

GENDERED MEANINGS OF BEAUTY TECH ACROSS THE CUSTOMER JOURNEY: HOW FACIAL SKIN ANALYZERS SHAPE CUSTOMER EXPERIENCE AT SKINCARE BRAND COUNTERS

Supasan SRINUTIVASU¹ and Teerasak KHANCHANAPONG^{2*}

1 TUXSA Online Master's Degree Program, Thammasat University, Thailand;
supasan5599@gmail.com

2 Thammasat Business School, Thammasat University, Thailand; teerasak@tbs.tu.ac.th
(Corresponding Author)

ARTICLE HISTORY

Received: 6 April 2026

Revised: 20 April 2026

Published: 1 May 2026

ABSTRACT

This study examines how male and female customers perceive a facial skin analyzer as a service innovation across the customer journey at skincare counters. Although beauty technology is increasingly used to personalize retail service encounters, limited research explains how customers interpret diagnostic tools at different journey stages or how interpretations vary by gender. Using an interpretive qualitative design, the study draws on semi-structured interviews with sixteen customers and one beauty advisor in Bangkok, supported by staff meeting notes for triangulation. The analysis is organized around four customer journey stages: reach, act, convert, and engage. The findings show that the same technology carries different meanings for customers. In the reach stage, women are more receptive to the analyzer as an attractive touchpoint, whereas men approach it more cautiously, expressing concerns about cost, credibility, and sales pressure. In the act stage, women are more likely to seek information and accept invitation, while men tend to remain passive unless the value is clearly explained. In the convert stage, both groups may be influenced by results, but women are more likely to view the analyzer as decision-enabling and purchase immediately, whereas men are more likely to delay purchase and compare alternatives. In the engage stage, women show stronger intentions to return for follow-up scans and recommend the service, while men tend to return only when product results are visible. The study shows that technology-enabled diagnostic touchpoints are socially interpreted rather than neutral, offering implications for customer journey theory, service innovation research, and retail practice.

Keywords: Beauty Technology, Customer Journey, Facial Skin Analyzer, Gender, Skincare Retail

CITATION INFORMATION: Srinutivasu, S., & Khanchanapong, T. (2026). Gendered Meanings of Beauty Tech Across the Customer Journey: How Facial Skin Analyzers Shape Customer Experience at Skincare Brand Counters. *Procedia of Multidisciplinary Research*, 4(5), 9.

INTRODUCTION

The beauty and skincare industry has entered an era in which personalization is no longer a premium add-on but an expected part of the customer experience. In physical retail, particularly at skincare brand counters, firms increasingly use diagnostic devices, imaging tools, and digital interfaces to make service encounters more individualized, data-driven, and persuasive (Grewal & Roggeveen, 2020). Facial skin analyzers represent one of the clearest manifestations of this shift. Rather than relying solely on visual inspection or salesperson judgment, these devices translate invisible or ambiguous skin conditions into an apparently objective diagnostic output that can then be linked to tailored product recommendations. In doing so, the technology has the potential to reshape how customers encounter the brand, interact with frontline staff, evaluate product fit, and sustain a relationship with the retailer over time.

This phenomenon matters for both theory and practice. From a theoretical standpoint, it sits at the intersection of customer journey research and service innovation research. Customer journey studies emphasize that customers experience brands through a sequence of touchpoints rather than isolated transactions (Lemon & Verhoef, 2016; Tueanrat et al., 2021). Service innovation research, meanwhile, highlights how new interfaces, delivery systems, and technological options alter the nature of service encounters (den Hertog & Bilderbeek, 1999; van Ark et al., 2003). A facial skin analyzer is therefore more than a device; it is a technology-mediated touchpoint that can reconfigure customer meanings at multiple moments in the journey. From a managerial standpoint, the stakes are equally high. Premium skincare counters operate in a highly competitive environment in which brands must justify price premiums, reduce uncertainty, and create memorable experiences that encourage repeat purchase and advocacy (Grewal & Roggeveen, 2020; Kuehnl et al., 2019). A diagnostic beauty technology may support these objectives, but only if customers perceive it as trustworthy, useful, and relevant to their needs.

Yet an important gap remains. Although prior work has explained how customer journeys are structured and how technology can enhance retail experience, much less is known about how customers interpret diagnostic beauty technologies across distinct journey stages in an offline service setting. Even less attention has been paid to gendered differences in these interpretations. This omission is significant because skincare consumption is not merely functional; it is socially and symbolically shaped. Men and women may approach the same technology with different expectations, anxieties, and decision logics. A facial skin analyzer may be read by one customer as professional guidance and by another as a possible sales tactic. It may generate reassurance for some and discomfort for others. Without understanding these differences, brands risk treating a technologically sophisticated touchpoint as universally effective when in fact its value may be contingent on who the customer is and where they are in the journey (Byrne & Milestone, 2023; Lemon & Verhoef, 2016).

The present study therefore asks how male and female customers perceive the facial skin analyzer as a technological innovation and how this technology shapes the four stages of the customer journey - reach, act, convert, and engage - at skincare brand counters. This focus is important for three reasons. First, it responds to calls in customer journey research to examine how different types of touchpoints create stage-specific effects rather than assuming uniform influence across the entire journey (Lemon & Verhoef, 2016; Tueanrat et al., 2021). Second, it extends service innovation research by showing that the value of technological innovation in service settings depends not only on functionality but also on the meanings customers attach to it (den Hertog & Bilderbeek, 1999; van Ark et al., 2003). Third, it contributes to gendered consumption research by

illustrating how a retail technology becomes embedded in broader norms concerning skincare, expertise, self-presentation, and willingness to be guided (Byrne & Milestone, 2023).

This study is guided by two research questions: (1) How do male and female customers perceive the facial skin analyzer as a technology-enabled touchpoint at skincare brand counters? and (2) How does the facial skin analyzer influence male and female customers differently across the four customer journey stages of reach, act, convert, and engage? The study, hence, aims to examine how male and female customers interpret the facial skin analyzer as a service innovation in a high-contact retail setting, to map how the technology shapes customer responses across the four stages of the journey, and to explain why the same technology produces different behavioral consequences for men and women.

The remainder of this paper reviews the relevant literature, develops the research framework and propositions, outlines the research methodology, and then presents the findings, discussion, and implications of the study.

LITERATURE REVIEW AND RESEARCH PROPOSITIONS

The Facial Skin Analyzer as a Service Innovation in Skincare Retail

Service innovation theory argues that innovation in services does not lie only in new technology itself, but in new service concepts, client interfaces, delivery systems, and technological options that reshape how value is created and experienced (van Ark et al., 2003; den Hertog & Bilderbeek, 1999). From this perspective, a facial skin analyzer clearly qualifies as a service innovation because it introduces diagnostic technology into the counter-brand encounter, changes how customer needs are assessed, supports more individualized product recommendations, and potentially reorganizes how frontline employees engage customers during consultation. Customers still interpret what it is, how it works, whether it is trustworthy, and whether it is useful for their skincare decisions. Its meaning, therefore, emerges within a sociotechnical encounter, not from the device alone. The beauty advisor plays a key interpretive role by explaining the technology, reducing uncertainty, and making the service feel credible and relevant. Customer responses to technology-infused encounters depend not only on the technology itself but also on surrounding human interaction. (Giebelhausen et al., 2014; van Ark et al., 2003; den Hertog & Bilderbeek, 1999).

Customer Journey as a Stage-specific Process of Touchpoint Interpretation

Customer journey research (Lemon & Verhoef, 2016; Tueanrat et al., 2021) frames customer experience as a stage-specific process of touchpoint interpretation rather than as a single purchase event. Customers encounter brands through a sequence of touchpoints that shape awareness, response, evaluation, purchase, and post-purchase relationship development over time. As a result, the effect of any touchpoint cannot be understood in isolation, but must be interpreted according to where it appears in the journey and how customers make sense of it at that stage. In retail contexts, especially high-contact settings such as skincare brand counters, touchpoints do not exert uniform effects. Instead, they perform different functions across different stages, and their influence depends on how customers perceive them in context (Grewal & Roggeveen, 2020; Voorhees et al., 2017). This perspective is particularly relevant for the facial skin analyzer, which is therefore treated not merely as a technical device at the point of sale, but as a technology-enabled touchpoint whose meaning changes across the stages of reach, act, convert, and engage (Lemon & Verhoef, 2016; Kuehnl et al., 2019).

The reach stage concerns initial awareness and meaning formation. At this point, customers do more than simply notice a touchpoint; they also evaluate whether it appears relevant, attractive,

trustworthy, and worth approaching. A facial skin analyzer may serve as a visibility-enhancing cue that signals innovation, expertise, and personalization, but its effectiveness depends on whether customers understand not only its presence but also its value (Lemon & Verhoef, 2016; Kuehnl et al., 2019).

The act stage captures the movement from passive noticing to active engagement. Customers may begin asking questions, seeking more information, accepting invitations to interact, or participating in the service process. Action is more likely when the touchpoint is perceived as understandable, useful, and low-risk, whereas an unclear or ambiguous touchpoint may create awareness without participation. Thus, act reflects the point at which customers begin to co-produce the experience (Lemon & Verhoef, 2016; Rosenbaum et al., 2017).

The convert stage refers to the translation of customer response into a concrete decision, typically purchase or commitment. Conversion is not viewed as a single persuasive event, but as the cumulative result of earlier touchpoints that reduce uncertainty, communicate value, and shape perceived fit. In this stage, diagnostic and personalized touchpoints are especially important because they make customer needs more visible and strengthen the legitimacy of product recommendations. Accordingly, convert is the phase in which touchpoints help customers move from consideration to action (Voorhees et al., 2017; Tueanrat et al., 2021; Lemon & Verhoef, 2016; Kuehnl et al., 2019).

The engage stage extends the analysis beyond immediate purchase to the post-purchase relationship between customer and brand. It includes revisit intention, follow-up interaction, relationship continuity, word-of-mouth recommendation, and advocacy. A touchpoint contributes to engagement when it becomes part of an ongoing narrative of value, progress, and trust. In skincare retail, a technology-enabled touchpoint such as a facial skin analyzer may therefore support not only purchase, but also later monitoring, reassurance, and relational continuity (Voorhees et al., 2017; Tueanrat et al., 2021).

Taken together, these four stages provide a useful framework for examining how customers interpret the analyzer without assuming that a technology-enabled touchpoint has one fixed effect across the entire journey (Lemon & Verhoef, 2016; Rosenbaum et al., 2017; Tueanrat et al., 2021).

Gendered Meanings of Beauty Technology

Although customer journey and service innovation literatures (den Hertog & Bilderbeek, 1999; Lemon & Verhoef, 2016; Rosenbaum et al., 2017; Tueanrat et al., 2021; van Ark et al., 2003; Voorhees et al., 2017) provide the basic conceptual foundation, they do not fully explain why the same technological touchpoint may be welcomed by some customers and treated cautiously by others. To address this gap, a gendered consumption lens is needed. Research on skincare and grooming consumption suggests that men and women often attach different meanings to skincare practices, product use, and beauty-related expertise. For example, Byrne and Milestone (2023) argue that men's skincare consumption often takes the form of "invisible consumption," meaning that such practices are more private and less openly discussed than women's more visible and relational skincare routines.

This distinction is important because the facial skin analyzer does more than recommend products; it makes skin conditions visible, transforms appearance into diagnostic information, and introduces mediated expertise into a face-to-face retail encounter (Szlávi & Landoni, 2022; Teo, Cheng, & Chow, 2025). As a result, men and women may interpret the same device through different logics. Female customers may be more likely to see it as a legitimate tool for personalized self-knowledge and informed product choice, whereas male customers may evaluate it more instrumentally, questioning its necessity, accuracy, cost, and possible sales intent. Thus, gender should be

understood not simply as a demographic variable, but as an interpretive mechanism that shapes how customers assign meaning to diagnostic beauty technology and move through the customer journey.

Research Propositions

Drawing on the literature reviewed above, the following propositions are proposed.

Reach: The facial skin analyzer as attraction versus reassurance

In the reach stage, the central issue is whether the touchpoint can attract attention and generate sufficient interest for customers to move closer to the brand (Lemon & Verhoef, 2016; Kuehn et al., 2019). Customer journey research suggests that early-stage touchpoints are critical because they shape first impressions and affect whether customers proceed to the next stage of engagement (Lemon & Verhoef, 2016). However, service innovation research also suggests that new technology may create uncertainty if customers do not immediately understand its function or value. Applied to skincare retail, the facial skin analyzer may initially signal novelty, expertise, and personalization, but it may also raise questions about cost, credibility, effort, and sales pressure.

Female customers are more likely to interpret the facial skin analyzer as an attractive and curiosity-inducing innovation because it promises personalized insight into skin condition and a more tailored beauty consultation. Male customers, by contrast, are more likely to require reassurance before assigning value to the device. For them, the facial skin analyzer may not automatically communicate usefulness; instead, it may first need to be framed as free, credible, practical, and low-pressure. Accordingly, the facial skin analyzer is expected to function more as an attraction mechanism for women and more as a reassurance-dependent touchpoint for men. Applying the extensive literature review presented above, the research proposition is presented below:

Research Proposition 1: In the reach stage, female and male customers tend to interpret the facial skin analyzer differently.

Act: The facial skin analyzer as an inquiry catalyst versus bounded interaction

The act stage concerns customers' willingness to respond, participate, and seek further information (Lemon & Verhoef, 2016; Kuehn et al., 2019). Once customers notice the facial skin analyzer, the next question is whether they are willing to engage with it, listen to the advisor's explanation, and treat the encounter as worth pursuing. Prior research on technology-based service encounters (Giebelhausen et al., 2014) indicates that trial depends heavily on role clarity, perceived usefulness, and confidence in the encounter. This is particularly relevant in skincare retail, where the facial skin analyzer is embedded in a socially visible and advisor-mediated consultation setting. From a gendered perspective (Byrne & Milestone, 2023), female customers are expected to be more willing to interpret the facial skin analyzer as a knowledge-generating touchpoint that justifies further inquiry. They may be more open to advisor invitation, more likely to ask follow-up questions, and more likely to treat the scan as the beginning of a broader consultation process. Male customers, in contrast, are expected to remain more bounded and instrumental in their response. Even when willing to participate, they may see the facial skin analyzer as an optional add-on rather than the start of a deeper interaction unless the value proposition is made highly explicit. Thus, the technology is likely to lower interactional barriers more effectively for women than for men. Accordingly, the research proposition is presented below:

Research Proposition 2: In the act stage, female and male customers tend to interpret the facial skin analyzer differently.

Convert: The facial skin analyzer as decision-enabling evidence versus comparative input

The convert stage is the point at which the facial skin analyzer becomes commercially important because its diagnostic output can shape purchase decisions (Lemon & Verhoef, 2016; Kuehnl et al., 2019). Personalized touchpoints are especially influential at this stage when customers view recommendations as grounded in their own needs rather than as generic persuasion. Because the facial skin analyzer translates invisible or ambiguous skin concerns into individualized visual evidence, it can strengthen the perceived legitimacy of product recommendations. However, service innovation research also suggests that technology alone does not guarantee conversion; customers still decide whether the information is sufficient to justify immediate commitment (van Ark et al., 2003; den Hertog & Bilderbeek, 1999).

Gendered interpretation is particularly important in this stage (Byrne & Milestone, 2023). Female customers are more likely to interpret the facial skin analyzer as decision-enabling evidence that links diagnosed skin conditions directly to immediate product choices, thereby reducing uncertainty and supporting on-the-spot purchase. Male customers, by contrast, are more likely to treat the analyzer as one information source among several. For them, the scan may inform later evaluation, but it does not necessarily resolve the decision at the counter. They may still compare brands, consult reviews, or delay purchase until the product's value is confirmed elsewhere. Thus, the facial skin analyzer is expected to accelerate immediate conversion more strongly among women, while serving more as comparative input for men. Accordingly, the research proposition is presented below:

Research Proposition 3: In the convert stage, female and male customers tend to interpret the facial skin analyzer differently.

Engage: The facial skin analyzer as relational follow-up versus conditional verification

In the engage stage, the issue is whether the touchpoint contributes to an ongoing relationship with the brand after the initial encounter. Post-purchase engagement may take the form of revisit intention, follow-up consultation, trust, recommendation, or advocacy (Lemon & Verhoef, 2016; Kuehnl et al., 2019). Customer journey theory (Lemon & Verhoef, 2016; Kuehnl et al., 2019; Rosenbaum et al., 2017; Tueanrat et al., 2021) suggests that later-stage touchpoints are especially important when they become integrated into a longer-term narrative of value and progress. In the skincare context, a facial skin analyzer has the potential to play exactly this role because it can be used not only for initial diagnosis but also for subsequent monitoring and progress verification.

Based on previous studies (Byrne & Milestone, 2023; Teo et al., 2025), it is argued that female customers are more likely to perceive this follow-up function as meaningful. They may see repeat scanning as a way to track improvement, confirm that products are working, and deepen their relationship with the counter-brand. The facial skin analyzer can therefore become part of a broader self-care and advocacy narrative. Male customers, by contrast, are more likely to re-engage only when product performance has already become visible and worth verifying. In this sense, the analyzer is less likely to become central to the relationship for men and more likely to remain a peripheral tool whose value depends on proven product results. Therefore, the engage-stage influence of the analyzer is expected to be stronger and more relational for women, but more conditional and outcome-dependent for men. Accordingly, the research proposition is presented below:

Research Proposition 4: In the engage stage, female and male customers tend to interpret the facial skin analyzer differently.

METHODOLOGY

This study draws on an interpretive qualitative study conducted at a skincare counter in CentralWorld, Bangkok. A qualitative design was appropriate because the purpose was not to test a causal model statistically but to understand how customers interpreted the facial skin analyzer, how they felt during the service encounter, and how those interpretations influenced movement through the customer journey.

The population for this study comprised consumers who had received facial skin analysis services at counter-brand skincare outlets located in department stores in Bangkok, Thailand. To ensure theoretical relevance and capture meaningful variation in customer responses, the study employed criterion-based purposive sampling. Participants were selected according to three characteristics expected to shape how they interpret and respond to the facial skin analyzer: gender, age, and prior counter-brand skincare experience.

First, participants were divided by gender into male and female customers. Second, they were grouped by age into two segments: 25–34 years and 35–44 years. These two age groups were chosen because they represent the highest skincare-consuming segments in Thailand (Ratchatawipasanan, 2024). Third, participants were classified according to their prior product usage experience: (1) customers who had never used counter-brand skincare products, and (2) customers who had previously used counter-brand skincare products. This sampling frame generated eight analytically distinct customer groups, as shown in Table 1.

To ensure balanced representation across the sampling matrix, the researcher collected data from two participants in each group, resulting in a total of 16 customer participants. In addition, one skincare counter employee at CentralWorld department store was interviewed as a knowledgeable observer of customer behavior in the service setting. This additional interview provided an important supplementary perspective and was used to strengthen the study through data triangulation, allowing customer accounts to be cross-checked against staff observations. Although the sample is relatively small, it was intentionally constructed to maximize analytic variation across eight theoretically relevant customer cells rather than to achieve statistical representativeness. Accordingly, the findings are interpreted as analytically rich and indicative patterns emerging within a bounded retail setting, rather than as universally generalizable gender effects.

Sampling continued until interviews within the eight cells yielded substantial repetition in stage-specific concerns, meanings, and behavioral intentions. In this sense, the study sought thematic sufficiency within the predefined matrix, especially around recurring issues such as women's curiosity and follow-up orientation and men's concerns about fees, credibility, and sales pressure. The goal was not numerical saturation in a statistical sense, but interpretive saturation adequate for a qualitative analysis. In addition, Eisenhardt (1989) argues that there is no precise guide nor ideal number of cases for qualitative research, although Eisenhardt (1989) recommends between four and ten cases as a guide to manageable data collection.

To facilitate systematic analysis, each participant was assigned a code. The first letter indicated gender (M = male; F = female), the second letter indicated customer type (N = new customer; E = existing customer), the third character indicated age group (1 = 25–34 years; 2 = 35–44 years), and the fourth character indicated the interview sequence within that subgroup when more than one participant was interviewed.

Table 1 Characteristics of Key Informants

	Prior product usage experience	Customers who had never used counter-brand products		Customers who had used counter-brand products	
	Age	Age 25–34	Age 35–44	Age 25–34	Age 35–44
Gender	Male	MN1X (2)	MN2X (2)	ME1X (2)	ME2X (2)
	Female	FN1X (2)	FN2X (2)	FE1X (2)	FE2X (2)

Data were collected between 1 November 2024 and 15 January 2025. The study employed semi-structured interviews with 16 customers who had experienced the facial skin analyzer and one beauty advisor who provided the service, complemented by meeting-note data used for triangulation. Semi-structured interviewing is particularly well-suited to studies that seek to uncover meanings, experiences, and interpretive differences across participants (Hennink et al., 2020).

The interview guide was organized around four journey stages - reach, act, convert, and engage - following established customer journey logic (Lemon & Verhoef, 2016; Rosenbaum et al., 2017). Questions explored prior awareness of the facial skin analyzer, reactions to staff invitation, interest in using the device, effects on purchase decisions, and intentions to return or recommend the service. The beauty advisor interview and staff meeting notes were used to corroborate or challenge customer accounts, thereby strengthening interpretive credibility through data triangulation (Hennink et al., 2020).

The analysis proceeded iteratively through several stages. First, all interviews were transcribed and read repeatedly to build familiarity with the material. Second, the researcher applied deductive first-cycle coding using the four customer journey stages - reach, act, convert, and engage - as organizing categories. Third, within each stage, inductive second-cycle coding was used to identify recurring meanings, concerns, and behavioral tendencies, such as curiosity, reassurance-seeking, information search, immediate purchase justification, and conditional re-engagement. Fourth, these codes were compared constantly across male and female participants and then checked against age and prior counter-brand experience so that gendered interpretations were not inferred too quickly from isolated statements. Analytic memos were written throughout this process to refine emerging categories and to clarify how particular quotations supported broader stage-specific themes.

Several steps were taken to strengthen rigor. Reliability was enhanced through the use of a structured interview protocol, systematic code application, and cross-case comparison (Sommer & Sommer, 2001; Tharenou et al., 2007; Yin, 2003). Validity was strengthened through triangulation with secondary materials, pattern matching, and systematic comparison between emerging themes and prior theory (Yin, 2003). In addition, the findings generated from customer interviews were cross-checked with evidence from company staff and staff meeting notes. This triangulation was used concretely. For example, staff observations confirmed that male customers frequently asked whether the scan was free and whether it would lead to sales pressure, while meeting notes reinforced the pattern that female customers were more likely to revisit for follow-up scans and to recommend the service to others. These cross-source comparisons enhanced the credibility and interpretive robustness of the study.

RESEARCH RESULTS

The analysis suggests that the facial skin analyzer influences male and female customers differently at each stage of the journey. The technology is not simply a neutral retail device; it is interpreted through distinct expectations concerning skincare involvement, trust in expertise, perceived risk, and willingness to engage with frontline staff, as discussed below.

Reach: The Facial Skin Analyzer as an Attraction for Women and a reassurance problem for Men

In the reach stage, the facial skin analyzer functioned as a visibility-enhancing touchpoint, but not equally across genders. Women were more likely than men to notice prior communications about the analyzer and to respond with curiosity and interest. One female participant explained, “I had seen it before and was interested, but I still had not tried it because I was worried that if I went in and did not buy anything, something might happen—I was afraid of being sold to.” Another remarked, “I had seen the machine in department stores and felt interested. I wanted to know how it worked.” These responses suggest that women tended to read the analyzer as an appealing form of personalized beauty technology, even when some reassurance was still needed.

Male customers, by contrast, more often interpreted the facial skin analyzer through uncertainty and skepticism. As one man put it, “I was not very interested because I thought there might be a fee and it felt like going into a clinic. If the advertisement clearly said it was free and showed how accurate it was, I would be more interested.” Another stated, “I saw it in a short YouTube clip, but I was not interested at that point. I would be more interested if someone at the counter explained it to me.” These responses indicate that the facial skin analyzer did not automatically communicate value to male customers; instead, it first raised questions about cost, credibility, and sales pressure. Theoretically, this pattern suggests that early-stage responses to service innovation depend on **sociotechnical coupling** rather than on the technological artifact alone. The device may attract attention, but frontline explanation is often required to transform visibility into meaningful reach. This interpretation is consistent with customer journey research showing that touchpoint design and communication quality shape movement into later stages of the journey, and with service innovation research emphasizing that innovation value depends on how customers interpret a new client interface (den Hertog et al., 2010; Kuehnl et al., 2019; Kranzbühler et al., 2019).

Act: Women as Active Information Seekers, Men as Cautious or Passive Evaluators

The gender contrast became more pronounced in the act stage, which concerns willingness to respond, interact, and seek further information. Women were considerably more likely to treat the facial skin analyzer as the beginning of a broader inquiry process. One female respondent stated, “I had not looked up anything before because I had never tried it myself. But now that I have just done the scan, I think I will go back and look for more information about the results and about the products the advisor recommended.” Another noted, “If the scan result matches the skin problem I am worried about, I want to know more—what technology they use and why it seems so accurate.” These responses indicate that women often engaged with the facial skin analyzer not as a one-off curiosity, but as a knowledge-generating touchpoint.

Male customers, however, tended to remain more instrumental and bounded in their response. One male participant commented, “I do not really feel the need to look up what kind of machine a brand uses, because normally I buy based on the product and the brand anyway.” Another added, “As for the machine itself, I would not really want to look up more information. It just feels like something to try once.” These responses suggest that lower visible enthusiasm should not automatically be read as rejection. Rather, male customers often accepted the technology at face value without extending the interaction into a deeper process of inquiry.

A second distinction concerns initiation. Female customers were more likely to see staff invitation as a legitimate and welcome trigger for participation, whereas male customers tended to respond only when the value proposition was explained clearly and convincingly. This supports the view that technology-enabled touchpoints do not reduce interactional barriers equally for all customers. Instead, the same touchpoint may invite exploratory participation for one group while remaining relatively bounded for another (Lemon & Verhoef, 2016; Rosenbaum et al., 2017). It also aligns with the broader argument that service innovations are socially interpreted rather than universally self-evident.

Convert: Women Use the Facial Skin Analyzer to Validate Immediate Purchase; Men Use It to Inform Later Evaluation

The convert stage produced the clearest commercial divergence between female and male customers. Women were more likely to treat the scan as decision-enabling evidence that justified immediate purchase. One female participant explained, “At first I was hesitating because the price was high, but after I saw the skin analysis results, I wanted to take better care of my skin. I had planned to buy only one product, but after the scan showed more problems, I ended up buying four.” Another stated, “If the staff had only recommended the products, I probably would not have bought more immediately, but when I saw my own skin on the machine, I felt I had to buy.” These accounts show how the facial skin analyzer made invisible concerns visible and transformed recommendations into responses to diagnosed needs rather than mere sales suggestions.

Male customers, in contrast, were more likely to regard the facial skin analyzer as useful but insufficient for immediate commitment. One male respondent said, “The machine helped me realize my skin problem was different from what I thought, but I still did not buy what it recommended, because I could buy another brand. I want to look up more information first, because product performance comes first.” Another noted, “It made me more interested in the brand’s products, but I still did not buy anything because I did not feel it was necessary right now.” These responses suggest that, for men, the facial skin analyzer informed judgment but did not settle it; independent information search, product comparison, and promotional considerations remained central.

Theoretically, this finding suggests that touchpoints influence conversion through different combinations of cognitive, emotional, and comparative mechanisms. For women, the facial skin analyzer functioned more as legitimizing evidence that narrowed uncertainty and supported action in the moment. For men, it functioned more as diagnostic input within a broader evaluation process. This interpretation is consistent with customer journey research on stage-specific touchpoint effects and with retail journey work stressing that movement from interaction to purchase depends on how customers process value cues at the moment of decision (Kuehnl et al., 2019; Lemon & Verhoef, 2016; Grewal & Roggeveen, 2020).

Engage: Women Return to Track Progress and Advocate; Men Re-engage Conditionally

In the engage stage, the facial skin analyzer again displayed gendered influence. Women were more likely to view follow-up scanning as meaningful and to connect it with revisit and recommendation. One female respondent explained, “I want to come back for another scan after I start using the product because I want to know how my skin is doing, and the skin analyzer makes the counter feel different, and the staff seems more credible.” Another said, “I really want to tell people close to me to try it because the machine shows the skin clearly and helps you choose products that suit you.” These responses suggest that the facial skin analyzer became part of an ongoing self-care narrative for many women: one does not merely buy a product, but also monitors whether it is working and shares that experience with others.

Male customers were more conditional in their re-engagement. As one man put it, “If the product does not work, I do not want to come back for another scan. But if it does work, then I would want to come back and check whether the machine was accurate.” Another suggested that what mainly motivated return was “product quality and service,” not the facial skin analyzer itself. These accounts indicate that, for men, the facial skin analyzer remained peripheral to the relationship: useful, perhaps, but not central enough to sustain a connection unless product performance had already been demonstrated.

This pattern reinforces the idea that a diagnostic beauty technology can serve as a retention mechanism only when customers incorporate it into an ongoing progress-verification system. Women were more likely to do so, whereas men were more likely to interpret the scan as a one-time assessment whose value depended on subsequent product results. This interpretation is consistent with customer journey theory, which views post-purchase engagement as shaped by how touchpoints become embedded in longer-term relational narratives, and with gendered consumption research suggesting that men’s skincare practices are often more private, instrumental, and less socially elaborated than women’s (Byrne & Milestone, 2023; Tueanrat et al., 2021).

Table 2 Summary of Gendered Differences in Customer Responses to the Facial Skin Analyzer Across the Customer Journey

Customer journey stage	Female customers	Male customers	Key interpretation
Reach	More likely to notice and be attracted to the facial skin analyzer. They viewed it as novel, personalized, and potentially useful for learning about their skin.	More cautious at first contact. They were more likely to question cost, credibility, sales intent, and possible pressure to buy.	The skin analyzer works as an attraction mechanism for women, but as a reassurance-dependent touchpoint for men. Staff explanation is critical to reduce uncertainty.
Act	More active in seeking further information and more open to invitation-based interaction. Many welcomed staff’s invitation even if they would not initiate the interaction themselves.	More passive and instrumental. They might accept the scan, but usually did not pursue deeper inquiry unless the value proposition was made very clear.	Women treated the skin analyzer as a knowledge-generating tool , whereas men treated it as a supplementary aid rather than the start of a broader interaction.
Convert	More likely to use scan results to support immediate purchase decisions and to see the facial skin analyzer as necessary before choosing products.	More likely to delay purchase, compare alternatives, and treat the facial skin analyzer as helpful but nonessential .	Women used the facial skin analyzer as decision-enabling personalized evidence ; men used it mainly for later evaluation and comparison .

Customer journey stage	Female customers	Male customers	Key interpretation
Engage	More willing to return for follow-up scans, track progress, and recommend the service to others.	Re-engagement was more conditional, usually depending on visible product results. They were more likely to recommend the product or service in general rather than the facial skin analyzer itself.	The facial skin analyzer supports relationship building and advocacy more strongly among women, but remains a peripheral, conditional tool for men.
Overall pattern	More receptive, relational, and diagnostic in their use of the facial skin analyzer across the journey.	More skeptical, evaluative, and conditional in their use of the facial skin analyzer across the journey.	The same beauty technology is not interpreted neutrally ; its impact is filtered through gendered meanings, risk perceptions, and different consumption logics.

DISCUSSION AND CONCLUSION

This study set out to explain how male and female customers perceive a facial skin analyzer and how that technology shapes the four stages of the customer journey at skincare brand counters. The findings suggest that the analyzer is best understood not as a static retail device but as a stage-sensitive, identity-filtered touchpoint. Its influence is cumulative but uneven. It attracts, activates, converts, and retains customers differently depending on how they interpret the meaning of skincare, technological expertise, and interaction with sales personnel.

Three broader insights emerge. First, customer journey effects are stage-specific. The facial skin analyzer did not operate through one dominant pathway. In the reach stage, its main function was to attract attention and reduce uncertainty. In the act stage, it served as an interaction catalyst. In the convert stage, it legitimized or enriched product decisions. In the engage stage, it created the possibility of progress monitoring and word-of-mouth advocacy. This finding deepens customer journey research (Lemon & Verhoef, 2016; Tueanrat et al., 2021) by showing that one touchpoint can perform multiple roles across the journey, with different mechanisms at each stage.

Second, service innovation is interpretively mediated. The facial skin analyzer may be technologically identical for all customers, but it is socially experienced in different ways. Women more often read it as a meaningful instrument of personalized diagnosis. Men more often read it as an optional aid whose value needed to be justified in practical, low-pressure, and credible terms. Compared to previous studies (den Hertog & Bilderbeek, 1999; van Ark et al., 2003), this study shows that service innovation effectiveness cannot be inferred solely from technological sophistication. What matters is whether customers perceive the technology as legitimate, useful, and appropriately aligned with how they approach the product category.

Third, gender differences are not merely about higher or lower interest in skincare; they concern different consumption logics. Female customers in this setting more readily integrated the facial skin analyzer into a relational and diagnostic journey, using it to interpret invisible skin conditions, support immediate action, and sustain ongoing contact with the brand. Male customers more often

approached the facial skin analyzer through an evaluative and conditional logic, asking whether it was free, whether it was credible, and whether it actually added value beyond what could already be learned elsewhere. These are not absolute binaries, but they are recurring patterned differences with important theoretical implications. The finding is consistent with research indicating that men's grooming and skincare consumption may remain comparatively private, instrumental, and less openly discussed (Byrne & Milestone, 2023).

Theoretical Contributions

The study contributes to theory in three ways. The first contribution is to customer journey scholarship. Existing work has established that touchpoints matter (Kuehnl et al., 2019; Lemon & Verhoef, 2016), but this study shows more precisely how a technology-enabled diagnostic touchpoint affects movement across journey stages in different ways. The facial skin analyzer enhances journey progression not simply by increasing information but by changing the meaning of information at each stage.

The second contribution is to service innovation research. The facial skin analyzer embodies several dimensions of service innovation: a new service concept, a new client interface, a new service delivery system, and a technological option (den Hertog & Bilderbeek, 1999; van Ark et al., 2003). Yet the study shows that such innovation succeeds only when technological capability is translated into customer-perceived relevance. This reframes service innovation as a sociotechnical accomplishment rather than a purely technical one.

The third contribution is to gendered consumption research. Much prior work on gender and skincare (Byrne and Milestone, 2023; Szlávi & Landoni, 2022; Teo, Cheng, & Chow, 2025) has focused on product usage, brand meanings, or masculine identity norms. This study adds a process perspective by examining how gender shapes interpretation of diagnostic technology during live retail interaction. In doing so, it shows that gender matters not only for what people buy, but for how they encounter and evaluate technologically mediated retail expertise.

Practical Implications

The findings offer several practical implications for skincare brands and beauty advisors. First, reach-stage communication should be redesigned in a more concrete and transparent way. Promotional materials should state clearly that the scan is complimentary, indicate the approximate time required, explain what the device can detect, and reassure customers that no purchase is required. For example, counter signage or digital media could use a message such as: "Free 3-minute skin analysis - no purchase required - checks hydration, pores, spots, and texture." This kind of message is especially important for reducing male customers' uncertainty, but it would also help women convert curiosity into approach behavior.

Second, staff scripts should be differentiated more explicitly by customer response pattern. For women, advisors can emphasize discovery and personalization, for example: "Would you like a complimentary scan to see what your skin needs today and receive tailored product suggestions?" For men, a shorter and more evidence-oriented script may be more effective, such as: "This is a free 3-minute scan that shows hydration and pore conditions. There is no obligation to buy, and I can summarize the results in one or two practical recommendations." Such script refinement directly addresses the different meanings that customers attach to the same technology.

Third, brands should introduce post-scan information support rather than relying only on verbal explanation at the counter. Because many women sought additional information after the service and some men wanted clearer evidence before acting, brands should provide scan summaries, QR-linked result pages, or take-home diagnostic cards. These materials should highlight the customer's

top two or three skin concerns, explain what each result means in plain language, and link each concern to a concise product recommendation or trial option.

Fourth, conversion strategies should be segmented more concretely. Female customers may respond well to consultative bundling based on scan outcomes, such as a personalized regimen card paired with a same-day bundle or add-on offer. Male customers may respond better to one hero product plus one supporting recommendation, accompanied by short efficacy claims, trial sizes, before-and-after evidence, or a compact comparison sheet that reduces the need for later information search. The managerial implication is not to stereotype customers, but to design flexible conversion tactics that match the distinct evaluation logics observed in the study.

Fifth, engagement systems should use the facial skin analyzer as a structured follow-up tool rather than as a one-off novelty. For women, brands could send a LINE message, SMS, or email inviting them back after 14 or 30 days for a progress scan, using language such as: “Come back for a complimentary progress check to see how your hydration and spots have changed.” For men, follow-up messages may work better when tied to product performance, for example: “If you would like to verify whether the product improved hydration or pore condition, you are welcome to return for a free re-scan.” These differentiated follow-up messages translate the findings into actionable re-engagement strategies.

Finally, referral programs may be particularly effective when tied directly to the analyzer experience. Because many female customers expressed willingness to recommend the service, brands could create simple “bring a friend” campaigns, paired scan appointments, or progress-tracking invitations that encourage shared use of the technology. At the same time, for more hesitant customers, referral appeals may work better when framed around practical utility rather than beauty enthusiasm, such as inviting a friend or partner to receive a free diagnostic check rather than promoting the analyzer as an aspirational beauty experience.

Limitations and Future Research

Despite the above findings and contributions, this study has limitations that also open promising avenues for further work. First, although the study purposefully sampled sixteen customers across eight analytically distinct groups and included one beauty advisor for triangulation, it remains a small, single-site qualitative inquiry conducted at one skincare counter in CentralWorld, Bangkok. The findings should therefore be interpreted as emerging and contextually grounded gendered patterns rather than as statistically generalizable claims about all skincare consumers. Even though the interviews yielded substantial repetition within the sampling matrix, future studies could strengthen external validity through a larger qualitative sample, a multi-site comparison, or a qualitative-quantitative design that tests whether the same stage-specific patterns hold across broader customer populations.

Second, the research relied on an in-store interview environment. Field conditions such as noise, interruptions, and the difficulty of recruiting participants during active shopping may have shaped the depth and nature of responses. Future studies could combine interview data with online follow-up surveys, diary methods, or mobile ethnography to capture more reflective post-visit interpretations.

Third, this study intentionally foregrounds gender, but gender was not the only meaningful differentiator in the underlying project. Age and prior counter-brand experience also shaped how customers interpreted the facial skin analyzer. Future research could examine how these dimensions intersect with gender rather than treating them separately.

Fourth, the present study examined perceptions and self-reported intentions. Future work could incorporate behavioral data, such as actual purchase conversion, return visits, retention rates, or

referral patterns, to test whether the qualitative mechanisms identified here translate into measurable commercial outcomes.

Finally, future research could compare facial skin analyzers with other beauty technologies such as virtual try-on, AI consultation chatbots, or app-based skin diagnostics. Such a comparison would help clarify whether the effects found here stem from diagnostic visualization specifically or from technology-mediated personalization more broadly.

REFERENCES

- Byrne, A., & Milestone, K. (2023). “He wouldn’t be seen using it...”: Men’s use of male grooming products as a form of invisible consumption. *Journal of Consumer Culture*, 23(1), 146–167. <https://doi.org/10.1177/14695405211066314>
- den Hertog, P., & Bilderbeek, R. (1999). *Conceptualising service innovation and service innovation patterns*. Research Programme on Innovation in Services (SIID), Ministry of Economic Affairs, Dialogic, Utrecht. https://www.researchgate.net/publication/215915602_Conceptualising_Service_Innovation_and_Service_Innovation_Patterns
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/amr.1989.4308385>
- Giebelhausen, M. D., Robinson, S. G., Sirianni, N. J., & Brady, M. K. (2014). Touch versus tech: When technology functions as a barrier or a benefit to service encounters. *Journal of Marketing*, 78(4), 113–124. <https://doi.org/10.1509/jm.13.0056>
- Grewal, D., & Roggeveen, A. L. (2020). Understanding retail experiences and customer journey management. *Journal of Retailing*, 96(1), 3–8. <https://doi.org/10.1016/j.jretai.2020.02.002>
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods* (2nd ed.). SAGE.
- Kranzbühler, A.-M., Kleijnen, M. H. P., & Verlegh, P. W. J. (2019). Outsourcing the pain, keeping the pleasure: Effects of outsourced touchpoints in the customer journey. *Journal of the Academy of Marketing Science*, 47(2), 308–327. <https://doi.org/10.1007/s11747-018-0594-5>
- Kuehnl, C., Jozic, D., & Homburg, C. (2019). Effective customer journey design: Consumers’ conception, measurement, and consequences. *Journal of the Academy of Marketing Science*, 47(3), 551–568. <https://doi.org/10.1007/s11747-018-00625-7>
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96. <https://doi.org/10.1509/jm.15.0420>
- Ratchatawipasan, C. (2024). *Facial skincare – Thai consumers – Formatted 2024*. Mintel. https://clients.mintel.com/content/report/facial-skincare-thai-consumers2024?fromSearch=%3Ffilters.region%3D9%26free%20text%3Dskincare%20%26last_filter%3Dregion%26resultPosition%3D1
- Rosenbaum, M. S., Otalora, M. L., & Ramírez, G. C. (2017). How to create a realistic customer journey map. *Business Horizons*, 60(1), 143–150. <https://doi.org/10.1016/j.bushor.2016.09.010>
- Szlávi, A., & Landoni, M. (2022). Human-computer interaction—Gender in user experience. In *HCI International 2022 Posters* (Communications in Computer and Information Science, Vol. 1580, pp. 132–137). Springer. https://doi.org/10.1007/978-3-031-09327-8_18
- Teo, S. C., Cheng, K. M., & Chow, M. M. (2025). Unlocking repurchase intentions in e-commerce platforms: The impact of e-service quality and gender. *Cogent Business & Management*, 12(1), Article 2471535. <https://doi.org/10.1080/23311975.2025.2471535>

- Tueanrat, Y., Papagiannidis, S., & Alamanos, E. (2021). Going on a journey: A review of the customer journey literature. *Journal of Business Research*, 125, 336–353. <https://doi.org/10.1016/j.jbusres.2020.12.028>
- van Ark, B., Broersma, L., & den Hertog, P. (2003). *Services innovation, performance and policy: A review*. Synthesis report in the framework of the project *Structurele informatievoorziening in Diensten (SIID)* for the Ministry of Economic Affairs of the Netherlands. University of Groningen, Groningen. Retrieved from <https://research.rug.nl/en/publications/services-innovation-performance-and-policy-a-review>
- Voorhees, C. M., Fombelle, P. W., Grégoire, Y., Bone, S., Gustafsson, A., Sousa, R., & Walkowiak, T. (2017). Service encounters, experiences and the customer journey: Defining the field and a call to expand our lens. *Journal of Business Research*, 79, 269–280. <https://doi.org/10.1016/j.jbusres.2017.04.014>

Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Conflicts of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher’s Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.



Copyright: © 2026 by the authors. This is a fully open-access article distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0).