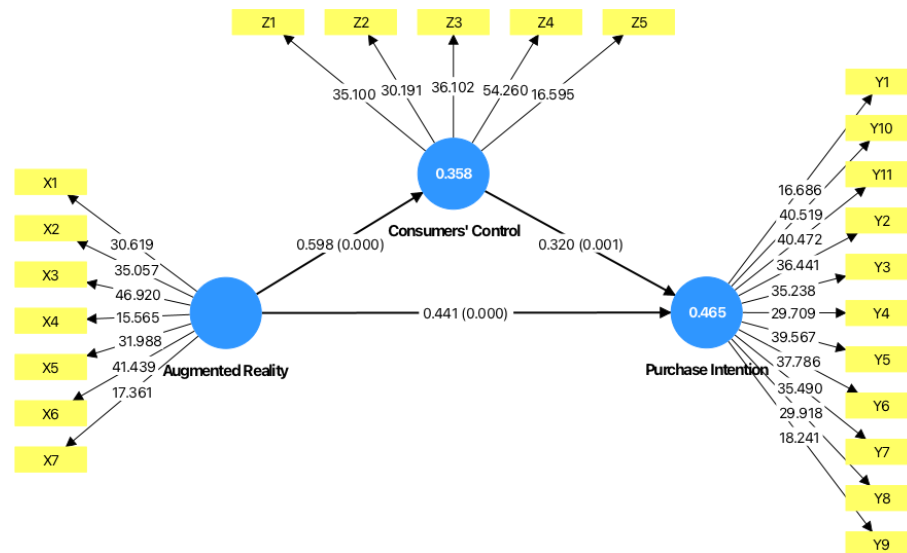


Figure 1. Final Model SEM-PLS

CONCLUSION

This study establishes that AR positively shapes Purchase Intention through both direct and mediated pathways, with Consumers' Control serving as the key intermediary mechanism. The immersive and interactive qualities of AR cultivate a sense of agency and confidence among users, translating into stronger buying motivation. These findings reposition AR not merely as a technological feature but as a substantive marketing lever capable of building trust, driving purchase decisions, and deepening brand relationships — particularly among digitally fluent Generation Z consumers engaging with brands on platforms such as TikTok.

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