

## A PLS-SEM Based Approach: Analyzing Generation Z Purchase Intention Through Facebook's Big Data

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**Abstract:** The objective of this paper is to provide a better rendition of Generation Z purchase intentions of retail products through Facebook. The study gyrated around the favorable attitude formation of Generation Z translating into intentions to purchase retail products through Facebook. The role of antecedents of attitude, namely enjoyment, credibility, and peer communication was also explored. The main purpose was to analyze the F-commerce pervasiveness (retail purchases through Facebook) among Generation Z in India and how could it be materialized effectively. A conceptual façade was proposed after trotting out germane and urbane literature. The study focused exclusively on Generation Z population. The data were statistically analyzed using partial least squares structural equation modelling. The study found the proposed conceptual model had a high prediction power of Generation Z intentions to purchase retail products through Facebook verifying the materialization of F-commerce. Enjoyment, credibility, and peer communication were proved to be good predictors of attitude ( $R^2=0.589$ ) and furthermore attitude was found to be a stellar antecedent to purchase intentions ( $R^2=0.540$ ).

**Key words:** Facebook; enjoyment; credibility; peer communication; attitude; intentions to purchase

### 1 Introduction

It has become pertinent for retail marketers to capitalize on social networking sites in promoting products, commercialize transactions, and give fillips to business activities. The digital era has come as a boon and witnessed a change from just being a mere agent

of advertising to handling multifarious activities like review, sharing, feedback analysis, providing pedestals for s-commerce (using social networking sites for e-commerce activities), pecuniary transactions, constant market vigilantism, and so on. A new type of commerce known as F-commerce has emerged as a result of the creation of Facebook<sup>[1]</sup>, and retailers have started

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capitalizing F-commerce to enhance buying experiences through better feedback, advocacy, and assistance in consumer loyalty<sup>[2]</sup>. Facebook has gained the cynosure among the social networking sites and graduated to a high level of affinity among Generation Z. As of 2020, it is estimated that Facebook has 1.7 billion daily active users, accounting to 37% of the global internet users.

Facebook has been an indispensable tool to retail companies and empirical evidence lends credence to the narrative. According to the data from Ref. [3], 97% of Fortune-100 firms have used social media tools, and 54% of them have Facebook fan sites. This makes Facebook the primary focus of the research. Further research have revealed that 96% of Fortune-500 specialty stores use Facebook to get happy customers' reviews. Reference [4] made Facebook an integral part of retail commercial activities. Facebook has become a mojo tool in the hands of marketers as Ref. [5] reported that 93% of the marketers have been using Facebook for marketing retail products. Facebook has extended its tentacles to even small and medium enterprises, enhancing their capabilities to forge a covenant directly to consumers<sup>[6]</sup> and adding the luxury to small business operations. Mobile portability has added to the usage of Facebook by enabling interactions with consumers encase simultaneously<sup>[7]</sup>, leading to cost competencies by saving fortunes on social media advertising<sup>[8]</sup>.

Generation Z or Zoomers are people who are born between 1997 and 2015. The underlying rationale of analyzing Generation Z was their adeptness in using technology to hobnob easily and they are considered quick learners of the advances in digital technological implements, especially in e-retailing and social networking. Generation Z has known to be highly captivated and influenced by social networking sites (like Facebook), and forge a natural camaraderie in connecting with people using social networking sites<sup>[9]</sup>.

Hence, retail firms which target neophyte users have to build tailored products with prompt feedbacks, else the propensity to switch to alternatives is highly elastic among Generation Z<sup>[10]</sup>.

#### Practitioner notes box

What is already known about the topic?

- Facebook is a de rigueur and the most preferred social networking site among Generation Z.
- Retail firms have been vying hard to capitalize on Facebook for various commercial activities.
- Generation Z's attitude is more favorable towards online retailing due to adeptness in using internet

technology.

#### What value does this paper add?

- The study predicts Generation Z's attitude towards purchase intentions of retail goods through Facebook.
- Enjoyment, credibility, and peer communication were able to predict Generation Z's attitude towards purchasing retail goods through Facebook.
- F-commerce has untapped potential and retail marketers shall capitalize on Generation Z's increasing propensity to use Facebook in an eloquent manner.

#### What findings do the paper posit?

- It was found that Generation Z's attitude was a major antecedent for forging intentions to purchase retail products through Facebook.

The attitude of Generation Z to purchase retail goods could be further enhanced by improving on the perceived enjoyment, credibility of Facebook, and enhancing peer communication.

## 2 Literature Review and Hypothesis Development

The definitions of the constructs taken in the study are mentioned in Table 1.

### 2.1 Enjoyment

In research, it was found that young consumers' perceived enjoyment was a determining predictor for

**Table 1** Definitions of the constructs.

Construct	Definition	Reference
Enjoyment	The term "enjoyment" refers to a favourable emotional reaction to a sporting event that expresses perceptions and emotions like pleasure, like, and having fun.	[11]
Credibility	Credibility has been viewed in information science as one of the relevant judgement criteria that are used to determine whether to accept or reject information that has been retrieved.	[12]
Peer communication	Operationally, peer communication was defined as overt contacts between young adults concerning products and services.	[13]
Attitude	"Chosen state of mind, mental outlook, or disposition with reference to a fact or condition" is the definition of "attitude".	[14]
Purchase intention	Purchase intentions are an individual's conscious plan to make an effort to purchase a brand.	[15]

intention to purchase retail products from Facebook<sup>[16]</sup>. The more enjoyable online shopping is, the more favorable the young consumers' intent to purchase online would be<sup>[17]</sup>. It is seen that perceived enjoyment draws hedonic pleasure within young consumers' purchase intentions of a product online and ensconces the customer loyalty base<sup>[17]</sup>. A sense of perceived enjoyment while using an online media for shopping will trigger positive intentions within young consumers' attitude to purchase more online in the future<sup>[18]</sup>. Purchasing online is an enjoyable experience which spawns amusement and stimulates imaginative thoughts of young consumers that help ease tense lives<sup>[19]</sup>. Perceived enjoyment is known to increase the smug factors within young consumers and help groom upbeat sentiments<sup>[20]</sup>. Behavioral intentions to purchase online through Facebook will be stronger if consumers draw an elated sense of enjoyment from the process of online purchasing<sup>[21]</sup>. Therefore, the following alternative hypothesis was suggested:

**H1:** Enjoyment has a favourable and significant relationship with Generation Z's perception of Facebook interactions with retail companies.

## 2.2 Credibility

In the study, consumer credibility is a synecdoche for consumer trust. When compared to physical shopping, online shopping requires a high level of credibility<sup>[22]</sup>. It was found that the platform/medium of purchase directly affected consumers' confidence and credibility in e-commerce<sup>[23]</sup>. Social media credibility serves as an effective channel for easing ephemeral and complicated transactions associated with online environmental purchases<sup>[24]</sup>. It has also been observed that, regardless of company size or type, a significant barrier to the effective adoption of internet purchasing for retail items is a lack of confidence<sup>[25]</sup>. The biggest barrier to customers adopting online buying is a lack of credibility, which makes consumers hesitant to make purchases<sup>[26,27]</sup>. A reliable platform is provided by the veracity of information shared on social networking sites like Facebook and by retail companies, which increases customer involvement for online transactions<sup>[28]</sup>.

**H2:** Generation Z's attitude about engaging with retail businesses in meaningful and positive ways on Facebook is connected to credibility.

## 2.3 Peer communication

It is found that the sharing of information and social interactions strengthens peer communication, which

positively impacts social media purchase attitudes and behaviors<sup>[29]</sup>. Consumers who have alike thoughts are better able to share an amiable relationship with each other and influence online shopping attitudes<sup>[30]</sup>. It has been found that young consumers who had engaged in online peer communication yielded greater effects on social influence dynamics affecting online purchases<sup>[31]</sup>. Adolescents were known to rapidly engage in online peer communication through social networking sites like Facebook<sup>[32]</sup>, due to two important developmental needs which are hobnobbing with peers and engraving group identity<sup>[33]</sup>. The need for group identity is so pronounced among adolescents that they usually tend to tread the attitudes or behavior of peers as it seems useful and seems to be the most salient alternative available<sup>[34]</sup>. Conformity to group development is pivotal for the development of adolescents and peer communication and is extremely valuable for the generation<sup>[35]</sup>. Aping each other tends to be hyperbolic under peer influence in young consumers, leading to relying heavily on peer communication influences<sup>[36]</sup>. People seem to apply the same social rules through online social networking sites as they would in the real face-to-face interaction, which generates similar social responses and undergoes the same processes of hobnobbing<sup>[37]</sup>. It has been learnt that adolescents inculcate values and attitude by interacting through social networking sites<sup>[38]</sup>.

**H3:** Peer communication is positively and significantly related to Generation Z's attitude towards engaging in retail brands through Facebook.

## 2.4 Attitude

The theory of planned behavior<sup>[39]</sup> has been used in a litany of studies where attitude was known to be a cardinal driver that shapes behavioral intentions and further affects consumers' purchase intentions and decision-making process<sup>[40]</sup>. Extant literature is suggestive of the fact that the attitude of young consumers shapes intentions to purchase a product through social media<sup>[2,41]</sup>.

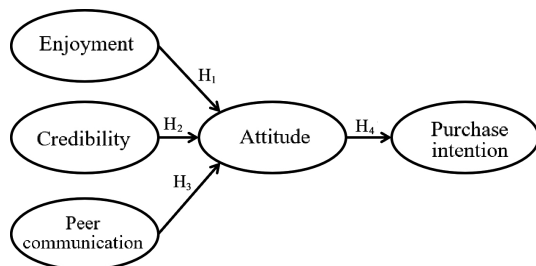
**H4:** Attitude is positively and significantly related to Generation Z's intention to purchase retail brands through Facebook.

The proposed conceptual model can be referred to in Fig. 1 that provides a visual rendition of the hypotheses and path models.

# 3 Research Methodology and Materials

## 3.1 Measurement instrument

The data were collected digitally due to the COVID-19



**Fig. 1 Proposed conceptual model (source: author's compilation).**

pandemic following social distancing protocol. Both objective questions (for demographic analysis) and each component of the suggested conceptual model were evaluated using a five-point Likert scale in the questionnaire. The questionnaire was cautiously presented to just Generation Z respondents.

### 3.2 Data collection

A pilot test with 30 respondents was undertaken prior to the data being distributed widely to eliminate any potential problems that would have hampered the data collection process. The findings of the pilot research deemed the questionnaire obstruction-free. Convenience sampling method was adopted to collect samples. Many researchers have known to exaggerate the trepidations that convenience sampling was more limited and lopsided in approach<sup>[42,43]</sup>, while others have maintained the position that convenience sampling is a suitable method for gathering data from a youthful population (Generation Z in the study). Generation Z includes the young tech-savvy enthusiasts, whose virtuosity in the usage of digital implements sets the tone for increased usage of social networking sites, e.g., Facebook, for retail purchases, justifying the morale for the inclusion of Generation Z respondents in the study. 120 replies were obtained out of a total of 220 questionnaires sent, for a response rate of 54.54%. Due to the necessary five-point Likert scale used for the questionnaire items, outliers were not a problem. After the data had been collected, they were reviewed for replies that followed a constant, increasing, or decreasing scale pattern. Using these techniques, 20 responses were discovered to be incorrect and were eliminated. The total sample size precipitated to 100 responses which were to be administered for further statistical analysis in the study.

### 3.3 Sample size justification

To calculate the minimum required sample size, Ref. [44] suggested multiplying the number of arrows pointing toward an independent construct by ten or the rule of

thumb of 10. This resulted in a total of 4 arrows, which computed the minimum sample size to be 40. The sample size in the study was 100, which provided a seal of approval and justified the data for further analysis.

### 3.4 Demographic analysis

Table 2 provides a visual treat for the demographic analysis of the respondents. Table 2 contains information about gender, age, the presently pursuing education courses enrolled in, and the stream. Moreover, the annual family income of the household was recorded. In addition to all, some general questions were also posed, which would help provide a better rendition to the empirical analysis of the data.

### 3.5 Construct and measures of items

Refer to Table 3 for the constructs and measures of the items taken in the study.

## 4 Analysis

Partial Least Square Structural Equation Modeling (PLS-SEM), which is independent of rigid assumptions like data distribution, was used to statistically evaluate the data<sup>[49]</sup>. With specific presumptions<sup>[50,51]</sup>, such as a limited sample size and better predictive power, PLS-SEM offers a superior alternative to covariance-based structural equation modeling. PLS-SEM uses the bootstrapping method to analyze the relationships between the constructs<sup>[52]</sup>. Hence, with the small sample size and limited reflective items to the construct, PLS-SEM was considered condign for the study.

### 4.1 Model assessment in PLS-SEM

To assess the fit, reliability, and validity of the suggested conceptual model using PLS-SEM, and only after the free of rising issues, the analysis can be further performed. Model evaluation consists of two steps: measurement (outer) and structural (inner) model analysis. In the first step, the model's reliability and validity are assessed using indicator reliability. Finally, convergent and discriminant validity, as well as Cronbach's alpha were successfully achieved. Second, bootstrapping is used to conduct hypothesis testing<sup>[53]</sup>. Figure 2 shows a visual representation of the model's evaluation using PLS-SEM.

### 4.2 Assessment of measurement (outer) model

#### (1) Indicator reliability

The factor loading in Table 4 fell between the range of 0.774 to 0.929 and was above the prescribed value of

**Table 2 Respondents' socio-demographic information.**

Variable	Division	Number of respondents	Percentage (%)
Gender	Male	58	58
	Female	42	42
Age	16–18	28	28
	19–21	38	38
	22–24	34	34
Education	Intermediate	23	23
	Undergraduate	32	32
	Postgraduate	29	29
	Pursuing PhD	16	16
Household income (monthly)	Below 30 000	9	9
	30 000 to 60 000	36	36
	60 000 to 90 000	29	29
	90 000 and above	26	26
Usage history on social media?	Facebook	67	67
	WhatsApp	12	12
	Instagram	14	14
	YouTube	7	7
Do you feel privileged to share retail brand Facebook page with others?	Yes	85	85
	No	15	15
Facebook usage every day?	Less than 1 h per day	4	4
	1 to 4 h per day	58	58
	4 to 8 h per day	10	10
	8 to 12 h per day	16	16
	More than 12 h per day	12	12
Activities done on Facebook?	Get updated on other people's life happenings.	22	22
	Enjoy new movies trailers and listen to music.	10	10
	See the latest fashion in retail brands, discounts offered, and review of a product.	41	41
	Uploading your photograph/video memories and share what new is happening in your life.	15	15
	Other issues.	12	12
Have you ever liked or joined a Facebook page for a retail brand?	Yes	81	81
	No	19	19
Device used for Facebook?	Mobile	78	78
	Computer/laptop	12	12

0.7<sup>[55]</sup>. The indicator reliability readings fell between the range 0.667 to 0.863 and was above the baseline value of 0.4<sup>[56]</sup>.

## (2) Internal consistency reliability

The internal consistency reliability was deciphered using the composite reliability values and they fell between the ranges of 0.909 to 0.946. The composite reliability values were well above the prescribed norm of value 0.7<sup>[56,57]</sup>. Extant literature has been suggestive of Cronbach's being a suitable index to establish internal consistency. The Cronbach's values were above the recommended standard of 0.7 and ranged from 0.851 to 0.914, which was extremely beneficial in investigations

including social and psychological trials<sup>[58]</sup>. Table 4 shows the composite reliability and Cronbach's values. As a result, the model's internal consistency was tenably attained.

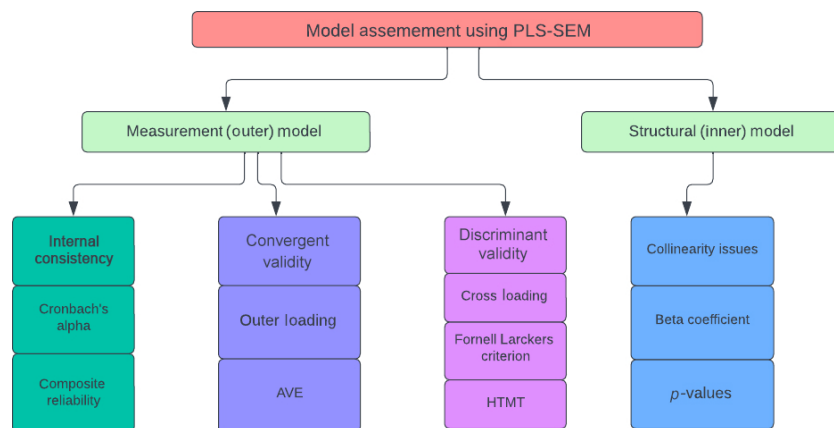
Reference [59] asserted that indicator reliability is demonstrated by all indication reliability loadings. All Cronbach's alpha values are more than 0.7<sup>[60,61]</sup>. Internal consistency is suggested by any composite reliability value which is greater than 0.7<sup>[62]</sup>. The Average Variance Explained (AVE) is more than 0.5<sup>[63]</sup>.

## 4.3 Validity testing

It is necessary to determine the outer loading values

**Table 3 Definition of the constructs with sources and notations.**

Construct	Notation	Question	Reference
Attitude	AT1	I am in support of viewing and joining the Facebook page for a retail business.	[45]
	AT2	Visiting and joining retail brands on Facebook pages is a good idea.	
	AT3	I am confident in accessing and joining the Facebook page of a retail brand.	
Credibility	CR1	I believe that Facebook sites for retail firms often keep their promises.	[1]
	CR2	I believe I can rely on the information posted on the Facebook page of a retail brand.	
	CR3	Facebook profiles for retail companies seldom make exaggerated promises.	
	CR4	I believe that Facebook sites for retail companies often display moral behaviour.	
Enjoyment	EN1	I enjoy posting on Facebook pages for retail businesses.	[46]
	EN2	I enjoy interacting with users on Facebook pages for retail brands.	
	EN3	It is entertaining to interact with users on Facebook pages for retail brands.	
Intention to purchase	INP1	I would intend to buy goods or services straight through a retail brand's facebook page, if it was feasible.	[47]
	INP2	I would anticipate buying goods or services directly through the retail brand's Facebook page, if it was feasible.	
	INP3	I would want to purchase goods or services straight from a retail brand's Facebook page, if it was feasible.	
Peer communication	PC1	I discuss my membership on a Facebook page with my online buddies.	[48]
	PC2	My online pals push me to interact with the Facebook sites they are a member of.	
	PC3	I invite my Facebook friends to interact on the page I am a member of.	
	PC4	I invite my online pals to interact on the Facebook groups I am a part of.	



**Fig. 2 Flowchart of model assessment using PLS-SEM.**

(factor loading) and the Average Variance Extracted (AVE) in order to verify convergent validity. Values for the factor loading were previously discussed during internal consistency reliability, and now the AVE values

were analyzed and fell in the range from 0.724 to 0.853. All AVE values were above the established norm of 0.5<sup>[64]</sup> which bills positively the data of convergent validity. The values can be seen in Table 4.

**Table 4** Various measures used to construe convergent validity.

LV	IV	FL	IR	Cronbach's alpha	CR	AVE	Rho A
AT	AT1	0.892	0.795	0.888	0.930	0.816	0.890
	AT2	0.915	0.837				
	AT3	0.903	0.815				
CR	CO1	0.856	0.732	0.882	0.918	0.738	0.893
	CO2	0.886	0.784				
	CO3	0.875	0.765				
	CO4	0.817	0.667				
EN	EN1	0.846	0.715	0.851	0.909	0.770	0.860
	EN2	0.916	0.839				
	EN3	0.870	0.756				
INP	INP1	0.929	0.863	0.914	0.946	0.853	0.917
	INP2	0.921	0.848				
	INP3	0.922	0.850				
PC	PC1	0.888	0.788	0.872	0.913	0.724	0.875
	PC2	0.774	0.599				
	PC3	0.875	0.765				
	PC4	0.862	0.743				

**Note:** LV: latent variable, IV: indicator variable, CR: composite reliability, FL: factor loadings, IR: indicator reliability (factor loading), and AVE: average variance extracted, and AVE is computed as  $\sum \text{squared multiple correlation} / (\sum \text{squared multiple correlation} + \sum \text{standard measurement error})$ . All factor loadings > 0.7, which is favorable<sup>[54]</sup>.

**4.4 Discriminant validity**

To demonstrate discriminant validity, the factors must load the parent concept more heavily than the other constructs. Table 5 shows the same and hence the discriminant validity was established using thorough cross loading method. Table 5 contains the cross loadings of the indicator variables in the study.

**4.5 Fornell and Larcker's criterion**

In order to show discriminant validity, the square root of the AVE for each latent variable in Table 6 should be bigger than the correlations between the latent variables. As a result, it was simple to establish discriminant validity according to Fornell and Larcker's criteria. Additionally, Ref. [24] determined that in order to guarantee the discriminant validity, the square root of the AVE of each idea must be greater than the correlation value.

**4.6 Heterotrait-monotrait ratio of correlation (HTMT) criterion**

In recent research, HTMT has emerged as a novel criterion for determining discriminant validity that fosters the offspring of PLS-SEM approach<sup>[25]</sup>. In 2015,

**Table 5** Cross loadings of the indicator variables in the study.

Variable	AT	CR	EN	INP	PC
AT1	0.892	0.689	0.670	0.718	0.621
AT2	0.915	0.600	0.664	0.659	0.634
AT3	0.903	0.619	0.591	0.616	0.593
CR1	0.704	0.856	0.715	0.558	0.610
CR2	0.611	0.886	0.633	0.537	0.624
CR3	0.565	0.875	0.655	0.510	0.617
CR4	0.514	0.817	0.597	0.456	0.490
EN1	0.571	0.680	0.846	0.487	0.578
EN2	0.687	0.685	0.916	0.595	0.652
EN3	0.611	0.642	0.870	0.560	0.664
INP1	0.704	0.559	0.572	0.929	0.597
INP2	0.632	0.576	0.553	0.921	0.480
INP3	0.704	0.540	0.609	0.922	0.522
PC1	0.639	0.633	0.732	0.557	0.888
PC2	0.577	0.532	0.562	0.481	0.774
PC3	0.543	0.612	0.575	0.457	0.875
PC4	0.554	0.550	0.564	0.465	0.862

**Table 6** Data used to calculate Fornell and Larcker's criterion.

Variable	AT	CR	EN	INP	PC
AT	<b>0.903</b>	-	-	-	-
CR	0.706	<b>0.859</b>	-	-	-
EN	0.713	0.761	<b>0.878</b>	-	-
INP	0.738	0.604	0.626	<b>0.929</b>	-
PC	0.682	0.685	0.720	0.579	<b>0.851</b>

**Note:** The square root of each construct's AVE is shown by the bolded numbers in the diagonal. These data exceeded each construct's correlation value in both the rows and columns, demonstrating the validity of the discriminant.

Henseler et al.<sup>[37]</sup> developed a more effective approach utilising a Monte Carlo simulation research, and they discovered that HTMT was able to achieve a mature level of specificity and sensitivity rate (97% to 99%) in comparison to the cross-loading criteria (0.00%) and Fornell and Larcker's criterion (20.82%). Table 7 lists the HTMT values, and because the values were less than 0.9, discriminant validity was established<sup>[29,30]</sup>.

As a result, the outer model's convergent, discriminant,

**Table 7** HTMT criterion.

Variable	AT	CR	EN	INP	PC
AT	-	-	-	-	-
CR	0.785	-	-	-	-
EN	0.814	0.874	-	-	-
INP	0.814	0.668	0.707	-	-
PC	0.772	0.775	0.830	0.643	-

**Note:** HTMT values with two tolerable exceptions of a higher threshold value of 0.9<sup>[44,65]</sup>.

and internal consistency properties were all confirmed. The following phase involved an analysis of the structural (inner) model.

**4.7 Assessment of the structural model**

It is important to check the Variation Inflation Factor (VIF) to make sure the data are free of any multi-collinearity problems (both outer and inner VIF values). In order to bill the data as being free of any multi-collinearity issues, the norm states that the VIF values must be greater than 5 for both the outer and inner VIF values<sup>[27]</sup> and for the data they were established favorably. Table 8 provides the values for VIF values (inner) model.

**4.8 Coefficient and *p*-value**

The proposed model was tested using the bootstrapping method of 5000 subsamples<sup>[42]</sup>. Table 9 obtains the path coefficients which are stated below with the upper and lower bound limits of confidence intervals. The *p*-values were all found to be less than 0.05. One may refer to Fig. 3 for the conceptual model output in pictorial form (The yellow rectangles and blue circles are connected by arrows that have factor loading values that must be greater than 0.7. As the standard for sociopsychological research<sup>[36]</sup>, the values represented by the lines linking the blue circles have a complete impact).

***R*<sup>2</sup> adjusted: Prediction power**

Following bootstrapping and reviewing the status of competing hypotheses, the prediction power of the model was analyzed, which is in Table 10.

**Table 8 Collinearity statistics (VIF) values.**

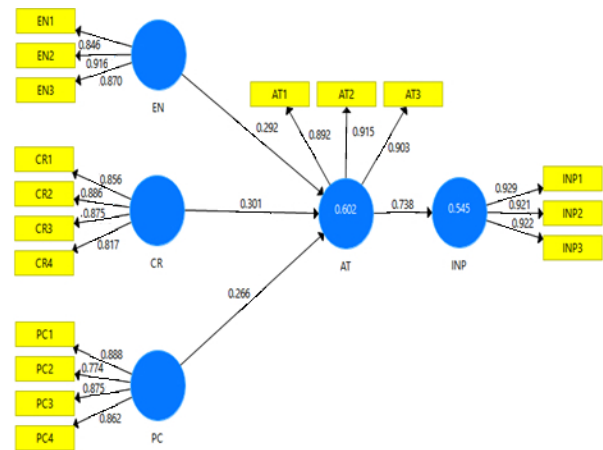
Variable	AT	CR	EN	INP	PC
AT	–	–	–	1.000	–
CR	2.621	–	–	–	–
EN	2.886	–	–	–	–
INP	–	–	–	–	–
PC	2.290	–	–	–	–

**Note:** VIF 5.0, which removes the data from any potential multi-collinearity problems<sup>[38]</sup>.

**Table 9 Path coefficients of the hypothesized relationships in the proposed model.**

Path ( <i>O</i> )	<i>M</i>	STDEV	<i>T</i>	<i>p</i> -value	LB	UB
AT-INP	0.738	0.740	0.060	12.356	0.000	0.612 0.839
CR-AT	0.301	0.302	0.205	2.862	0.004	0.093 0.504
EN-AT	0.292	0.283	0.099	2.939	0.003	0.083 0.477
PC-AT	0.266	0.275	0.104	2.547	0.011	0.083 0.494

**Note:** (*O*): original mean; *M*: mean estimate; STDEV: standard deviation; *T*: *T* value; LB: lower confidence level; UB: upper confidence level.



**Fig. 3 Conceptual model after PLS algorithm is performed.**

**Table 10 Prediction power of the variables in the study.**

Variable	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> adjusted
AT	0.602	0.589
INP	0.545	0.540

**4.9 Hypotheses, testing results, and interpretations**

The statistical analysis came to the conclusion that none of the alternative hypotheses could be dismissed. Accepting the alternative hypothesis H1, enjoyment ( $u=0.292, t=12.356, p=0.05$ ) had a favourable and substantial influence on young consumers’ attitude on engaging with retail brands through Facebook. The alternative hypothesis H2 was approved since it was discovered that credibility ( $u=0.301, t=2.862, p=0.05$ ) had a favourable and substantial influence on consumers’ approach to interacting with retail companies on Facebook. Peer communication was shown to be positively and significantly related to young consumers’ sentiments towards interacting with retail brands on Facebook ( $u=0.266, t=12.356, p=0.05$ ), and H3 was approved. H4 was acceptable since it was discovered that consumers’ attitudes regarding interacting with retail brands on Facebook ( $u=0.738, t=12.356, p=0.05$ ) had a favourable and substantial influence on their desire to buy.

**5 Discussion**

The results have approved the inclusion of enjoyment, credibility, and peer communication as able antecedents to the perceived attitude of Generation Z towards retail products through Facebook with a prediction power of 58.9% (adjusted  $R^2 = 0.589$ ). It was even found that the  $\beta$ -coefficients of enjoyment, credibility, and



peer communication were 0.292, 0.301, and 0.266, respectively. Out of the trinity, credibility had the most influence after enjoyment and peer communication on the perceived attitude of Generation Z towards retail products through Facebook. The findings seem to concur with the results of Wiese<sup>[61]</sup>. It claimed that plans to buy retail goods on Facebook among Generation Z were positively and significantly impacted by pleasure. Furthermore, the model's strong predictive power was consistent with findings of Ref. [49], which argued that youthful customers had a more positive attitude regarding making purchases online. The results also lay averment to the findings of Ref. [46] that better credibility will lead to pronounced usage of online shopping. The findings were also in line with the research of Ref. [59] which demonstrated that young consumers (Generation Z) had a higher proclivity to engage in online peer communication which later forms and translates their attitude towards intentions to purchase retail products through Facebook. It was also apparent that Generation Z's intention to purchase retail products through Facebook was easily predicted by perceived attitude with a prediction power of 54% (adjusted  $R^2=0.540$ ). Overall, the model has validated the inclusion of enjoyment, credibility, and peer communication in predicting both attitude and intentions to purchase retail products through Facebook among Generation Z.

## 6 Implication

The findings suggested that the model has been able to predict both the attitude and intentions of Generation Z to engage in F-commerce (retail purchases through Facebook online). The implications are discussed below in two categories. The first is for academicians, researchers, and market analysts, and the second is for marketers, suppliers, and digital market advertisers engaged in F-commerce of retail products.

### 6.1 Implications for academicians, researchers, and market analysts

The conceptual model successfully predicted the purchase intentions of Generation Z engaged in F-commerce, based on their preference for tech-savvy implements. The empirical study explains how variables such as enjoyment, credibility, and peer communication influence the formation of attitudes toward F-commerce among Generation Z. Academics, researchers, and market analysts can learn from the findings that

Generation Z can easily connect with Facebook and purchase retail products. Facebook was a necessary tool, and academics could include academic chapters on how Facebook communicates with and influences Generation Z. Other variables that help predict the power of the proposed conceptual model could be mined by social science researchers and psychologists. Market analysts could use the findings to develop better products that are custom tailored fit to the needs of Generation Z. The findings point to a heavy use of Facebook to translate Generation Z's attitudes toward favorable retail purchase intentions, and marketers may be able to assist in ways to maximize retail advertisement online to capitalize on the potential. The study also adds to the academic literature on Generation Z F-commerce.

### 6.2 Implications for marketers, suppliers, and digital market advertisers

The findings have large implications for marketers, and the marketers can now adopt interactive ways and means to communicate with Generation Z about retail products through digital Facebook advertising. Suppliers could easily capitalize on fronts like global position system for delivery of goods and warehouse location on Facebook that would easily help influence the purchase intentions of Generation Z. The greatest implication is for digital marketing and advertisers who can design products and Facebook fan pages for various companies to spread the canvass of reach to Generation Z and influence them for further purchases.

## 7 Conclusion and Limitation

A strong predictor of Generation Z's inclination to buy retail goods through Facebook was discovered to be the proposed hypothesized model. This study is a sub-generic one which included and empirically justified the inclusion of all variables. The findings concluded the importance of attitude which was predicted by enjoyment, credibility, and peer communication and served as a major antecedent to intentions to purchase retail products through Facebook. It was concluded that F-commerce has large potential to be exploited for enhancing retail business sales and profits by capitalizing on young consumers through social networking sites.

The study had various limits and encountered some difficulties. Firstly, the study only includes members of Generation Z, which might skew the findings because educated samples may be more likely to respond in a way that is more socially acceptable<sup>[41]</sup>. The model's

prediction ability was discovered to be excellent, but it may be improved much more by adding more factors. Secondly, only Facebook was examined as a social media platform; more study may have looked at Instagram, Snapchat, YouTube, and other sites. Thirdly, the study finishes with only measuring the intention to purchase retail products through Facebook among Generation Z, and further research could also determine the actual behavior and purchases amid a more varied and diversified population.

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