

Understanding Online Purchase Intention in Social Commerce: The Roles of Web Quality, User Satisfaction, and Algorithmic Personalization

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Abstract—This study examines how web quality influences online purchase intention through user satisfaction in social commerce, with a specific focus on TikTok Shop. Drawing on the WebQual 4.0 framework and expectation-confirmation theory, the research investigates the effects of usability quality, information quality, and service interaction quality on user satisfaction and how satisfaction subsequently drives online purchase intention. Extending prior WebQual research, this study integrates algorithmic personalization as a moderating mechanism that strengthens the satisfaction–online purchase intention relationship, addressing an aspect largely overlooked in existing social commerce studies. Data were collected from 210 TikTok Shop users in Banjarmasin and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that all web quality dimensions significantly enhance user satisfaction, which in turn positively affects online purchase intention. Algorithmic personalization significantly reinforces this relationship, and the model explains 44.6% of the variance in online purchase intention ($R^2 = 0.446$). The findings contribute to theory by extending WebQual to algorithm-driven social commerce contexts and offer practical insights for platforms seeking to optimize user experience and personalized recommendation strategies.

Index Terms—Web quality, user satisfaction, online purchase intention, social commerce, algorithmic personalization, TikTok Shop.

I. INTRODUCTION

Social media has indeed been in continuous evolution over the past decade, from how people communicate and share information to how they interact with brands online. Applications that began as simple social networking platforms, such as Facebook and Instagram, and more recently TikTok, have transformed into ecosystems that seamlessly weave together entertainment, social interaction, and e-commerce. The fusion has given rise to a form of online retail known as social commerce, a blend of traditional shopping with social interaction, changing how consumers learn about, become confident in, and eventually purchase products.

Among all social media platforms, TikTok has quickly become one of the most influential in modern consumer behavior [1]. The development of TikTok Shop further integrates entertainment, social interaction, and online shopping, enabling users to purchase products directly within the app [2]. This phenomenon of TikTok Shop represents a further development of the convergence between media consumption and online retail, in which decisions to purchase products are increasingly dependent on social interactions, user-generated content, and recommendations from influential content creators [3], [4], [5].

The rapid adoption of TikTok Shop demonstrates how personalized technologies are reshaping user experiences in social commerce. At the core of this transformation, algorithmic personalization delivers content and product recommendations that align with users' preferences [6], making platform interactions more relevant and engaging. Beyond improving content visibility, personalization actively shapes purchasing behavior by dynamically matching products with users' interests. Unlike conventional e-commerce, which relies largely on search-based exploration, purchase decisions on TikTok Shop are frequently triggered by algorithm-driven recommendations embedded within content consumption, positioning feed personalization as a critical factor that

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redefines product perception and alters how established determinants of online purchasing operate [7].

Although many studies have examined how aspects of platform quality shape user satisfaction, the evidence across the three key WebQual dimensions remains inconsistent. Previous research shows mixed conclusions regarding whether usability quality consistently improves satisfaction [8], [9], whether information quality reliably enhances the user experience [10], [11], and whether service interaction quality produces a stable effect across different digital environments [12], [13]. Similar inconsistencies appear in the relationship between satisfaction and online purchase intention, suggesting that its strength varies across different platform formats and interaction patterns [14], [15].

These inconsistencies indicate that the established explanation of how platform quality shapes satisfaction and how satisfaction influences online purchase intention may not fully apply to newer social commerce environments. User experiences on platforms such as TikTok Shop are shaped by short-form video content and algorithm-driven exposure that personalizes content visibility based on user engagement [16]. In addition, interactions with content creators play a critical role in influencing user engagement and online shopping preferences in social commerce environments [17]. This situation necessitates re-examining the WebQual dimensions in a context where platform interactions operate differently and assessing whether satisfaction remains a stable predictor of online purchase intention. It also raises the possibility that personalization technologies strengthen this relationship. These considerations form the logical foundation for the model that links WebQual dimensions to satisfaction, connects satisfaction to online purchase intention, and evaluates the role of algorithmic personalization as a potential amplifying factor.

Addressing a critical gap in social commerce research, this study advances theory in two significant ways. First, it resolves inconsistencies in prior WebQual 4.0 findings by re-contextualizing usability, information quality, and service interaction quality within an algorithm-intensive social commerce environment, thereby clarifying how web quality dimensions function on platforms such as TikTok Shop. Second, it extends existing theory by introducing algorithmic personalization as a moderating mechanism in the satisfaction-purchase intention relationship, offering a more precise explanation of how satisfaction translates into behavioral intention in algorithm-driven platforms.

Algorithmic personalization is conceptualized as a critical moderating mechanism that conditions how user satisfaction is formed and how effectively it translates into online purchase intention. While personalization fundamentally shapes users' information exposure, attention allocation, and decision-making processes in social commerce environments by algorithmically curating content visibility and relevance [18], [19]. Prior platform quality and satisfaction research has largely treated it as an implicit background feature rather than an explicit theoretical construct. This theoretical omission leads to incomplete explanations of consumer behavior, particularly

in digital marketplaces where user experiences are predominantly shaped by algorithmically curated content. This study advances a more nuanced and accurate account of consumer behavior in contemporary algorithm-driven online marketplaces.

Understanding the determinants of online purchase intention has become increasingly important as social commerce expands. This study aims to examine how web quality influences online purchase intention through user satisfaction and to investigate how algorithmic personalization shapes consumer experiences on TikTok Shop. Using the WebQual framework, the study operationalizes web quality through usability, information quality, and service interaction quality [8], and positions algorithmic personalization as a moderating variable that can strengthen or weaken the relationship between user satisfaction and online purchase intention. By integrating WebQual dimensions with algorithmic personalization in the TikTok Shop context, this study contributes to the literature by providing a context-sensitive explanation of consumer behavior, reconciling inconsistencies in prior findings, and offering theoretical and practical insights to enhance user experience and engagement in social commerce.

II. RELATED WORK & HYPOTHESIS

A. Expectation-Confirmation Theory (ECT)

ECT explains user satisfaction and behavioral intention by comparing users' initial expectations with their actual experiences after using the system [20]. When system performance meets or exceeds expectations, users experience confirmation that leads to satisfaction and strengthens behavioral intentions such as continued use or online purchasing [21]. It suggests that satisfaction emerges when perceived outcomes align with cognitive evaluations formed before system use, reinforcing trust and intention to continue engagement. In contrast, unmet expectations result in dissatisfaction and lower engagement.

B. Web Quality

Web quality is the extent to which a website demonstrates the ability to satisfy users' needs through its design, information delivery, and interactive features. It is a critical construct in understanding user experience and satisfaction within online platforms. The WebQual framework provides a systematic approach to evaluating website quality from the user's perspective [22]. In its latest development, WebQual 4.0 identifies three fundamental dimensions, which are usability, information quality, and service interaction, as central indicators of web quality. Therefore, web quality reflects both the functional and experiential aspects that influence user perceptions and behavioral outcomes [23], [24]. In the context of social commerce, customer satisfaction reflects users' overall evaluation of a website's features, performance, and user experience, shaped by personal experiences and the extent to which the website meets their needs and expectations [25].

C. Usability Quality and User Satisfaction

Usability describes how easily a user interacts with a website to achieve their goals, whereas user satisfaction represents the overall positive evaluation of that experience [26]. Every time users experience intuitive navigation and fast responses, they feel more comfortable and in control, which enhances their satisfaction. Many studies confirm that as usability increases, user satisfaction also increases across various e-commerce and digital platforms [8], [10], [12], [27].

H1: Usability quality has a significant effect on user satisfaction

D. Information Quality and User Satisfaction

Information quality describes how accurately, relevantly, completely, and promptly information is delivered on a platform, ensuring that users receive dependable and meaningful content. When the information provided meets these standards, it has a strong positive effect on user satisfaction, as well-organized and trustworthy information enables users to make informed decisions, minimize uncertainty, and develop trust in the platform [28]. Empirical studies consistently indicate that users who perceive the information as reliable and thorough report higher satisfaction levels, reflecting their belief that the platform effectively fulfills their informational needs and expectations [8], [10], [12], [13], [27], [29].

H2: Information quality has a significant effect on user satisfaction

E. Service Interaction Quality and User Satisfaction

Service interaction quality refers to how effectively exchanges between users and a digital platform encompass empathy, reliability, personalization, and communication efficiency. When platforms provide timely support, personalized responses, and clear communication, users perceive higher service quality, which directly enhances their trust and satisfaction [30]. Empirical findings across e-commerce and social commerce studies reveal that effective service interactions not only improve users' emotional experiences but also strengthen their overall satisfaction, encouraging continued engagement and loyalty toward the platform [8], [11], [12].

H3: Service interaction quality has a significant effect on user satisfaction

F. User Satisfaction and Online Purchase Intention

User satisfaction reflects a user's overall evaluation of their online shopping experience when performance meets or exceeds expectations. In social commerce, user satisfaction leads to greater trust, higher perceived value, and reduced uncertainty. Past literature has consistently shown that satisfaction is a strong predictor of online purchase intention

[14], [31], [32].

H4: User satisfaction has a significant effect on online purchase intention

G. Mediating Role of User Satisfaction

Web quality has long been recognized as a key driver of user behavior in online environments, particularly in shaping user satisfaction. Satisfied users develop positive evaluations of the platform, which in turn increases their willingness to make purchases. Therefore, user satisfaction serves as a crucial psychological mechanism that translates perceptions of web quality into online purchase intention [14], [33].

Usability quality reflects the degree to which an online shopping platform is easy to use, efficient, and comfortable to interact with. A website that is intuitive and transparent in its interface, clear in its navigation, and smooth in transaction processing enhances user satisfaction by meeting users' needs and expectations [8], [10], [12], [27]. Satisfaction promotes trust and increases the desire to purchase, thereby encouraging users to exhibit a higher level of online purchase intention [14], [31], [32].

H5: User satisfaction mediates the relationship between usability quality and online purchase intention

Information quality refers to the extent to which the information provided on a platform is accurate, complete, relevant, and timely. High-quality information minimizes uncertainty, increases users' confidence, and improves perceived value. Empirical evidence has shown that reliable and relevant information enhances user satisfaction, which subsequently influences online purchase intention [34].

H6: User satisfaction mediates the relationship between information quality and online purchase intention

Service interaction quality refers to responsiveness, empathy, and reliability in online service encounters, including customer support and post-purchase assistance. Effective service interactions increase trust, reduce perceived risk, and foster emotional attachment. Previous studies confirm that service quality is a major driver of satisfaction and behavioral intention in online settings [34].

H7: User satisfaction mediates the relationship between service interaction quality and online purchase intention

H. Moderating Role of Algorithmic Personalization

Algorithmic personalization refers to the use of data-driven algorithms that tailor content, product recommendations, and advertisements to individual user preferences and behaviors [35]. In social commerce, personalization enhances the relevance and appeal of information presented to users, creating a more engaging and efficient shopping experience [36]. Previous studies have shown that high-quality personalized recommendations, defined by their relevance, accuracy, and

diversity, significantly enhance user satisfaction and directly influence purchasing or clicking behavior [37], [38]. Reference [37] emphasized that recommendation quality is a key factor shaping users' digital experiences. Similarly, [39] found that recommendation quality builds trust and perceived value, which, in turn, drive online purchase intention. Furthermore, satisfied users who receive relevant, personalized recommendations tend to exhibit stronger online purchase intentions than those exposed to generic platform experiences [40].

Although prior research indicates that algorithmic personalization and recommendation quality can increase user satisfaction and online purchase intention, most studies focus mainly on their direct effects [41], [42]. Research examining the boundary conditions under which satisfaction translates into online purchase intention remains limited, particularly in algorithm-driven environments such as TikTok Shop, where users continuously interact with personalized content [43]. In practice, perceived irrelevance or intrusiveness may weaken the influence of user satisfaction on online purchase intention, whereas relevant personalization may strengthen it by reducing search effort and improving convenience. Therefore, this study examines algorithmic personalization as a moderating variable in the relationship between user satisfaction and online purchase intention.

H8: Algorithmic Personalization positively moderates the relationship between User Satisfaction and Online Purchase Intention

III. RESEARCH METHOD

The study adopts an explanatory research design with a quantitative approach. Figure 1 depicts the conceptual framework developed in this study, integrating WebQual dimensions with user satisfaction and online purchase intention, while incorporating algorithmic personalization as a moderating mechanism. The sample consisted of 210 active TikTok Shop users in Banjarmasin, selected through purposive sampling based on specific criteria to ensure alignment with the research objectives. Data were collected using structured questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This method is suitable for prediction-oriented research involving complex models with multiple latent constructs and moderating effects, and it can accommodate non-normal data distributions [44]. Focusing on TikTok Shop users within a specific empirical context allows for a more targeted analysis of consumer behavior in a social commerce environment. The measurement model was assessed through convergent validity, discriminant validity, and reliability tests, including composite reliability and Cronbach's alpha. In contrast, the structural model was evaluated using R^2 , Q^2 , and SRMR to assess overall model fit.

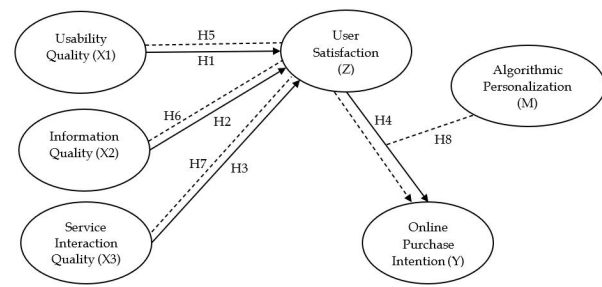


Fig. 1. Conceptual framework.

IV. RESULTS AND DISCUSSION

A. Characteristics of Respondents

In the study, the total number of respondents was 210, all of whom were TikTok Shop users in Banjarmasin City. Based on Table 1, the highest percentage by gender was female, with 121 respondents (57.62%), while males totaled 89 (42.38%). This fact indicates that women dominate online shopping activities through TikTok Shop.

Regarding age, the 24–29 years age group was the most represented, at 42.86%, followed by the over-29 years at 30.48% and the 18–23 years at 26.67%. This trend indicates that the majority of users fall into the young-adult category, who are generally digitally literate and adaptable to new technologies.

Regarding education level, 31.43% of the respondents reported having a Bachelor's degree, 30.95% reported an Associate's degree, 22.86% reported a Senior High School diploma, 9.05% reported a Master's degree, and 2.86% reported a Doctoral degree or other qualification. This phenomenon indicates that most TikTok Shop users are moderately to highly educated.

In general, the respondents' profiles indicate that TikTok Shop users in Banjarmasin are young adult females with moderate to high educational backgrounds. This demographic trend comprises digitally active users with strong technological literacy who prefer interactive shopping experiences, including algorithmically personalized recommendations. Such a profile provides a foundation for analyzing user perceptions of website quality, satisfaction levels, and purchase intention in the TikTok Shop-based social commerce context.

Table 1.
Respondent Characteristics

Criteria		Frequency	Percentage
Gender	Male	89	42.38%
	Female	121	57.62%
Age	18–23 years old	56	26.67%
	24–29 years old	90	42.86%
	>29 years old	64	30.48%
	Senior High School (SMA)	48	22.86%
Education level	Diploma (D3)	65	30.95%
	Bachelor's Degree (S1)	66	31.43%
	Master's Degree (S2)	19	9.05%
	Doctorate (S3)	6	2.86%
	Others	6	2.86%

B. Outer Model

Based on Table 2, the results of the convergent validity test indicate that all measurement indicators have loading factor values above the threshold of 0.70, confirming that each indicator strongly reflects its underlying construct [45].

Based on Table 3, all constructs demonstrated Cronbach's Alpha and Composite Reliability (CR) values greater than 0.70, as well as Average Variance Extracted (AVE) values exceeding 0.50 [45]. These results confirm that all variables in the model exhibit satisfactory internal consistency reliability and meet the criteria for convergent validity.

Table 2.
Loading Factor Convergent Validity

Variable	Item	Convergent Validity	
		Loading Factor	Description
Usability quality (X1)	X1.1	0.81502	Valid
	X1.2	0.74633	Valid
	X1.3	0.76626	Valid
	X1.4	0.75469	Valid
	X1.5	0.77574	Valid
	X1.6	0.80796	Valid
	X1.7	0.85664	Valid
	X1.8	0.79883	Valid
Information quality (X2)	X2.1	0.73611	Valid
	X2.2	0.75647	Valid
	X2.3	0.79689	Valid
	X2.4	0.81086	Valid
	X2.5	0.84737	Valid
	X2.6	0.76101	Valid
	X2.7	0.7811	Valid
	X3.1	0.76347	Valid
Service interaction quality (X3)	X3.2	0.83829	Valid
	X3.3	0.79008	Valid
	X3.4	0.78835	Valid
	X3.5	0.74768	Valid
	X3.6	0.76968	Valid
	X3.7	0.73304	Valid
	X3.8	0.7433	Valid
	Z.1	0.81712	Valid
User satisfaction (Z)	Z.2	0.79446	Valid
	Z.3	0.79544	Valid
	Z.4	0.83665	Valid
	Z.5	0.83701	Valid

Variable	Item	Convergent Validity	
		Loading Factor	Description
Online purchase intention (Y)	Y.1	0.87079	Valid
	Y.2	0.87457	Valid
	Y.3	0.85972	Valid
	Y.4	0.85957	Valid
	Y.5	0.86696	Valid
Algorithmic personalization (M)	M.1	0.84028	Valid
	M.2	0.76931	Valid
	M.3	0.79823	Valid
	M.4	0.80116	Valid
	M.5	0.74758	Valid
	M.6	0.79059	Valid

Table 3.
AVE Score

Variable	Cronbach's Alpha	Composite Reliability	AVE	Description
Usability quality (X1)	0.91418	0.93027	0.62556	Reliable
Information quality (X2)	0.89584	0.91817	0.61627	Reliable
Service interaction quality (X3)	0.90307	0.92194	0.59658	Reliable
User satisfaction (Z)	0.87484	0.90896	0.66643	Reliable
Online purchase intention (Y)	0.91703	0.93767	0.75055	Reliable
Algorithmic personalization (M)	0.88145	0.90962	0.62681	Reliable

Based on Table 4, all indicators exhibited VIF values below 5, thereby confirming that the PLS measurement model is free of multicollinearity [45].

Table 4.
VIF Test

Item	VIF
X1.1	2.45561
X1.2	1.8973
X1.3	2.05971
X1.4	1.95063
X1.5	2.06075
X1.6	2.25107
X1.7	2.77752
X1.8	2.10931
X2.1	1.74732
X2.2	1.80494
X2.3	2.12766

Item	VIF
X2.4	2.26888
X2.5	2.45335
X2.6	1.87397
X2.7	2.03309
X3.1	1.98193
X3.2	2.52916
X3.3	2.14774
X3.4	2.10042
X3.5	1.82212
X3.6	2.05379
X3.7	1.81164
X3.8	1.82402
Z.1	2.03457
Z.2	1.91207
Z.3	1.86974
Z.4	2.20227
Z.5	2.10469
Y.1	2.66604
Y.2	2.75571
Y.3	2.68475
Y.4	2.50801
Y.5	2.63806
M.1	2.19622
M.2	1.77436
M.3	1.91747
M.4	1.94543
M.5	1.84083
M.6	1.99329

Based on Table 5, all HTMT ratios were below the 0.90 threshold, confirming that the constructs possess adequate discriminant validity and are not excessively correlated with one another [46].

Table 5.
HTMT Value

	ALG (M)	IQ (X2)	OPI (Y)	SIQ (X3)	UQ (X1)
ALG (M)					
IQ (X2)	0.47709				
OPI (Y)	0.42199	0.29771			
SIQ (X3)	0.38905	0.50625	0.24006		
UQ (X1)	0.57397	0.52546	0.26927	0.50504	
US (Z)	0.55185	0.67697	0.48616	0.58154	0.6809

C. Inner Model

Based on Table 6, the Q^2 values for user satisfaction (0.343) and online purchase intention (0.303) exceed the 0.15 threshold, indicating that the model exhibits strong predictive relevance

for the endogenous variables [45]. Additionally, the R^2 values for User Satisfaction (0.522) and Online Purchase Intention (0.446) indicate that the exogenous variables account for over 44.6% of the variance in the endogenous constructs. Together, these results suggest that the model exhibits moderate-to-strong explanatory power for both dependent variables.

Table 6.
 Q^2 and R^2 Values of Endogenous Constructs

Variable	Q^2	R^2
User satisfaction (Z)	0.34269	0.52246
Online purchase intention (Y)	0.30256	0.44608

Based on Table 7, the direct effect hypothesis test indicates that all examined relationships exhibit meaningful effect sizes (f^2), confirming their substantive contribution to the structural model. Information quality ($f^2 = 0.170$) and usability quality ($f^2 = 0.193$) demonstrate moderate effects on user satisfaction, while service interaction quality shows a smaller but still relevant effect ($f^2 = 0.061$). User satisfaction exerts a moderate effect on online purchase intention ($f^2 = 0.126$). Notably, the interaction between algorithmic personalization and user satisfaction reveals a strong effect size ($f^2 = 0.404$), underscoring the significant moderating role of algorithmic personalization in strengthening the impact of user satisfaction on online purchase intention.

Table 7.
Results of the Direct and Moderating Effect Hypothesis Test

Relationship	f^2 Value
IQ $\rightarrow$ US	0.16986
UQ $\rightarrow$ US	0.19271
SIQ $\rightarrow$ US	0.06071
US $\rightarrow$ OPI	0.12583
ALG $\times$ US $\rightarrow$ OPI	0.40415

- Hypothesis 1 (H1): Usability quality $\rightarrow$ User satisfaction
Original sample (β) = 0.36051, t-statistic = 6.24525, and p-value = 0.000 < 0.05. The relationship is significant; H1 is accepted.
- Hypothesis 2 (H2): Information quality $\rightarrow$ User satisfaction
Original sample (β) = 0.33830, t-statistic = 6.40763, and p-value = 0.000 < 0.05. The relationship is significant; H2 is accepted.
- Hypothesis 3 (H3): Service interaction quality $\rightarrow$ User satisfaction
Original sample (β) = 0.19984, t-statistic = 3.90357, and p-value = 0.00010 < 0.05. The relationship is significant; H3 is accepted.
- Hypothesis 4 (H4): User satisfaction $\rightarrow$ Online purchase intention
Original sample (β) = 0.30075, t-statistic = 4.22757, and p-value = 0.00002 < 0.05. The relationship is significant; H4 is accepted.
- Hypothesis 5 (H5): Usability quality $\rightarrow$ User satisfaction $\rightarrow$ Online purchase intention
Original sample (β) = 0.10842, t-statistic = 3.48850, and

p-value = $0.00049 < 0.05$. The relationship is significant; H5 is accepted.

- Hypothesis 6 (H6): Information quality → User satisfaction → Online purchase intention

Original sample (β) = 0.10175, t-statistic = 3.49465, and p-value = $0.00048 < 0.05$. The relationship is significant; H6 is accepted.

- Hypothesis 7 (H7): Service interaction quality → User satisfaction → Online purchase intention

Original Sample (β) = 0.06010, t-statistic = 2.78642, and p-value = $0.00535 < 0.05$. The relationship is significant; H7 is accepted.

- Hypothesis 8 (H8): User satisfaction × Algorithmic personalization → Online purchase intention

Original sample (β) = 0.47334, t-statistic = 9.00383, and p-value = $0.00000 < 0.05$. The relationship is significant; H8 is accepted.

Further analysis of the f^2 values reveals that the moderating effect of Algorithmic Personalization on the relationship between User Satisfaction and Online Purchase Intention has an f^2 value of 0.40415, which is larger than the f^2 value for the direct effect (0.06012). This condition suggests that algorithmic personalization significantly moderates the relationship between user satisfaction and online purchase intention. Therefore, we can conclude that algorithmic personalization effectively moderates the relationship between user satisfaction and online purchase intention.

D. Discussion

The results of this study extend both WebQual 4.0 [22] and ECT [20] by demonstrating their relevance in algorithm-driven social commerce contexts. The findings confirm that WebQual dimensions remain central in shaping user satisfaction, while also showing that their effects unfold within platforms where user experiences are structured by algorithmic personalization rather than solely by user-initiated interactions. Moreover, the study advances ECT by revealing that the influence of user satisfaction on online purchase intention is contingent on the intensity of personalization, highlighting the role of algorithm-mediated experiences in shaping post-consumption evaluations and behavioral intentions.

The findings show that the magnitude of usability quality has a positive and significant effect on user satisfaction, encompassing cognitive experiences such as efficiency, learnability, and response time, as well as affective responses such as comfort and trust. System efficiency, intuitive navigation, and interface stability reflect an evaluative process through which users interpret ease of use as an indicator of the system's reliability and predictability, thereby building trust through clear interactions. Empirical evidence by [8], [12], [26] reinforces this relationship, as clear and stable interfaces foster a sense of control and security that shapes satisfaction. At the

same time, [10] and [27] further argue that usability dimensions can serve as affective catalysts, transforming technical perceptions into emotional commitment toward the system.

Information quality is a key cognitive construct that drives user satisfaction by validating accuracy, relevance, and comprehensibility; users evaluate not only factual correctness but also how well the information supports purchasing decisions and fits their needs. This process involves both cognitive and affective elements, as satisfaction emerges when information is perceived as valuable, useful, and trustworthy. Empirical evidence reinforces this mechanism. Accurate and relevant information enhances clarity and transparency, which increases satisfaction [27]. Appropriate presentation formats such as text, video, and live streaming strengthen platform credibility and emotional trust [29], while high content relevance reduces uncertainty and strengthens expectation confirmation [12].

The findings also highlight service interaction quality as a relational dimension that shapes user satisfaction through social, emotional, and trust-based experiences within the digital system. Interaction quality is not only determined by technical responsiveness but also by the meaningful relationships users experience through fast communication, clear transaction information, and a sense of security. These interaction patterns foster confidence in the platform's credibility and reliability. Empirical evidence from [8], [11], [12] supports this relationship by showing that empathy and responsiveness in e-commerce contexts enhance emotional attachment and satisfaction.

User satisfaction plays a vital role in shaping online purchase intention and is among the strongest predictors of whether users will repurchase or recommend the platform. These findings suggest that affective evaluations formed through users' system experiences translate into tangible behavioral intentions, meaning that emotionally satisfied users are more motivated to make purchases. In particular, satisfaction derived through expectation confirmation leads to repurchase intention, as users affirm a positive experience and become willing to repeat it.

This is consistent with earlier studies [14], [31], [32], which indicate that satisfaction functions as a psychological mediator between user experiences and purchase intention. Indicators such as interest in buying and intention to recommend represent observable outcomes of subjective satisfaction. This shift from emotional response to concrete intention highlights satisfaction as a key driver of behavioral outcomes in digital shopping contexts.

The mediation analysis results shed further light on the influence of usability quality on online purchase intention, with user satisfaction playing a vital role in this process. Specifically, the findings show that high usability quality, defined by ease of use, clarity, and system stability, does not immediately result in purchasing behavior; instead, it first creates a favorable

emotional and cognitive experience that leads to satisfaction, which subsequently affects purchase intentions. Improved system usability enhances users' confirmed expectations reflected in positive satisfaction [8], [10], [12], [27]. Once satisfied, users' intention to make purchases is strengthened [14], [31], [32]. This process suggests that usability should be viewed not only as a technical metric of system performance but also as a key factor that triggers emotional engagement, which, in turn, influences future purchasing behavior.

Similar to usability, information quality plays a significant role in shaping user satisfaction and ultimately driving online purchase intention. The results show that information quality, as reflected in the accuracy, relevance, and clarity of product or service information, does not directly affect online purchase intention. Instead, its effect on online purchase intention is mediated by satisfaction: accurate and relevant information provides cognitive validation that the platform is trustworthy and capable of meeting users' needs, thereby generating satisfaction and motivating purchase intentions. This mediating mechanism is consistent with prior research [34], which highlights that high information quality reduces uncertainty and gradually builds user trust. When users perceive the platform's information as reliable and useful, they become more confident in their purchasing decisions and more likely to purchase in the future.

Service interaction quality plays a crucial role in shaping users' satisfaction and influencing online purchase intention. High-quality service interactions are usually described as responsive, empathetic, and reliable, which enhance satisfaction and, consequently, increase purchasing intentions. This condition indicates that the better the interaction between users and the platform in terms of customer support, service responsiveness, and overall communication, the better their emotional experience will be, leading to stronger behavioral intentions to purchase. These results support the findings of [34], which show that service interactions are not purely functional but also affective: when users feel well cared for, their emotional attachment to the platform grows, motivating them to make more purchases and recommend the service to others.

The moderation results indicate that algorithmic personalization significantly strengthens the relationship between user satisfaction and online purchase intention. In this context, personalization refers to the system's ability to adapt its offerings based on users' preferences and usage behavior, making recommendations more relevant and aligned with individual needs. When users perceive recommendations as personally meaningful, their satisfaction becomes more influential, thereby increasing their intention to purchase.

Algorithmic personalization, therefore, functions not only as a technical mechanism but also as a driver of emotional resonance, making users feel understood and valued, which further encourages online purchase intention. Prior studies [37] and [38] similarly report that personalized experiences lead to stronger user behaviors, and investments in personalization algorithms can enhance satisfaction and purchasing outcomes

by improving recommendation relevance [39], [40].

E. Implication

This study provides important theoretical and managerial implications by advancing the understanding of online purchase intention in social commerce through an integrated perspective of WebQual 4.0 and ECT. The findings confirm that web quality dimensions, including usability, information, and service interaction quality, shape users' cognitive and affective experiences and foster user satisfaction as the key mechanism linking platform evaluations to behavioral intentions. In particular, information quality influences online purchase intention indirectly through satisfaction, reinforcing satisfaction as a form of expectation-based validation and trust formation in digital shopping contexts.

This study also extends personalization research by demonstrating that algorithmic personalization strengthens the relationship between user satisfaction and online purchase intention, indicating that recommendations serve not only as technical features but also as sources of emotional resonance and perceived value.

From a managerial perspective, social commerce platforms should enhance overall web quality by improving system efficiency, navigation, interface stability, clarity of product information, and secure, responsive service interactions. Simultaneously, platforms should continuously optimize algorithmic personalization to provide relevant, accurate, diverse, and non-intrusive recommendations, thereby translating satisfaction more effectively into purchase intention, loyalty, repeat purchasing, and sustainable transaction growth.

V. CONCLUSION

This study investigates the determinants of online purchase intention in social commerce, with a specific focus on TikTok Shop. The findings reveal that web quality, represented by usability quality, information quality, and service interaction quality, significantly enhances user satisfaction, which in turn serves as a central driver of online purchase intention. These results confirm that positive platform experiences are critical in shaping consumer decision-making within social commerce environments.

Beyond these direct relationships, the study demonstrates that algorithmic personalization plays a crucial role in amplifying the effect of user satisfaction on online purchase intention. Personalized content and product recommendations increase the relevance of platform interactions, thereby strengthening the behavioral impact of satisfaction. This finding underscores the importance of personalization technologies on algorithm-driven platforms, where purchasing decisions are often triggered during content consumption rather than through deliberate search.

From a theoretical perspective, the findings enrich WebQual 4.0 and ECT by extending their applicability to social commerce contexts characterized by algorithmic curation. The results suggest that web quality dimensions should be understood as experiential attributes embedded within

dynamically personalized systems. In practice, the study highlights the need for platform managers to integrate system usability, high-quality information, responsive service interactions, and effective personalization strategies to foster stronger engagement and purchase outcomes.

Despite these contributions, this study has several limitations. The data were collected exclusively from TikTok Shop users in Banjarmasin, which may limit the generalizability of the findings. Future research is encouraged to examine this model across different geographic settings and social commerce platforms, to incorporate additional variables such as trust, perceived risk, and social influence, and to employ longitudinal or experimental designs to better capture the evolving role of algorithmic personalization in digital consumer behavior.

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