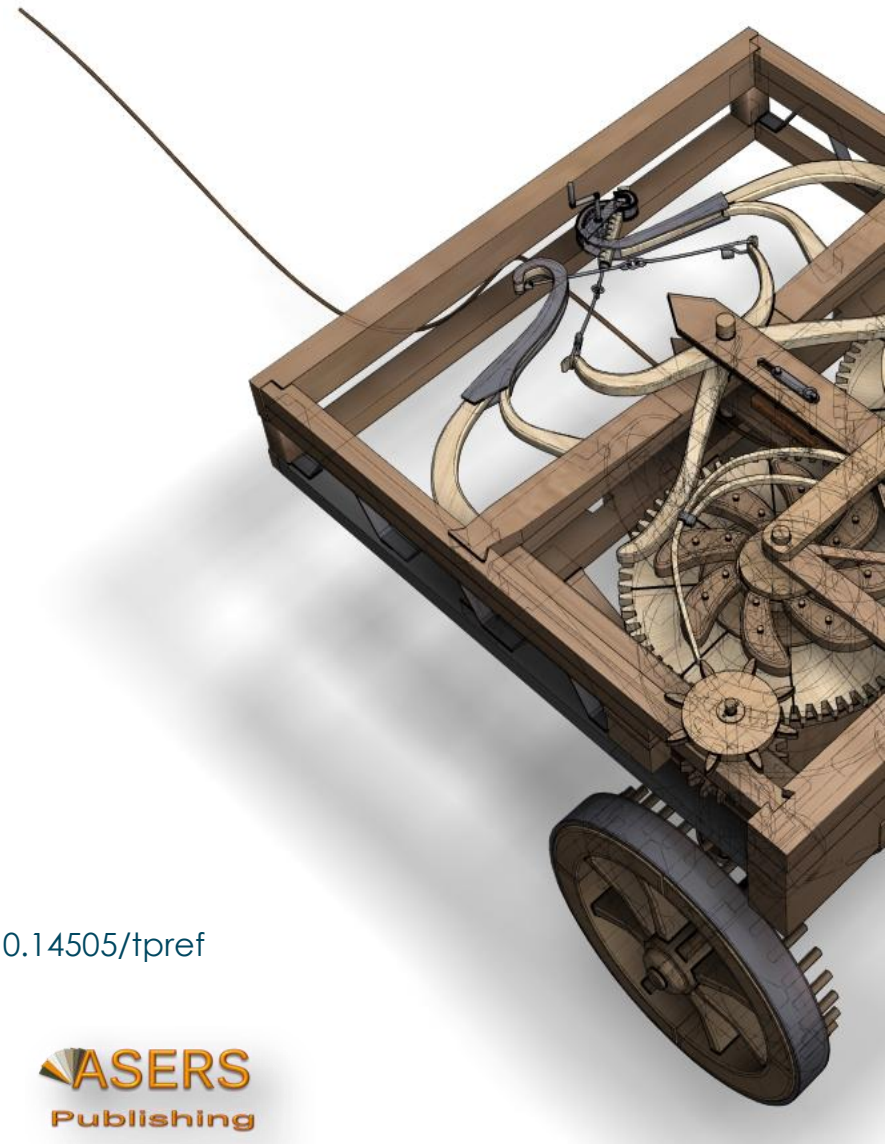
Theoretical and Practical Research in Economic Fields



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Call for Papers
Winter Issue
Theoretical and Practical Research in Economic Fields

Many economists today are concerned by the proliferation of journals and the concomitant labyrinth of research to be conquered in order to reach the specific information they require. To combat this tendency, **Theoretical and Practical Research in Economic Fields** has been conceived and designed outside the realm of the traditional economics journal. It consists of concise communications that provide a means of rapid and efficient dissemination of new results, models, and methods in all fields of economic research.

Theoretical and Practical Research in Economic Fields publishes original articles in all branches of economics – theoretical and practical, abstract, and applied, providing wide-ranging coverage across the subject area.

Journals promote research that aim at the unification of the theoretical-quantitative and the empirical-quantitative approach to economic problems and that are penetrated by constructive and rigorous thinking. It explores a unique range of topics from the frontier of theoretical developments in many new and important areas, to research on current and applied economic problems, to methodologically innovative, theoretical, and applied studies in economics. The interaction between practical work and economic policy is an important feature of the journal.

Theoretical and Practical Research in Economic Fields is indexed in Scopus, RePec, ProQuest, Cabell Directories and CEEOL databases.

The primary aim of the Journal has been and remains the provision of a forum for the dissemination of a variety of international issues, practical research, and other matters of interest to researchers and practitioners in a diversity of subject areas linked to the broad theme of economic sciences.

At the same time, the journal encourages the interdisciplinary approach within economic sciences, this being a challenge for all researchers.

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All the papers will be first considered by the Editors for general relevance, originality, and significance. If accepted for review, papers will then be subject to double blind peer review.

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The Influence of the Internet on Consumer Purchasing Behavior across Different Product Categories

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Abstract: This study explores how the internet influences consumer purchasing behavior across various product categories, with particular attention to trust in online information and the impact of demographic factors such as age, income, and digital habits. A systematic literature review (SLR) was combined with an empirical survey conducted in Croatia involving 251 respondents. Non-parametric statistical tests were used to examine differences in online behavior based on age, income, employment status, and daily internet use. The internet exerts a stronger influence on purchasing decisions for categories like clothing, technology, and travel than for food or hygiene products. Trust in online information is also higher in product categories that typically require more research or personal investment. Younger users show significantly greater online engagement and reliance on digital content when shopping. However, no significant behavioral differences were observed based on employment or income levels. This study integrates quantitative analysis with bibliometric visualization, offering a comprehensive view of how the internet shapes consumer decisions across product types. It also reveals key psychological and demographic drivers of online behavior, providing a valuable framework for future research and digital marketing strategies. The sample is geographically limited to Croatia, which may affect the generalizability of the findings. Marketers and e-commerce platforms can tailor strategies based on product type and target demographic to enhance engagement and trust.

Keywords: consumer behavior; online shopping; internet influence; product categories; trust; digital marketing.

JEL Classification: D12; L81; M31; A12.

Introduction

The rapid advancement of digital technologies in recent decades has fundamentally transformed how consumers search for information, evaluate options, and make purchasing decisions. The internet has emerged as a critical component of this process, playing a central role at nearly every stage of the customer journey. Online reviews, product comparisons, influencer endorsements, and social media content have become powerful tools that shape consumer preferences and decisions in the digital marketplace. The study of Chen *et al.* (2022a) investigates how

online product reviews influence consumer purchasing decisions, highlighting the significant role of digital information sources in shaping consumer behavior.

Internet's influence is particularly prominent in specific product categories - namely technology, fashion, and travel - where consumers tend to engage in more extensive research due to higher costs or greater personal relevance. These products often require more deliberation, making online information more impactful. Conversely, everyday items such as food, hygiene products, and household essentials are frequently purchased based on habit, urgency, or in-store experience, where the internet plays a comparatively smaller role. The study Tarnanidis *et al.* (2023) emphasizes that consumers are more likely to engage in extensive online research and be influenced by digital content when purchasing fashion items, which are often associated with personal identity and social expression. The findings of Šostar & Ristanović, (2023a) indicate that while the internet significantly shapes consumer behavior across various product categories, individual psychological factors, particularly financial capacity, ultimately play a more decisive role in purchasing decisions than external digital or social influences.

A critical factor shaping this dynamic is the level of trust consumers place in online sources. Elements such as website credibility, the authenticity of customer reviews, and the presence of social proof can significantly affect how consumers perceive the reliability of the information they encounter online. There is significant influence of customer reviews and consumer trust on online purchasing behavior, highlighting how trust in online information sources impacts consumer decisions (Mallik *et al.* 2025). Generational differences are also evident - young adults who have grown up with digital technology are typically more influenced by online content, more comfortable with digital platforms, and more active in e-commerce compared to older age groups. In addition to generational trends, demographic characteristics such as age, income, education level, employment status, and digital literacy are essential to understanding consumer behavior in the digital sphere. These variables not only shape what individuals buy online, but also how frequently they shop, through which platforms, and from where. The study Syamsudin *et al.* (2025) highlights that Generation Z relies more heavily on social media platforms like Instagram and TikTok for shopping inspiration, whereas Millennials emphasize brand reputation and sustainability. Consumers are becoming increasingly demanding, as evidenced in the study by Šostar and Ristanović (2024), which shows a clear preference for organic and locally produced products, highlighting the growing importance of sustainable practices in consumer behavior. Also, emerging trends such as mobile commerce, personalized advertising, and algorithm-driven marketing have further strengthened the internet's role in influencing purchasing behavior. These innovations are reshaping consumer habits and raising new questions about motivation, decision-making, and trust in the digital economy. Advertising, which uses consumer behavior data to present relevant content, has significant potential to affect purchase decisions (Apriansyah *et al.* 2025).

The purpose of this study is to explore how the internet influences consumer purchasing behavior across different product categories, how trust in online information varies among consumers, and how demographic factors affect patterns of online shopping in the digital age.

1. Literature Review

1.1. Analysis using VOSviewer

This study adopts a Systematic Literature Review (SLR) approach to critically synthesize existing research on the influence of the internet on consumer purchasing behaviour across different product categories. The SLR method was chosen because it enables a comprehensive, transparent, and replicable evaluation of prior academic work, ensuring the development of a well-grounded theoretical framework. Following the guidelines outlined by established systematic review protocols, the research process was divided into defined stages: formulation of research questions, identification of studies, eligibility screening, data extraction, and synthesis.

Table 1 presents a thematic classification of keywords into five distinct clusters, each marked by a specific colour and characterized by closely related keywords. These clusters help us understand the main areas of research focus in the field of online consumer behaviour, e-commerce, and digital influence. Cluster 1: Yellow revolves around general digital engagement and its influence on consumer behaviour. It represents the foundational concepts of how the internet has transformed consumer behaviour, facilitated online information access and changed how consumers interact with products and services. It highlights a broad spectrum of digital consumption behavior. Cluster 2: Red emphasizes the influence of social media on consumer decisions. The inclusion of keywords like word of mouth and credibility points to how peer reviews and online opinions affect purchase intentions. The term impact suggests a focus on the effectiveness and reach of social platforms in shaping consumer trust and behavior. Cluster 3: Blue centres on e-commerce adoption and trust issues. It explores how trust and privacy concerns affect online shopping behaviour. The presence of information

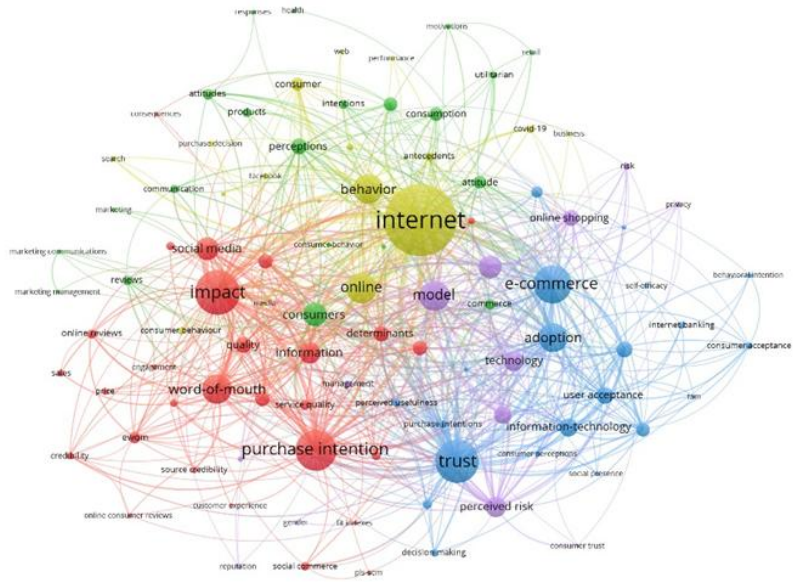
technology also indicates the technological infrastructure enabling secure and seamless digital transactions. Cluster 4: Green delves into the psychological and behavioural dimensions of consumer behavior. It looks at how consumer perceptions and attitudes drive motivations behind online consumption and the consequences thereof. This is a more introspective look into the decision-making process from a consumer psychology perspective. Cluster 5: Purple is theory-driven, focused on technology adoption models like TAM (Technology Acceptance Model). It investigates determinants such as perceived usefulness and the role of models in explaining how consumers accept and use new technologies. This cluster is crucial for understanding structured theoretical frameworks in consumer behavior. This clustering provides a comprehensive thematic map of how digital tools, platforms, psychological factors, and theoretical models interconnect in understanding online consumer behavior. From practical implications (social media and e-commerce) to theoretical underpinnings (TAM and behavioural models), the table systematically categorizes complex topics into digestible research domains, facilitating focused analysis and deeper insight into consumer studies in the digital age.

Table 1. Clusters and Keywords

Sl. No	Clusters	Mapped colour	Keywords
1	Cluster-1	Yellow	Internet, behaviour, online, information, consumers
2	Cluster-2	Red	Social media, impact, word of mouth, purchase intention, credibility
3	Cluster-3	Blue	E-commerce, adoption, trust, online shopping, information technology, privacy
4	Cluster-4	Green	Perceptions, attitudes, consumption, motivations, consequences
5	Cluster-5	Purple	Model, technology, determinants, perceived, usefulness, acceptance models

The network visualization map illustrates the intellectual structure of research surrounding the influence of the internet on consumer behaviour, using keyword co-occurrence analysis. At the core of the map is the keyword “Internet”, (Figure 1) depicted as the most central and frequently occurring term, signifying its overarching relevance in connecting various sub-themes. Distinct color-coded clusters represent thematic groupings within the broader research field. The yellow cluster highlights general consumer interaction with online environments, featuring keywords like internet, behaviour, and information. The red cluster focuses on the impact of social media, word-of-mouth, and purchase intention, pointing to studies on online marketing and consumer influence. The blue cluster emphasizes e-commerce, trust, online shopping, and privacy, addressing adoption and risk perceptions in digital purchasing.

Figure 1. Network based on Co-occurrence Keyword Map. Source: Map created through the VOS viewer application



Source: Map created through the VOS viewer application

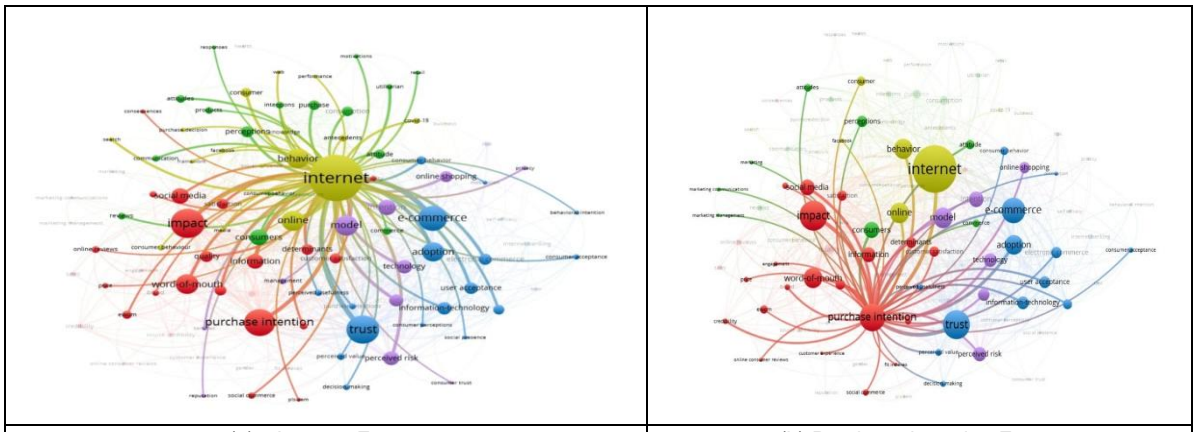
The green cluster reflects consumer psychology and attitudinal factors with keywords such as attitudes, consumption, and motivations. Meanwhile, the purple cluster is grounded in theoretical frameworks, showcasing terms like technology, model, and perceived usefulness, which link to models like the Technology Acceptance Model (TAM). Larger nodes such as trust, impact, and purchase intention indicate frequently discussed concepts, while the interlinking lines depict strong co-occurrence relationships between them. Collectively, the map provides

a visual summary of the dominant themes and interrelationships in the literature, offering valuable insights for researchers, marketers, and e-commerce strategists seeking to understand consumer behaviour in online contexts.

The central theme of this network is the concept of the "internet," which acts as the core node connecting various research topics. The visualization reveals a highly interconnected structure where internet-related behaviours, trust, and e-commerce adoption are closely tied. Social media, word-of-mouth, and consumer behaviour are strongly linked to online purchasing intentions. Notably, the model also suggests that consumer perceptions and attitudes significantly influence online behaviour. Additionally, theoretical models such as TAM and UTAUT are employed to explain the dynamics of internet usage and technology acceptance. This highlights the comprehensive nature of research focusing on the internet's impact on consumer behaviour, with an emphasis on trust, risk perception, and social influence (Figure 2a).

In this map, "purchase intention" emerges as a central element, sharing equal prominence with the "internet." The dual-core structure of the visualization emphasizes the interaction between internet-related behaviours and the factors influencing purchase decisions. Social media, word-of-mouth, and online reviews play a critical role in shaping consumer purchase intentions, while trust and perceived risk are crucial determinants for e-commerce adoption. The connections between "trust," "purchase intention," and "e-commerce" underscore the importance of building consumer trust in online platforms to drive purchasing decisions. Additionally, the use of theoretical models (*e.g.*, TAM, UTAUT) helps explain the underlying factors influencing online consumer behaviour. The overall structure of the network highlights the interconnectedness of social influence, trust, and purchase behaviour in the digital marketplace (Figure 2b).

Figure 2. Highlights Internet Focus and Purchase intention from network based on Co-occurrence Keyword Map

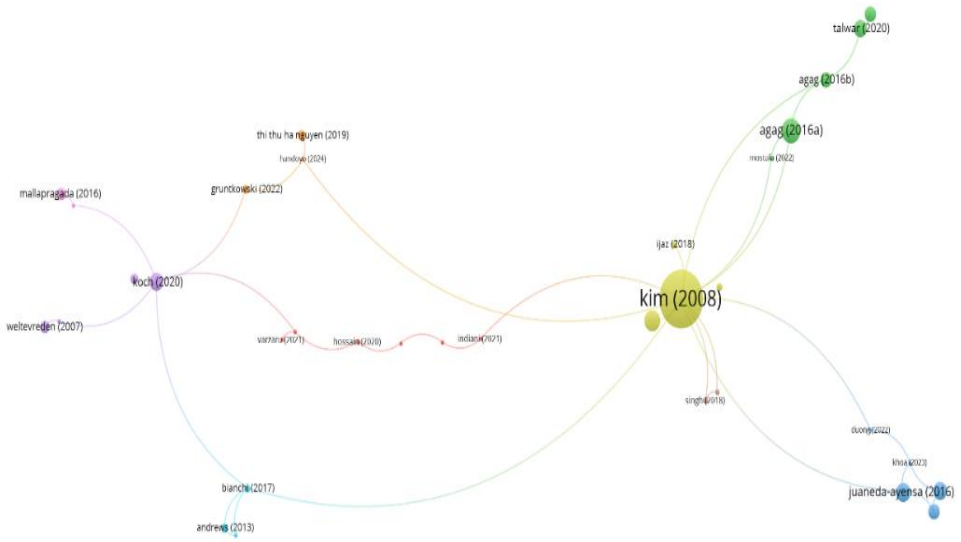


(a) Internet Focus (b) Purchase intention Focus

Source: Map created through the VOS viewer application

Analysis in Figure 3 focuses on a multi-coloured co-authorship network graph generated using VOS viewer, which visually represents collaborative relationships among researchers. In this graph. Nodes represent individual authors. Edges (lines) represent co-authorship links between them. Colours indicate different clusters - groups of authors who frequently collaborate or work on related themes. Each colour cluster signifies a distinct research focus or collaborative group. Each cluster interpret different ideas like Yellow Cluster, represent a group working on a specific or emerging research theme. This cluster may indicate interdisciplinary studies, new technologies, or novel research domains. Authors here might be early adopters or innovators introducing new approaches or combining methods from different disciplines Green Cluster, often form a well-established collaborative group. Likely associated with foundational research areas or popular topics within the broader field. This cluster may reflect large-scale projects, institutional collaborations, or frequent publication activity in core domains Blue Cluster, typically engaged in specialized or trendsetting research areas. May represent niche topics or technical innovations within a specific domain. This group could be pushing the boundaries of traditional methodologies and exploring novel techniques. Red Cluster, engage in interdisciplinary or cross-domain research. Likely includes authors working at the intersection of multiple fields. Indicates strong collaboration between different perspectives, enriching academic discourse with diverse approaches and methodologies. The central position in the network is occupied by the work of Kim (2008), which clearly shows a high degree of connection with numerous other studies and clusters, indicating its methodological or theoretical significance within this academic field.

Figure 3. Interaction and linkages between the 9 clusters.



Source: Map created through the VOS viewer application

Table 2 groups research papers into clusters based on their similarities in themes, keywords, citations, or bibliographic coupling. Each cluster represents a set of closely related studies, indicating that the papers within a cluster share common research objectives or focus areas. For example, Cluster 1 includes authors like Akhlaq (2016), Hossain (2020), suggesting a shared thematic link among their works. Similarly, Cluster 2 groups together papers by Agag (2016 a & b), Khanra (2021), and Mostafa (2022), likely focusing on a particular aspect of consumer behavior or e-commerce. Other clusters, such as Cluster 3 and Cluster 4, include papers by authors like Duong (2022), Gensler (2022), and Kim (2008), reflecting a different thematic orientation. Clusters 5 to 9 include fewer papers but represent distinct thematic niches or emerging research areas. The presence of some authors in the same year but in different clusters (*e.g.*, Agag 2016 a & b) indicates nuanced variations in their focus. The table essentially maps the intellectual structure of the literature in a particular field -possibly digital marketing or online consumer behavior - highlighting how groups of studies are interlinked and contribute to the development of specific research streams. The note at the bottom confirms that the clustering was done using VOSviewer, a bibliometric tool, and that multiple papers from the same year may belong to different clusters depending on their content.

Table 2. Clusters and authors

Sl. No.	Cluster 1	Sl. No.	Cluster 2	Sl. No.	Cluster 3	Sl. No.	Cluster 4
1	Akhlaq (2016)	1	Agag (2016 a)	1	Duong (2022)	1	Ijaz (2018)
2	Hossain (2020)	2	Agag (2016 b)	2	Flavián (2020)	2	Kim (2008)
3	Huterska (2022)	3	Khanra (2021)	3	Gensler (2022)	3	Pappas (2016a and 2016b)
4	Indiani (2021)	4	Mostafa (2022)	4	Juaneda-Ayensa (2016)	4	Van-Dat Tran (2019)
5	Vărzaru (2021)	5	Talwar (2020)	5	Khoa (2023)	5	-
Sl. No	**Cluster 5**	**Sl. No.**	**Cluster 6**		**Cluster 7**		**Cluster 8**
1	Goel (2022)	1	Andrews (2013)	1	Gruntkowski (2022)	1	Singh (2018)
2	Koch (2020)	2	Bianchi (2017)	2	Handoyo (2024)	2	Zerbini (2022)
3	Wei (2024)	3	Sánchez-Torres (2018)	3	Nguyen (2022)	3	-
4	Weltevreden (2007)	4	-	4	-	4	-

Source: Output from VOS viewer application (a) & (b) this shows the sub papers under the same author in the same year

Trust emerges as one of the most influential determinants in shaping consumer behaviour in online settings. It significantly moderates the relationship between perceived value and purchasing intentions across various sectors, such as fashion, travel, and cross-border commerce (Kim *et al.* 2019). Website quality, security,

and reputation remain essential factors in developing consumer trust, while third-party seals play a marginal role (Kordzadeh and Warren, 2017). In newer formats like live-streaming e-commerce, real-time visuals and direct interaction further reduce perceived risk, enhancing trust (Liu *et al.* 2017). Sánchez-Franco and Rondán-Cataluña (2010) conducted a qualitative comparative analysis (QCA) and identified that combinations of product risk, web-vendor risk, price-quality perceptions, and marketing strategies influence consumer trust and decision-making in online transactions.

1.2. Drivers of Consumer Channel Choice: Psychological, Cultural, and Product Influences

Trust and perceived risk are critical in influencing consumer online purchase behavior, as demonstrated by Kim *et al.* (2008). Similarly, Sánchez *et al.* (2006) analyzed the role of perceived value in shaping tourists purchase decisions in travel contexts. Trust developed through social networking sites was found to positively affect customer equity among Thai consumers as explored by Kananukul *et al.* (2015). Using both PLS-SEM and fsQCA methods, Liang *et al.* (2020) analyzed the user acceptance of Internet of Vehicles services, identifying key influencing factors. Liu *et al.* (2017) focused on the importance of product and website quality in online purchasing behavior. Park and Huang (2017) identified trust issues and security concerns, that prevent consumers from booking hotels via smartphones. According to Mattison *et al.* (2019), trust marks are effective tools to enhance consumer confidence and contribute to e-commerce. Technical cues and situational factors like boredom can trigger impulsive buying in social commerce as noted by Xue *et al.* (2024a). In store live streaming has emerged as a novel method influencing offline purchasing intentions (Zhang *et al.* 2023). Chen *et al.* (2022b) pointed out that product tolerance can seriously affect consumers' choice of purchasing channels. The study by Chocarro *et al.* (2013) examines how situational elements make the consumer decision-making process between online and offline shopping. Gensler *et al.* (2022) focused on the discussion on showrooming, showing that beyond pricing, product experience and convenience greatly affect consumer choices. Risk perception remains a vital element in online grocery shopping behavior, as found by Habib *et al.* (2021). Hou *et al.* (2023) explored the impact of consumer discussion patterns on multichannel purchasing intentions using the ESG evaluation system. Webrooming, a tactic used to reduce uncertainty, was examined by Kaduskeviciute *et al.* (2019). Offline shoppers' preferences for online or offline search channels and devices are highly dependent on the product category as shown by Kim *et al.* (2019). Szopiński *et al.* (2019) analyzed the complexities of cross-channel information search in purchasing electronics. Šostar *et al.* (2024a) highlight that while traditional marketing mix elements shape loyalty in supermarkets, trust in online information increasingly influences consumer decisions across product categories.

Ge (2008) focused on how traceable food cues affect purchase intentions. Improving consumer attitudes towards websites, especially in the tourism sector, was the focus of Alcántara-Pilar *et al.* (2018). According to Bhatti *et al.* (2022), various factors affect the transition from browsing to buying in online purchases. Luo *et al.* (2024), using signaling and social exchange theories, examined how live-streaming environments lead to impulse buying. The influence of both product and website characteristics on online behavior was investigated in depth by Mallapragada *et al.* (2016). Pappas (2016a) analyzed how marketing strategies, perceived risks, and consumer trust interact to shape online purchasing behavior. In a related study, Pappas (2016b) applied qualitative comparative analysis to explore how marketing strategies can mitigate perceived risks in tourism e-commerce. In China, Zhu *et al.* (2020) highlighted the role of consumer privacy policies in boosting trust in e-commerce platforms. Online product reviews play a vital role in consumer decisions, as shown by Chen *et al.* (2015). Ngo *et al.* (2024) stressed the impact of electronic word-of-mouth (eWOM) credibility on online purchase intentions via social networking sites. Credibility can be reduced by typographical errors in reviews, which Cox *et al.* (2017) found to negatively affect consumer trust. Forman *et al.* (2008) revealed that disclosing identity information in reviews can boost trust and sales impact. Kang *et al.* (2022) explored how online reviews shape decisions regarding new products. According to Wang *et al.* (2020), doctor's reputations in online spaces influence patients' willingness to share medical experiences. Zhang *et al.* (2022) illustrated how purchase intentions evolve under the influence of opinion dynamics. Gag and El-Masry (2016) showed that perceived usefulness and trust are vital for hotel booking intentions. In Egypt, Aref and Okasha (2020) emphasized how trust, price sensitivity, and convenience influence online shopping behavior among educated consumers. Elbeltagi *et al.* (2016) analyzed the role of ethical e-retailing in fostering customer satisfaction and repurchase intentions. The role of the internet in travel decision-making was highlighted by Garín-Muñoz *et al.* (2010), particularly in Spain's tourism sector.

Using machine learning, Mendieta-Aragón *et al.* (2023) analyzed how technology-driven trends shape consumer behavior in e-tourism. Mostafa *et al.* (2022) identified the determinants of online purchase intention and their impact on buyer behavior. Pinto *et al.* (2019) examined the importance of website quality, ease of use, and

trust in shaping travel agency purchase decisions. Andrews *et al.* (2013) observed that in Chile, trust and convenience are major influences on internet purchasing behavior. Trust, ease of use, and social influence are critical components of social commerce participation (Bianchi *et al.* 2017). In their meta-analysis, Luceri *et al.* (2022) confirmed that timesaving and convenience are primary motivators for mobile shopping. Steinhoff *et al.* (2020) highlighted the emerging role of technology in relationship marketing, focusing personalization and privacy concerns. Zhao *et al.* (2023) found that trust and perceived benefits play central roles in consumer behavior in China's C2C e-commerce market. Agag and El-Masry (2016a) integrated Innovation Diffusion Theory and TAM to explore online travel community engagement and purchasing behavior. Alrawad *et al.* (2023), using SEM, revealed how risk perception varies across different consumer segments. Chen *et al.* (2022c) applied Innovation Resistance Theory to identify barriers to mobile ticketing adoption, including complexity and trust issues. Talwar *et al.* (2020) investigated barriers to online travel booking and found that perceived security risks and high prices are major concerns. In a similar way, Xue *et al.* (2024b) analyzed consumer resistance to electric vehicle purchases due to high costs and infrastructure concerns. Finally, Dang *et al.* (2018) observed that in Vietnam, consumer attitudes toward online food purchasing are moved by product variety and convenience, though trust and delivery remain barriers. Exploring consumer behavior in emerging smart product categories, Chen *et al.* (2023) found that expectancy and social influence significantly shape intentions to buy smart clothing.

1.3. Digital Touchpoints and Design: Enhancing User Experience and Decision-Making

Rehman *et al.* (2019) find that trust and commitment can moderate the relationship between consumers' purchase intentions and their actual online shopping behaviour. The study by Saleem *et al.* (2022) investigates consumer motivation for adopting e-shopping, revealing that factors such as usefulness, ease of use, attitude, and subjective norms influence online shopping behaviour. According to Theodorou *et al.* (2023), the pandemic had played a major impact on online consumer behaviour, with attitude, subjective norms, and perceived behavioural control shaping consumers' intentions to shop online during the crisis. Nguyen *et al.* (2019) used an extended Technology Acceptance Model (TAM) to explore online food purchasing in Vietnam, showing that perceived usefulness, ease of use, trust, and attitude positively influence consumers' purchase intentions in emerging economies. Agag and El-Masry (2016a) examined the factors influencing consumers' hotel booking intentions online, concluding that trust, attitude, subjective norms, and perceived risk are crucial in determining booking intention. Alrawad *et al.* (2023) analysed how customers perceive risks in online shopping using Structural Equation Modelling (SEM) with multigroup analysis, identifying that financial, privacy, product, and delivery risks negatively affect customer trust and purchase intentions. Chen *et al.* (2022c) found that value and risk barriers hinder the adoption of mobile ticketing apps, suggesting that reducing perceived risks and enhancing usefulness could encourage user acceptance.

Talwar *et al.* (2020) identify significant barriers to purchasing from online travel agencies, such as risk perceptions, lack of trust, and technological complexity, which deter consumer engagement. According to Gruntkowski *et al.* (2022), the pandemic accelerated consumer adoption of online grocery shopping in Germany, driven by convenience, safety concerns, and changes in purchasing behaviour. Handoyo *et al.* (2024) conducted a meta-analysis on the factors influencing e-commerce purchasing and emphasized the important roles of trust, risk, and security in shaping consumer decisions. Social media communication and electronic word-of-mouth (e-WOM) can influence brand equity, as Lin *et al.* (2023) explain, showing that high product involvement strengthens the impact of these communication channels on brand value. Oktaviani *et al.* (2024) examine green consumer behaviour towards purchasing imperfect products, highlighting how sustainable labelling influences online shopping intentions. According to Rani and Shivaprasad (2021), key factors such as trust, risk, and emotional responses influence online communication behaviours. Wang *et al.* (2023) explore how consumer perceptions like trust, product quality, and platform reputation can affect purchase intentions on cross-border e-commerce platforms, emphasizing their importance in global online shopping behaviour. Gender-based differences in online shopping behaviours were explored by Akhlaq and Ahmed (2016), who found that women emphasize trust and security, while men focus more on convenience and timesaving. Bhati *et al.* (2022) examined the influence of e-service quality on online buying intention and found that factors such as ease of use, trust, and customer satisfaction significantly impact consumers' intention to purchase online. The role of social networking in promoting mobile commerce was investigated by Hossain *et al.* (2020), who found that trust, mobile phone use, and social influence are key drivers of online shopping and payment behaviours through mobile platforms. According to Huterska and Huterski (2022), technological infrastructure, consumer trust, and socio-economic conditions can influence online purchasing behaviours across different EU nations. Indiani *et al.* (2021) examined key factors influencing consumer purchasing behaviour in emerging online retail markets focusing the roles of

trust, convenience, price sensitivity, and the impact of digital payment systems on shaping online shopping decisions. Andon *et al.* (2024) explored how gamification, virtual-try-on technology, and e-logistics service quality affect online shopping behaviour, showing the significance of technological advancements in shaping consumer decisions. In their study, Duong *et al.* (2022) investigated how online interpersonal relationships and data ownership awareness mediate the link between perceived benefits and problematic internet shopping highlighting the role of consumer awareness in addressing online shopping issues.

Gallart-Camahort *et al.* (2023) examined how the internet influences retailer quality and contributes to building retailer brand equity, underlining the growing importance of online presence in brand perception. Juaneda-Ayensa *et al.* (2016) studied the key drivers of technology acceptance in omnichannel retailing, showing that perceived ease of use and usefulness significantly influence consumer purchase intentions across both online and offline channels. Khoa *et al.* (2023) found that customer anxiety negatively affects their interactions with omnichannel systems, influencing customer trust, satisfaction, and purchase intentions. Liu and Zheng (2023) examined the factors which t influence consumers' purchase intentions for agricultural products. Ramayah *et al.* (2018) explored how consumption values such as social, emotional, functional, and epistemic influence online purchase intentions, showing that emotional and social values play a significant role in shaping buying behaviour. Web advertising visual design impacts online purchase intention, as Shaouf *et al.* (2016) explain, revealing that females are more influenced by visual appeal in advertisements compared to males. Singh and Srivastava (2018) found that the type of product moderates online shopping behaviour and purchase intention in India, concluding that product type influences consumers' online shopping decisions for different product categories.

1.4. Theoretical and Technological Foundations of Modern E-Commerce

Zerbini *et al.* (2022) conduct a meta-analysis to identify the key drivers of consumer adoption of e-commerce, revealing that factors such as trust and perceived risk play significant roles. These findings provide valuable insights for businesses looking to enhance online adoption strategies. The role of sustainable consumer behavior in driving innovation within the retail sector is explored by Šálková *et al.* (2023), who examine how eco-friendly product preferences influence retail strategies and the development of sustainable practices. Shi *et al.* (2021) investigate how the built environment impacts online purchases of intangible services, stating that environmental factors mediate the role of online purchase attitudes in shaping consumer behavior. The online shopping behavior of Guangzhou residents during the COVID-19 pandemic is explored by Wei *et al.* (2024), identifying shifts in consumer patterns driven by health concerns and restrictions, which have heightened reliance on e-commerce. Weltevreden *et al.* (2007) compare e-shopping and city center shopping, finding that the attractiveness of city centers influences consumer preferences, while e-shopping is increasingly favored for its convenience. However, city centers continue to appeal due to their social and experiential offerings. Budhathoki *et al.* (2024) use a text mining approach to explore consumer satisfaction with farmed salmon imports in China, finding that factors such as product quality, price, and delivery times significantly shape e-commerce satisfaction. Hong *et al.* (2019) analyzes consumer satisfaction in fresh e-commerce logistics, revealing that timely delivery, product quality, and customer service are crucial factors in ensuring satisfaction for the success of fresh product e-commerce. Customer satisfaction in e-commerce during the COVID-19 pandemic is examined by Ilieva *et al.* (2022), who found that timely delivery, product quality, and customer support were essential in driving satisfaction, with a greater emphasis on online shopping due to the pandemic. Vasić *et al.* (2019) investigate how online shopping determinants influence customer satisfaction in the Serbian market, concluding that website quality, product variety, and customer service play crucial roles in shaping satisfaction. The relationships between e-impulse buying tendency, customer satisfaction, and the intention to continue e-shopping are explored by Goel *et al.* (2022), showing how these factors shape consumer decision-making. Hidayat *et al.* (2021) highlights the importance of consumer trust as a key element in online purchase decisions, revealing that trust influences online purchase decisions significantly. During the COVID-19 pandemic, Koch *et al.* (2020) reveal that safety concerns, convenience, and the desire for contactless transactions were major drivers of online shopping, with these trends likely to continue post-pandemic. Nguyen *et al.* (2022) examine how perceptions, attitudes, and subjective norms influenced online shopping behaviors in Vietnam during the COVID-19 pandemic, finding that convenience, safety, and trust were significant motivators for online shopping. Also, Šostar & Ristanović, 2023b confirms that the greatest impact of the COVID-19 pandemic was observed in the goods market, where disruptions in supply (delivery delays, product shortages) and shifts in distribution channels (increased online shopping) occurred. Gao *et al.* (2020) analyze how the pandemic influenced the adoption of e-commerce for food purchases in China, showing significant shifts in consumer behavior towards online food shopping. Grădinaru *et al.* (2022) examine

students' perceptions of mobile commerce, revealing a shift in consumer preferences towards mobile-based shopping platforms. The key drivers influencing mobile commerce adoption are identified by Vărzaru *et al.* (2021), who focus on factors that affect the use of mobile shopping platforms. Flavián *et al.* (2020) explore how webrooming and showrooming practices enhance smart shopping decisions by integrating online and offline channels, showing that these practices positively affect consumer decisions. The disruption of offline sales by online research is analyzed by Li *et al.* (2023), who demonstrate how digital information influences traditional purchasing behavior. Singh and Swait. (2017) explores the impact of mobile internet on consumer behavior, showing how mobile channels influence search and purchase decisions in retail. Alzate *et al.* (2022) use text mining of online consumer reviews to analyze brand image and positioning in retail, revealing how consumer perceptions influence brand perceptions and purchase decisions. Dankwa *et al.* (2021) explore the role of social media advertising in consumer decision-making, finding that consumer engagement acts as a key intermediary, strengthening the effect of social media ads on purchase decisions.

The internet has profoundly transformed consumer purchasing behavior across different product categories by enhancing access to information, expanding choices, and shaping decision-making processes. Consumers now rely heavily on online reviews, social media, and digital platforms to guide their purchases, leading to more informed and personalized buying patterns. As technology continues to evolve, understanding these shifting behaviors remains crucial for businesses aiming to meet the dynamic expectations of modern consumers, as evidenced by the works of Zerbini *et al.* (2022), Wei *et al.* (2024), Vasić *et al.* (2019) and Šostar *et al.* (2024b).

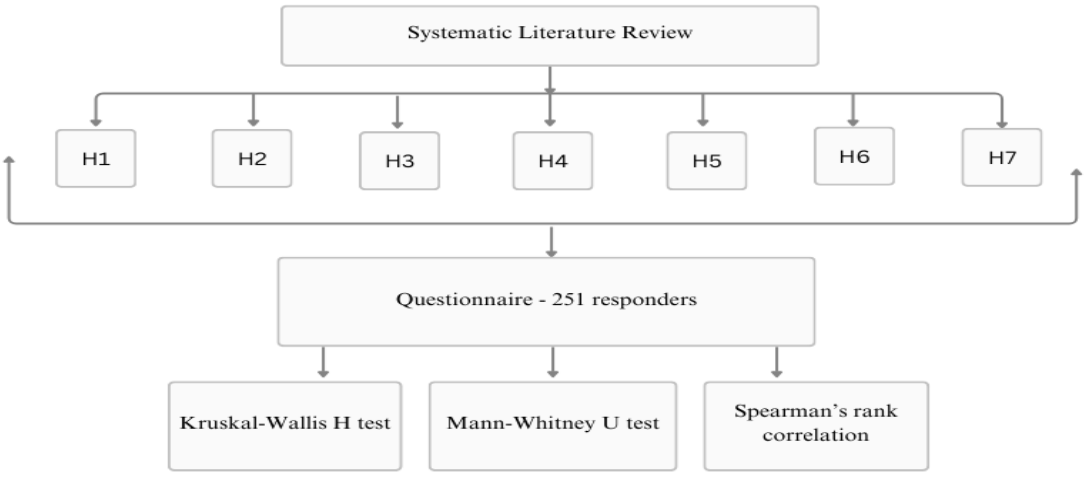
2. Materials and Methods

2.1. Research Procedure

This study adopts a systematic literature review (SLR) methodology to explore the key areas of interest. Based on the outlined theoretical framework, the SLR approach plays a crucial role in building a comprehensive understanding of existing knowledge within the field, identifying research directions and patterns, and informing the development of future research agendas. The growing emphasis on evidence-based approaches has led to a wider range of literature review types in recent years. For this study, academic sources were collected through a targeted keyword search in the Web of Science database, selected for its broad and authoritative coverage of scientific, technological, and social science research.

Following an in-depth review of relevant literature, the study established its research hypotheses, which were then tested through a survey-based approach. Data was collected in 2025 through an online questionnaire distributed via social media, targeting a random sample of 251 participants from Croatia. Data collected from the survey were analyzed using nonparametric statistical methods, including the Kruskal-Wallis H test, Mann-Whitney U test, and Spearman's rank correlation, due to the non-normal distribution of the dataset, as illustrated in Figure 4.

Figure 4. Research Design and Methodology Framework



Note: H1: The internet significantly influences product selection for most users, regardless of product category; H2: Consumer trust in online information is higher for technological and travel-related products than for food and hygiene products; H3: Younger users (18–35) spend more time online and shop online more frequently compared to users over 36;

H4: Employed users spend more time online and shop more frequently online compared to unemployed users; H5: Users with higher monthly income (800 euros or more) show greater trust in online information during the purchasing process; H6: Users who purchase clothing and tech products rely more heavily on the internet in their purchasing decisions compared to those who buy food.

When examining the gender distribution of respondents (Table 3), it can be observed that 73.7% are female, while 26.3% are male. Regarding age, 33.2% of participants are between 18 and 25 years old, 20.0% are aged 26–35, 23.2% are 36–45, 15.6% are 46–55, and 8.0% are over 56 years of age. As for employment status, 62.2% indicated that they are employed, while 37.8% reported being unemployed. Concerning marital status, 57.6% of respondents are married, while 42.4% are single. In terms of monthly income, 20.8% reported earning up to 499 euros, 21.2% earn between 500 and 799 euros, 26.9% between 800 and 1099 euros, and 31.0% earn more than 1099 euros per month. When asked about their average daily internet usage, 21.9% reported using the internet up to 60 minutes per day, 32.3% between 61 and 120 minutes, 25.9% between 121 and 180 minutes, and 19.9% more than 180 minutes per day. Regarding the frequency of online purchases, 10.4% shop online once or more per week, 38.2% once or more per month, and 51.4% once or more per year. When it comes to the type of products most frequently purchased online, the largest share of respondents reported clothing and footwear (48.0%), followed by sports equipment and children's toys (12.9%), and hygiene or pharmaceutical products (12.1%).

Table 3. Demographic Structure of Responders

		N	%
Gender	Male	185	73,7%
	Female	66	26,3%
	Total	251	100,0%
Age	18-25	83	33,2%
	26-35	50	20,0%
	36-45	58	23,2%
	46-55	39	15,6%
	56 +	20	8,0%
	Total	250	100,0%
Working status	Employed	156	62,2%
	Unemployed	95	37,8%
	Total	251	100,0%
Marriage status	Married	144	57,6%
	Single	106	42,4%
	Total	250	100,0%
Monthly income	To 499 EUR	51	20,8%
	500-7999 EUR	52	21,2%
	800-1099 EUR	66	26,9%
	Above 1099 EUR	76	31,0%
	Total	245	100,0%

3. Research Results

The following section presents the key findings of the research, based on the collected survey data, including demographic characteristics of the respondents, patterns of internet usage, online purchasing behavior, and consumer preferences across different product categories.

Table 4. Internal Consistency of Scales by Product Category (Cronbach's Alpha Values)

Product Category	Cronbach's Alpha	N of Items
Food	0,900	3
Clothing	0,899	3
Hygiene/Pharmaceutical	0,946	3
Household/Garden	0,944	3
Technology	0,935	3
Sports/Toys	0,958	3
Travel Packages	0,960	3

When examining the Cronbach's Alpha coefficients for the observed factors in Table 4, it becomes evident that the values are consistently high across all categories, exceeding the threshold of 0.7. This indicates a very high level of reliability for all the scales used in the study, and therefore, the grouping and further analysis will be conducted based on the specified product categories.

Based on the significance values presented in Table 5, the distribution patterns can be assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. If the significance value for a given category (factor) is greater than 0.05 ($p > 0.05$), the data is considered to follow a normal distribution. Conversely, if the significance is below 0.05, the distribution deviates from normality. Since the significance values for all observed categories are below the 0.05 threshold, it can be concluded that the assumption of normality was not met. As a result, the subsequent analysis was conducted using nonparametric statistical methods.

Table 5. Normality Distribution Test

Product Category	Kolmogorov-Smirnov [a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Food	,154	224	,000	,943	224	,000
Clothing	,098	224	,000	,964	224	,000
Hygiene/Pharmaceutical	,127	224	,000	,940	224	,000
Household/Garden	,119	224	,000	,947	224	,000
Technology	,142	224	,000	,948	224	,000
Sports/Toys	,137	224	,000	,940	224	,000
Travel Packages	,118	224	,000	,941	224	,000

Note: a. Lilliefors Significance Correction

The Table 6 provides an overview of how respondents rated the influence of the internet on their purchasing decisions, their trust in online information, and how accurate they find that information, across seven different product categories. These categories include food, clothing, hygiene and pharmaceutical products, household and garden products, technology, sports equipment and toys, and travel packages. The first set of values shows the extent to which the internet affects purchase decisions. The highest ratings were recorded for clothing (average score 2.93) and travel (2.87), followed by technology (2.85) and sports equipment and toys (2.82). On the other hand, food products received the lowest average score (2.42), suggesting that the internet plays a smaller role in guiding purchases in that category. These differences support the idea that while the internet does have an influence across all product types, the strength of that influence varies depending on the nature of the product. This partially supports the first hypothesis (H1), which assumed a generally strong influence of the internet across product categories. The second and third sets of values in the table relate to the level of trust in online information and how accurate that information is perceived to be. Travel and technology products stand out with the highest ratings in both aspects - travel scores 2.88 for trust and 2.89 for accuracy, while technology scores 2.77 and 2.83 respectively. In contrast, food and hygiene products receive noticeably lower ratings in both categories. Food, for example, scores 2.50 for trust and 2.60 for perceived accuracy. These findings align with the second hypothesis (H2), which suggested that consumers are more likely to trust online information when shopping for products such as travel services and technology, compared to more everyday items like groceries and personal care products. The results in this table point to clear differences in how consumers rely on the internet depending on what they are buying. While digital sources influence most purchase decisions to some extent, they play a more central role in certain categories—particularly those involving more planning, comparison, or technical knowledge.

Table 6. Average Ratings of Internet Influence, Trust, and Perceived Accuracy across Product Categories

Product Category	Influence of Internet ($\bar{x}$)	Trust in Internet ($\bar{x}$)	Perceived Accuracy of Online Info ($\bar{x}$)
Food	2.42	2.50	2.60
Clothing	2.93	2.93	2.91
Hygiene/Pharmaceutical	2.80	2.76	2.81
Household/Garden	2.70	2.71	2.73
Technology	2.85	2.77	2.83
Sports/Toys	2.82	2.85	2.83
Travel Packages	2.87	2.88	2.89

Tables 7 and 8 present the results of a nonparametric analysis (Kruskal-Wallis H test) examining whether there are statistically significant differences in consumer behavior across different age groups. The analysis is based on ranked data and compares responses within seven product categories: food, clothing, hygiene/pharmaceuticals, household/garden products, technology, leisure, and travel. Table 7 displays the mean rank scores for each age group (18–25, 26–35, 36–45, 46–55, and 56+). In most product categories, the highest average ranks are found among younger respondents, particularly those aged 18–25 and 26–35. This suggests that these groups exhibit stronger engagement with the internet during the purchasing process. Table 8 provides the test statistics and corresponding p-values for each product category. Significant differences between age groups ($p < 0.05$) were found for the following categories: Food ($p = .032$); Clothing ($p = .000$); Hygiene/Pharmaceuticals ($p = .002$); Technology ($p = .002$); Leisure ($p = .029$); Travel ($p = .002$). These results indicate that age plays a statistically significant role in shaping consumer behavior for these product types. The only category where no significant difference was observed is Household/Garden products ($p = .112$).

Table 7. Mean Ranks of Online Consumer Behavior by Age Group across Product Categories

Product Category	Age	N	Mean Rank	Product Category	Age	N	Mean Rank
Food	18-25	83	128,24	Clothing	18-25	83	133,30
	26-35	49	142,32		26-35	48	160,54
	36-45	56	123,46		36-45	57	110,25
	46-55	39	95,15		46-55	39	97,35
	56 +	19	112,58		56 +	19	80,55
	Total	246	128,24		Total	246	133,30
Health	18-25	83	125,47	Household/Garden	18-25	82	125,32
	26-35	47	153,94		26-35	47	138,47
	36-45	58	115,89		36-45	58	122,86
	46-55	36	96,18		46-55	37	105,39
	56 +	20	102,85		56 +	19	96,63
	Total	244	125,47		Total	243	125,32
Technology	18-25	83	130,90	Sports/Toys	18-25	79	122,89
	26-35	46	147,32		26-35	48	145,44
	36-45	58	118,15		36-45	57	120,45
	46-55	37	100,92		46-55	39	96,64
	56 +	20	83,13		56 +	20	116,10
	Total	244	130,90		Total	243	122,89
Travel Packages	18-25	81	116,14				
	26-35	48	148,61				
	36-45	57	120,77				
	46-55	35	86,61				
	56 +	18	123,53				
	Total	239					

Table 8. Kruskal-Wallis H Test for Age Differences Across Product Categories [a,b]

Product Category	Kruskal-Wallis H	df	Asymp. Sig.
Food	10,594	4	,032
Clothing	29,164	4	,000
Hygiene/Pharmaceutical	16,920	4	,002
Household/Garden	7,487	4	,112
Technology	17,158	4	,002
Sports/Toys	10,797	4	,029
Travel Packages	17,040	4	,002

Note: a. Kruskal Wallis Test; b. Grouping Variable: Age

These findings directly support Hypothesis H3, which proposes those younger users (ages 18–35) spend more time online and engage more frequently in online shopping compared to older users. The consistently higher rank scores for the younger age groups across almost all product categories confirm that this demographic is more likely to rely on the internet during their purchasing process. Data highlight a clear generational difference in online consumer behavior. Younger individuals are not only more active online but also tend to show greater reliance on digital content when making purchasing decisions, particularly in categories such as clothing, technology, and travel.

Tables 9 and 10 present the results of a nonparametric analysis (Mann-Whitney U test) aimed at identifying whether there are significant differences in online purchasing behavior between employed and unemployed respondents across selected product categories. Table 9 shows the mean rank scores for both employed and unemployed participants in relation to six product categories: clothing, hygiene/pharmaceutical products, household/garden items, technology, leisure, and travel services. The rank values are relatively close across all categories, indicating that there are no substantial behavioral differences between the two groups in terms of how they interact with the internet when shopping for these products. Table 10 confirms this observation with statistical results. In all six categories, the significance levels (Asymp. Sig. 2-tailed) are well above the threshold of 0.05. For example, in the category of clothing, the p-value is .738; for technology, it is .995; and for leisure products, it is .923. These values clearly indicate that the differences in behavior between employed and unemployed respondents are not statistically significant. These findings directly address Hypothesis H4, which suggested that employed individuals would spend more time online and shop more frequently via the internet than their unemployed counterparts. Based on the results, H4 is not supported. The data indicate that employment status does not have a measurable impact on online purchasing patterns in the observed categories. regardless of employment status, consumers appear to engage with online content in a similar way when it comes to making purchasing decisions. This suggests that other factors - such as age, digital habits, or personal interest - may play a more influential role than employment itself.

Table 9. Mean Ranks of Online Consumer Behavior by Employment Status

Product Category	Employment status	N	Mean Rank	Sum of Rank		Employment status	N	Mean Rank	Sum of Rank
Food	Employed	153	122.50	17742.50	Clothing	Employed	153	122,82	18791,00
	Unemployed	94	126.00	11844.00		Unemployed	94	125,93	11837,00
	Total	247				Total	247		
Health	Employed	152	120,09	18254,00	Household/Garden	Employed	151	123,64	18670,00
	Unemployed	93	127,75	11881,00		Unemployed	93	120,65	11220,00
	Total	245				Total	244		
Technology	Employed	152	122,98	18692,50	Sports/Toys	Employed	152	122,16	18569,00
	Unemployed	93	123,04	11442,50		Unemployed	92	123,05	11321,00
	Total	245				Total	244		
Travel Packages	Employed	147	118,69	17447,00					
	Unemployed	93	123,37	11473,00					
	Total	240							

Table 10. Mann-Whitney U & Wilcoxon W Test for Differences Based on Employment Status

Product Category	Mann-Whitney U	Wilcoxon W	z	Asymp. Sig. (2- tailed)
Food	7000.000	18742.500	-,420	,675
Clothing	7010,000	18791,000	-,334	,738
Hygiene/Pharmaceutical	6626,000	18254,000	-,831	,406
Household/Garden	6849,000	11220,000	-,326	,744
Technology	7064,500	18692,500	-,007	,995
Sports/Toys	6941,000	18569,000	-,096	,923
Travel packages	6569,000	17447,000	-,514	,607

Note: a. Kruskal Wallis Test; b. Grouping Variable: Age

Tables 11 and 12 explore whether there are significant differences in online consumer behavior based on respondents' monthly income levels. The analysis was conducted using the Kruskal-Wallis H test, a nonparametric method suitable for comparing more than two independent groups, in this case: respondents earning up to 499 euros, 500-799 euros, 800-1099 euros, and over 1099 euros per month. Table 11 presents the mean ranks for each income group across various product categories. While there are slight variations in ranks - for example, respondents in the 500-799 euro range consistently show higher ranks in categories like food, hygiene, and leisure - the differences are neither large nor consistent enough to suggest a clear trend. In fact, in several categories such as clothing, travel, and health, the highest earners (over 1099 euros) do not demonstrate stronger engagement or trust in online information compared to lower-income groups. Table 12 summarizes the statistical significance of these observed differences. The p-values for all categories are above the 0.05 threshold, indicating that the differences in behavior across income groups are not statistically significant. For example, in the case of food products, the p-value is 0.061; for clothing, it is 0.179; and for travel, 0.518. These results suggest that income level does not play a decisive role in shaping consumers' trust in online information or their behavior when purchasing these types of products.

Table 11. Mean Ranks of Online Consumer Behavior by Monthly Income Level

Product Category	Monthly Income (EUR)	N	Mean Rank	Product Category	Monthly Income (EUR)	N	Mean Rank
Food	Up to 499	50	113,44	Clothing	Up to 499	51	123,44
	500-799	52	137,47		500-799	52	134,13
	800-1099	64	129,39		800-1099	64	124,07
	Above 1099	75	107,46		Above 1099	74	107,43
	Total	241			Total	241	
Health	Up to 499	51	115,60	Household /Garden	Up to 499	50	105,67
	500-799	52	135,78		500-799	52	138,15
	800-1099	62	122,07		800-1099	63	121,71
	Above 1099	74	110,21		Above 1099	73	113,78
	Total	239			Total	238	
Technology	Up to 499	50	106,59	Sports/Toys	Up to 499	50	111,23
	500-799	52	134,28		500-799	52	134,05
	800-1099	63	128,06		800-1099	65	124,28
	Above 1099	74	112,16		Above 1099	71	110,30
	Total	239			Total	238	
Travel Packages	Up to 499	50	116,90				
	500-799	51	129,52				
	800-1099	62	114,60				
	Above 1099	71	111,82				
	Total	234					

Table 12. Kruskal-Wallis H Test for Differences Based on Monthly Income [a,b]

Product Category	Kruskal-Wallis H	df	Asymp. Sig.
Food	7,358	3	,061
Clothing	4,909	3	,179
Hygiene/Pharmaceutical	4,559	3	,207
Household/Garden	6,554	3	,088
Technology	6,043	3	,110
Sports/Toys	4,713	3	,194
Travel Packages	2,270	3	,518

Note: a. Kruskal Wallis Test; b. Grouping Variable: Monthly Income

These findings are directly related to Hypothesis H5, which proposed that respondents with higher monthly incomes (800 euros or more) would demonstrate greater trust in online information during the purchasing process. Based on the analysis, H5 is not supported. Trust and engagement with online content do not significantly vary according to income level, at least not in a statistically meaningful way. The results suggest that monthly income is not a major factor influencing how consumers perceive and use internet-sourced information when shopping across various product categories. Other variables, such as age or time spent online, may have a more pronounced effect.

Tables 13 and 14 explore the connection between the amount of time users spend online each day and their online purchasing behavior. The results are particularly relevant to Hypothesis H7, which assumes that individuals who spend more than 180 minutes online daily are more likely to shop online more frequently. The data in Table 13 show that for categories such as clothing, technology, and leisure products, the mean ranks are noticeably higher among those who reported spending between 121 and 180 minutes, or more than 180 minutes online. This pattern suggests that increased daily internet use is associated with greater online shopping activity in these categories. Table 14 confirms that the observed differences are statistically significant for clothing ($p = .008$), technology ($p = .004$), and leisure ($p = .030$). For other product types, such as food or travel, no significant differences were found. These results provide partial support for H7, indicating that time spent online does influence online purchasing behavior — but primarily for products that often involve browsing or personal interest.

Table 13. Mean Ranks of Online Consumer Behavior by Daily Internet Usage

Product Category	Time on Internet per day (minutes)	N	Mean Rank	Product Category	Time on Internet per day (minutes)	N	Mean Rank
Food	Up to 60	53	117,00	Clothing	Up to 60	54	103,11
	61-120	80	115,45		61-120	79	115,31
	121-180	64	136,39		121-180	65	141,66
	More than 180	50	129,24		More than 180	49	137,60
	Total	247			Total	247	
Health	Up to 60	54	110,31	Household /Garden	Up to 60	54	108,29
	61-120	78	115,82		61-120	77	118,90
	121-180	64	139,47		121-180	65	132,22
	More than 180	49	126,91		More than 180	48	131,11
	Total	245			Total	244	
Technology	Up to 60	55	100,75	Sports/Toys	Up to 60	55	108,94
	61-120	76	114,04		61-120	76	111,14
	121-180	65	138,11		121-180	64	139,05
	More than 180	49	141,83		More than 180	49	133,72
	Total	245			Total	244	
Travel Packages	Up to 60	52	113,96				
	61-120	75	112,13				
	121-180	65	128,13				
	More than 180	48	130,32				
	Total	240					

Table 14. Kruskal-Wallis H Test for Differences Based on Daily Internet Usage [a,b]

Product Category	Kruskal-Wallis H	df	Asymp. Sig.
Food	3,908	3	,272
Clothing	11,699	3	,008
Hygiene/Pharmaceutical	6,280	3	,099
Household/Garden	4,441	3	,218
Technology	13,349	3	,004
Sports/Toys	8,923	3	,030
Travel Packages	3,365	3	,339

Note: a. Kruskal Wallis Test; b. Grouping Variable: Time spend on Internet per day

Tables 15 and 16 present an analysis related to Hypothesis H6, which assumed that users who primarily purchase clothing or technology products online rely more heavily on the internet when making purchasing decisions, compared to users who primarily buy food. Table 15 shows the mean ranks for each product category based on the type of item respondents reported buying most frequently online. While there are some variations in rank scores, these differences are not consistent or substantial. For example, respondents who most often purchase technology products or clothing do not show markedly higher levels of online influence or trust than those purchasing food or hygiene products.

Table 15. Mean Ranks of Online Consumer Behavior by Most Frequently Purchased Product Type

Product Category	Most Frequently Purchased Products Online	N	Mean Rank	Product Category	Most Frequently Purchased Products Online	N	Mean Rank
Food	Food	19	129,03	Clothing	Food	19	106,58
	Clothing	116	123,82		Clothing	117	131,12
	Hygiene/Pharmaceutical	29	116,83		Hygiene/Pharmaceutical	28	109,98
	Household/Garden	17	140,53		Household/Garden	17	122,65
	Technology	16	116,59		Technology	16	114,97
	Sports/Toys	32	122,16		Sports/Toys	32	118,64
	Total	15	101,60		Total	15	114,93
Health	Food	19	109,24	Household /Garden	Food	19	113,58
	Clothing	117	121,92		Clothing	115	121,83
	Hygiene/Pharmaceutical	28	125,57		Hygiene/Pharmaceutical	28	114,45
	Household/Garden	16	124,28		Household/Garden	17	124,44
	Technology	16	110,28		Technology	16	127,81
	Sports/Toys	31	124,74		Sports/Toys	31	113,26
	Total	15	128,43		Total	15	141,07
Technology	Food	19	103,97	Sports/Toys	Food	19	104,97
	Clothing	116	121,59		Clothing	118	117,61
	Hygiene/Pharmaceutical	28	111,54		Hygiene/Pharmaceutical	25	118,44
	Household/Garden	17	117,21		Household/Garden	17	123,29
	Technology	16	134,81		Technology	16	119,06
	Sports/Toys	31	125,61		Sports/Toys	31	141,58
	Total	15	143,77		Total	15	129,13
Travel Packages	Food	18	101,64				
	Clothing	117	118,62				
	Hygiene/Pharmaceutical	27	116,02				
	Household/Garden	17	116,09				
	Technology	14	122,32				
	Sports/Toys	29	116,59				
	Total	15	153,07				

Table 16. Kruskal-Wallis H Test for Differences Based on Most Frequently Purchased Product Type [a, b]

Product Category	Kruskal-Wallis H	df	Asymp. Sig.
Food	2,974	6	,812
Clothing	4,100	6	,663
Hygiene/Pharmaceutical	1,364	6	,968
Household/Garden	2,354	6	,884
Technology	4,122	6	,660
Sports/Toys	4,335	6	,631
Travel Packages	5,117	6	,529

Note: a. Kruskal Wallis Test; b. Grouping Variable: Most Frequently Online Purchased Product Type

Table 16 reports the results of the Kruskal-Wallis H test and confirms that none of the observed differences between groups are statistically significant. In all seven product categories, the p-values exceed 0.05, indicating that the frequency with which certain types of products are purchased does not correspond with significantly different patterns of online behavior. These findings lead to the rejection of Hypothesis H6. While it might be expected that consumers of tech or fashion items would be more reliant on online content when making purchasing decisions, the data do not support this assumption. Instead, the results suggest that the type of product most frequently purchased online does not, by itself, predict how much influence or trust a user places in online information.

4. Discussions

The findings of this study provide nuanced insights into how the internet shapes consumer purchasing behavior across product categories. While the internet generally exerts significant influence on consumer decisions, this impact is not uniform. For example, product types such as clothing, technology, and travel services consistently show higher levels of digital influence, trust, and perceived accuracy compared to categories like food and hygiene products. This aligns with the conclusions of Liu *et al.* (2017), who emphasized the role of product involvement in shaping online shopping behavior. Interestingly, generational differences emerge as a key factor. Younger consumers, especially those aged 18–35, demonstrate significantly greater reliance on digital content and spend more time online. These patterns confirm observations made by Gensler *et al.* (2022), who argued that digital natives exhibit more dynamic and exploratory purchasing behavior influenced by social media and personalized content. Conversely, older demographics remain more skeptical toward digital information, which may be linked to lower digital literacy or different purchasing habits. However, contrary to our initial hypotheses, income and employment status were not statistically significant variables in determining online purchasing behavior. These challenges assumptions often found in earlier research (*e.g.*, Andrews *et al.* 2013) that linked higher income with increased e-commerce engagement. The results suggest that digital behavior is more closely tied to individual preferences and online familiarity than to economic capacity. Moreover, trust continues to be a central factor in consumer decision-making. Categories involving higher perceived risk (such as travel or electronics) show a stronger correlation between trust in online sources and purchase intent, echoing findings from Kim *et al.* (2008) and Pappas (2016a). Surprisingly, consumers who frequently buy technology or fashion online do not necessarily express greater trust in online content, suggesting that habit and product familiarity may moderate trust dependencies in some categories. Taking together, these results support the growing body of research indicating that the influence of the internet is multi-dimensional- dependent on product characteristics, consumer demographics, and psychological factors such as trust and risk perception (see Liang *et al.* 2020; Park & Huang, 2017). While the digital environment has democratized access to information, it has not equalized how consumers interact with that information, nor how they translate it into behavior.

Conclusions and Further Research

This study explored the influence of the internet on consumer purchasing behavior across different product categories, with particular attention to trust, product type, and demographic variables. The findings confirm that digital platforms play a central role in shaping consumer decisions, especially for products that involve personal relevance or require more research, such as fashion, technology, and travel services. Age emerged as a crucial determinant, with younger users exhibiting stronger online engagement and a higher tendency to rely on internet-sourced information when shopping. Meanwhile, trust in online content was shown to be a key mediator between internet use and purchase behavior, particularly in high-risk or complex product categories. However, variables such as income and employment status were not statistically significant, suggesting that access to and use of online content is widespread and increasingly independent of socio-economic status. By combining systematic literature review with empirical analysis, this research contributes to a deeper understanding of digital consumer behavior. It highlights the importance of tailoring e-commerce strategies to different demographic groups and product types and underlines the need for building trust in digital platforms to sustain consumer confidence.

As digital technology becomes increasingly embedded in the fabric of daily life, the internet's role in influencing consumer behavior has expanded beyond mere information access. It now represents a dynamic, multidimensional space where individuals encounter marketing stimuli, evaluate credibility, and make complex purchasing decisions. Despite the growing body of literature on online consumer behavior, few studies offer a comparative analysis across diverse product categories while simultaneously accounting for trust and demographic variability. This study addresses that gap by providing both empirical evidence and theoretical insight into how digital environments shape decision-making in distinct consumer contexts. By doing so, it

contributes novel findings to the ongoing discourse on digital commerce and offers timely implications for marketers, platforms, and policymakers aiming to adapt to an increasingly segmented and trust-sensitive online marketplace.

Future research could expand this analysis by exploring cross-cultural comparisons or integrating behavioral tracking data to complement self-reported survey responses. As digital ecosystems continue to evolve, ongoing research will be essential to capture the complexity of consumer behavior in the online age.

Credit Authorship Contribution Statement

Marko Šostar: Conceptualization, Investigation, Methodology, Project administration, Software, Formal analysis, Writing – original draft, Supervision, Data curation, Validation, Writing – review and editing, Visualization, Funding acquisition.
Kavya Sujith Kumar: Conceptualization, Investigation, Methodology, Formal analysis, Data curation, Writing – review and editing, Visualization.
Magdalena Dražetić: Conceptualization, Investigation.

Declaration of Competing Interest

The authors declare no conflicts of interest.

Declaration of Use of Generative AI and AI-Assisted Technologies

The authors declare that they have not used generative AI.

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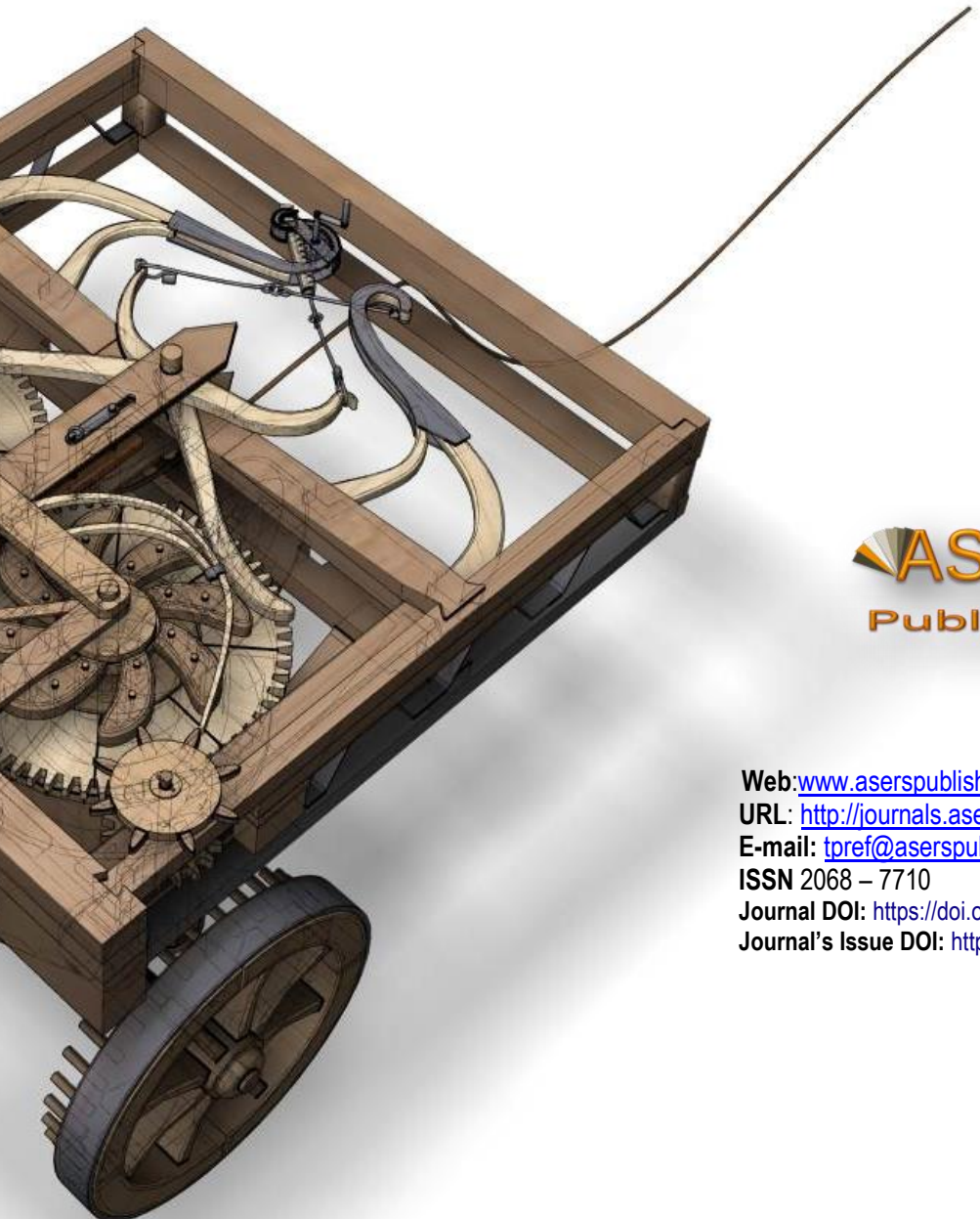

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