

Influencing Factors of Retweet Intention of Branded Tweet Message

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ABSTRACT

This study examined how Twitter (officially renamed to X) is accepted among Gen-Z users as a marketing tool. This study extended the technology adoption model by including two core motivational factors -intrinsic and extrinsic motivations and examined how these factors influence users' retweet intention. This study used survey instruments and structural equation modeling to explore and test the factors influencing users' retweet intention of branded tweet messages of 263 participants in 2022. The survey results support that perceived usefulness and ease of use are significantly associated with users' attitudes toward using Twitter (AT) as a marketing tool. The study also significantly validated the addition of intention to retweet (IRT), which is influenced by the attitude toward using Twitter (AT) as a marketing tool. These findings highlight the evolving role of social media platforms in shaping consumer behavior and provide a refined model for analyzing content-sharing motivations, which will help marketers maximize the impact of digital campaigns.

KEYWORDS: TAM, perceived usefulness (PU), perceived usefulness (PEOU), intention to retweet, extrinsic motivation, intrinsic motivation

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ARTICLE HISTORY: *Received:* 8 Feb 2024; *Revised:* 05 Nov 2024; *Accepted:* 06 Nov 2024; *Published:* 30 June 2025

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1. Introduction

Web-based platforms facilitating online social communication have significantly modified the nature of human interactions (Tiago & Verissimo, 2014). According to Petrosyan (2024), approximately 63.9 percent of the global population uses social networking sites to connect and interact with each other. What started as an entertainment channel among teenage users (Laudon & Traver, 2010) has now become a mainstream marketing platform (Mangold & Faulds, 2009) for marketers.

Twitter (officially renamed as 'X') is one of the largest social media platforms used by marketers to engage with customers. GWI's survey reveals that 37.8 percent of the active users of Twitter/X aged 16+ follow or research brands and products through Twitter/X (GWI, Q3, 2024). Therefore, Twitter/X has shown excellent prospects for marketers as a leading microblogging social networking platform (Kwon & Sung, 2011). By retweeting, users pass along messages to their networks. Retweets bring new people into the conversation and create a chain effect that helps to reach the messages to a broader audience (Boyd, Golder & Lotan, 2010; Shi, Rui, & Whinston, 2014). Marketers consider Twitter's option to 'retweet' or share as a momentous indicator of Twitter's effectiveness (Boyd et al., 2010; Shi et al., 2014). Desired marketing outcomes are not exclusively limited to achieving users' intention to use Twitter as a tool for users' purchase decision-making processes, and they can also be achieved by developing users' intention to retweet the content (Moran, 2012; Stelzner, 2009), as it can ultimately spread the brand-related messages among Twitter users.

The primary purpose of this study is to investigate the factors that influence the acceptance of Twitter/X as a marketing tool. This study proposes a processing model to predict users' behavioral intention (IT) to use Twitter and intention to retweet (IRT). As the predictor of behavioral intention, this study tested the effects of motivation, perceived ease of use, and perceived usefulness. Marketers will benefit by gaining users' motivation to use Twitter technology. As potential users may use the Twitter/X network for multiple tasks, it is hard to find and distinguish among their preferences of usage of those tasks (e.g., entertainment, information, gathering, socializing, purchase) in terms of perceived usefulness (PU) and perceived ease of use (PEOU). Therefore, findings from this study will help companies understand how potential users use social networks such as Twitter/X as a marketing tool. In addition, the refined model will help marketers maximize user participation and strengthen brand presence on social media platforms.

2. Literature Review

Twitter is growing rapidly as a strategic marketing tool. From a marketer's standpoint, Twitter is considered a relatively faster, less expensive, and geographically limitless tool (Dickey & Lewis, 2009). As a real-time information network, Twitter connects consumers to the latest information about relevant and interesting topics. These benefits enable marketers to connect online with consumers who are motivated to engage with their brands (Kwon & Sung, 2011). In that way, Twitter enables marketers to personalize brands and help build and maintain consumer relationships by engaging in conversations.

Content sharing is an important function of Twitter. In addition to composing and posting a tweet, Twitter users can rebroadcast their tweet to followers, which is known as "retweet" (Shi et al., 2014). Thus, Twitter has been described as a tool to create electronic word of mouth (Jansen, Zhang, Sobel & Chowdury, 2009a), as a viral marketing mechanism (Asur & Huberman, 2010), and as a form of online word-of-mouth branding (Jansen, Zhang, Sobel & Chowdury, 2009b). From a marketing perspective, retweets can reach millions of customers, creating a vast diffusion of information for marketers (Stelzner, 2009). According to Malhotra et al. (2012), retweets can create implicit, often explicit, endorsements in addition to reaching

more potential customers. Thus, retweets work as a form of social promotion in which followers become brand promoters within their social networks and validate it by passing it along (Malhotra et al., 2012).

2.1 Antecedents of Retweet Intention: Perceived Usefulness, Perceived Ease of Use, and Motivation

The Technology Acceptance Model (TAM), established by Davis in 1986, facilitates the prediction of users' attitudes toward new technology and their subsequent acceptance, as measured by intention to use and actual usage (Di Pietro & Pantano, 2012). The primary aim of TAM was to establish a framework for examining the influence of external factors on internal beliefs, attitudes, and intentions.

Davis et al. (1989) identified perceived usefulness (PU) and perceived ease of use (PEOU) as external factors. The utilization of an application is directly correlated with individuals' perceptions of its efficacy in enhancing job performance. Davis (1989) identified the initial variable as perceived usefulness (PU). Secondly, potential users may recognize the utility of a particular application while simultaneously perceiving it as overly complex, leading them to conclude that the effort required to use the system surpasses its performance advantages. In addition to usefulness, usage is theorized to be affected by perceived ease of use (PEOU) (Davis, 1989).

Perceived usefulness (PU) refers to the extent to which an individual believes that utilizing a specific system will improve their job performance (Davis, 1989, p. 320). A system characterized by high perceived usefulness refers to one in which users recognize a positive correlation between use and performance outcomes. Perceived ease of use (PEOU) is defined as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). PEOU is derived from the definition of "ease," which denotes the absence of difficulty or significant effort. Davis (1989) asserted that, under equivalent conditions, an application perceived as more straightforward to use is more likely to gain user acceptance.

Although TAM has been applied in several social media acceptance studies, most of these are focused on the most extensive network, Facebook (Di Pietro & Pantano, 2012; Pinho & Soares, 2011; Rauniar et al., 2014). Despite being an effective communication, industrial, and marketing tool, Twitter is yet to be explored by media and communication researchers (Davenport, Bergman, Bergman & Ferrington, 2014). Nevertheless, researchers identified some unique features of Twitter that make it a strong player in the field of communication research. This study employs two concepts – perceived usefulness and perceived ease of use- to find how users adopt Twitter and make their purchase decisions based on Twitter communication.

Motivation influences general behavior and IT acceptance (Moon & Kim, 2001). Motivation theory has been extensively utilized to explain information technology adoption (Lee et al., 2005). Extrinsic and intrinsic incentives drove behavior, according to Deci (1971). The difference between intrinsic and extrinsic motivation is that intrinsic motivation is driven by interest in the action rather than external reinforcement (Davis et al., 1992). They observed that extrinsic (usefulness) and intrinsic (enjoyment) aspects motivate IT use. In other investigations, usefulness was extrinsic, and subjective satisfaction was intrinsic (Moon & Kim, 2001). These two motivations influence information technology utilization. Extrinsic and intrinsic motivation affect activity intentions and conduct (Davis et al., 1992; Moon & Kim, 2001).

2.2 Proposed Model and Hypotheses

The main reason consumers use Twitter is to keep in touch with friends and share messages by easing their interactions, according to past research. Facebook studies are also undertaken (Di Pietro & Pantano, 2012). Users can connect with companies and businesses through social media pages and accounts by submitting comments, asking for product information, complaining, etc. Thus, Twitter allows consumers to share

experiences and learn about products and services through a consumer-to-consumer (C2C) approach, while also giving managers a direct channel for B2C communication with clients. Thus, Twitter has become a new channel between enterprises and clients, affecting CRM. Twitter helps organizations immediately connect with customers and give tailored promotions and offers, increasing marketing strategy productivity and efficiency (Pantano, Tavernise, & Viassone, 2010). Previous research found that TAM causalities should also apply to Twitter (Shin, 2010). The current study proposed a model to explain brand tweet retweet intention antecedents.

2.2.1 Perceived Usefulness (PU)

The perceived ease of use and perceived usefulness primarily influence user perceptions and attitudes toward technology (Davis, 1989). Each social media platform provides specific core services and consequently offers a range of tools and applications to enhance its users' use. PU signifies beneficial outcomes resulting from the characteristics of the employed technology. The degree to which the utilitarian value of social media is regarded as advantageous influences the perceived usefulness (PU). This study primarily examines how Twitter users embrace Twitter communication as an auxiliary tool in their purchasing decision-making process. This study proposes the following hypothesis based on the TAM framework and relevant previous research:

H1. The perceived usefulness (PU) of Twitter-mediated messages affects customers' attitudes (AT) toward using this network to make shopping decisions.

2.2.2 Perceived Ease of Use (PEOU)

The growing diversity of social media users suggests that creating an account and using and enjoying the services should be easy. Twitter users may evaluate the site based on its ease of use and effectiveness in helping them make purchase decisions. Most TAM investigations assume that PEOU directly affects PU (Davis, 1989). Therefore, it can be assumed that the PEOU of the Twitter network will influence users' purchase decisions. Based on TAM, the following hypotheses are proposed for the Twitter network:

H2. Twitter's perceived ease of use (PEOU) directly influences the network's perceived usefulness (PU) as a supporting tool for making purchasing decisions.

H3. Perceived ease of use (PEOU) of Twitter directly influences the attitude (AT) towards using this network as a supporting tool for making purchasing decisions.

2.2.3 Attitude toward Using Twitter (AT) and Behavioral Intention to Retweet (IRT)

The primary purpose of disseminating content on social media is to convey users' attitudes (Boyd et al., 2010). This assertion presupposed that user had accessed sufficient information sources regarding a specific topic and sought to disseminate that message to their followers or friends to convey their perspective.

In Twitter communication, retweeting is considered the most prominent method of spreading messages, with the least effort toward a bigger audience (Shi et al., 2014). In short, Twitter users want their followers to accept or follow their attitude about a specific message or topic (Kim, 2014). Furthermore, individuals frequently convey their stance on a subject by retweeting a tweet that articulates an opinion on Twitter (Gao, Mahmud, Chen, Nichols, & Zhou, 2014). Based on these findings, users' attitudes toward using Twitter have influenced their intention to retweet purchase-related messages to their network. Thus, the following hypothesis is proposed.

H4. Attitude (AT) toward Twitter directly influences behavioral intention to use retweet (IRT) as a supporting tool for making purchasing decisions.

2.2.4 Extrinsic (ME) and Intrinsic (MI) Motivation

Previous studies have often distinguished individuals' motivation to perform an activity into two broad categories—extrinsic motivation and intrinsic motivation (e.g., Deci, 1971)—and widely utilized these categories to predict the usage of information systems. This study also depicts a relationship between individuals' general motivation and their behavioral intention to use retweets (IRT).

Twitter users can also be extrinsically driven to retweet. Retweeting is used to share content that users find valuable, intriguing, or entertaining that will resonate with their followers (Handy, 2012). Retweets are displayed in both followers' and the public's timelines, increasing the probability of maintaining and gaining followers. Followers are a key indicator of influence (Beck, 2009). Status or prestige is tied to the number of followers, which can be earned via retweeting (Toubia & Stephen, 2013). If users believe they can obtain incentives by sharing useful or amusing material, they will have retweet intents, according to this study. The following hypothesis is proposed:

H5. Extrinsic motivations (ME) directly influence Twitter users' behavioral intention to use retweet (IRT).

Intrinsic motivation pertains to engaging in an activity for its inherent satisfaction, such as enjoyment or entertainment, rather than for its perceived instrumental value (Davis et al., 1992). In the context of Twitter, intrinsic rewards are obtained from sharing and posting content. Toubia and Stephen (2013) assert that "a user should derive more intrinsic utility from broadcasting content as the size of his or her audience increases" (p. 371) on Twitter. The proposed study posits that users who perceive inherent satisfaction from sharing content are likely to develop intentions to use retweet (IRT). Therefore, the subsequent hypothesis is put forward:

H6. Intrinsic motivations (MI) directly influence Twitter users' behavioral intention to use retweet (IRT).

2.2.5 Intention to Retweet (IRT) and Behavioral Intention to Use (IT) Twitter

The research suggested a correlation between users' intention to retweet (IRT) and their behavioral intention to use (IT). Retweeting is a prominent form of interaction within the Twitter network. Previous studies have indicated that retweeting facilitates rapid information dissemination and engages new users in the discourse (Boyd et al., 2010; Shi et al., 2014).

From a marketing standpoint, retweets can indirectly but favorably spread the word about the business (Malhotra et al., 2012). Users' retweet intention positively influences their purchase intention and contributes to the broader utilization of the Twitter network. Consequently, the subsequent hypothesis is put forward.

H7. Intention to retweet (IRT) directly influences behavioral intention to use Twitter (IT) as a supporting tool for making purchasing decisions.

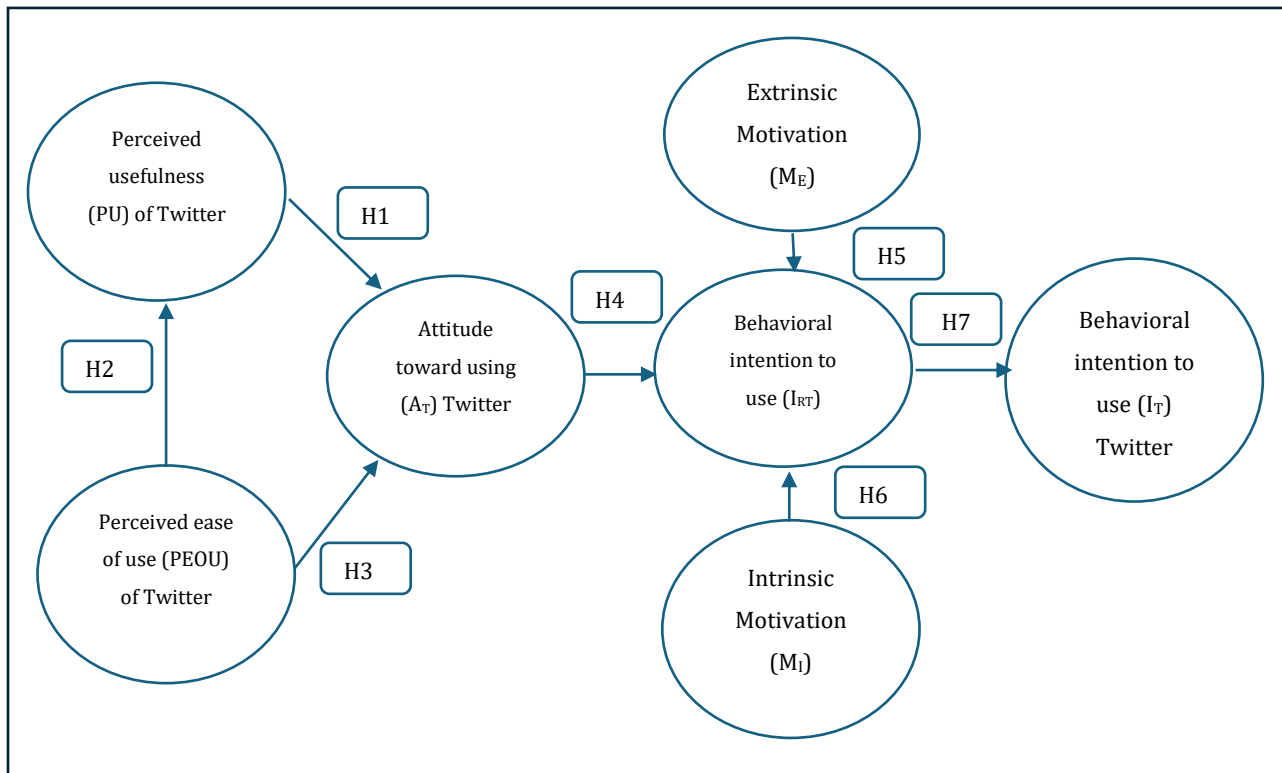


Figure 1: Hypothesized Technology Acceptance Model (TAM) of Twitter as a supporting tool for purchase decisions.

3. Methodology

3.1 Population and Sample

This study is based on the United States of America, as X/Twitter is particularly popular in the country, with 106.23 million users.¹ Students aged between 18-35 were approached for the study. The gen-Z age group was methodologically appropriate for the current study as they represent a significant segment of X/Twitter users worldwide. This target demographic was chosen because they utilize social media frequently (Ellison, Steinfield & Lampe, 2007). Previous studies in this particular field also deployed such methods with the same kind of samples (Pinho & Soares, 2011). According to Statista (2024), the age distribution of 70 percent of global X/Twitter users is between 18 years and 34 years.² Pew Research Center found that the Twitter network is mainly appealing to young adults aged between 18 and 29 (Duggan & Brenner, 2013). All the US Midwestern public university undergraduate students were considered the population. A structured questionnaire was designed and implemented.

Sample size. Scholars worry about sample size in SEM research (Clark & Miller, 2013; Westland, 2010; Wolf, Harrington, Clark & Miller, 2013). SEM sample size is not universally appropriate. Recent studies

¹ Statista Research Department (2024). Retrieved from <https://www.statista.com/statistics/242606/number-of-active-twitter-users-in-selected-countries/>

² Statista Research Department (2024) retrieved from <https://www.statista.com/statistics/1498204/distribution-of-users-on-twitter-worldwide-age-and-gender/>

recommend sample sizes of 30 to 460 (Kenny, 2014), while the "rule-of-thumb" method recommends 40 to 240 (Wolf et al., 2013). This study reached 303 participants, and after data cleaning, 263 samples were analyzed.

Data collection. Data collection was conducted in a large midwestern university classroom. Before each data collection session, the principal investigator briefly described the purpose of the study and the survey procedures to the participants. The instructions were also clearly written and highlighted on the questionnaire for clarity.

3.2 Survey Instrument and Measurement Scales

An online and offline survey of students at a large US Midwestern public university was done to scientifically explore and achieve this study's goals. Different product brands may have different impacts on users. Thus, the scope of this study is limited to the clothing industry. A survey questionnaire was developed with three sections. The questionnaire was comprised of three sections containing questions about Twitter usage, construct-related questions, and demographic questions respectively. It took 5-7 minutes to survey. This survey was voluntary for students.

The constructs used in the study are: perceived usefulness (PU), perceived ease of use (PEOU), attitude toward using Twitter (A_T), behavioral intention to use Twitter (I_T), and behavioral intention to retweet (I_{RT}). The constructs were generated from previously used items by researchers (Davis, 1986; 1989; Venkatesh & Davis, 1996). However, the language of the questions was modified with regard to the appropriateness of the proposed study. The scales were measured using a 7-point Likert-like intensity scale (1- strongly disagree, 7- strongly agree). Previous similar studies (e.g., Di Pietro & Pantano, 2012; Rauniar et al., 2014) also used a Likert-type intensity scale to measure such constructs. The measurement of each construct, along with the Cronbach's alpha, is shown in Table 1.

Table 1: Summary of Measurements with Mean, Standard Deviation, Cronbach Alpha

Constructs	Measures	Reference
Perceived usefulness (PU)	"Using Twitter improves my productivity," "Using Twitter improves my performance," "Using Twitter enhances my effectiveness," and "Overall, I find Twitter useful" (<i>Cronbach's α = .895</i>)	(Davis, 1989)
Perceived ease of use (PEOU).	"Learning to use Twitter is easy for me," "I find it easy to get Twitter to do what I want to do," "Twitter is rigid and inflexible to interact with," and "Overall, I find it easy to use Twitter" (<i>Cronbach's α = .820</i>)	(Davis, 1989)
Attitude Toward using Twitter (A_T).	"Overall, I find using Twitter positive," "Overall, I feel favorable toward Twitter," and "Overall, I am satisfied with Twitter" (<i>M = 3.720, SD = 1.312, Cronbach's α = .896</i>)	(Nysveen et al., 2005)
Intention to use Twitter (I_T).	"My general intention to use Twitter is high," "I will continue to use Twitter," and "I will continue to use Twitter in the future." (<i>M = 2.598, SD = 1.067, Cronbach's α = .907</i>)	(Bauer, Barnes, Reichardt & Neumann, 2005)

Constructs	Measures	Reference
Intention to retweet (I_{RT})	"My general intention to retweet is high," "I will continue to retweet," and "I will continue to retweet in the future." (<i>M</i> = 2.701, <i>SD</i> = 1.438, <i>Cronbach's α</i> = .850)	(Bauer et al., 2005)
Extrinsic motivation (M_E)	"Retweeting would enable me to accomplish my Twitter tasks more quickly," "Retweeting would improve my performance," "Retweeting would increase my productivity," "Retweeting would enhance my effectiveness on Twitter," "Retweeting would make it easier to do my Twitter tasks," and "I would find Retweeting useful in my Twitter tasks" (<i>Cronbach's α</i> = .966)	(Davis et al., 1992)
Intrinsic motivation (M_I).	"I find retweeting to be enjoyable," "The actual process of retweeting is pleasant," and "I have fun retweeting Twitter messages". (<i>Cronbach's α</i> = .901)	(Davis et al., 1992)

3.3 Data Analysis

This research used Structural Equation Modeling (SEM) to test the hypothesized model through a confirmatory analytical technique with the SPSS Analysis of Moment Structures (AMOS) program. One of the primary advantages of SEM is it allows the examination of multiple relationships simultaneously while accounting for both direct and indirect effects (Byrne, 2016). Additionally, though constructs such as perceived usefulness, ease of use, and motivation play crucial roles in shaping user's behavior on Twitter, these constructs cannot be directly measured. Hence, SEM enables the conduct of Confirmatory Factor Analysis (CFA) to ensure that the measurement model accurately represents the theoretical constructs, thereby enhancing the reliability and validity of the findings (Gefen, Straub, & Boudreau, 2000).

4. Result

4.1 Descriptive Statistics

Three hundred and three undergraduates volunteered for the survey. After deleting non-Twitter users and cleaning the dataset, 263 samples were suitable for study. Respondents were 31.2% male and 68.8% female. Many responders are 19-22 years old, with a mean age of 20 (*SD* = 1.62). Most participants (39.5%) were sophomores, followed by seniors (31.2%) and juniors (21.3%). Based on general usage information on Twitter, participants reported spending an average of more than 38 minutes on Twitter daily (*M* = 38.31, *SD* = 41.64). Participants also reported that they send an average of more than 12 tweet messages (*M* = 12.33, *SD* = 71.61) and nine retweet messages per week (*M* = 9.27, *SD* = 32.65). Analysis further found that participants have an average of 316 followers (*M* = 316.04, *SD* = 296.36). Participants also followed an average of 286 Twitter accounts (*M* = 286.05, *SD* = 207.45). Participants have been using their Twitter account for more than 3 years on average (*M* = 3.45, *SD* = 1.57).

4.2 Proposed Model Test

Firstly, reliability, validity, and significant association of factor loading and their constructs were assessed. In other words, the measurement model with latent constructs and observable variables was examined. Next, the structural model with hypothesized relationships was tested and changed to explain the results better.

4.2.1 Measurement Model Evaluation

The measurement model illustrates the relationships between latent variables and their indicators. A confirmatory factor analysis (CFA) of the complete measurement model verified that each of the indicators had a significant loading on their respective latent construct ($p < .01$). The measurement model demonstrated an acceptable fit (CMIN = 677.920, d.f. = 278, $p < .001$, CMIN/d.f. = 2.439, AGFI = .792, NFI = .881, TLI = .913, CFI = .926, RMSEA = .074) (Hu & Bentler, 1999; Hoyle & Panter, 1995).

This study used Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and Average Shared Variance (ASV) to examine the convergent and discriminant validity and reliability of the latent constructs. The thresholds for these values are $CR > 0.7$, $AVE > 0.5$, $MSV < AVE$, and $ASV < AVE$ (Hair, Black, Babin, & Anderson, 2010). Details are reported in Table 2.

Table 2: Test of Convergent and Discriminant Validity of Latent Variables

	CR	AVE		MSV	ASV
Perceived Usefulness (PU)	0.901	0.699	>	0.170	0.094
Perceived Ease of Use (PEOU)	0.858	0.669	>	0.297	0.092
Attitude toward using Twitter (A_T)	0.897	0.743	>	0.441	0.241
Intention to use Twitter (I_T)	0.914	0.780	>	0.441	0.175
Intention to Retweet (I_{RT})	0.927	0.810	>	0.358	0.197
Extrinsic Motivation (M_E)	0.889	0.668	>	0.392	0.186
Intrinsic Motivation (M_i)	0.904	0.760	>	0.392	0.204

Covariances. Here, scale items for measuring latent variables were adopted from the literature to confirm that measured variables load on only one factor and that observed variable error terms should not covariate. All constructs had correlation values below .70 (Tabachnik & Fidell, 2007), suggesting no multicollinearity. Table 3 presents the correlation, variance, and covariance of the variables of interest.

Table 3: Correlation, Variance, and Covariance Matrix

	PU	PEOU	A _T	I _T	I _{RT}	M _E	M _I
PU	1.041	.073	.417	.388	.310	.503	.346
PEOU	.084	.733	.475	.340	.307	.106	.324
A _T	.412	.559	.987	.814	.704	.378	.522
I _T	.308	.322	.664	1.524	.777	.429	.495
I _{RT}	.208	.245	.484	.430	2.146	.835	1.053
M _E	.467	.117	.361	.329	.540	1.114	.786
M _I	.282	.315	.438	.334	.598	.620	1.444

Note. Diagonal = Variances, Above diagonal Covariances, Below diagonal = Correlations.

4.2.2 Structural Model Evaluation

The structural model was evaluated with the greatest likelihood. The study's results, detailed in Table 1, indicated that the initial model did not well fit the data (CMIN = 690.410, d.f. = 223, $p < .001$, CMIN/d.f. = 3.096, AGFI = .776, NFI = .862, TLI = .888, CFI = .901, RMSEA = .089) (Hu & Bentler, 1999; Hoyle & Panter, 1995). Except for CFI, none of the indices achieved the requisite threshold level. Nonetheless, as previously mentioned, the intricate nature of SEM sometimes results in a suboptimal fit for the suggested model (Hooper, Coughlan, & Mullen, 2008).

Adding A_T → I_T path in the model. Based on modification indices from the statistical analysis, an additional path (A_T → I_T) was incorporated to enhance the model's fit. According to Bowen and Guo (2011), additional parameters are permissible if substantiated by a theoretical rationale. The AT → IT pathway clearly demonstrates that users' attitudes towards Twitter strongly influence their propensity to utilize the platform. This trajectory can potentially be substantiated by the accurate TAM model (Davis, 1986; Davis et al., 1989). The original TAM model posits that one's attitude toward utilizing a system influences the intention to use that system. However, multiple scholars removed attitude system use variables from the original TAM model while extending the model or adding new variables to it (Chow, Herold, Choo, & Chan, 2012; Rauniar et al., 2014; Venkatesh & Davis, 2000; Zhou, Xue, & Li, 2022). The current study also initially omitted the A_T → I_T path from such theoretical assumptions. However, after running an SEM analysis, the path was found to be valid and important for the Twitter-specific model building.

Test of the modified model. The overall fit of the modified structural model was good (CMIN = 486.638, d.f. = 220, $p < .001$, CMIN/d.f. = 2.212, AGFI = .834, NFI = .902, TLI = .935, CFI = .944, RMSEA = .068). Although the value of AGFI marginally missed the threshold level, the rest of the indicators showed that the final model is significantly better than the proposed model (Hu & Bentler, 1999; Hoyle & Panter, 1995).

The structural model's parameter estimates initially supported the hypothesis testing. Findings indicate that six of the seven hypotheses were supported. Only H2 was not supported. Results indicate that perceived usefulness (PU) has a direct influence on attitude toward using Twitter (AT), while perceived ease

of use (PEOU) also directly influences AT. Furthermore, AT directly affects the intention to retweet (IRT), and both extrinsic motivation (ME) and intrinsic motivation (MI) exert direct effects on IRT. Additionally, IRT directly influences intention to use Twitter (IT), and AT similarly affects IT, thereby supporting hypotheses H1, H3, H4, H5, H6, and H7. Nevertheless, no significant association was identified between perceived ease of use (PEOU) and perceived usefulness (PU); thus, H2 was not supported. Davis (1989) argues that the perceived ease of using technology results in perceived usefulness from using the technology. But in the case of social media networking platforms such as Twitter/X this relationship did not hold. One possible explanation is based on the attitude to use technology. Ease of use does not increase the utility of using the SNS platform. The users need extrinsic and intrinsic motivation to use the technology. Table 4 presents a comparison of the initial structural model and the modified structural model.

Table 4 Comparison of Structural Estimates and Goodness-of-Fit Indices for Initial and Modified Model

Relationship (From → To)	Initial Model	Modified Model
	Std.	Std.
PEOU → PU	.079	.081
PU → A _T	.367***	.369***
PEOU → A _T	.515***	.515***
A _T → I _{RT}	.297***	.260***
M _E → I _{RT}	.323***	.289***
M _I → I _{RT}	.363***	.334***
I _{RT} → I _T	.394***	.158**
A _T → I _T		.591***
<i>Goodness-of-fit indices</i>		
$\chi^2(d.f.)$	690.410(223)	486.638(220)
$\chi^2/d.f.$ ratio	3.096	2.212
Adjusted GFI (AGFI)	.776	.834
Normed Fit Index (NFI)	.862	.902
Tucker-Lewis Index (TLI)	.888	.935
Comparative Fit Index (CFI)	.901	.944
RMSEA	.089	.068
** p<.05, *** p<.001.		

5. Discussions and Implications

This study proposed and tested a model to examine the influence of antecedents on the retweet intention of Twitter users in response to brand messages. Two concepts from the Technology Acceptance Model—perceived usefulness and perceived ease of use—and two motivational concepts were used as antecedents to attitudes toward Twitter usage, subsequently influencing retweet intention. This study theoretically enhances the understanding of social media communication. This study approached from a marketing perspective of Twitter, provides insights that can assist marketers in optimizing their Twitter communication to effectively disseminate messages to their target audiences. Subsequent contributions and implications are examined in detail below:

5.1 Theoretical Contributions

Researchers suggest that previous theories and models require extension and re-validation within a new context (Rauniar et al., 2014). This study validated the Technology Acceptance Model within the context of Twitter and offered several theoretical contributions to the field of social media acceptance and usage. This study provides evidence for the utilization of Twitter as a marketing tool. Of the seven hypotheses, six are supported by the analyses. This study introduced three new variables: extrinsic motivation (ME), intrinsic motivation (MI), and behavioral intention to retweet (IRT) within the context of Twitter. The integration of these variables is successfully validated by the SEM model fit. The findings of this study contribute to developing and extending the original Technology Acceptance Model in a novel context. The findings can be utilized to examine the TAM model in additional social media contexts. The findings indicate that both the perceived usefulness (PU) and perceived ease of use (PEOU) of Twitter directly influence users' attitudes (AT) toward Twitter as a tool for supporting purchasing decisions. The findings indicate that perceived usefulness (PU) and perceived ease of use (PEOU) are significant beliefs regarding Twitter as a marketing platform. The study identifies PU and PEOU as significant factors influencing attitudes toward Twitter as a marketing tool. The influence of perceived ease of use on perceived usefulness has been found to be insignificant. This finding is noteworthy. Previous studies on social media have identified the path as significant (e.g., Pinho & Soares, 2011; Rauniar et al., 2014).

In contrast, a study by Di Pietro and Pantano (2012) examining the influence of Facebook networks on users' purchasing decisions found that the relationship between perceived ease of use (PEOU) and perceived usefulness (PU) was non-significant. This finding aligns with the results of the current study, which was conducted in the context of Twitter. From a theoretical standpoint, it provided a significant enhancement to the TAM. This issue can be explained by noting that users' perceptions of social media vary significantly in general and as a marketing tool. The relationship between perceived ease of use (PEOU) and perceived usefulness (PU) is significant in the context of social media acceptance. However, when considering social media as a marketing tool, users do not perceive the impact of Perceived Ease of Use (PEOU) on Perceived Usefulness (PU). In such cases, users tend to prioritize factors related to their purchasing decisions over the influence of perceived ease of use on the perceived usefulness of the network itself. A further explanation may be that the study's subjects had extensive prior experience with Twitter, leading to a diminished perception of the impact of perceived ease of use on perceived usefulness.

Additionally, studies have indicated varied results concerning the impact of perceived ease of use (PEOU) on perceived usefulness (PU) (Agarwal & Karahanna, 2000; Davis, 1989; Venkatesh & Davis, 2000). TAM initially posited perceived ease of use (PEOU) as a determinant of perceived usefulness (PU) (Davis, 1989). Davis et al. (1989) observed that perceived ease of use (PEOU) did not influence perceived usefulness (PU) immediately following a one-hour introduction to the system; however, it significantly affected PU after a

period of 14 weeks. Venkatesh and Davis (2000) consistently reported significant effects of perceived ease of use (PEOU) on perceived usefulness (PU), irrespective of the measurement timing. Agarwal and Karahanna (2000) concluded that perceived ease of use (PEOU) did not significantly influence perceived usefulness (PU), thereby refuting their hypothesis. The influence of Perceived Ease of Use (PEOU) on Perceived Usefulness (PU) is significant and varies based on context, timing, and the specific system involved. Consequently, analogous studies carried out in alternative contexts and timeframes may yield different results.

Further, the study found that users' attitude (A_T) toward using Twitter significantly influences their intention to retweet (I_{RT}) as a purchasing decision-making tool. Including the variable intention to retweet (I_{RT}) is new in Twitter-based TAM studies. However, the study's outcome justified the path's insertion significantly. This finding could help explain how users' attitudes toward a given network can influence them to spread messages through that network. From the diffusion of innovation perspective, users' attitude toward using Twitter helps spread marketing-related Twitter communication within the network. As the retweeting feature had been identified as a significant feature of the Twitter network (Boyd et al., 2010; Shi et al., 2014), the findings from this study further added how users' behavioral intention to retweet can be generated from a marketing perspective. Thus, the use of the TAM model in social media studies has been justified from a social media commerce (SMC) standpoint.

Extrinsic motivation (ME) and intrinsic motivation (MI) significantly influence users' behavioral intention to retweet (IRT). Numerous studies on the Technology Acceptance Model (TAM) have identified extrinsic motivation as a critical factor influencing the acceptance and utilization of a system (Moon & Kim, 2001). Igbaria, Parasuraman, and Baroudi (1996) found that system usage is influenced by extrinsic motivation, either positively or negatively. The present study reinforced earlier findings by establishing it as a significant factor influencing users' intention to retweet.

Intrinsic motivation (MI) was identified as a significant factor influencing users' intention to retweet (IRT). The phenomenon may be attributed to the intrinsic motivation experienced by Twitter users as their follower count increases. Toubia and Stephen (2013) assert that if the intrinsic benefit of posting content increases with the number of followers, then a greater follower count should result in increased posting activity. Thus, the intrinsic motivation of Twitter users to increase their follower count influences their tendency to retweet, which constitutes a form of posting. The findings of the present study corroborate the assertion made by Toubia and Stephen (2013).

The study identified an additional significant outcome that is distinctive within the realm of TAM research. The structural model indicated that users' intention to retweet (IRT) significantly influences their intention to use (IT) the actual Twitter network. In TAM research, behavioral intention to use a system typically precedes actual system use (e.g., Pinho & Soares, 2011; Rauniar et al., 2014; Venkatesh & Davis, 2000). In the current study, it was hypothesized that IRT would impact IT, given that Twitter is regarded as a comprehensive marketing tool. The findings indicate that users' intentions to retweet facilitate greater engagement with the Twitter network and contribute to the expansion of their networks, particularly when viewed as a marketing tool. The findings confirm that retweets introduce new participants into a conversation (Boyd et al., 2010; Shi et al., 2014), thereby expanding the network and increasing users' intention to engage with the Twitter platform.

Finally, the SEM analysis suggested incorporating the path ($AT \rightarrow IT$) to enhance the model's fit. The $AT \rightarrow IT$ pathway demonstrates that users' attitudes toward Twitter significantly influence their behavioral intentions to utilize the platform. This path can be theoretically supported by the actual Technology

Acceptance Model (Davis, 1986; Davis et al., 1989). The original Technology Acceptance Model posits that an individual's attitude toward using a system influences their intention to utilize that system. Several scholars have excluded the “attitude → system use” pathway from the original Technology Acceptance Model (TAM), while also extending the model or incorporating new variables (Chow, Herold, Choo, & Chan, 2012; Rauniar et al., 2014; Venkatesh & Davis, 2000). The current study did not initially consider the AT → IT path based on these theoretical assumptions. Subsequent SEM analysis confirmed the validity and significance of the path for the Twitter-specific model development. This finding further validates prior research (e.g., Di Pietro & Pantano, 2012; Kwon & Wen, 2010; Shin, 2010) on similar topics from a theoretical perspective. In summary, the outcomes of this study contribute to the empirical investigation of consumer acceptance of social-mediated advertising messages.

5.2 Managerial Implications

The current study produced several outcomes that can help practitioners and marketers craft their marketing messages effectively on X/Twitter and in social media as a whole. Managers should keep in mind that PU and PEOU are two important factors that lead to users' attitudes toward using Twitter as a marketing tool. Therefore, aligning these two factors with managerial goals would be challenging. Without guaranteeing these factors, managers cannot expect that users will easily accept this social platform for their purchasing decisions.

Next, it was found from the outcomes that users' attitudes toward using Twitter influence their intention to retweet and use the Twitter network. These findings are crucial from a marketing perspective. Users' intention to retweet and use Twitter can ensure it. Retweets spread messages quickly to other users on Twitter. Retweets further help users to use the network, as supported by the findings. In other words, users' attitudes toward Twitter help marketers in two ways: by spreading messages and by making the network more appealing to users for marketing purposes.

The current study found that both extrinsic and intrinsic motivation influence users' intention to retweet while using the network as a marketing tool. Previous studies (e.g., Beck, 2009; Toubia & Stephen, 2013) suggested that Twitter users can be extrinsically motivated to perform a task on Twitter. For example, one may be influenced to retweet a brand message if the brand offers any discount, coupon, gift, etc. This finding suggests that extrinsic rewards are still helpful in spreading marketing messages through social media. Therefore, marketers should not think that their messages will be passed along without any incentives. There should be some rewards for those who disseminate these messages to others.

This study also found that users' intention to retweet marketing messages is also influenced by intrinsic motivation. This finding is essential for marketers. Usually, it is understandable that extrinsic rewards are helpful in spreading messages. However, it is not very common to expect users to be intrinsically motivated to forward marketing messages. This study found support for this, which social media marketers can utilize. Marketers should focus on providing pleasant experiences to the users if they want them to spread their messages. For example, marketers can highlight or rank users' social media status based on how much they contribute to spreading messages. As Cooper (2011) mentioned, marketers can involve users via online competition, involving customers in promoting and showcasing their achievements through company channels.

Finally, the results of the current study found important implications for social media marketers that they can use to improvise their tactics. If these tactics are implemented in the marketing strategies, marketers would gain acceptability among users, and their messages would be passed along by the users with less

effort. Customers would also benefit from the marketers in the process and by purchasing products and services with less effort, thus making it a two-way social media engagement opportunity.

In summary, the study contributes theoretically by offering an extended TAM model that incorporates extrinsic and intrinsic motivators to analyze consumers' content-sharing motivations. This refined model contributes to the broader understanding of social media engagement and digital marketing effectiveness literature. From a managerial perspective, the study underscores the importance of intrinsic and extrinsic motivators to enhance users' engagement with branded content. Marketers can use promotions or rewards to drive extrinsic motivation, while personalized brand content and gamification techniques can boost intrinsic motivation for content sharing among social-media platform users.

6. Conclusion, Limitations, and Future Research

This research confirms the applicability of the Technology Acceptance Model (TAM) within the context of social media. Furthermore, the present study identified and validated several new pathways (i.e., extrinsic motivations → intention to retweet, intrinsic motivation → intention to retweet, intention to retweet → intention to use Twitter), contributing significant insights to the comprehension of Twitter's acceptance and usage, as well as social media in general. The study's findings hold significance for both theoretical and practical aspects of communication, advertising, and marketing.

The present study has several limitations that warrant acknowledgment. Consequently, additional research is necessary to overcome these limitations and provide new insights. This section discusses the limitations and directions for future research in detail. Firstly, the majority of respondents in this study are aged 19 to 22 years. The population in this age group is recognized as heavy users of social media (Ellison, Steinfield, & Lampe, 2007); however, the generalizability of the findings from their responses is restricted to other age groups. Future research may include users from different age groups to draw differentiation or similarities in age-related motivations. Secondly, the present study concentrates only on a clothing brand. The information regarding various products, brands, or companies can influence consumers differently, depending on their level of involvement with the product or firm. Consequently, research on these specifications may yield diverse results. Future studies may compare and contrast results from diverse social-media platforms listed as the top social-media platforms for marketers to facilitate the market's chosen marketing platforms for their brands. Future research may integrate these issues into future studies.

In conclusion, despite these limitations, the present empirical study may serve as a valuable resource for future researchers, practitioners, and educators in the field of social media. This study may facilitate future research focused on using Twitter and other social media for marketing objectives.

Disclosure Statement

The study findings were presented at a conference but not published.

Conflicts of Interest

The authors declare no conflict of interest.

Citation

Rony, N., Shams, A., & Ahmed, R. (2024). Influencing factors of retweet intention of branded tweet message. *Bangladesh Journal of MIS*, 10(2), 65–82.
<https://doi.org/10.61606/BJMIS.V10N2.A4>

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