

# Online Purchase Intention using Social Media: A Systematic Literature Review

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## ABSTRACT

Social Media (SM) have become an essential tool for the marketing of products and services, affecting customer Purchase Intention (PI). However, experts have no agreement over the factors or predictors as well as the theories that can explain the variation in PI. This review study attempts to discover the predictors (factors, mediator, moderator) of online PI using an SM platform. A systematic review of the online PI was performed. The findings demonstrated that the number of studies relevant to online PI via SM engagement is growing. The quantitative approach is widely employed in the literature, with most studies, though, not utilizing theories to explain online PI through SM. The findings also displayed that Structural Equation Modeling (SEM) is increasingly being deployed. The frequency analysis exhibited that the most important predictors are Attitude (AT), Subjective Norms (SN), Trust (TR), Perceived Usefulness (PU), Perceived Risk (RS), and Perceived Ease Of Use (PEOU). The findings were discussed, and sellers were urged to enhance information quality and reduce the risk of conducting online transactions by offering various payment methods. Further research employing mixed methods and theoretical frameworks is needed in this domain, especially considering developing nations.

*Keywords-online purchase intention; customer purchase intention; theory of planned behavior; social media; Systematic Literature Review (SLR)*

## I. INTRODUCTION

SM play a substantial role in the collection and spread of information in various fields, including entertainment, science, communication, crisis management, and climate change [1]. It is crucial to understand the strong influence of these platforms on individuals' psychology [2], AT, and purchase habits. Additionally, social networking has emerged as an essential tool for marketing and has evolved into a fundamental platform for online shopping [3]. The market for online purchasing via SM usage was anticipated to have reached \$19.4 billion in the United States (US) and \$186.04 billion in China, with a growth of \$474 billion by 2023 [4]. Due to COVID-19 expansion and

the need for businesses to relocate and conduct transactions online, the value of SM-related purchases has recently increased [5]. During the COVID-19 pandemic, customers have doubled the amount of time they devote to SM for gathering information and making purchases [6]. Owing to the aforementioned factors, it is now essential for businesses to develop an efficient online SM marketing plan in order to survive and grow [7]. Furthermore, PI is still in its early stages [8, 9]. PI is a major factor affecting marketing efficiency. However, there is little consensus about the predictors of online PI via SM employment [10]. Although some researchers have linked purchasing behavior to elements such as the SN and PU of online shopping [11], others have discovered that the

website image as well as the brand image play a significant part in determining customers' PI [12]. The content and quality of the information are also crucial for the online purchasing decisions of customers [13]. In addition, there is no consensus in the literature regarding the theoretical models that might explain the heterogeneity in SM use and its effect on PI [10, 14].

Several studies have suggested that Ajzen's (1991) Theory of Planned Behavior (TPB) is the underlying theory that can explain the customer behavior by utilizing SM. Other researchers employed theories, such as the Technology Acceptance Model (TAM), to interpret customers' buying intent [1]. Recent studies indicate that research on SM and its applications is primarily performed in developed nations, with few studies being conducted in the developing ones [2]. Moreover, experts have noted that the significance of SM for marketing is growing, despite the limited research on SM marketing strategies [4].

Therefore, there is a variation in the perspective of researchers regarding the predictors of online PI using SM [14]. The purpose of the current study is to conduct a Systematic Literature Review (SLR). This study is based on a single research question pertaining to the identification of the predictors of SM usage and their effects on customer PI. A sub-research question is related to the current level of knowledge on this topic. The present work also provides researchers with guidelines for extending the findings of previous studies.

## II. RESEARCH METHODOLOGY

The Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology is deployed in this study and is based on the procedures proposed in [15]. PRISMA provides the necessary guidance to conduct SLR research [16]. Prior literature, namely the study performed in [17], followed a similar approach. An SLR was carried out to understand the status of the literature considering the adoption of SM utilizing SEM.

### A. Data Source

This research aims to discover the predictors of SM online PI among consumers. The initial step was to identify the keywords used to search for articles. On the premise of this study's topic, a query was generated: ("Social Media") AND ("marketing strategy") AND ("intention to purchase"). The search was conducted on Scopus, Web of Science (WoS), and Google Scholar.

### B. Eligibility and Exclusion Criteria

The research resulted in 319 articles. To obtain an up-to-date literature assessment, (a) the search was restricted to the time period of 2016–2022. (b) Book chapters, conference proceedings, books, and book series were not included in the review. The review was limited to peer reviewed empirical articles. In addition, to avoid the translation and to have accurate findings, (c) non-English-written articles were excluded, which brought the total number of articles to 122. These articles were evaluated for eligibility by (d) reading the titles and abstracts. A total of 88 articles were filtered out. (e) 32 articles were removed on the basis of not fitting the article

scope. (f) Two independent researchers, with marketing and technology utilization experience, reviewed the articles. The researchers provided scores regarding the suitability of the articles. Articles with high and moderate scores were retained, while those with low scores were removed. (g) The final set of articles consisted of 34 articles, which were fully reviewed and analyzed. Figure 1 depicts the article collection process.

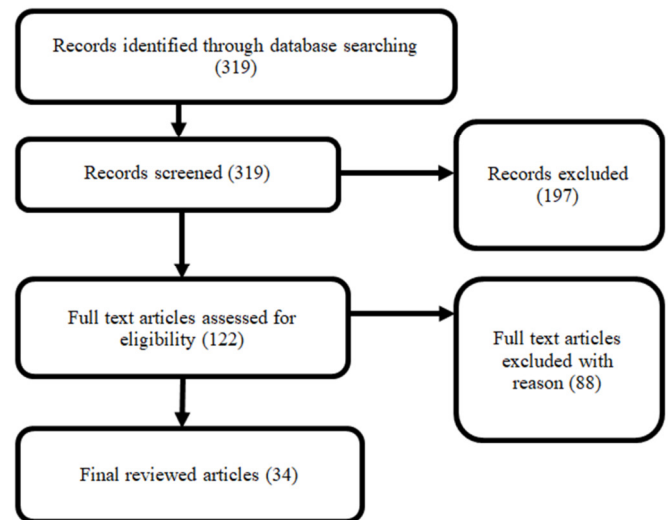


Fig. 1. Process of identifying and reviewing articles.

## III. TAXONOMY

Taxonomy is implemented to classify theories, models, methods, or empirical findings in a systematic way. This study reviewed the literature to understand the status of online PI via SM. Accordingly, articles that pertain to the use of SM for buying products and services online were reviewed. For a better presentation of the reviewed studies, the articles were classified into two categories. The first category contains the articles that adopted a single theory, and the second contains the articles that deployed combined theories. These categories and their corresponding articles are discussed below.

### A. Single Theory Articles

One of the theories widely utilized in PI literature is the TPB, which was developed in [18] and includes three main variables, namely SN, AT, and PBC. Researchers in [19] used the TPB to analyze the impact of several factors on the AT and PI of consumers in India. The findings of the research displayed that the financial and product risk had a significant influence on consumer perceptions. AT was affected by variables, such as diversity, convenience, economics, and hedonistic pleasures. Social networks influence individuals' intents to make a purchase. In addition, TPB was deployed by researchers in India to assess the intention to buy and to examine PI [20, 21]. The results emphasized the importance of SN and AT in predicting the likelihood of making a purchase. In Saudi Arabia, the effect of SN and AT, and that of TR on the Behavioral Intention (BI) of people concerning e-participation was explored. The results disclosed that these variables play a vital role in forecasting this type of behavior [22].

TPB was employed in Malaysia to investigate internet purchasing patterns [23]. The findings demonstrated a positive impact of TR, convenience, contentment, and security on the online purchase activity. In a similar manner, authors in [34] utilized the TPB to examine the influence of a country's culture on consumer buying patterns. The findings exhibited that the purchasing patterns of clients in Spain and Colombia differed according to the national culture. Authors in [25] indicated that RS, SN, and PBC affected the AT towards internet buying. In China, it was found [1] that TPB variables are significant predictors of consumer intention. Using TPB, authors in [2] explored the online PI in Kosovo. The results revealed that the AT, SN, and RS were found to affect online PI. TPB was used by researchers in Morocco in order to assess the online TR and PI [4]. The findings showed that the AT, RS, and TR influenced the online PI.

TAM includes two variables related to the PEOU and PU. It is hypothesized that both affect AT and BI, which in turn influence the actual PI. A few previous studies have utilized TAM in the context of investigating SM and its impact on PI. TAM was deployed by [6] to examine the AT and online PI of customers. The results disclosed that hedonic values, TR, and privacy concerns, as well as utilitarian values, have a positive influence on the AT of online shoppers. Similarly, authors in [8] showed that PU, PEOU, privacy, security, and TR are the major factors determining the use of online social commerce. Moreover, authors in [12] concluded that security has a positive impact on TR, whereas RS has a significant negative effect on TR. The findings also demonstrated that consumer TR affected positively online purchasing decisions. Authors in [11] explored the online PI of fresh agricultural products. The findings displayed that consumers' PEOU and PU of online pre-sale fresh agricultural products have a significant positive influence on their PI. Furthermore, researchers in [13] utilized TAM to examine the effects of PU, TR, and PEOU on online PI. The findings revealed that all these three parameters had an impact on online PI.

The Generational Cohort Theory (GCT) was employed in [26] to investigate online purchasing behavior and PI. The study examined the effects of information quality, AT, and perceived value on online shopping behavior and found that these variables are essential. Another theory is the Stimulus Organism Response (SOR) model [27]. SOR indicated that a variety of environmental factors can act as a stimulus (S) that influences an individual's internal state (O), which then determines the individual's behavioral response (R). In Iran, researchers deployed the SOR and explored the influence of social network characteristics on PI [28]. RS and TR affected the AT, which in turn impacted the BI.

The Procedural Fairness Theory (PFT) focuses on the fairness of decision-making procedures, rather than on the ultimate outcomes. Research indicates that individuals are more inclined to perceive an outcome as fair when they perceive the procedures leading to it as being fair, irrespective of whether the outcome is advantageous or not [29]. The PFT was deployed to examine the influence of assurance and consumer concerns on online purchase decisions [30]. The findings revealed that online experience, TR, and privacy and security

are critical factors for online purchase decision making. The Social Exchange Theory (SET) is a concept in social psychology that investigates human interactions and relationships. It posits that individuals carefully consider the advantages and disadvantages of their actions, aiming to maximize rewards and minimize costs in their interactions with others [31]. The SET was deployed in [32] to explore the decision to select a touristic destination. The findings highlighted the importance of TR in such procedures. Gratification theory is a communication theory that focuses on how people actively select and use media to fulfil their various needs and desires. It suggests that individuals consume media content because it offers them gratification in terms of information, entertainment, social interaction, or it covers other psychological needs [33]. The gratification theory was adopted by researchers in [34]. The study investigated the impact of information quality, information credibility, and TR on generating consumer resonance for PI on social networks. According to the findings, information quality and credibility, as well as TR are critical factors.

#### B. Combined Theories Articles

Several studies combined more than one theory to examine and predict the PI of customers. TAM and TPB were combined in [35] to analyze online purchase behavior. The findings exhibited that SN from TPB, and PU from TAM have a substantial effect on online purchase behavior. Researchers in [36] also coupled TAM and TPB to explore online shopping intention. The findings demonstrated that PU, PEOU, AT, and SN had a major positive influence on consumers' online shopping, whereas RS had a negative influence.

More studies have integrated TAM and TPB, such as in the UK, where researchers included the variables of TAM, TPB, RS, and TR and examined their effects on customer PI [37]. These variables were proved to be important for consumers in an online environment and in their choice to conduct online transactions. Authors in [38] combined TAM and TPB to analyze the factors influencing PI during COVID19. The results indicated that TAM variables, such as PEOU and PU, as well as TPB variables, such as SN, AT, and TR, are crucial for the online purchase intent. Researchers in Malaysia [39] and the USA [40] integrated TAM and TPB to investigate the predictors of online PI and technology adoption, respectively. In addition to TAM, TPB was also integrated with several other theories. For example, researchers in [41] coupled the TPB with the social networking theory to grasp customer online PI in Turkey. In [24], the TPB was also coupled with Diffusion of Innovation (DOI) to investigate the PI and the online PI across the cultures of two countries, Colombia and Spain.

In Pakistan, researchers deployed a combination of TPB and UTAUT to explore the influence of customers' PIs and the mediating role of AT in this process [42]. Combining TPB with the Theory of Reasoned Action (TRA), researchers in Vietnam examined the effects of security, individuality, reputation, and consumer AT on online shopping PI [43]. Using a similar approach, authors in [44] merged TRA with TAM. The research stated that user-generated content would affect perceived credibility, usefulness, and risk, which is projected to influence the AT and online PI.

Previous studies also combined the Information Adoption Model (IAM) with TRA [45]. The results indicated that the quality, credibility, usefulness, and adoption of information, as well as the need for information and the AT toward information, are the major key factors in Electronic Word Of Mouth (EWOM) in SM regarding consumers' PI. The TAM was also integrated with the e-commerce acceptance model, which added the RS and TR to the TAM variables, such as PU and PEOU, in order to examine consumers' online behavior toward performing a transaction. In Pakistan, the TRA, TPB, and TAM theories were integrated to evaluate the moderating effect of TR and commitment on customer PI and online purchasing behavior [46].

#### IV. RESULTS

##### A. Critical Analysis

Previous studies were analyzed to determine which factors are significant for online PI using SM. The current literature is exploratory in nature, with the majority of studies [49–52] not employing theories to explore the online PI. One of the goals of this study is to determine the factors that predict online purchasing behavior. Based on the literature review, the most prevalent factors are the AT, SN, TR, PU, RS, and PEOU, as determined by the frequency analysis. Furthermore, this section analyzes the reviewed articles in terms of their publication dates, country of origin, research methodology and theoretical frameworks, data analysis techniques, and sample sizes in order to shed light on the present status of the field.

##### B. Profile of Reviewed Articles

The number of relevant articles has increased since 2017 and continued to rise in 2020. The modest number of articles published in 2021 could be attributed to the belief that COVID-19 investigations dominated the academic research. In 2022, an increase in the number of articles was anticipated. Regarding the considered countries of the published articles, it was shown that four articles were published in relation to more than one country, whereas three articles considered Pakistan, Malaysia, Indonesia, and the USA. Finally, one article regarded the situation in each of Saudi Arabia, Iran, and Turkey. On the basis of economic status, the examined studies can be divided into three categories. Developed nations possess the 26% of studies, followed by 59% found in emerging economies, and 15% in developing countries. Figure 2 portrays the distribution of articles based on countries.

The reviewed articles can be divided into two groups. The first group employed a questionnaire as a data-gathering method. This category accounted for 97% of the studies, whereas the second category, which comprised the remaining 3%, aimed to review literature. Among the 97% of articles that have adopted the aforementioned approach, there were several theories that have been followed to explain the variation in online PI. A total of 61% of the examined studies employed a single theory, such as TPB (30%) or TAM (15%). The GCT (3%), IAM (3%), and Gratification Theory (GT) (3%) were also deployed. 39% of those surveyed articles have combined multiple theories to describe consumer behavior. TPB and TAM, TPB and TRA, and TPB and UTAUT comprise the combined theories.

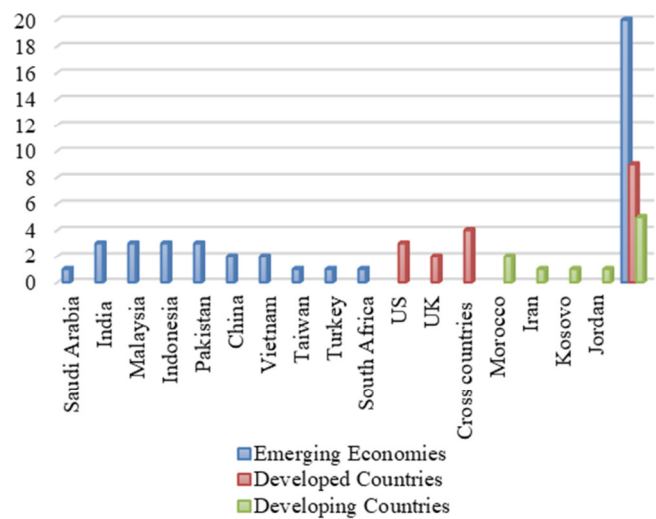


Fig. 2. Distribution of articles based on country and economy.

The literature on SM and online PI is dominated by studies that did not employ any theory. Several aspects, including website quality, information quality, risk, and security, were the focus of these investigations. For instance, authors in [47] discovered that website image, online habits, and website knowledge affected e-customer loyalty and satisfaction. Similarly, authors in [48] revealed that website quality, website security, and TR have a beneficial influence on purchasing decisions. Authors in [12, 49], compared the aforementioned conclusions. Moreover, authors in [50] assessed the consumers' intent to make an online purchase. The findings demonstrated that financial and product risk negatively impacted online PI, whereas convenience, product selection, a real store, and awareness had a positive impact. Similarly to this study, authors in [51] evaluated the impact of risk on customers' AT regarding online group purchasing. The data demonstrated that perceived reputation, structural assurance, product risk, and website credibility have a substantial impact on customers' AT toward online group purchasing. Additionally, researchers studied customer PI and discovered that SM dependence, RS, and perceived price had a substantial effect on the perceived value, which in turn affected PI [52].

Store characteristics and perceived value have a favorable effect on purchasing decisions, whereas sales promotions have a negative effect. Moreover, the findings of [53] revealed that EWOM, reputation, security, privacy, and RS are critical for the PI of SM users. Similarly, authors in [54] reported that both TR and RS are substantial for PI. Furthermore, brand identity and image were the most influential factors for PI, while brand loyalty, SM marketing activity, and customer experience were equivalently the most influential factors for PI.

Previous studies have utilized a minimum sample size of 50 respondents. The maximum number of respondents was 859, whereas the overall mean was 381. The assessed studies have utilized numerous software packages. Analysis of the Moments Structure (AMOS) has been employed by 24% of the reviewed studies. In 26% of the reviewed studies, Smart Partial Least Square (PLS) was deployed. Thus, 50% of the reviewed studies

implemented SEM, which includes AMOS and PLS, while the other 50% of the studies employed first-generation data analysis software, such as SPSS.

## V. DISCUSSION

There is no doubt that an increasing number of consumers show a preference for online shopping over traditional physical store visits. This may be largely related to convenient, hassle-free shopping. Internet shopping is increasing globally, especially in countries with a well-developed infrastructure for online marketing. With an abundance of information, customers now have the freedom to make purchases from anywhere and at any time.

This study conducted a thorough literature review to find the most influential predictors of online PI. The study filtered and extracted the most relevant articles. As a result, this study's conclusions are based on an evaluation of 34 papers pertaining regarding SM usage associated with online PI. This study revealed a rise in the rate of articles on SM and their influence on PI, particularly evidenced in 2022. This rise could be a response to the demand for more research on the implications of SM, and it is consistent with the growing importance of SM in online purchase behavior [55].

The findings also revealed that the majority of the studies were conducted in Indonesia, India, and Malaysia, with 59% of them being carried out in emerging economies and 26% in developed countries. In the context of emerging economies, SM exploration has been more frequently utilized to investigate consumer PI. This conclusion contradicts the assertions of the authors in [56], who indicated that developed countries dominate the research on SM studies and their applications to online PI. However, it is important to emphasize that in developed nations, e-commerce has achieved exceptional success and provided significant economic and social benefits [45]. On the contrary, in developing nations, the situation is very different. Several challenges have impeded the growth of e-commerce in these economies [34]. Consumers in developed nations have adapted to the Internet and benefited from e-commerce, which has modified their lifestyles [44]. Customers in developing nations, on the other hand, are accustomed to face-to-face transactions, distrust technical systems, and cannot afford the associated risk [36]. These obstacles present an opportunity for online merchants and marketing professionals to evaluate the RS impact on the online purchase behavior and obtain knowledge about a consumer's perspective on shopping online [38].

The findings also showed that quantitative studies are preferable compared to other approaches. TPB and TAM are among the theories utilized in the examined studies. In the literature, there is also a slight tendency to combine multiple theories to predict online purchasing behavior.

The findings additionally indicated that the sample size of the reviewed studies was adequate, as the sample size for studies employing SPSS was larger than 30 responses, which is consistent with the recommendations of previous studies regarding the use of the SEM. The relatively larger sample size in the reviewed studies revealed that SEM is being more

frequently utilized in the literature and is on the verge of outperforming SPSS.

According to Figure 3, the findings disclosed that AT, SN, TR, PU, RS, and PEOU are the most significant predictors of online PI via SM.

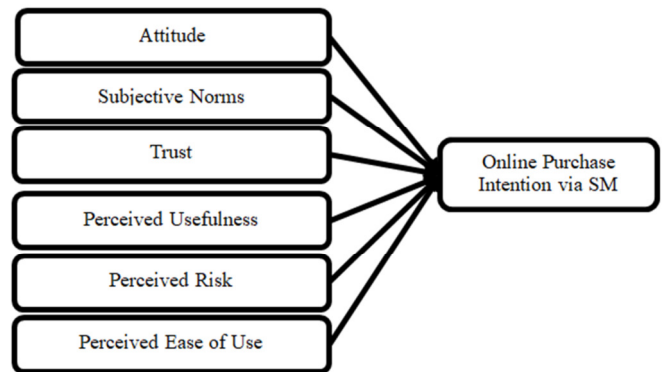


Fig. 3. Conceptualization of the important variables of online PI via SM.

Given that SM is a free zone, where anybody can publish his views and feedback about the product and services, as well as rate the product and services of the seller, these factors are vital for supporting the decision to purchase online. The AT and SN are components of the TPB, while the PU and PEOU are essential variables of TAM [41]. Contextual variables are related to the TR in the online purchase as well as the RS. These findings are in line with those of [34, 45]. Owing to the existence of online fraud and the potential for predatory behavior on SM, purchasing via SM is risky. Therefore, RS is a key factor in the determination of online PI. This is consistent with the findings of [19], which noted that there are several types of risk, including product risk, financial risk, and non-delivery risk. Similarly, the findings of [51] suggest that customers confront a number of hazards when making online purchase decisions.

## VI. IMPLICATIONS

Based on the findings of this study, there are several factors that are critical for online PI. In order to alleviate the feeling of being at risk in an online environment, TR is essential. Customers can be assured that the seller is trustworthy if they have TR. Thus, customers who trust the online brand are likely to make additional purchases and recommend it to others [23]. In addition to TR, the security and privacy of an online transaction are essential factors for customers to make a purchasing decision [48]. Again, the perceived worth of the online product and services, as well as the reliability of the information the customer acquires from the brand or the seller can play a significant part in their decision to purchase from the online seller [44, 45]. Therefore, the aforementioned variables were deemed to be the most important predictors of online PI via SM utilization. Some websites produce too much, too little, or the wrong type of content to engage their viewers, which is one of the current challenges in this area. On the basis of these findings, decision makers are urged to improve the quality of the information offered for their products and services. They

are also encouraged to reduce risk, particularly financial risk, by developing a secure payment system and providing clients with a variety of payment options, such as the ability to pay at the customer's doorstep. Additionally, sellers are urged to boost customer TR and perceived value, as well as to be credible and trustworthy.

This study also indicated that customer ATs can function as obstacles or advantages for marketers, making the study of consumer AT critical in this context. Developing a marketing plan that disregards the sentiments of customers toward a certain product or service may be detrimental to its success. Comprehending customer AT and beliefs is the first step in modifying or reinforcing them. Thus, marketers are benefited from utilizing their knowledge of AT to predict customer behavior. Such a strategy is necessary for nations with a wide range of geographical, social, cultural, political, and other types of variety, which generates several market segments. This study encompasses implications for decision makers in terms of identifying the critical factors that lead to an enhancement in the online PI. Understanding the findings, which is based on a literature of 34 articles, will lead to better deployment of the variables and improvement in the decision making of the online seller.

#### VII. LIMITATIONS AND FUTURE WORK DIRECTION

This study involves some limitations that need to be considered for further expanding the literature on this topic. The first of these is the publication date of the reviewed articles. The reviewed articles were extracted from the time period between 2016 and 2022. This occurred in an attempt to have the latest view of the literature. In addition, the reviewed publications were retrieved from only four databases, including Web of Science, Scopus, and Google Scholar. Thus, researchers should take these limitations into account when interpreting the results. As a means to contribute to the research on online PI via SM, it is advised that future studies expand the time period to include more articles before 2016 and after 2022. Future studies could also investigate other databases so that the findings can be further generalized. It is suggested that future research should investigate the predictor of online purchases utilizing SM in developing nations. This is because the studies pertaining to this subject are still limited compared to the emerging economies and developed countries. Yet the use of SM in these countries is staggering. A mixed method approach that includes qualitative or quantitative approaches is recommended to examine the predictors. To comprehend the predictors of online PI via SM, it is possible to apply more explanatory theories, such as the UTAUT, or a multi-perspective theory, such as the Technology-Organization-Environment framework (TOE).

COVID-19 has impacted both the PI and SM utilization of customers. This is because the majority of businesses have relocated their product and service marketing to the Internet. Consequently, additional research is required to analyze the predictors during and after the COVID-19 pandemic. Studying the impact of COVID-19 on online purchases helps in understanding if the changes observed during the particular pandemic are temporary or if they signal long-term shifts in consumer behavior. This information can help forecast future

consumer behavior and market trends, providing businesses and policymakers with valuable insights for making informed decisions. This study indicated that certain variables play a critical role in SM's online purchases. These variables include information quality, risk, TR, security and privacy, perceived value, and information credibility. A framework capable of combining and analyzing these variables in the context of online PI using SM would further enrich the literature in this domain. To strengthen the explanatory power of online PI utilizing SM, variables, such as TR, information technology knowledge, and demographic information, such as gender, age, education, and experience with SM can be explored as intervening and moderating variables.

#### VIII. CONCLUSION

This literature review presents the current state of knowledge and identifies the predictors of online Purchasing Intention (PI) via Social Media (SM) utilization. The study has systematically extracted, analyzed, and reviewed the selected articles. The reviewed articles were taken from four databases, and the results indicated that the number of publications concerning online PI using SM platforms is increasing. The findings also revealed an increase in the number of studies conducted in emerging economies. The number of quantitative studies is higher than that of qualitative and review studies, while the majority of them do not employ underlying theories. The sample size of the examined articles met the minimal sample size requirement for employing data analysis software of the first and second generation.

A frequency analysis was performed to determine the most prevalent predictors. The findings exhibited that customer perceptions of the Perceived Ease Of Use (PEOU), Perceived Usefulness (PU), and SM Trust (TR), as well as the risk associated with making online transactions to purchase goods or services, are the most significant determinants. Additional predictors included security and privacy, perceived value, and information credibility. The findings were outlined, and the decision-makers were encouraged to place greater emphasis on information quality and risk mitigation. The necessity for more studies in developing countries employing a mixed method approach and combining theories to increase the variance in online shopping by utilizing SM was highlighted as a direction for future research.

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