Social Commerce Dynamics and Online Impulse Buying: The Mediating Role of Consumer Trust among Gen Z and Millennials

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***Abstract*—The quantitative research measures the influence of social proof techniques, interaction with peers, and credibility of the platform on online impulse purchase behavior of Generation Z and Millennials engaged in social commerce activities (N=133). Using the results of the empirical survey, the measurement model analyzes the direct and mediated effects between Social Commerce Constructs (SCC), Perceived Social Support (PSS), Consumer Trust (TRST), and Impulse Buying Intention (IBI). Reliability check shows that all constructs have high internal consistency ($\alpha \geq 0.80$). Correlation analysis of bivariate Pearson correlations reveals that all constructs are significantly and positively correlated ($p<0.001$). Consumer Trust has the highest connection with impulse buying intention ($r=0.694$). The results of multiple linear regression prove that the hypothesized structural model explains 46.8% of the total variance in the impulsive behavior of online consumers ($R^2=0.468$, $F(3,129)=37.78$, $p<0.001$). Social Commerce Constructs have the greatest direct effect ($\beta=0.362$, $p<0.001$), then Consumer Trust ($\beta=0.275$, $p<0.001$), and Perceived Social Support ($\beta=0.211$, $p=0.007$). Additionally, Hayes PROCESS Macro analysis (Model 4) proves that Consumer Trust is a statistically significant partial mediator in the relation between Social Commerce Constructs and Impulse Buying Intention ("effect"=0.152,95%" Boot CI "[0.078,0.242]) and accounts for 28.0% of the total effect ("VAF"=28.0%). The results mean that the presence of dynamic social proof stimulates spontaneous purchasing, but creating trust infrastructure and receiving peer support is necessary to achieve maximum effectiveness of purchasing activity.**

***Index Terms*—Social commerce, social proof, Impulse buying intention, Consumer trust, Perceived social support, Gen Z & millennials, Mediation analysis, PROCESS macro**

I. INTRODUCTION

The accelerated growth of digital commerce over the last two decades has fundamentally changed the global retail sector. Initial models of e-commerce that involved linear transaction-oriented interaction between detached buyers and virtual shops have been replaced with highly dynamic and socialized retailing experience. Such a shift can be broadly understood as a development of social commerce, a strategic combination of social media and electronic commerce functions. Unlike traditional e-commerce sites operating mostly as digital catalogs, social commerce platforms provide consumers with user-generated content, instant socialization opportunities, peer recommendations, and transactional functionalities integrated directly into the flow of social media feeds. As a result, digital networking platforms like Instagram, TikTok, Facebook Marketplace, and YouTube have been transformed from mere means of communications and entertainment into potent channels of discovery, engagement, and commerce.

A key element in the mechanics and success of social commerce is the widespread use of social proof. According to classical social psychology, social proof implies that people tend to rely on the behavior of other people when they face uncertainties and lack information. In social commerce platforms, social proof is represented by multiple forms of digital proof, such as user-generated reviews, numeric star rating, peer recommendations, influencer endorsements, real-time viewership during live commerce streams, and post-purchase sharing. All these kinds of information become critical heuristics that lower search costs, minimize the risk associated with the uncertain

product performance, and instantly validate the product, seller, and its popularity.

At the same time, rapid development of social commerce has fundamentally reshaped consumer decision-making process making these environments highly susceptible to impulsive buying. Impulse buying is an unplanned sudden purchase made out of a sudden desire initiated immediately by some kind of stimulus. Historically, it was an essential component of overall retail revenues. Within social commerce ecosystem, however, the chance of such behavior is much higher. Instant "buy now" links, live video streaming, algorithm-based content distribution, and interactive social feeds minimize cognitive evaluation process and make the gap between product discovery and financial transaction extremely narrow. Younger generations of digital native consumers, especially Gen Z and Millennials, are highly involved in their regular social media activities and thus are subject to constant social stimuli, high amount of peer reviews and influencer recommendations.

II. REVIEW OF LITERATURE

1. Design and Social Features of Architectures The transformation from conventional e-commerce to social commerce is dependent upon architecture design and implementation of social features. As illustrated by Huang and Benyoucef (2013), the introduction of interactive social features such as user forums, review features and social feeds changes the online environment from a transactional platform to a social one. Through this design, consumers can transform from mere buyers to brand value co-creators.

2. Change in Consumer Decision Power: The architecture of social commerce changes the dynamics of decision-making power between consumers and online merchants. Peer recommendations, consumer ratings and post-consumption experiences decentralize the control of information. By facilitating direct access to peer information, the social commerce architectures reduce dependency on seller generated information and enhance consumer influence in market transactions.

3. Determinants of Social Commerce Intentions: The intentions of consumers to purchase in social media depend on the social support mechanisms and the trust of the underlying platform. Sheikh et al. (2019) reveal that informational support such as user reviews and emotional support from peers enhance consumer trust. This is the basis of willingness by users to engage in commercial activities in social networks.

4. Social Presence and Purchase Intention Building up interpersonal closeness in digital spaces can help in mitigating the problem of physical distance in online shopping. According to Lu et al. (2016), high social presence, which is established by means of real-time communication tools and peer interaction features, enhances consumer trust in social commerce vendors. High social presence leads to purchase intention.

5. Mechanism of Trust Transfer Consumers often transfer trust from the social networking platform to unknown third-party vendors in it. Zhao et al. (2019) examine the mechanism in a customer-to-customer (C2C) context and find out that institutional trust of the hosting platform serves as a bridge. This institutional trust is then transferred to the individuals and reduces their perceived risks and encourages repeated purchase behaviors.

6. Drivers of Electronic Word-of-Mouth (eWOM) Generation of user reviews and recommendations is critical in sustaining the growth of social commerce. Ahmad and Laroche (2017) investigate consumer review helpfulness and identify a social commerce construct referred to as eWOM. The study reveals that positive and negative reviews contribute differently to informational support and shape peer purchase decision.

7. Drivers of Online Impulse Buying In social commerce environment, impulse buying is encouraged by interactive mechanisms. Akram et al. (2018) evaluate drivers of online impulse buying in social commerce platforms based on Stimulus-Organism-Response (S-O-R). Their findings indicate that exposure to product variety, visual appeal and peer influence induces positive emotions leading to impulse purchases.

8. Mechanisms of Social Learning in Purchase Decision Consumers make use of peer actions and feedback to develop purchase strategies. Chen et al. (2017) apply social learning approach to evaluate decision-making in social platforms. Their findings indicate that social interaction and observation of

habits of community members reduce search costs and lead to purchase decisions.

9. Live Stream Commerce Live stream commerce involves real-time product demonstration and instant communication between viewers and sellers. Wongkitrungrueng and Assarut (2020) reveal that live stream sales foster consumer trust and engagement in that they offer transparency about the products and instant engagement. This interactive environment decreases uncertainty and increases sales conversions.

10. Mechanisms of Uncertainty Reduction in Live Streaming: The dynamic process involved in live video shopping helps in reducing cognitive risks during consumer evaluations. Lu and Chen (2021) investigate live streaming commerce from the perspective of uncertainty reduction and find out that the responsiveness of the broadcaster and real-time social proof mitigate product performance concerns. This reduction in uncertainty leads to buyer intent.

11. Trust Transfer in Live Stream Selling In live stream selling, consumers perceive the trust of the broadcaster in the products presented during the live streaming. Chen et al. (2020) illustrate how trust of the live streamer is transferred directly to the products being sold. This increases speed of purchase through reduced information processing.

12. Antecedents of Platform eWOM Engagement Sustained consumer participation in social commerce depends on peer communication networks. Ali et al. (2020) establish that platform interactivity, its usefulness and community belonging encourage users to engage in eWOM. This continuous interaction sustains the value of community.

13. Familiarity of Platform and Drives Social commerce adoption drivers include general platform familiarity and social presence that increase consumer confidence in the social commerce platforms. Al-Adwan and Kokash (2019) identify key drivers of social commerce adoption, including platform familiarity and social presence that increase user trust and buy intention.

III. METHODOLOGY

Primary Objectives:

1. To evaluate the impact of Social Commerce Constructs (eWOM, platform design) on consumer trust.
2. To determine the effect of social support (informational and emotional) on purchase intentions.
3. To analyze how trust transfer mechanisms influence online impulse buying behavior.

Hypotheses (H_1 to H_4):

- H_1: Social Commerce Constructs (eWOM and interactive features) significantly positive influence consumer trust.
- H_2: Perceived social support (informational and emotional) significantly increases consumer purchase intention.
- H_3: Consumer trust positively impacts impulse buying behavior in social commerce environments.
- H_4: Trust in the hosting social platform significantly transfers to third-party seller trust.

Analytical Tools & Quantitative Methods:

- Software: IBM SPSS / SmartPLS / R
- Descriptive Statistics: Frequencies, percentages, means, and standard deviations for demographic profile ($N = 133$).
- Reliability & Validity: Cronbach's Alpha ($\alpha \geq 0.70$) and Composite Reliability.
- Inferential Statistics: Pearson Correlation Analysis, Multiple Linear Regression Analysis, and Structural Equation Modeling (PLS-SEM) to test Hypotheses H_1 through H_4.

IV. RESULTS

1. Sample Demographic Profile

Demographic Breakdown ($N = 133$)

Metric / Variable	Category	Frequency (n)	Percentage (%)
Gender Identity	Female	80	60.15%
	Male	49	36.84%

	Non-binary / Prefer not to say	4	3.01%
Age Group	18–24	53	39.85%
	25–34	47	35.34%
	35–44	22	16.54%
	Under 18	7	5.26%
	45 and above	4	3.01%
Primary Platform	Instagram	55	41.35%
	TikTok	46	34.59%
	Facebook / Meta Marketplace	21	15.79%
	YouTube / Live Streams	9	6.77%
	Other	2	1.50%

Interpretation: The target population heavily aligns with Gen Z and Millennial active social media shoppers (75.19% aged 18–34), with a predominant female presence (60.15%). Instagram (41.35%) and TikTok (34.59%) constitute over 75% of active social shopping engagement, confirming high platform familiarity and social proof exposure.

2. Scale Reliability & Descriptive Statistics

Construct Psychometric Properties ($N = 133$)

Construct / Subscale	Items Count	Mean	Std. Deviation	Cronbach's Alpha (α)	Internal Consistency Benchmark
Social Commerce Constructs (SCC)	4	3.94	0.80	0.842	Good ($\alpha \geq 0.80$)
Perceived Social Support (PSS)	4	3.61	0.87	0.826	Good ($\alpha \geq 0.80$)
Consumer Trust (TRST)	5	3.46	0.93	0.865	Good ($\alpha \geq 0.80$)
Impulse Buying Intention (IBI)	3	3.43	0.84	0.811	Good ($\alpha \geq 0.80$)

Interpretation: All four constructs exceed the standard academic threshold of $\alpha \geq 0.70$, demonstrating strong internal consistency and measurement reliability. Respondents reported the highest mean baseline for Social Commerce Constructs ($M = 3.94$), highlighting strong engagement with ratings, interactive features, and user reviews.

3. Inter-Construct Correlation Analysis

Bivariate Pearson Correlation Matrix (r)

Construct	1. Mean_SCC	2. Mean_PSS	3. Mean_TRST	4. Mean_IBI	Sig. Level
1. Mean_SCC	1.000	0.586	0.566	0.660	$p < 0.001$
2. Mean_PSS	0.586	1.000	0.551	0.646	$p < 0.001$
3. Mean_TRST	0.566	0.551	1.000	0.694	$p < 0.001$
4. Mean_IBI	0.660	0.646	0.694	1.000	$p < 0.001$

Interpretation: All constructs exhibit moderate-to-strong statistically significant positive linear relationships ($p < 0.001$). Consumer Trust displays the highest correlation with Impulse Buying Intention ($r = 0.694$). Furthermore, no inter-construct correlations exceed $r = 0.80$, confirming the absence of severe multicollinearity.

4. Multiple Linear Regression Model

Model Goodness-of-Fit Summary (DV: Impulse Buying Intention)

R	R2	Adjusted R2	Std. Error of Estimate	F-Statistic	p-value
0.684	0.468	0.455	0.428	37.78	< 0.001

Regression Coefficients & Multicollinearity Diagnostics

Predictor Variable	Unstandardized B	Std. Error	Standardized Beta (β)	t-value	p-value	Tolerance	VIF
(Constant)	0.412	0.285	—	1.446	0.151	—	—
Social Commerce (SCC)	0.385	0.082	0.362	4.695	< 0.001	0.612	1.634
Perceived Social Support (PSS)	0.214	0.078	0.211	2.744	0.007	0.628	1.592

Consumer Trust (TRST)	0.268	0.074	0.275	3.622	< 0.001	0.645	1.550

Interpretation: The overall model is statistically significant ($F(3,129) = 37.78, p < 0.001$) and accounts for 46.8% of the variance in Impulse Buying Intention ($R^2 = 0.468$). All predictors contribute significantly:

- Social Commerce Constructs ($\beta = 0.362, p < 0.001$) exert the strongest direct effect on impulse purchases.
- Consumer Trust ($\beta = 0.275, p < 0.001$) and Perceived Social Support ($\beta = 0.211, p = 0.007$) follow as direct predictors.
- Variance Inflation Factors ($VIF < 5.0$) confirm that multicollinearity is well within safe thresholds.

5. Mediation Analysis (Hayes PROCESS Model 4)

Path Analysis: SCC → TRST → IBI

Path / Effect Type	Effect (β)	Std. Error	t-value	p-value	Boot LLCI (95%)	Boot ULCI (95%)	Hypothesis Conclusion
Total Effect (c)	0.542	0.075	7.227	< 0.001	0.394	0.690	Supported
Direct Path a (SCC → TRST)	0.486	0.071	6.845	< 0.001	0.346	0.626	Supported
Direct Path b (TRST → IBI)	0.312	0.072	4.333	< 0.001	0.170	0.454	Supported
Direct Effect c′ (SCC → IBI)	0.390	0.079	4.937	< 0.001	0.234	0.546	Supported
Indirect Effect (a × b)	0.152	0.042	—	—	0.078	0.242	Partial Mediation (VAF = 28.0%)

Interpretation: Consumer Trust significantly mediates the link between Social Commerce Constructs and Impulse Buying Intention. Because 0 is not included within the 95% bootstrap confidence interval [0.078,0.242], the indirect effect (effect = 0.152) is statistically significant. The Variance Accounted For ($VAF = \frac{0.152}{0.542} \times 100 = 28.0\%$) demonstrates that Consumer Trust acts as a partial mediator, absorbing 28% of the total impact social proof features exert on impulse purchases.

V. FINDINGS

The empirical investigation ($N = 133$) offers key insights into how social proof mechanisms, peer interactions, and platform credibility drive online impulse buying behavior among Gen Z and Millennial shoppers across social commerce environments [cite: 1].

Psychometric reliability tests confirmed robust measurement integrity across all structural variables, with Cronbach's alpha coefficients surpassing the standard academic benchmark ($\alpha \geq 0.80$)[cite: 1]. Social Commerce Constructs registered the highest mean baseline ($M = 3.94, SD = 0.80$), demonstrating that ratings, interactive product communication, and peer reviews are deeply embedded in modern digital shopping habits [cite: 1]. Perceived Social Support followed ($M = 3.61, SD = 0.87$), underscoring the necessity of peer feedback during product evaluation [cite: 1]. Consumer Trust recorded a mean of 3.46 ($SD = 0.93$), while Impulse Buying Intention averaged 3.43 ($SD = 0.84$)[cite: 1].

Bivariate Pearson correlation analysis revealed statistically significant positive linear associations among all constructs ($p < 0.001$)[cite: 1]. Consumer Trust established the strongest correlation with Impulse Buying Intention ($r = 0.694$), proving that feeling secure directly correlates with spontaneous purchasing [cite: 1]. Inter-construct correlations remained below $r = 0.80$, ruling out severe multicollinearity concerns [cite: 1].

Multiple linear regression modeling demonstrated strong explanatory power ($R^2 = 0.468$,Adjusted $R^2 = 0.455, F(3,129) = 37.78, p < 0.001$), indicating that the combined predictors account for 46.8% of the total variance in impulse buying behavior [cite: 1]. Pathway contributions confirmed that Social Commerce

Constructs exert the highest direct influence on impulse buying ($\beta = 0.362, p < 0.001$), followed by Consumer Trust ($\beta = 0.275, p < 0.001$) and Perceived Social Support ($\beta = 0.211, p = 0.007$)[cite: 1]. Variance Inflation Factors ($VIF < 1.70$) verified model stability [cite: 1].

Hayes PROCESS Macro (Model 4) mediation analysis confirmed that Consumer Trust acts as a significant partial mediator between Social Commerce Constructs and Impulse Buying Intention [cite: 1]. The total effect of social commerce on impulse buying was significant ($c = 0.542, p < 0.001$)[cite: 1]. The indirect path through Consumer Trust ($a \times b = 0.152$) was statistically confirmed via 5,000 bias-corrected bootstrap resamples, as the 95% confidence interval did not span zero [0.078,0.242][cite: 1]. Calculating the Variance Accounted For ($VAF = 28.0\%$) reveals that Consumer Trust mediates nearly a third of the total relationship, confirming that social proof triggers immediate purchases both directly and by building buyer trust

VI. SUGGESTIONS

Based on the quantitative empirical findings, social commerce platforms and online vendors should execute three targeted strategies:

- Optimize Social Proof Density and Interactive Features: Because Social Commerce Constructs exert the strongest direct impact on impulse buying ($\beta = 0.362$), digital platforms must embed high-density social proof directly into browsing feeds [cite: 1]. This includes showcasing real-time user ratings, verified customer photo/video reviews, and interactive live streaming features that lower decision friction and trigger immediate buying choices [cite: 1].
- Build Robust Consumer Trust Architecture: Given that Consumer Trust serves as both a partial mediator ($VAF = 28.0\%$) and direct predictor ($\beta = 0.275$), platforms must systematically reduce buyer risk [cite: 1]. Implementing visible buyer protection guarantees, secure payment processing, transparent return policies, and vendor verification badges will strengthen platform reliability and convert initial interest into immediate sales [cite: 1].
- Cultivate Community-Driven Social Support: Since Perceived Social Support significantly drives impulse buying ($\beta = 0.211$), platforms should foster interactive user communities [cite: 1]. Building customer forum spaces and encouraging authentic peer-to-peer recommendation exchanges creates a supportive environment that validates buyer decisions and fuels spontaneous purchasing [cite: 1].

VII. CONCLUSION

This study confirms that social proof elements, peer support, and platform trust play pivotal roles in driving online impulse buying among Gen Z and Millennial shoppers [cite: 1]. The regression model accounts for 46.8% of variance in impulse buying intent, driven directly by social commerce features, trust, and peer support [cite: 1]. Hayes PROCESS mediation analysis proves that Consumer Trust functions as a key partial mediator ($VAF = 28.0\%$), bridging social mechanics with immediate buying action [cite: 1]. To optimize conversions, social commerce platforms must balance vibrant peer social proof with robust, trust-building operational infrastructure[cite: 1].

REFERENCES

[1] Ahmad, S. N., and M. Laroche, "Analyzing electronic word of mouth: A social commerce construct," International Journal of Information Management, vol. 37, no. 3, pp. 202–213, 2017, doi: 10.1016/j.ijinfomgt.2016.08.004.

[2] Akram, U., P. Hui, M. K. Khan, C. Yan, and Z. Akram, "Factors affecting online impulse buying: Evidence from Chinese social commerce environment," Sustainability, vol. 10, no. 2, Art. no. 352, 2018, doi: 10.3390/su10020352.

[3] Al-Adwan, A. S., and H. Kokash, "The driving forces of Facebook social commerce," Journal of Theoretical and Applied Electronic Commerce Research, vol. 14, no. 2, pp. 15–32, 2019, doi: 10.4067/S0718-18762019000200103.

[4] Ali, Y. S., A. R. C. Hussin, and H. M. Dahlan, "Electronic word of mouth engagement in social commerce platforms: An empirical study," Information Development, vol. 36, no. 3, pp. 438–456, 2020, doi: 10.1177/0266666919864070.

[5] Chen, A., Y. Lu, and B. Wang, "Customers' purchase decision-making process in social commerce: A social learning perspective," International Journal of Information Management, vol. 37, no. 6, pp. 627–638, 2017, doi: 10.1016/j.ijinfomgt.2017.05.008.

[6] Chen, C. D., Q. Zhao, and J. L. Wang, "How livestreaming increases product sales: Role of trust transfer and elaboration likelihood model," Behaviour & Information Technology, vol. 41, no. 2, pp. 358–373, 2022, doi: 10.1080/0144929X.2020.1801640.

[7] Hajli, N., and J. Sims, "Social commerce: The transfer of power from sellers to buyers," Technological Forecasting and Social Change, vol. 94, pp. 350–358, 2015, doi: 10.1016/j.techfore.2015.01.012.

[8] Huang, Z., and M. Benyoucef, "From e-commerce to social commerce: A close look at design features," Electronic Commerce Research and Applications, vol. 12, no. 4, pp. 246–259, 2013, doi: 10.1016/j.elerap.2012.12.003.

[9] Lu, B., and Z. Chen, "Live streaming commerce and consumers' purchase intention: An uncertainty reduction perspective," Information & Management, vol. 58, no. 7, Art. no. 103509, 2021, doi: 10.1016/j.im.2021.103509.

[10] Lu, B., W. Fan, and M. Zhou, "Social presence, trust, and social commerce purchase intention: Empirical research," Computers in Human Behavior, vol. 56, pp. 225–237, 2016, doi: 10.1016/j.chb.2015.11.057.

[11] Sheikh, Z., L. Yezheng, T. Islam, Z. Hameed, and I. U. Khan, "Impact of social commerce constructs and social support on social commerce intentions," Information Technology & People, vol. 32, no. 1, pp. 68–93, 2019, doi: 10.1108/ITP-04-2018-0182.

[12] Wongkitrungrueng, A., and N. Assarut, "The role of live streaming in building consumer trust and engagement with social commerce sellers," Journal of Retailing and Consumer Services, vol. 53, Art. no. 101986, 2020, doi: 10.1016/j.jretconser.2019.101986.

[13] Zhao, J. D., J. S. Huang, and S. Su, "The effects of trust on consumers' continuous purchase intentions in C2C social commerce: A trust transfer perspective," Journal of Retailing and Consumer Services, vol. 50, pp. 42–49, 2019, doi: 10.1016/j.jretconser.2019.04.014.