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Persuasive Communication in Online Shopping Websites: A Qualitative Content Analysis of Strategies and Ethical Considerations

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ABSTRACT

Persuasive communication is one of the important aspects of online content. It plays a vital role in online website users' behaviour, decision-making, and engagement. With the rapid growth of digital media, marketers, designers, and content creators understand how persuasive tactics are employed. This tactic is vital because it is employed across all the websites. This study explores how persuasive communication in online shopping strategies influences users on online shopping websites. The researcher used the qualitative content analysis method to identify persuasion techniques. Drawing on the Elaboration Likelihood Model (ELM) and Cialdini's principles of persuasion as analytical lenses, the study systematically analyses persuasive strategies, such as scarcity, urgency, social proof, and personalisation, on user behaviour impacts, and ethical considerations on online shopping websites. Employing qualitative content analysis and NVivo-based clustering techniques, the research identifies recurring patterns and evaluates their ethical implications. Rather than measuring actual consumer behaviour, this study focusses on how persuasive strategies are designed and communicated within e-commerce interfaces. In the digital era, persuasive communication is more significantly utilised. In this era, digital media dominates all information consumption, and social interaction employs persuasive tactics. This study will enhance the literature on online persuasion by offering a structured qualitative understanding of persuasive communication practises in the online shopping context and providing insights into strategies used for their effectiveness and ethical concerns in digital media platforms.

Keywords: Cialdini's principles, Elaboration Likelihood Model (ELM), engagement, online shopping websites, persuasive communication

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INTRODUCTION

The rise in digital media is experienced due to the increased use of persuasive communication on digital media websites. Many websites are being utilised by their users. The social media platform, e-commerce platforms, news platforms, and others come under many websites. Websites are considered crucial tools for the use of persuasive communications by businesses or individuals for influencing the user's actions. The rise in e-commerce platforms has led to a digital world. The digital world has led to a persuasive communication platform that influences the user's purchasing decision. Persuasion is practised by the marketer to convince the user to do the expected act. Persuasive communication tools such as scarcity, social proof indicators, urgency indicators, and personal recommendation tools are some of the platforms practised by the marketer.

The adoption of persuasive strategies had positioned online shopping websites as critical sites for examining persuasion. It is crucial for marketers, designers, and researchers that these online shopping websites use such tactics to improve user experience, conversion rates, and trustworthiness. A study by Kaur (2025), the results for this research show that social influencers and website rewards each have a positive and significant effect. Users have shown a strong trust in social influencers, viewing them as sources of reliable, comprehensive, and unbiased information. This trust adds to the persuasive force of influencers, thereby increasing their recommendations particularly effective in encouraging impulsive purchases. Unlike the traditional advertising formats, persuasive communication in e-commerce is deeply embedded in the design of e-commerce interfaces, from product descriptions to advertising pop-ups, countdown timers, and recommendation systems. While effective in enhancing conversion rates and user experience, these strategies also raise critical ethical questions, such as deceptive practises and data privacy concerns. The research shows that peripheral cues are more effective in persuading user behaviour, particularly on online websites. It utilised some elements, for instance limited-time offer, scarcity, authority, and evidence (Braca & Dondio, 2023).

Theoretical approaches such as the Elaboration Likelihood Model (ELM) have been very helpful in examining the nature of persuasive communication processes and their applications in digital communication. The ELM encapsulates both central route persuasion, which entails careful message analysis, and peripheral route persuasion, which entails appeals through authoritativeness, scarcity, and social validation. In m-commerce settings, the appeal through authoritativeness, among others, is usually highlighted due to their efficacy in attracting immediate notice and early response. To complement the ELM, one can apply the Cialdini's persuasion principles, which offer a simple categorisation system of the prevalent

persuasion strategies, that is, scarcity, social validation, authoritativeness, and reciprocity.

However, the efficacy of persuasive strategies in convincing consumer behaviour has been widely discussed in previous literature, whereas the way these strategies are designed, presented, and combined qualitatively in online shopping websites has received less attention in terms of qualitative content analysis. In the meantime, an upward trend in this regard is linked to several ethical implications regarding transparency, manipulation, and user autonomy because of data-driven personalisation. Personalised persuasive communication may potentially improve relevance and the user experience, but it also forms a different ethical space regarding users who are unaware of how their data has been used to shape persuasive messages.

In response to these gaps, this paper uses a qualitative content analysis approach for exploring persuasive communication strategies embedded in online shopping websites. Instead of measuring the users' behaviour or perceptions directly, this research concentrates on the identification of recurring persuasive features and ascertains, with the aid of established persuasion theories, their potential influence and ethical implications. This, in turn, enhances the research's contribution to the understanding of persuasive communication practises in digital commerce and develops a basis for future empirical investigation into users' responses and ethical governance of persuasive design.

LITERATURE REVIEW

A key characteristic of persuasive communication in the online shopping environment is the way in which digital interfaces are designed to persuade and convince consumers to take desired actions. In contrast to offline consumer persuasion, those in the online buying environment are embedded in the architecture of the buying environment itself. Previous studies in digital consumer persuasion and human-computer interaction indicate these persuasive architectural components persuade to shape the design of information as opposed to influencing consumer behaviour itself (Kaptein & Eckles, 2014; Sunstein, 2015a).

Despite a vast number of studies related to persuasive outcomes, less effort has been made to explore systematically the strategies used for persuasion and their adoption in the context of web shopping sites through the lens of qualitative content analysis. There is a vast importance to exploring persuasion communication at the design level, which could help clarify both the outcome and the ethical issues associated with it. The strategies of influence of persuasive communication are supported by two (2) theoretical frameworks that are utilised in the digital era. Firstly, the Elaboration Likelihood Model (ELM). This model was developed by Petty and Cacioppo (1986). The ELM theory is widely used in persuasive messages. There are two (2) renowned dual-process theories under the ELM's main routes to persuasion. There are central routes and peripheral routes. The central route involves a thoughtful evaluation

of the message's arguments. The ELM theory is applied to online communication and provides a comprehensive framework to explore how persuasive communication strategies influence users on online shopping websites (Petty & Cacioppo, 1986). In online shopping environments, users are frequently exposed to high volumes of information under conditions of limited time and attention. For example, the elements that always sway users, such as website aesthetics, ease of navigation, or credibility cues such as user reviews and testimonials, result in reliance on the peripheral route of persuasion (Jayathilake, 2024). Nonetheless, not all users are equally influenced by peripheral cues. Based on the ELM theory, users who are highly motivated or possess the capacity to process information more deeply are more likely to take the central route. These cues are designed to facilitate rapid decision-making without requiring extensive cognitive processing. However, ELM suggests that users with higher motivation or involvement may engage in central-route processing, particularly when evaluating the information about the products on online shopping websites, which draws users' attention to seeking reliable and evidence-based information (Pan, 2024).

In the context of this study, the ELM is employed not as a predictive model of user behaviour but as an analytical framework for categorising persuasive cues observed in online shopping websites. Specifically, it guides the identification of whether persuasive strategies are primarily oriented toward central or peripheral processing routes based on their communicative characteristics.

Secondly, Cialdini's principles of influence in digital persuasion. A second factor to consider in relation to digital persuasion tools, therefore, concerns Cialdini's Six Principles of Influence in relation to applying these to design for improved online interaction. Cialdini's Six Principles of Influence can be identified, therefore, to encompass an established concept under broader persuasive communication. Cialdini's Six Principles of Influence were identified to encompass basic ideas of 'reciprocity, commitment, social proof, authority, liking, and scarcity' among others. All these have long been established ideas in relation to persuasive communication. In addition, these six ideas today exemplify how, in their own way, individuals become influenced by diverse options that target their own diverse psychological needs or preferences (Cialdini, 2009). By taking diverse specified acts, in this case, clicking on related links, signing up for newsletters, or proceeding to make payments to purchase products, among others, these influencing ideas have been modified or applied accordingly for improved interaction in online sites. Therefore, sites offering diverse online purchasing options have been applying these influencing ideas in relation to established diverse design features such as 'customer reviews (social proof), expert endorsement (authority), time-limited deals (scarcity), or personalised recommendations (liking and commitment)', among others.

Empirical studies have demonstrated that these principles are particularly effective in digital environments due to their alignment with users' cognitive shortcuts and decision heuristics. For instance, the principle of social proof is employed via user feedback, reviews, and testimonials, which provide evidence of others' positive experiences with a product or service (Ham & Nelson, 2016a). Apart from that, websites also employ scarcity tactics to persuade users, such as flash sales with limited days, limited-time offers, or countdown timers, which create a sense of urgency and encourage immediate action (Mayasari & Salsabila, 2025). Research by Kaptein and Eckles (2014) indicates that social proof mechanisms such as ratings and testimonials serve to legitimise products and reduce perceived risk. However, the application of these principles in online contexts also concerns ethics, particularly when users manipulate or deceive these techniques by using fake feedback, reviews, or creating false scarcity (Sunstein, 2015a). As a summary of Cialdini's principles (Figure 1), these principles provide a robust framework of how persuasive communication strategies influence users on online websites. Although digital ethics are gaining more attention these days, fewer qualitative studies exist in which digital ethically disputable persuasion

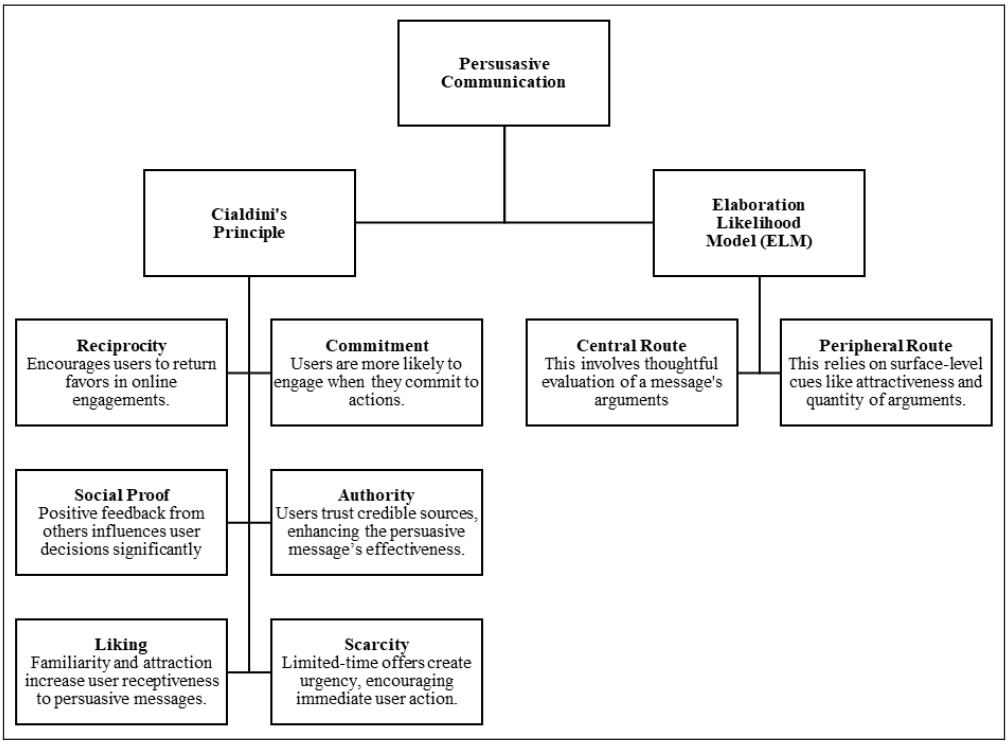

Figure 1. Research framework of Cialdini's principal and Elaboration Likelihood Model (ELM)
Source: Authors' own work

tactics are explored within online shopping sites.

Although the effectiveness of the ELM and Cialdini's principles is well proven, the existing research tends to investigate the outcomes of behaviour by means of experimental and survey research. Little research was conducted on the investigation of the qualitative aspects of persuasive communication as practised on actual e-commerce systems about ethical viewpoints. The existing research will fill the research gap by making use of qualitative content analysis with the aim of analysing the online shopping websites regarding the incorporation of persuasive communication techniques. By integrating the ELM and Cialdini's principles as analytical lenses, the study focusses on identifying recurring persuasive cues, interpreting their communicative functions, and discussing their ethical implications. Rather than claiming direct behavioural effects, the research contributes a design-oriented and ethically informed perspective on persuasive communication in digital commerce.

Research Questions

1. What are the persuasive communication strategies embedded on online shopping websites?
2. How are the persuasive communication strategies (e.g., scarcity, urgency, social proof, and personalisation) communicated through website features?
3. How do users perceive the ethical boundaries of the persuasive communication strategies?

Research Objectives

1. To identify the persuasive communication strategies embedded on online shopping websites.
2. To analyse the persuasive communication strategies through website design using the ELM and Cialdini's principles as analytical frameworks.
3. To evaluate the ethical considerations associated with the use of persuasive techniques.

METHODOLOGY

This research utilises qualitative content analysis to investigate persuasive communication strategies embedded on online shopping websites. It examines to analyse and classify the recurrent persuasion signals and their possible communication and ethical implications. Based on the analytical framework of the Elaboration Likelihood Model (ELM) and the persuasion principles of Cialdini, the research aims to scrutinise the design of the persuasion strategy in the online content and interface, not the actual communication behaviour of the users. NVivo 11 is software that utilised for clustering and thematic analysis, allowing for detailed exploration of the identified persuasive elements and their implications.

Data Collection

A purposive sampling method will be employed to select a diverse range of online shopping websites from different industries, such as e-commerce platforms, fashion, electronics, and groceries. These websites will represent varying levels of user engagement and employ different persuasive strategies. There are three (3) criterias for selecting online websites. First, persuasive communication strategies such as scarcity, social proof, urgency, and personalisation are used on online shopping websites. Next, the availability of publicly accessible website content suitable for analysis. For example, landing pages, product descriptions, and advertisements. The sources were also collected from user interface elements such as banners and pop-ups. Thirdly, ethical considerations are associated with the use of persuasive techniques, such as personalised recommendations, countdown timers, and data from user reviews and testimonials. The data sources were collected from publicly available online website content. The structured content analysis technique is a systematic data collection method where various predetermined questions with a structural nature were collected during an exploration of the online websites. This study gave me an understanding of the designing and use of persuasion elements and enabled me to code the patterns in a systematic way. There were no direct user observations, surveys, or interviews carried out, and this study certainly does not aim to measure any real behaviours or user perceptions. All the websites that were chosen were publicly accessible, and no data was extracted that was not of design elements or content publicly available on these sites. There was no extraction of any private user data. It is ensured that the study meets the ethical standards for any study involving publicly available digital content. Also, all the data was shared with the programme NVivo for systematic coding. Coding was done after several iterations of readings of data for accurate classification of persuasion elements. The final step was interpreting the themes in the context of persuasion theory. These elements of persuasion were matched against the principles of influence of Cialdini theory and the ELM models for understanding their behaviours.

Data Analysis

This study conducted QCA to systematically study persuasive communication strategies implemented on online shopping sites and to understand the ways these strategies influence users' behaviour and decision-making processes. QCA is selected because, through it, one can draw a theoretically informed yet structured interpretation of textual and visual content while maintaining contextual meaning. The approach of the analysis followed the method of directed qualitative content analysis guided by prevailing persuasion theories; Cialdini's principles of influence and the Elaboration Likelihood Model (ELM). Thematic analysis in NVivo identifies persuasive cues, aligning them with theoretical frameworks like the Elaboration Likelihood Model (ELM), which was systematically examined

for central-route and peripheral-route cues and for examples of six Cialdini's principles of influence. Classifying patterns, themes, and persuasive techniques, in turn, was organised in relation to theory or concepts, for instance, scarcity indications, urgency calls, social proof signs, authority endorsements, and recommended indicators. Ethical consideration and examples of potentially deceptive, questionable, and misleading techniques (e.g., artificial scarcity, ambiguous recommendations, misleading reviews) were considered and addressed. The emerging themes and the corresponding questions, presented in the order of data collection, are outlined in Table 1.

RESULTS AND DISCUSSION

Identification of Persuasive Strategies

The qualitative content analysis identified recurring persuasive strategies across the sampled online shopping websites. The strategies were categorised according to the ELM (central vs peripheral cues) and Cialdini's principles of persuasion.

Scarcity

The analysis revealed several recurring persuasive strategies across the selected online shopping websites. The most prevalent strategy included scarcity and urgency tactics, such as limited time offers and countdown timers. These limited time offers, which were commonly displayed on landing pages and product descriptions, encouraged immediate purchases. For example, an online website that promotes its product via a live method. There is a nudge to consumers. Marketers create a sense of urgency to grab products with countdown timers or limited time are frequently displayed on landing pages with a banner stating, "Offer ends in 1 hour" or "Only 1 left in stock". These are some scarcity sentences that create urgency. Based on the output word cloud (Figure 2), there is an "immediate". It is made available as soon as possible to grab the offers within the countdown timers. These design features instil a sense of urgency in the viewer and cause the viewer to focus on the present moment, as in the peripheral route of persuasion in the ELM model, which emphasises the heuristic processing that makes judgments based on simple features such as quantity versus quality rather than evaluating the information. Under the Cialdini theoretical model for influence, the designer's tactics represent the application of the "Scarcity" principle. As per results from the text search query (Figure 3*)*, scarcity leads to immediate action, such as creating urgency. This may lead them to fear of missing out, known as FOMO. This FOMO reaction makes a consumer feel worried because they may miss a good opportunity, especially when caused by things that are advertised on social media for purchase. The intense penetration of social media into people's lives has had a very serious impact on people. With increasing shares, social media addiction has caused users to worry about sharing and missing information. This situation has led to the formation of

Table 1
Themes and questions of the research

Variable	Question asked
Preparatory questions regarding general online shopping websites	
Theoretical alignment	1. Categorisation of persuasive elements according to the ELM (central vs peripheral route) and Cialdini's principles (General)
Persuasive communication strategies	1. How do different persuasive strategies (e.g., scarcity, urgency, social proof, and personalisation) (General)
	2. How does the phrasing of scarcity messages (e.g., "limited stock" vs. "only 2 left") (Content)
	3. How do countdown timers influence the urgency of consumers' (Content)
	4. How does social proof influence consumer reviews and ratings affect first-time visitors' trust in the website? (Content)
The ethical boundaries	1. How do users perceive the ethical boundaries of strategies? (General)
	2. Discover that a fake review or rating system has been manipulated? (Content)

Figure 2. Result of NVivo word cloud analysis

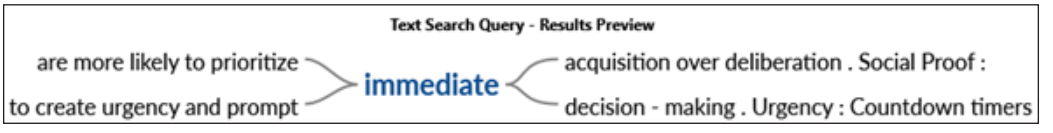

Figure 3. NVivo text search query of scarcity

FOMO, especially in users of the post-90s generation (Tanhan et al., 2022; Wang et al., 2021). Marketers well utilised this scarcity strategy concept to attract people's attention to purchase items on social media. As per the ELM model concepts, which are stored under peripheral route elements. To avoid this immediate action or scarcity, consumers do not experience FOMO. These immediate actions from the consumers may result in unnecessary purchases multiple times.

Social Proof

After that, social proof such as user reviews, star ratings, and testimonials prominently influenced user trust and perceived credibility. For instance, most websites now feature "verified purchase" labels and "best seller" tags. These features provide trust and credibility to consumers, influencing user decisions by providing external validation. This social proof technique increased trust among consumers in online purchases. Research by Amblee and Bui (2011) found that electronic word-of-mouth (eWOM) is one of the effective indicators of product reputation for consumers. For consumers who lack prior purchasing experiences, eWOM helps them to identify the best products within social communities, including online ratings and reviews. Apart from that, a research result by Talib and Saat (2017) indicated that the high number of followers and recommendations from social communities influences buyers' intention in online purchasing through social proof strategies. These online ratings and reviews serve as valuable indicators to consumers. Based on the word cloud output (Figure 2), such as trust, reviews, and proofs shared by consumers once they have completed their online process, makes them too confident to move forward with online purchasing. As per results from the text search query (Figure 4), user reviews play a vital role in persuading consumer behaviour. Social proof was consistently embedded in product pages and recommendation sections. Moreover, these social proof strategies can be included under peripheral route elements in the ELM model. The "positive" recommendation by online consumers led to an enhanced favourable attitude towards unfamiliar products and sellers (Talib & Saat, 2017). These strategies effectively influence consumers' purchasing intentions. Therefore, there is an option for sellers, either to increase follower counts or to enhance community recommendations. So, consumers wisely use this strategy when purchasing online.

Figure 4. NVivo text search query of social proof

Urgency

Based on the study, Febrilia et al. (2024) represent the stimulus through website personality, product attributes, and motivational activities employed by retailers. The rationale for incorporating website personality as a stimulus lies in the fact that a website's design, functionality, and overall personality constitute the primary stimuli encountered by consumers in their online interactions. The personality of a website affects users' perceptions, emotional reactions, and levels of engagement (Febrilia et al., 2024; Rejikumar & Asokan-Ajitha, 2021). Product attributes encompass the characteristics of a product, such as quality, features, and pricing, which serve as stimuli influencing consumers' perceptions, preferences, and attitudes. The attributes affect the assessment of a product's utility and value (Chiu et al., 2014; Febrilia et al., 2024). Promotional activities, discounts, and incentives employed by marketers act as external stimuli that affect consumer motivations and emotions. These activities generate urgency, excitement, and perceived value, influencing consumer responses (Darke et al., 2003; Febrilia et al., 2024). As per results from the text search query (Figure 5), "offer" strategies are needed to create an urgency for consumers to purchase online. Offers such as limited stock available and offers that end in X hours persuade consumers. Consumers are persuaded by these kinds of urgency strategies by marketers. In the ELM terms, urgency cues function as peripheral-route stimuli, attracting attention, and prioritising rapid decision-making. Cialdini's scarcity and reciprocity principles also inform these strategies, as marketers create a sense of limited opportunity and prompt immediate engagement. These social urgency strategies depend on surface-level cues such as promotional activities, discounts, and incentives employed by marketers, and the arguments presented by social media sellers and consumers. Based on the output word cloud, there is an "immediate" output push that pushes consumers to the urgency factors.

Personalisation

Lastly, personalisation. The websites' tailored content and product recommendations are based on browsing history and demographic data, creating a sense of relevance for users. Convenience and personalisation strategies (CPSs) have emerged as effective strategic levers for acquiring consumers and eliciting "positive" responses from them. (Anshu et al., 2022; Rodríguez-Ardura et al., 2025) report that convenience strategies enhance consumer attitudes and intentions to

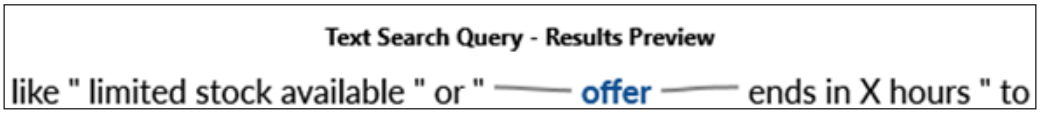

Figure 5. NVivo text search query of urgency

repurchase by engaging them in co-creation activities. e-retailers implement convenience strategies to address consumers' limited shopping time and energy by efficiently providing goods and services, minimising the time and effort needed to amend orders, and ensuring prompt delivery (Duarte et al., 2018; Rodríguez-Ardura et el., 2025). Alimamy and Gnoth (2022) and Lalicic and Weismayer (2021) identified comparable impacts on consumers' co-creation intentions through personalisation strategies, whereby e-retailers engage with consumers in a supportive and enriching manner, addressing their individual preferences (Zhang et al., 2019). However, while there is a potential nexus between CPSs and consumers perceived opportunities to co-create value, previous studies do not elucidate the mechanisms by which these processes contribute to value creation for the company. This outcome is surprising given the fundamental assumption of reciprocity and bidirectionality in value cocreation. As per the results from the text search query (Figure 6), “positive” responses from consumers, such as credibility, reducing uncertainty about product quality, visuals, recommendations, and social conversion, persuade them. The personalisation strategy can be included under central route elements. Contrary to the concepts of scarcity and urgency, personalisation has the potential to include central-route features because people can get engaged at a more meaningful level with the information that is of interest to them. From a Cialdini point of view, the principle of liking is satisfied in the case of personalisation because it increases people’s engagement with the information. The quality of arguments presented by social media sellers and consumers. Based on the output word cloud, there is a “positive” output push that persuades consumers of the personalisation factors. Personalisation aligns with the trend of leveraging data-driven technologies to enhance relevance and user experience.

Ethical Implications of Persuasive Strategies

The study mentioned ethical issues surrounding the use of persuasive techniques such as deception and manipulative personalisation. Deception techniques include fake reviews and scarcity that has been artificially generated. For example, "only 1 left." Manipulative personalisation refers to a situation where individuals feel ‘tracked’ or influenced by highly targeted advertisements. Ethical considerations align with Sunstein's (2015b) critique of manipulative practises, emphasising the need for transparency and user consent.

Figure 6. NVivo text search query of personalisation

Striking a balance between effective persuasion and ethical responsibility remains a critical challenge for marketers and designers. Transparency in personalised content was identified as a mitigating factor for ethical concerns. Websites that disclosed how personalisation worked. For example, "Recommended for you based on your browsing history" was perceived as more trustworthy. This study defines that consumers perceive the ethical boundaries of strategies such as scarcity, fake reviews, or misleading personalisation. These ethical considerations are associated with the use of persuasive techniques. The study's findings address the ethical considerations underlying the targeted persuasive techniques employed by marketers. The ethical responsibility of being aware of the ethical implications of targets. For example, in the study by a researcher, Pilaj (2017), for the well-being of individuals or society at large, intentions must be explicit and evaluated against ethical standards, including the autonomy of investors, such as individual autonomy. Consequently, in the implementation of persuasive measures, designers must critically examine their intentions within the framework of ethical boundaries (Benner et al., 2022; Pilaj, 2017). As per the text search query outputs (Figure 7), the ethical consideration depends on individual autonomy, as said by researcher Pilaj (2017). Thus, the findings support the validity and relevance of applying the model in theorising consumers' responses, aligning them with theoretical frameworks like the Elaboration Likelihood Model (ELM) and Cialdini's principles of influence. This process includes coding for peripheral and central route elements and assessing their impact on user behaviour in terms of ethical considerations.

CONCLUSION

This study underscores the critical role of persuasive communication in shaping user behaviour, engagement, and decision-making on online shopping websites. Strategies such as scarcity, urgency, social proof, and personalisation have proven effective in enhancing user experience and driving conversions. The use of theoretical models such as the Elaboration Likelihood Model (ELM) and Cialdini's principles allows for a comprehensive approach when evaluating the interplay between cognitive processing and persuasive techniques. Central route persuasion is more appealing to consumers seeking trustworthy data, while peripheral techniques are optimal for

Figure 7. NVivo text search query of ethical implications

time-strapped and less motivated consumers. Ethical concerns were identified as a vital consideration when applying persuasive techniques. Greater openness regarding personalisation techniques, as well as responsible use of both the scarcity and social proof principles, can help alleviate concerns and create trust. A balance is necessary, therefore, that balances the effective use of persuasive message techniques for successful business outcomes, along with upholding worthwhile, high-quality ethics for the long-term purpose of winning the loyalty of consumers on the web. Future studies must focus on the gaps outlined and include future perspectives based on user attitudes, a range of sectors, and multiple cultural and temporal consideration analyses, given the ever-evolving nature of the digital world on online shopping websites.

Implications of the Study

This study presents various implications for marketers, website designers, policymakers, and researchers within the realm of digital communication.

Implications for Marketers and Website Designers.

The understanding of the effectiveness of motivational persuasion techniques like scarcity, urgency, and personalisation can enable the marketer to improve user engagement as well as conversion rates. Peripheral route persuasion techniques such as scarcity/urgency indicators, countdown timers, and limited stock indicators are mainly employed based on the Elaboration Likelihood Model (ELM). Social proofs such as customer testimonials, customer ratings, and "verified labels" are also commonly employed for improving credibility. Personalisation strategies, such as content suggestions, contain elements of central route persuasion when the content strongly favours their interests. Certain ethical issues arise regarding overemphasis on scarcity, lack of clarity regarding personalisation, and customer feedback, which call for ethical marketing practises. The integration of principles of the ELM theory and Cialdini's principles would enable this research study to present a sound framework for understanding the working of persuasion design elements on e-commerce websites. Though this research study would not aim at measuring user behaviour, it would also present some useful insights on design trends and ethical considerations, which would help future research work.

Limitations and Recommendations for Future

Future research should explore user perspectives through surveys or interviews to complement the content analysis. As a future researcher, explore the nuanced digital platforms that continuously evolve in applications and implication strategies, especially in terms of ethical boundaries. Apart from that, cross-cultural research can be explored by future research. Investigate cultural variations in the perception and efficacy of persuasive techniques to identify culturally specific strategies. Other than that,

Artificial Intelligence and personalisation can be explored and examined to understand the influence of artificial intelligence on the development of hyper-personalised user experiences, with particular attention to ethical considerations and the establishment of user trust. Addressing these limitations and expanding the research scope will enable future studies to develop a more thorough understanding of persuasive communication in the digital era.

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