

Drivers of E-Commerce Adoption in Algeria: An Empirical Field Study Using the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB)

العوامل المحفزة لاعتماد التجارة الإلكترونية في الجزائر: دراسة ميدانية لعينة باستخدام نموذج قبول التكنولوجيا و نظرية السلوك المخطط

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Abstract:

This research investigates the factors shaping online purchase intention among Algerian consumers, employing the Technology Acceptance Model (TAM) enhanced with social influence constructs. Drawing from a sample of 152 respondents, the findings indicate that perceived usefulness, perceived ease of use, and social norms play a pivotal role in shaping e-commerce adoption intentions, collectively accounting for 42.9% of the variance in purchase intention. Notably, social factors exert a particularly strong impact on this collectivist cultural framework. These findings contribute to the technology adoption literature by demonstrating the relevance of the Technology Acceptance Model (TAM) and theory of planned behavior (TPB) in a non-Western, North African context, where communal values and external social influences disproportionately shape decision-making processes

Keywords: E.Commerce, Consumer Behavior, TAM, TPB, Technology adoption.

Jel Classification Codes : M31, Z33, L81.

Introduction:

In the contemporary era, technological advancements are progressing at an unprecedented rate, revolutionizing industries by enhancing efficacy and efficiency across sectors.(Kumari & Ahmed, 2021). Among these innovations, the internet stands out as the most transformative force reshaping modern life. It has fundamentally altered daily routines and consumer behavior, displacing traditional methods of buying and selling goods. Today, the Internet is indispensable to commercial operations, offering businesses global reach and unlocking a wealth of opportunities through its widespread adoption.

Electronic commerce (e-commerce), is defined as the digital exchange of goods, services, or payments via electronic networks (Grandon & Pearson, 2004; Gupta, 2014; Jain et al., 2021), has emerged as a critical strategic priority for organizations worldwide. It enables enterprises to produce, market, and distribute products on a global scale by leveraging information and communication technologies. More than just a transactional tool, e-commerce encompasses all applications of technology aimed at optimizing a company's external relationships and operational processes (Georgiadis et al., 2013).

Once a niche concept, e-commerce has evolved into a cornerstone of online activity. Its appeal lies in its adaptability: businesses can create tailored platforms to showcase specialized offerings, while consumers enjoy unparalleled convenience. This shift has reshaped global retail strategies, service delivery, and market dynamics. As noted by Awiagah et al. (2016), e-commerce continues to redefine how businesses promote their products and how consumers make purchasing decisions. However, evolving consumer expectations and digital competition present significant challenges for companies striving to maintain relevance. Consequently, there is a growing demand for innovative consumer insights, theories, and frameworks to better understand target audiences and craft personalized, data-driven marketing strategies.

While the majority of e-commerce research has historically centered on developed economies with mature technological infrastructures, the globalization of digital markets necessitates extending this inquiry to emerging regions characterized by untapped growth potential and distinct sociocultural contexts. Algeria exemplifies this shift: the country has witnessed a surge in both e-commerce platforms and consumer participation in recent years. Despite this rapid growth, existing literature has barely overlooked the drivers and barriers shaping Algerian consumers' online purchasing decisions, as well as their behavioral patterns on e-commerce platforms(Chaabna & Wang, 2015; Chikhi & Ourlis, 2020; Djafri et al., 2024). Prior studies have predominantly focused on supply-side perspectives—such as strategies for businesses, SMEs, and entrepreneurs—rather than analyzing demand-side dynamics (Hassen et al., 2020; Houari & Medjedel, 2009; Laridja & Tiar, 2022). This gap underscores the urgency of conducting targeted empirical research to identify key determinants influencing Algerian consumers' adoption of e-commerce, offering critical insights to align market strategies with localized preferences and challenges.

Algeria's e-commerce sector has experienced rapid expansion in recent years, achieving a market valuation exceeding \$1.5 billion by 2024(Algérie Presse Service, 2024). This surge not only unlocks new opportunities for distributing diverse goods, products, and services but also addresses critical population demands and the persistent challenges private enterprises face in nationwide distribution. As a result, understanding the key factors influencing Algerian consumers' adoption of this emerging technology is essential.

The study aims to achieve the following objectives:

- 1) Identify the factors that influence the intention to purchase online.
- 2) Propose a conceptual framework to guide experts in crafting targeted strategies for engaging digital consumers.
- 3) Evaluate the impact of social norms, perceived usefulness, perceived ease of use, and societal norms on online purchasing decisions.

II. Literature Review

The pervasive nature of e-commerce technology allows businesses to connect with millions globally while offering several key benefits: increased efficiency through automation tools like automatic product identification systems; reduced transaction costs due to streamlined electronic processing; and enhanced collaboration via improved information-sharing mechanisms across various sectors.

Electronic commerce is defined broadly by Schneider (2017, p. 6) as encompassing not just trade between firms but also internal organizational processes related to human resources management strategies for hiring new talent; strategic planning initiatives aimed at optimizing sales performance metrics; procurement practices designed around sourcing materials efficiently from suppliers.

In line with Dave Chaffey's conceptual framework for understanding what constitutes electronic commerce activities—any digitally mediated interaction involving an enterprise should be considered under this umbrella whether financial in nature such as purchases made online through credit cards versus non-financial exchanges including customer support services offered via email platforms (Chaffey, 2015, p. 13).

The concept of e-commerce is multifaceted, with definitions varying based on one's viewpoint. As noted by Kalakota and Whinston (1997, p. 3), several key standpoints emerge (page 3):

- 1) **From a Communications Standpoint:** Focuses on the exchange of information and value through digital channels, encompassing electronic payments, delivery of products/services, and distribution of data.
- 2) **From a Business Processes Standpoint:** It uses technology to automate workflows, enhance transaction efficiency, and reduce manual intervention in commercial activities.
- 3) **From a Service Standpoint:** From this angle, e-commerce allows businesses to reduce costs while simultaneously increasing the speed at which services are delivered—enhancing overall quality in the process.
- 4) **From an Online Standpoint:** Refers to the buying and selling of goods, services, and data over the internet.

Consumer behavior refers to the *multidimensional framework* through which individuals perceive, evaluate, and engage with every stage of a purchase decision. This process spans pre-purchase research, transactional actions, and post-purchase evaluation, reflecting the consumer's cognitive and behavioral engagement in achieving an informed choice (Gozmir & Chouhbi, 2023; Lim et al., 2023; Nassè, 2021; Pachauri, 2001). More simply, consumer behavior encompasses the actions and resulting outcomes that occur when a consumer goes through a decision-making process, selects a product or service, and ultimately uses it.

If this decision-making process occurs in an online environment, it is referred to as online consumer behavior. This term encompasses a range of factors influencing an individual's choice to acquire goods and services via electronic commerce channels or platforms. Therefore, online consumer behavior describes the diverse behaviors and patterns displayed by customers when they interact with e-commerce platforms or during online purchasing. 326

The factors impacting consumer behavior can be categorized into both internal and external dimensions, and the concept of "influence" is fundamental to understanding it. This demonstrates that consumer behavior is adaptive to various situations and stimuli. Some of these influencing factors include perception, learning, culture, attitude, social norms, socioeconomic status via social class distinctions, past experiences, family dynamics, and reference groups (Babin et al., 2017, p. 24; Lim et al., 2023). These influences create complex interaction patterns that shape final purchase decisions. Additionally, decision-making process varies based on the time required and the complexity of the decision-making process. The level of complexity depends on the difficulty of the decision and the number of activities involved, the more complex the decision, the longer it takes to make, as time and complexity are closely related (Stankevich, 2017). As noted by Schiffman et al. (2012, p. 406), this relationship becomes particularly pronounced in online environments, where consumers often face additional considerations related to technology and security.

Prior research examining technology adoption in consumer contexts has employed a variety of models and frameworks (Dwivedi et al., 2019; Haryanti & Subriadi, 2020; Wang et al., 2008). Prominent among these are the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB), both of which have been extensively applied to explain how individuals and organizations perceive, adopt, and integrate technologies into daily activities. These frameworks offer valuable insights for understanding how individuals accept and use new technology, so researchers can pinpoint critical determinants such as perceived usefulness, ease of use, and behavioral intent, that shape adoption decisions, enabling the development of strategies to optimize technology implementation. Furthermore, alternative models, such as the Diffusion of Innovation (DOI) theory, are gaining traction for examining how innovations spread throughout society, shedding light on the process through which new technologies achieve widespread acceptance (Lundblad, 2003).

In more mature markets where e-commerce has reached an advanced stage, the e-commerce adoption rate is different than in developing countries due to multiple factors like trust, and infrastructure,.....(Hendricks & Mwapwele, 2024; Murthy et al., 2021; Yang et al., 2012), researchers often turn to comprehensive models similar to Venkatesh's Unified Theory of Acceptance and Use of Technology (UTAUT). This framework incorporates multiple variables like performance expectancy (anticipated benefits), effort expectancy (perceived ease of use), social influence, and facilitating conditions (infrastructure support) to predict user behavior and behaviors regarding technology adoption(Venkatesh et al., 2003). In contrast, studies in emerging economies or niche sectors may prioritize more basic models such as cultural norms or access to resources. Therefore, by integrating and contrasting diverse models, researchers gain valuable insight into adoption dynamics, revealing how socioeconomic, psychological, and contextual variables interact across various contexts and populations.

II-1- The Technology Acceptance Model (TAM):

Davis (1989) introduced the Technology Acceptance Model (TAM) as an adaptation of the Theory of Reasoned Action (TRA), specifically tailored to explain to explain why individuals accept or reject technological innovations. At its core, TAM suggests that perceived usefulness (the degree to which a technology enhances performance) and perceived ease of use (the extent to which

using the technology requires minimal effort) are crucial determinants influencing user acceptance. Behavioral intention emerges from these perceptions; it is a direct predictor of whether individuals will actually use the technology. Since its inception, TAM has become a widely adopted framework for empirically testing user acceptance behavior related to technology adoption and usage. By highlighting these core factors, TAM has proven to be a valuable tool in predicting and explaining user behavior across diverse contexts.

- 1) Perceived Usefulness (PU):** Usefulness refers to the extent to which an individual believes that adopting a certain system or application will enhance their performance or decision-making efficiency (Davis, 1989). This construct is a vital component in shaping one's intention to adopt technology, as users prioritize tools that demonstrably improve productivity or outcomes. Factors such as social influence, perceived benefits, and overall usability positively contribute towards fostering this perception, reinforcing its impact on technology acceptance. These elements collectively reinforce users' confidence in the system's capacity to deliver tangible value.
- 2) Perceived Ease of Use (PEOU):** Relates to consumers' expectations regarding the usability of technology (Davis, 1989), particularly how easy and intuitive they perceive the system to be and to operate without extensive training or cognitive strain. PEOU plays a significant role in user acceptance since individuals are more likely to adopt a system that they find simple to navigate. Studies have shown that high levels of perceived ease of use correlate with an increase in user satisfaction, which in turn enhances technology adoption (Aburbeian et al., 2022; TAHAR et al., 2020).

Generally, The Technology Acceptance Model (TAM) provides a framework for predicting an individual's likelihood of adopting a technology based on three criteria: Perceived Usefulness, Perceived ease of use, and perceived benefits. Perceived Usefulness assesses how well a system performs its tasks, ensuring reliability and efficiency. Perceived Ease of Use refers to how user-friendly and intuitive the technology is, and the cognitive or operational effort required for individuals to navigate the system. Perceived benefits encompass the advantages that the individual sees in adopting technology, such as increased productivity, time efficiency, or convenience. These benefits act as motivational drivers, influencing the user's cost-benefit analysis during the adoption process.

II-2- The Theory of Planned Behavior (TPB):

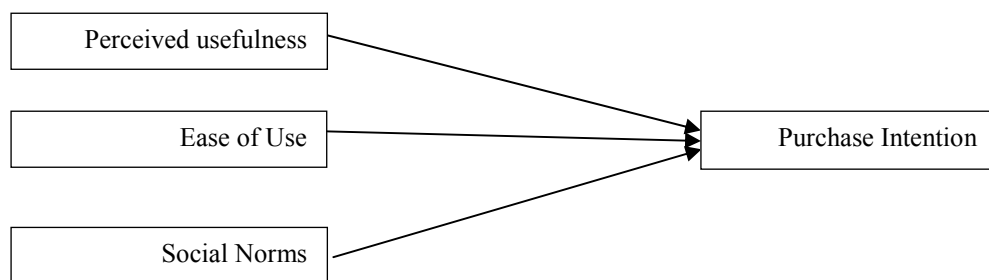
The Theory of Planned Behavior (TPB) is primarily concerned with predicting the occurrence of specific behaviors within an individual's volitional control. At the heart of the TPB lies the concept of behavioral intention, which is shaped by attitudes toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). This theoretical model seeks to explain the perceived likelihood of the behavior achieving a desired outcome and their attitudinal evaluations of its potential benefits and drawbacks.

Attitudes reflect an individual's positive or negative evaluation of performing the behavior, while subjective norms capture perceived social pressures to perform or not perform the behavior. Perceived behavioral control, conversely, denotes self-assessment of one's ability to perform the behavior, accounting for internal and external constraints (Ajzen, 2020). By having a better grasp of these factors that shape intention, the TPB provides researchers with a valuable tool that allows them to predict and potentially influence behavioral change and tailor targeted interventions to modify intention-driven actions.

- 1) **Social norms:** Social norms are unwritten rules and expectations that define what is considered acceptable, appropriate, or typical behavior within a specific group, community, or culture. They serve as a benchmark for behavior, exerting a strong influence on individual actions and interactions (Legros & Cislighi, 2019). By shaping conduct through implicit or explicit consensus, social norms provide foundational guidelines that promote cohesion and predictability in social dynamics.

II-3- Research model (Conceptual Framework):

To understand the influence of consumer behavior on online purchase intention as well as the factors impacting online consumers' purchase intention, we have chosen three independent variables: Perceived Usefulness, Perceived ease of use, and Social Norms. Therefore, our model will be based on three independent variables (Perceived of usefulness, ease of use, and social norms) and one dependent variable (the purchase intention).



a. HYPOTHESIS:

1) Hypothesis 1: Perceived Usefulness and Purchase Intention

- Null Hypothesis (H_0): Perceived usefulness does not significantly influence the purchase intention on an e-commerce site.
- Alternative Hypothesis (H_A): Perceived usefulness positively and significantly influences the purchase intention on an e-commerce site.

2) Hypothesis 2: Perceived Ease of Use and Purchase Intention

- Null Hypothesis (H_0): Perceived ease of use does not significantly influence the purchase intention on an e-commerce site.
- Alternative Hypothesis (H_A): Perceived ease of use positively and significantly influences the purchase intention on an e-commerce site.

3) Hypothesis 3: Social Norms and Purchase Intention

- Null Hypothesis (H_0): Social norms do not significantly influence the purchase intention on an e-commerce site.
- Alternative Hypothesis (H_A): Social norms positively and significantly influence the purchase intention on an e-commerce site.

b. Decision Rule

- 1) Accept H_0 : If p is above alpha (0.05), it means there is no significant difference between the variables.

- 2) Reject H_0 , accept alternative hypothesis (H_A): If p is below alpha (0.05), it indicates there is a significant difference between the variables.

III. Results and discussion:

Data collection was conducted using a well-structured questionnaire distributed via the Google Forms platform. A Likert scale was employed to measure key variables, ensuring precise and reliable responses. The collected data were then analyzed using SPSS software for statistical processing and interpretation.

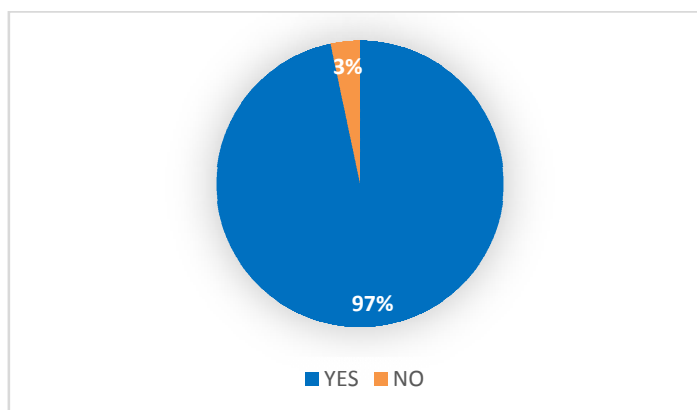
Table n°1: Demographics of study (n=152)

1) Gender	Male	56%
	Female	44%
2) Age (years old)	> 18	0
	18 - 24	12%
	25 - 39	61%
	40 - 60	21%
	< 60	6%
3) Education	Primary	0
	Secondary	7%
	University	89%
	Ph.D / Other	4%
4) Socio-professional category	Students	23%
	employee	65%
	unemployed	2%
	business owner	6%
	retired	1%
	other	3%

Source: Data obtained from our survey.

- 5) Have you already purchased a good or service online? (websites for e-commerce, social networks, etc.).

Figure n°1: e-commerce using by our respondents

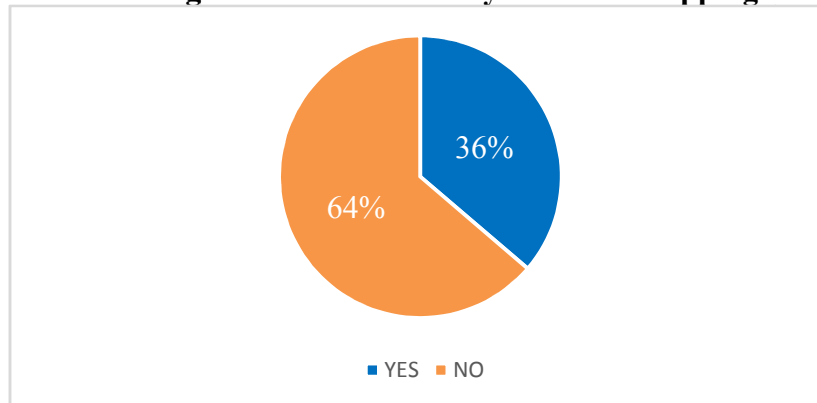


Source: Data obtained from our survey.

Survey results indicate widespread e-commerce adoption among respondents, with 97% (n = 148) having previously made an online purchase. This suggests high digital literacy, broad internet access, and growing consumer trust in Algerian e-commerce platforms. This dominance of online shoppers reflects increasing comfort with e-commerce, likely driven by diverse payment options, improved user experiences, and social commerce influence. The remaining 3% (n = 4) who have never purchased online may face barriers such as lack of trust or limited access to digital payments. These insights highlight a maturing e-commerce market while signaling the need for initiatives that promote full digital inclusion.

6) Do you find it difficult to buy products online?

Figure n°3: The difficulty of online shopping

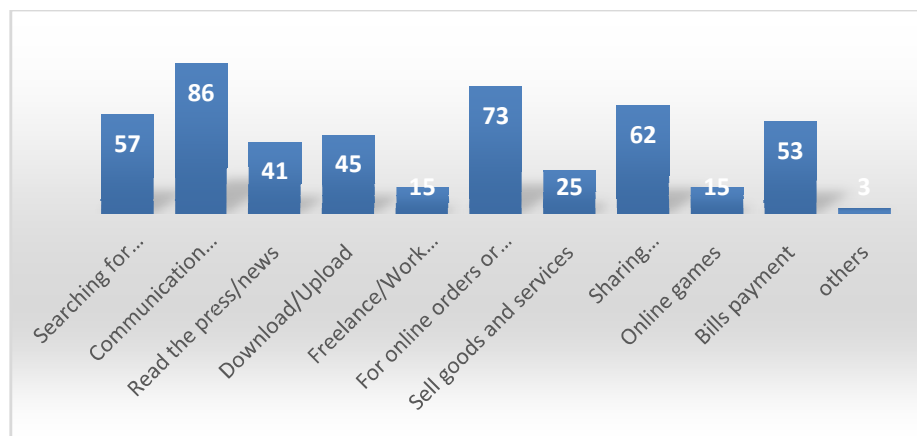


Source: Data obtained from our survey.

Analysis of 152 survey respondents revealed that while a majority (64%, n = 97) experience no difficulties with online purchasing, a substantial minority (36%, n = 55) still encounter challenges. This highlights that despite increasing e-commerce adoption in Algeria, significant barriers remain for a notable segment of consumers. These challenges likely stem from a combination of technological factors (e.g., website navigation, mobile optimization), trust and security concerns (e.g., fraud, product authenticity), and payment-related obstacles (e.g., access to digital payment methods). Disparities in digital literacy may also contribute to hesitation among less experienced users. However, the strong presence of accessible experiences (64%) indicates progress in digital adoption, likely driven by improved platform usability, increased internet access, and evolving consumer behavior.

7) The Multifaceted Drivers Fueling Internet Adoption

Figure n°3: The purpose of using the Internet.



Source: Data obtained from our survey.

In this question, respondents should choose two reasons that most drive them to use the Internet. The goal is to see if there is a correlation between those who use online payment and those who use the Internet daily. According to the models we have used, the basic idea is that the likelihood of a consumer adopting a new technology is predicted by their previous behaviors. Most people use the internet for communication through social media and e-mail, the second motivation is to order and purchase products from online stores and services. Sharing documents and searching for information is also a strong motivation to use the internet. Bill payment was also cited as a good reason to use the internet although online payments are very low in the country. Download/Upload and to read the press were moderately chosen by the respondents as a reason to use the internet. Other reasons like Freelancing, selling goods and services through the internet, and online games are cited as feeble motivations for using the internet.

Table n°2: Descriptifs Statistiques.

	N	Min	Max	Mean	Std dev	Variance	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Stat	Stat	Std error	Stat	Std error
PerceivedUsefulness	152	1,30	5,00	3,4046	,88379	,749	,378	,255	,287	,500
Perceivedease of use	152	1,55	5,00	3,9265	,67375	,587	,742	,255	,479	,500
Social Normes	152	1,10	5,00	3,5565	,91086	,824	-,364	,255	,293	,500
Purchase intention	152	1,10	5,00	3,4462	,94654	,934	-,229	,255	,408	,500
N valide (listwise)	152									

Skewness is a metric used to quantify how asymmetrical the data distribution is. It indicates Whether the data points are uniformly distributed or skewed toward one side of the mean. Table (3) demonstrates that there was a skew in all four variables. There is a modest negative skew in Perceived Usefulness (-0.378), with values that are somewhat focused on the right. Social norms, on the other hand, is closer to symmetry but still significantly negatively skewed (-0.364). There is a substantially negative skew in perceived ease of use (-0.742), with more values on the right and a longer tail on the left. Purchase intention (-0.229) has very minimal skewness since it is nearly symmetric.

Kurtosis is a metric used to quantify how tailed distribution is, it shows whether the data has heavy tails (more outliers) or light tails (fewer outliers) compared to a normal distribution. Social norms (0.293) and perceived usefulness (0.287) have somewhat leptokurtic distributions, which means they have a normal distribution with a few extra outliers. The variable with the highest kurtosis, perceived ease of use (0.479), has a higher peaked distribution with more extreme values (outliers). The distribution of purchase intention (-0.408) is platykurtic, which means it has a wider range of data points and fewer extreme values. Higher kurtosis (perceived usefulness, perceived ease of use, and social norms) often means that replies have more extreme values scattered around the mean. This suggests that while most respondents tended to rate things similarly, some offered extremely high or low evaluations. Conversely, a flatter distribution with a lower kurtosis (purchase intention).

III-1-The reliability test :

We checked the items' reliability using Cronbach's alpha. This test enables us to confirm how consistently several study or test items assess the same competence or characteristic. Stronger

internal consistency is indicated by higher Cronbach's alpha values. A reference value of 0.7 is commonly employed. A Cronbach's alpha of more than 0.7 often means that the research or test's items evaluate the same ability or trait. The items might not consistently assess the same ability or trait if Cronbach's alpha is less than 0.7. However, the criteria of your field of study and the quantity of items in the analysis also influence which reference value is best to employ.

Table n°3: «Cronbach's Alpha Coefficient Result»

Variables	Cronbach's Alpha	Numbers of Items
Perceived Usefulness	0.822	05
Perceived ease of use	0.912	06
Social Normes	0.855	03
Purchase intention	0,927	04

The table indicates that all of our items are reliable since the measurement scale's internal consistency for each of our variables is high. The variable of perceived usefulness is quite good, the great reliability of the measuring scale is demonstrated by Cronbach's alpha coefficient, which is equivalent to 0.822. The perceived ease of use and social norms are also perfect with Cronbach's alpha coefficient that surpassed 0.912 and 0.855 respectively, indicating a higher reliability and internal consistency of the items. The reliability of our dependent variable Purchase intention is also so high demonstrating a strong internal consistency of the items' Correlation matrix.

III-2-Model summary :

Table n°4: Model summary

Model	R	R Square	AdjustedR Square	Std. Error of the Estimate
1	0,655 ^a	0.429	0.417	0.769

- 1) **R²:** measures the proportion of the variance in the dependent variable that is explained by the independent variables in the regression model. $R^2=0.429$ indicates that the independent variables in the model account for 42.9% of the variation in the dependent variable. Since the remaining 57.1% of the variation cannot be explained by the model, there must be more factors affecting the dependent variable. Nonetheless, the fact that the R^2 value is not proximate to 1 suggests that the model can only explain a moderate amount of the variation of the dependent variable; further development is necessary. An additional relevant consideration for a more thorough assessment is adjusted R^2 .
- 2) **adjusted R²:** R^2 indicates the proportion of the variance of the variable, whereas adjusted R^2 corrects R^2 by taking into account the number of independent variables in the model. A more accurate measure of the model's ability to generalize to a wider population is provided by adjusted R^2 . An adjusted R^2 value of 0.417 suggests that the model captures approximately 41.7% of the variance in the dependent variable, taking into account the number of independent variables. This implies that while the model may be somewhat accurate, it may not account for all the variables or interactions. An adjusted R^2 of 0.417, which is slightly lower than the R^2 of 0.429, suggests that a part of the variance explained by the model might be due to randomness rather than a true relationship between the independent and the dependent variable.

- 3) **The standard error of the estimate (SEE):** it reflects the average difference between observed and predicted values, serving as the standard deviation of the residuals. With a SEE of 0.768, the model demonstrates a high level of predictive accuracy. This implies that the model effectively explains a substantial amount of the variability present in the data.

III-3-Anova model:

The Analysis of Variance (ANOVA) table provides an overview of the regression model's performance, which breaks down the total variance into elements that may be attributed to residual error and the model. The table is structured as follows:

Table n°5 : ANOVA

Source	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-statistic	Significance (p-value)
Regression (SSR)	41.166	3	13.722	23.377	< 0.000
Residual (SSE)	87.416	149	0.587		
Total	128.582	152			

Dependent Variable: Purchase Intention

Predictors: (Constant): Perceived usefulness (PU), Perceived Ease of Use (PEOI), Social Norms (SN).

The total sum of squares (128.582) is the sum of the regression sum of squares (41.166) and the residual sum of squares (87.416), confirming the internal consistency of the ANOVA table

- 1) **Explanatory Power:** According to the SSR, the regression model explains 41.166 units of the total variability in the dependent variable. This equals around 32 percent of the whole variability ($SST = 128.582$)
- 2) **The residual variability ($SSE = 87.416$):** is the percentage of the overall variability that the model is unable to explain. This suggests that the data still contains a sizable degree of unexplained variability.
- 3) **Model Significance:** A high F-statistic (23.377) and an extremely low p-value (< 0.000) indicate that the regression model is statistically significant. The F-statistics p-value tests the null hypothesis, which states that all regression coefficients are equal to zero. Generally speaking, a p-value of less than 0.05 is considered statistically significant. The regression model is highly significant in this instance as the independent variables' impact on the purchase intention is substantial ($p=0.000$), less than 0.05. This implies that the dependent variable is significantly impacted by at least one of the predictor factors.
- 4) **Model Adequacy:** After controlling for the predictors in the model, the average variance of the residuals, or the unexplained variation in the dependent variable, is represented by the Mean Square Error (MSE). An MSE of 0.587 in this instance is quite low, suggesting that the model's predictions are fairly accurate. The existence of unexplained variability, however, raises the possibility that the present model is missing some important variables or interactions.

III-4- Correlation matrix :

All elements appear to be connected, with each expressing the direction and degree of their interrelationship. With correlation coefficients ranging from 0.362 to 0.645, the table below

demonstrates that all of the components employed in this study had average to high correlations with one another.

Table n°5 :Correlation Coefficients.

		PerceivedUsefulness	Perceived ease of use	Social Norms	Purchase intention
	N	152	152	152	152
PerceivedUsefulness	Pearson Correlation. Sig. (2 Tailed)	1			
Perceivedease of use	Pearson Correlation. Sig. (2 Tailed)	0,425 0,000	1		
Social Norms	Pearson Correlation. Sig. (2 Tailed)	0,434 0,000	0,362 0,001	1	
Purchase intention	Pearson Correlation. Sig. (2 Tailed)	,412 0,000	0,412 0,000	0,645 0,000	1

**. La corrélation est significative au niveau 0.01 (bilatéral).

- 1) Perceived Usefulness (PU) and Perceived Ease of Use (PEOU):**The correlation coefficient between PU and PEOU is $r=0.425$ indicating a moderate positive relationship between the two variables. This suggests that as users perceive a technology or product to be easier to use, they are also more likely to perceive it as useful. Perceived usefulness tends to rise in tandem with perceived ease of use. This association is unlikely to be due to chance, as shown by the statistical significance ($p < 0.01$). This is consistent with the TAM, which holds that perceived usefulness is increased by ease of use, which in turn affects behavioral intentions.
- 2) Perceived Usefulness (PU) and Social Norms (SN):** PU and SN have a correlation value of $r=0.434$, this points to a somewhat positive link, suggesting that consumers' judgments of a **product's usefulness** are shaped by social factors (such as peer, family, or societal expectations). There is also a statistical significance in this association with $p<0.001$. This is consistent with theories of social influence, which postulate that people may view a product as more beneficial if others in their social circle endorse it.
- 3) Perceived Ease of Use (PEOU) and Social Norms (SN):** PEOU and SN have a correlation value of $r=0.362$ with $p<0.001$. This suggests a moderately favorable association. it indicates that social influence also affects how users perceive the ease of use of a product. The amplification could be that products recommended by peers or widely adopted in a community may be perceived as easier to use due to familiarity or advice from experienced users.
- 4) Perceived Usefulness (PU) and Purchase Intention (PI):**With a p-value of less than 0.001, the relationship is statistically significant. while the correlation coefficient between PU and PI is $r=0.412$ indicating a moderate positive relationship. This means that as the Perceived Usefulness (PU) of the system rises, so does the intention to buy. The Technology Acceptance Model (TAM) hypothesis, according to which purchase intentions are directly impacted by perceived usefulness, is supported by this data.

- 5) **Perceived Ease of Use (PEOU) and Purchase Intention (PI):** Perceived Ease of Use (PEOU) and Perceived Importance (PI) show a moderate positive correlation with a coefficient of $r=0.412$. This moderate positive correlation implies a link between the variables. For instance, when a product is user-friendly, it enhances the likelihood of consumers making a purchase. This finding aligns with the Technology Acceptance Model (TAM) hypothesis, which posits that the perceived usefulness of a product influences consumers' purchase intentions, mediated by its ease of use. The relationship is statistically significant, indicating that the likelihood of this result occurring by random chance is less than 0.1% confidence level.
- 6) **Social Norms (SN) and Purchase Intention (PI):** This is the strongest correlation found in the sample, indicating a strong positive relationship between social norms and purchase intention, with a correlation coefficient exceeding 0.645. This is consistent with the Theory of Planned Behavior, which holds that behavioral intentions are significantly predicted by social norms. When making judgments about what to buy, consumers are heavily influenced by peer recommendations, cultural trends, and social expectations. A P value of less than 0.05 indicates a significant relationship.

III-5- Hypothesis testing:

The null (H_0) and alternative (H_A) hypotheses are tested at a significance level (α) of 0.05. The null hypothesis will be rejected if the p-value is less than 0.05; otherwise, it will be accepted.

1) Hypothesis 1:

- Since $p < 0.01$, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_A).
- This confirms that Perceived Usefulness significantly influences Purchase Intention rather than occurring by random chance. This aligns with the Technology Acceptance Model (TAM), which suggests that perceived usefulness is a key driver of technology adoption and online behavior.

2) Hypothesis 2:

- Since $p < 0.01$, reject the null hypothesis (H_0) and accept the alternative hypothesis (H_A). we conclude that Perceived Ease of Use significantly influences Purchase Intention on an e-commerce site.
- This finding aligns with the Technology Acceptance Model (TAM), which posits that Perceived Ease of Use influences users' behavioral intentions to use technology-based systems, including e-commerce platforms.

3) Hypothesis 3:

- Since the p-value < 0.01 , we reject the null hypothesis (H_0) and we accept the alternative hypothesis (H_A), which means social norms significantly and positively influence purchase intention on an e-commerce site.

Conclusion :

This study used a quantitative survey to examine the factors affecting online purchase intention among Algerian consumers. The results showed that perceived usefulness ($r = 0.412$, $p < 0.01$), perceived ease of use ($r = 0.412$, $p < 0.05$), and social norms ($r = 0.645$, $p < 0.05$) significantly predicted purchase intention, together explaining 42.9% of the variance. Among these, social norms had the strongest correlation, highlighting the strong influence of social factors on consumer behavior. These findings emphasize the need to consider both technological and social factors when studying e-commerce adoption in emerging markets. However, this study was based on a relatively small sample ($n = 152$), which limits the generalization of the results to the wider Algerian population. Future research should include larger and more diverse samples to better capture national consumer behavior patterns.

Practically, the findings suggest that Algerian e-commerce businesses should improve website usability and perceived usefulness, while also leveraging social norms through methods like user testimonials, influencer marketing, and community engagement. Marketing messages should clearly highlight the benefits of online shopping : convenience, time savings, variety, and competitive prices while ensuring platforms are user-friendly and supported by effective customer service. Ultimately, this study underscores the importance of aligning e-commerce strategies with the cultural and social context of Algeria's digital market.

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