European International University, EIU-Paris

Doctoral Thesis

Title:

"The Impact of Artificial Intelligence on the Consumer Behavior of Greeks: Understanding the Awareness of AI Benefits in Their Consumer Journey and How Lack of Knowledge of the Concept of Artificial Intelligence Can Lead to Ignorance, Anxiety, and Fear."

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Statement of Originality

This is to certify that the content of this thesis is my work. I certify that the intellectual content of this thesis is the product of my work and that all the assistance received in preparing this thesis and sources have been acknowledged.

Theofanis (Fanis) Aritzis

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"Tell me and I forget. Teach me and I remember. Involve me and I learn."- Benjamin **Franklin**

"The Impact of Artificial Intelligence on the Consumer Behavior of Greeks: Understanding the Awareness of AI Benefits in Their Consumer Journey and How Lack of Knowledge of the Concept of Artificial Intelligence Can Lead to Ignorance, Anxiety and Fear."

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Abstract

This research investigates the impact of artificial intelligence (AI) on Greek consumers' consumer behavior, emphasizing the way in which consumer attitudes, emotions, and behaviors are influenced by AI awareness and a lack of AI comprehension.

The two primary research questions of the study are to assess the level of AI awareness among Greek consumers and to investigate how a lack of understanding of AI fosters ignorance, anxiety, and fear, thereby influencing their acceptance of AI technologies. Also, in which way consumer attitudes, emotions, and behaviors are influenced by AI awareness and the lack of AI understanding, with a particular emphasis on the impact of artificial intelligence on the consumer behavior of Greeks. The study's two primary research questions are to evaluate the level of AI awareness among Greek consumers and to assess how a lack of understanding of AI fosters ignorance, anxiety, and fear, thereby influencing their acceptance of AI technologies.

The research examines Greek consumers and their perceptions of AI. It uses quantitative surveys and qualitative interviews. In the quantitative phase, a structured questionnaire assessed AI awareness and perceived effects among 318 Greeks from various demographics. The qualitative phase examined 20 interviews' personal narratives and complex experiences to determine AI adoption's cultural and emotional factors.

The study found that Greek consumers have a superficial but comprehensive understanding of AI and significant misconceptions. This superficial understanding has increased skepticism and anxiety, particularly about AI's potential effects on employment and privacy. Older and less educated people have higher anxiety levels on

cultural and educational grounds. It is important to mention that this study underlines the need to improve AI education and put focused communication tactics into place to allay fears and misconceptions about AI. Moreover, to protect consumer interests and encourage the moral use of AI, this research also advocates for regulatory changes in AI and ethics. By addressing these deficiencies, there is room for developing both beneficial and socially responsible AI ethical deliverables in the future. This study provides empirical insights that assist the scientific community in fostering responsible AI adoption and developing policies that align innovation with societal welfare by underscoring at the same time the importance of ethical considerations in AI development via AI education systems, marketing campaigns and regulatory systems.

Chapter I. Introduction

Rational of research background of the study

Research Question(s)

2.1. Rationale of research background of the study

In terms of consumer behavior, artificial intelligence (AI) has become a disruptive force that offers both new opportunities and unique challenges. This study examines the influence of AI on consumer behavior in Greece, where traditional values converge with technical progress. The study examines Greek consumers' perceptions and interactions with AI, emphasizing the relationship between AI awareness and decision-making processes. The study examines the cultural, emotional, and psychological aspects influencing AI adoption through theoretical frameworks such as the Theory of Planned Behavior and the Risk-as-Emotion Hypothesis.

This mixed-methods study utilized a two-phase approach: (1) a quantitative survey with 318 people countrywide to discern patterns of AI knowledge and behavior, and (2) qualitative interviews to obtain in-depth insights into anxieties, misconceptions, and cultural influences. Principal findings indicate that fear, stemming from cultural conservatism, religious convictions, and socio-economic conditions, serves as a substantial impediment to AI acceptance. Misunderstandings and inadequate digital literacy intensify opposition among specific demographics, including rural and elderly populations.

The results underscore the necessity for focused educational programs and creative marketing to mitigate knowledge deficiencies, diminish opposition, and foster trust. This study offers practical insights for enterprises, governmental bodies, and academic institutions seeking to promote AI adoption, utilizing Greece as a culturally varied case study relevant to analogous worldwide environments.

Research Gap

Despite AI's rapid global integration, there is a significant dearth of comprehensive research that examines its impact on consumer behavior in culturally diverse environments, such as Greece. In the past, research has primarily concentrated on various dimensions, such as technological and economic factors, while neglecting the significant cultural and emotional factors that also influence the acceptance of technology. The goal of this study is to research these factors.

1.1.Research Question(s):

This investigation is guided by a set of focused research questions organized thematically to help us better understand the subject.

Research Questions

- How knowledgeable are Greek consumers when it comes to artificial intelligence?
- Ignorance, anxiety, and fear can be exacerbated by a lack of understanding of AI concepts?
- How do negative emotions impact the way Greek consumers perceive and use AI technologies?
- What role do consumers' cultural and religious beliefs play in their reluctance to embrace AI?
- In what ways do Greek consumers' daily lives and decision-making processes benefit from or suffer from the integration of AI?
- How can commercial and educational strategies work together to increase AI acceptance?
- How do concerns about privacy and ethics impact the trust that Greek consumers have in AI systems?
- Approach

In order to answer these research questions thoroughly, we use a mixed-methods strategy that combines quantitative and qualitative techniques.

First Stage: Online Surveys (Quantitative Analysis). The goal is to gauge how well-informed, biased, and engaged a diverse group of Greek consumers are when it comes to artificial intelligence. The methodology consists of conducting extensive digital surveys to learn about customers' knowledge, opinions, and habits related to artificial intelligence.

Phase B: Comprehensive Interviews (Analytical Evaluation). Our goal is to delve into the complex cultural, emotional, and ethical factors that influence how Greek consumers perceive and react to artificial intelligence. To learn about people's

backgrounds, worries, and hopes about AI, the technique entails carrying out semi-structured interviews with chosen participants. To gain a thorough and applicable knowledge of the connection between AI awareness and consumer behavior in Greece, this mixed-methods approach is warranted since it merges the extensive reach of quantitative analysis with the profound insights of qualitative exploration.

Chapter II. Literature Review

2.1. Consumer Behavior Understanding

Overview

Artificial intelligence (AI) is definitely revolutionizing consumer behavior in the digital era by making products and services more efficient and tailored. Its integration into consumer behaviors prompts intricate questions about AI's cultural and psychological impacts.

The actions and the behaviors of the customers That being said, there is no doubt that it is a challenging industry that necessitates an understanding of the decision-making processes as well as the motivations of customers. The reality of the situation cannot be refuted in any way. As per the findings of Průša and Sadílek (2019), Harrington et al. (2011), and "Improving understanding of Generation Y consumers," (2015), it has been observed that different generations of consumers, including Generation Y, exhibit distinct characteristics and preferences that have an effect on their behavior. Researchers have developed consumer profiles to improve the comprehension of consumer behavior, which are defined categories of consumers formulated based on demographic, geographic, and psychographic data (Xi & Idris, 2022; Onel et al., 2018). These personas aid marketers and researchers in understanding the needs, interests, and motivations of diverse consumer segments. Furthermore, there is a connection between consumer psychology and the comprehension of how customers perceive and engage with brands ("Effect of Company Brand Image on Consumer Purchase Intention," 2023; Eng & Jarvis, 2020). This is because consumer psychology is a field that focuses on the psychology of consumers. According to Eng and Jarvis's 2020 study, "Effect of Company Brand Image on Consumer Purchase Intention," 2023 came out. There are a number of factors that have the potential to influence the consumers' attachment to the brand as well as their intentions to make a purchase of the product. These factors include, but are not limited to, personal narratives of celebrities, trust, and the image of the brand. Individually, each and every one of these components has the potential to have an effect on a variety of different customers. . Analyzing consumer behavior, generational characteristics, personality traits, and psychological factors equips organizations and marketers with essential

insights for formulating efficient marketing strategies and comprehending consumer preferences and motivations.

Critical Analysis

While studies conducted by Průša and Sadílek (2019) and Harrington et al. (2011) have outlined the basic patterns of consumer behavior across different generations, it is necessary to reevaluate these models in light of the rapid adoption of AI technologies so that they account for AI's influence on decision-making and consumer involvement.

2.2.The Consumer Psychology- The Human Emotions

Overview

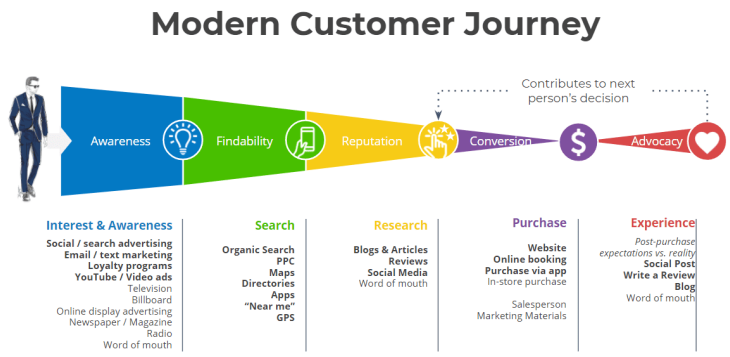
Consumer Behavior Theory Customers' responses and interactions with artificial intelligence can be studied using models provided by Emotion Hypotheses. According to Oliver (1999) and Berry and Parasuraman (1996), consumers' emotional and psychological factors, along with practical benefits, influence their acceptance of AI.

The concept of human emotions was a subject of discussion in psychology. Recommends the existence of basic emotions that have a biological basis. He challenges the arguments of Ortony and Turner against basic emotions and argues that the evidence for universals of expression and physiology strongly supports the existence of basic emotions. It also underscores the significance of evolution and biological determinants in shaping emotions, while recognizing the impact of cultural and social learning mechanisms. He further substantiates his claim by examining the evidence for physiological reactions related to emotions. Proposes that a fundamental conceptual framework for emotion can elucidate diverse findings and direct forthcoming empirical investigations (Ekman, 1992). In contrast, emotion refers to the psychological construct that includes perception, motives, empathy, and emotion regulation (Russell, 2003). Evidence from expression, physiology, and development perspectives supports the biological basis of basic emotions.

Human emotions play an essential role in the consumer journey. The Research has demonstrated that consumers' behavioral responses and intentions are directly influenced by the quality of service (Berry & Parasuraman, 1996). Moreover, consumer pleasure is deemed an essential factor in cultivating loyalty (Oliver, 1999). It is crucial to recognize that enjoyment does not typically equate to belief, and not all service providers may attain loyalty owing to numerous variables (Oliver, 1999). Dedication encompasses perceived product superiority, personal strength, societal commitment, and synergistic consequences (Oliver, 1999). Comprehending and regulating these emotions along the consumer experience is essential for organizations to cultivate and sustain client loyalty.

Critical review & recent literature

Recent studies have provided more evidence to support these theories, highlighting a neglected area in regard to traditional Greek consumer values: the emotional responses caused by AI and their potential effects on customer loyalty and trust (Eng & Jarvis, 2020).



Source: Yuzdepski, Z. (2023) The 5 phases of the modern consumer journey in needs-based selling (updated 2022), Vendasta Blog. Available at: https://www.vendasta.com/blog/following-modern-customer-journey/ (Accessed: 29 December 2024).

2.3. The Consumer Journey

Overview

Customer experience consists of different stages that occur during the customer journey. These stages include awareness, consideration, decision or purchase, retention, and influence (Farah et al., 2021). The customer journey comprises a sequence of interactions with the company throughout the purchasing and service acquisition process (Klaus, 2013). Comprehending client experience and journey is essential for firms, as it enables them to formulate and provide favorable customer encounters (Lemon and Verhoef, 2016).

Past experiences influence customer experiences and can be shaped by, for example, the social environment, self-service technologies, and store branding (Verhoef et al., 2009). Different stages of the customer journey affect customer satisfaction differently. For example, perceived quality in the preparation and departure stages has a more significant impact on customer satisfaction in search and trust services, while perceived quality in the delivery and departure stage has a more significant effect on customer satisfaction in experiential services (Xie and Sun, 2021). To optimize the customer experience, companies must perform well at every touch point and every stage of the customer journey (Sultan, 2019).

Critical Analysis & Recent Studies:

The literature frequently ignores the complex ways in which AI affects decision-making, even though AI significantly affects consumer behavior. While AI has the potential to simplify decision-making, some worry that consumers may become too dependent on it, thereby diminishing their independence (Xi & Idris, 2022).

Critical Analysis: AI affects consumer behavior, but the literature often ignores its complex effects on decision-making. Despite its potential to simplify decision-making, AI may make customers too dependent on it, reducing their autonomy (Xi & Idris, 2022).

Last, recent AI studies and Onel et al. (2018) show that while AI improves decision-making efficiency, it complicates consumers' product evaluation and purchase decisions.

2.4. Consumer Psychology

Overview

Consumer psychology is the field that studies the psychological factors that influence consumer behavior and decision-making. It includes various concepts and theories related to consumer behavior.

B. Self-contradiction, decision-making approach, psychological distance, and emotional impetus. Self-contradiction denotes the incongruity between an individual's self-perception and their desired self-image. These self-contradictions may influence customer behavior psychologically. They may result in several coping mechanisms, including direct resolution, symbolic self-containment, dissociation, escapism, and seamless reconciliation. (Mandel et al., 2017). The decision-making style refers to the cognitive framework that defines the consumer's approach to making decisions. These styles have considerable stability and exert a persistent influence on consumer choices. They are influenced by many decision-making factors that affect customer behavior (Walsh et al., 2001). Psychological distance, encompassing social, temporal, and physical dimensions, is crucial in influencing customer purchase intentions. Various characteristics of psychological space might influence customer decision-making processes and purchase behaviors (Hwang, 2021). Emotional factors can affect consumer decision-making. Psychological elements, including motivation, cognition, learning, beliefs, and attitudes, affect consumers' decisions about credit card usage and the selection of particular products and services (Karim and Tajibu, 2021). Comprehending consumer psychology is essential for marketers and organizations, as it enables them to adeptly modify their marketing strategies to target and influence consumer behavior. By analyzing aspects such as self-contradiction, decision-making patterns, psychological distance, and emotional motives, organizations can enhance their comprehension and responsiveness to the demands and preferences of their target customers (Awliya & Nurzaman, 2020).

Critical Analysis

Consumer psychology is important because it studies how psychology affects consumer behavior and decision-making. Marketers must understand these dynamics to create consumer-focused strategies. Companies can improve consumer satisfaction and market engagement by examining and addressing self-contradiction, decision-making styles, psychological distance, and emotional drivers (Awliya & Nurzaman, 2020). Consumer psychology also helps marketers and businesses understand and influence consumer behavior. Understanding psychological drivers helps businesses create more targeted, effective, and responsive campaigns that resonate with consumers, improving customer relationships and sales.

2.5. Psychology of Consumer Behavior

Overview

We would all agree that consumer behavior is for sure a complex phenomenon that is shaped by multiple and numerous influences. Psychological factors, including motivation, perception, learning, beliefs, and attitudes, profoundly influence consumer behavior (Rumagit, 2022; Awliya and Nurzaman, 2020). These factors are essential in shaping customer decision-making processes, encompassing product discovery, selection, and acquisition (Rumagit, 2022).

Furthermore, self-contradiction can influence consumer behavior, a mismatch between how we perceive ourselves and how we see ourselves (Mandel et al., 2017). The compensatory consumer behavior model explains the psychological impact of self-contradiction on consumer behavior and identifies the strategies consumers use to deal with these contradictions (Mandel et al., 2017). In addition, consumer behavior can be analyzed using artificial intelligence (AI) technology to recognize and analyze consumer facial expressions, predict consumer sentiment, and provide personalized product recommendations. Li et al. (2022). Comprehending consumer behavior necessitates the examination of psychological aspects and the application of various research methodologies, including qualitative interviews and AI-driven analysis (Vargas-Hernández and Cervantes-Guzmán, 2020; Li et al., 2022).

2.6.Psychological Factors Influencing Consumer Behavior

Overview

Psychological Determinants Affecting Consumer Behavior Psychological variables significantly influence consumer behavior. Numerous research studies have investigated the correlation between psychological characteristics and consumer decision-making patterns. Lysonski and Durvasula (2013) discovered that psychological factors, including perceived time pressure, opinion leadership during shopping, shopping confidence, consumer susceptibility to interpersonal effects, and materialism, affect decision-making style. They also noted alterations in decision-making styles throughout time.

Consumers have displayed an increased level of brand loyalty, fashion consciousness, impulsivity, and carelessness during their purchasing experiences. Walsh et al. (2001) underscored the need of comprehending the psychological frameworks linked to market segmentation decision-making patterns. They highlighted the stability of decision-making patterns over time and their correlation with successful marketing strategies.

Additional research has recognized motivation, cognition, learning, and psychological identity as psychological determinants affecting consumer behavior (Rumagit, 2022; Wu, 2023; Li et al., 2020).

2.7. The resistance to change in psychology and consumer psychology

Overview

According to Ford et al. (2008), resistance to change serves as a catalyst for change by facilitating reflection and restructuring. The research on organizational change has recognized four prevalent themes or challenges in change initiatives: content concerns, contextual issues, process issues, and criteria (Armenakis & Bedeian, 1999). The subjects encompass the essence of organizational change, the influences or circumstances within the corporate milieu, the measures executed to effectuate the change, and the anticipated outcomes (Armenakis & Bedeian, 1999). Monitoring

emotional and behavioral reactions to change is crucial for comprehending resistance to change (Armenakis and Bedeian, 1999). In order to meet the demands of the modern workplace, psychological research on resistance to change is always changing (Armenakis & Bedeian, 1999). To effectively manage and mitigate resistance to change, it is essential to evaluate the perspectives of both change agents and change recipients.A number of factors can contribute to consumer psychology's resistance to change. A person's propensity to oppose change can be measured using the Resistance to Change Scale (Oreg, 2003). This scale assesses short-term outlook, cognitive rigidity, emotional reactions to forced change, and habitual desire (Oreg, 2003).

Additionally, consumers may exhibit innovation resistance if they perceive functional shortcomings in a new product or encounter psychological obstacles like unfavorable routine changes or discontent with the product's appearance (Sun et al., 2021).

The amygdala is associated with negative emotional responses.Furthermore, consumers may exhibit resistance to innovation if they encounter psychological obstacles like unpleasant routine changes, dissatisfaction with the product's appearance, or a belief that a new product has functional flaws (Sun et al., 2021). According to Sun et al. (2021), customer loyalty affects how consumers view innovation and the relationship between adoption and anti-innovation. Assessing client attributes and the innovation's impact is necessary to look into this resistance to change (Alshallqi et al., 2022). Successfully introducing new products and promoting sustainable consumer practices require acknowledging and addressing customers' resistance to change (Gonzalez-Arcos et al., 2021; Talke and Heidenreich, 2013). Furthermore, psychological barriers like unwanted routine changes, dissatisfaction with the product's appearance, or the conviction that a new product has functional flaws can cause consumers to resist innovation (Sun et al., 2021). Consumer perceptions of innovation are shaped by customer loyalty, which also affects the relationship between adoption and anti-innovation (Sun et al., 2021). Assessing client characteristics and the innovation's impact is necessary to look into resistance to the innovation (Alshallqi et al., 2022). Successful product adoption and the encouragement of sustainable consumer behaviors depend on identifying and reducing customer resistance to change (Gonzalez-Arcos et al., 2021; Talke and Heidenreich, 2013). The importance of human

emotions in the age of artificial intelligenceLeDoux (2000) asserts that anxiety is a basic emotion that is closely related to human experience and has a big impact on how people behave as consumers and make decisions. According to the risk-as-emotion theory, emotions typically outweigh analytical assessments of risk and have a significant impact on consumer behavior (Loewenstein et al., 2001). When using AI, care must be taken because it can either help or hinder the adoption of disruptive technologies. Formulation requires an understanding of the complex relationships among consumer behavior, AI awareness, and concern. An elevated anxiety response and increased activity in the insula and amygdala, which are connected to negative emotional reactions, are hallmarks of anxiety disorders.

2.8.The definition of Ignorance

Overview

Ignorance denotes a deficiency in knowledge or understanding on a specific subject or topic. In this context, the term "condition" refers to the state of being required to be aware of significant information or facts. A lack of interest in pursuing information is one of the many factors that can lead to ignorance. Other factors include limited access to educational opportunities, inadequate exposure to a variety of perspectives, and inadequate exposure to a variety of perspectives. It is stated in a number of philosophical ancient quotes and in the academic bibliography that was described earlier that in order to overcome ignorance over the course of time, one must be willing to learn, have an open mind, and be committed to seeking out information that is reliable and accurate. This is the only way to overcome ignorance . Making educated decisions, enhancing comprehension, and promoting intellectual development all depend on acknowledging and resolving ignorance. In a number of circumstances, ignorance can cause anxiety (Hanson et al., 2009). Likewise, expectant women who are uninformed about pregnancy and labor may experience worry and anxiety (Hassanzadeh et al., 2020). Insufficient understanding of a medical condition, such as diabetes or cardiovascular disease, might instigate dread and hinder patients' acceptance of their situation (Hamid et al., 2014). The absence of awareness on oral cancer screening may result in fear and subsequent avoidance of such screenings

(Shepperd et al., 2013). Moreover, ignorance of personal finance can induce dread and anxiety in financial concerns (Fiksenbaum et al., 2017). Ignorance can engender dread by fostering uncertainty and a perception of the unknown.

A recognized correlation exists between ignorance and fear. Individuals frequently experience dread and worry when they possess insufficient knowledge or comprehension of a specific issue or scenario. These feelings of apprehension are brought on by the ambiguity and unpredictability that are associated with the unknown. Based on the findings of various studies, it has been determined that anxiousness regarding the riddle is a typical human reaction that originates from the desire to protect oneself. Knowledge and comprehension are the things that one seeks to acquire in order to minimize this fear. It provides a sensation of control and mitigates uncertainty. Mitigating knowledge deficiencies by education and information sharing can consequently alleviate anxiety and foster a sense of empowerment.

Adverse emotions, such as anxiety, can hinder consumers from adopting the new era of artificial intelligence (AI). Fear is a potent emotion that can affect decision-making and behavior. Neuroscientific studies indicate that fear is processed in the amygdala, an essential element of the brain's emotional circuitry (LeDoux, 2000). The amplification of fear may result in avoidance behavior and reluctance to change. The risk-as-emotion framework asserts that emotional reactions often affect behavior, irrespective of inconsistencies with cognitive risk assessments (Loewenstein et al., 2001). Thus, if customers associate fear with AI, they may hesitate to adopt it and prefer conventional technology instead.. Consequently, if customers link fear to AI, they may be reluctant to embrace it and opt for established technology instead. Comprehending the influence of emotions, particularly fear, on consumer decision-making is essential for organizations and decision-makers to properly implement and enhance AI technologies.

Critical Analysis & Relevant Literature Review

The Adoption of AI and the Concept of Ignorance: A Critical Analysis A multifaceted challenge is revealed by the examination of ignorance, particularly in the context of AI adoption. The absence of knowledge is not the sole definition of ignorance; it is often accompanied by a complex web of socio-economic barriers,

cultural hesitations, and psychological resistances that can distort public perception and decision-making methods. Riek (2016)'s research on robotics and human-computer interaction demonstrates that direct interaction with AI systems can effectively demystify the technology and demonstrate its practical benefits, thereby reducing fear and anxiety. This investigation indicates that experiential learning, which prioritizes practical application, may be more effective in combating ignorance than informational campaigns.

2.9.Different Consumer Generations

Overview

Various consumer generations have distinct preferences for communication channels and financial technologies. Constantinescu-Dobra and Coțiu (2022) assert that individuals of all ages, encompassing Generations X, Y, and Z, have exhibited increased interest in social media as a communication medium, particularly during the COVID-19 pandemic. In online buying, Generations Y and Z demonstrated a more pronounced increase in online consumption compared to Generation X (Constantinescu-Dobra and Coțiu, 2022) discovered that older consumers prefer conventional physical banking, but younger consumers are more inclined towards contemporary technologies. The presumption that older individuals disregard technology may be overly restrictive, as cognitive decline is not the sole factor explicating age-related disparities in technology utilization. Experts who are seeking to integrate new technologies for the elderly should ensure that their innovations are in harmony with existing technology, as aging may be a conditioned reaction (Harris et al., 2016).

Assertions regarding generational differences in technology adoption, particularly between younger and older consumers, are grounded in cross-cultural comparative studies (Sindermann et al., 2022) and empirical data derived from quantitative surveys (n = 318) segmented by age cohorts. Statistical analyses, including Principal Component Analysis (PCA), revealed a pronounced generational divide:

younger Greek participants (18–35 years) exhibited higher technological proficiency and openness to AI, whereas older adults (65+ years) demonstrated resistance, largely attributable to lower digital literacy and familiarity with emerging technologies. These findings align with established literature documenting persistent generational gaps in technology adoption behaviors, wherein younger demographics consistently display greater adaptability to innovation (Lysonski & Durvasula, 2013). This analysis underscores the necessity of age-tailored strategies to address disparities in AI acceptance, particularly in contexts where cultural and educational factors intersect with technological change.

Artificial intelligence (AI) will affect the different generations of consumers in different ways. Research, as will be explained below, has shown that AI can have a significant impact on consumer behavior and perceptions.

Smartphones serve a crucial function as AI instruments in consumer purchase decisions and retail experiences. Artificial intelligence technology, such as visual recognition, speech recognition, and machine vision, can provide consumers with more effective consumption cues and improve the value perception of the entire consumption process (Yin and Qiu, 2021). AI marketing technology can help consumers make complex purchasing decisions, save time and cost, and improve shopping efficiency. The accuracy, understanding, and interactive experience of AI technology positively affect the utilitarian value and hedonic value of consumers, which in turn promotes their purchase intentions (Yin and Qiu, 2021). In addition, effective interaction and communication with AI chatbots can improve consumers' perceptions of interaction quality, satisfaction, and usage intentions (Lee and Park, 2022). Motivation, ease of use, performance, and satisfaction with the result influence consumers' motivation to use AI tools for shopping (Chopra, 2019). Smartphones are crucial as AI instruments in consumer purchase decisions and retail experiences.

Artificial intelligence facilitates the prediction of customer behavior through data processing, pattern identification, and predictive analytics management skills. Here are several methods via which AI can forecast customer behavior. Extensive data processing: AI can rapidly analyze substantial volumes of data, allowing organizations to evaluate extensive customer information. This data encompasses information from

previous marketing initiatives, client insights, and digital behavior. Foreseeing accuracy: AI computations can evaluate genuine data and identify trends and patterns that may not be apparent to humans.

1. Employing machine learning methodologies, AI can precisely forecast future customer behavior by analyzing historical trends. Targeted marketing: AI can assist marketers in determining which marketing techniques and campaigns yield the highest client engagement. By analyzing consumer data, AI can discern the most efficient marketing channels, messages, and content tailored for certain client categories. Trend Analysis: Artificial Intelligence can discern and forecast trends in consumer purchasing behavior.
2. Through the analysis of data from many sources, including social media and online platforms, AI can discern upcoming trends and assist firms in maintaining a competitive edge. Customized suggestions: AI may evaluate client data to deliver tailored recommendations for products and services.
3. By analyzing client preferences and behaviors, AI can suggest pertinent products and enhance the customer experience. Enhanced communication: AI-driven chatbots and virtual assistants can assess client inquiries and deliver prompt and precise responses.

It enhances communication with customers and elevates their experience. The capacity of AI to analyze extensive datasets, discern trends, and generate precise forecasts enables organizations to enhance their comprehension and anticipation of consumer behavior. This data can be utilized to build targeted marketing campaigns, customize consumer experiences, and maintain a competitive advantage.

2.10. How the concept of AI creates anxiety in people and will affect different generations

Overview

Smartphones, though, are a challenging part of AI. There is a theory from scholars that computer anxiety is related to AI anxiety Rosen, Sears, & Weil, 1987). However, this is only partially accurate. There are differences between the above two.

The computer started in the early 1980s, and since then, studies have shown that as digitalization progresses, people have less fear of it (Y.O., 2018).

The main differences between computers and AI.

AI has the ability after its creation to act autonomously without any human, such as a computer.

AI can "live" in various physical forms and shapes. Computers, especially in their early beginnings, couldn't.

AI: can provide personalized services to consumers/people via their chat boxes and emails, etc., something that computers could not conduct and had to do too many and in a manual way if they would like, for example, to make personalized communication to a segmented group of their consumers in their database to communicate a sales offer

Due to the above differences, AI generates a "myth" around its name and creates a sense of mystery and fear both to each creator—engineers and people who do not know a lot about it—and they get informed by internet "hoaxes," TikTok, & YouTube videos most of the time without getting accurate information around the terminology and the capabilities—the concept of the Artificial intelligence and how it can influence our lives shortly and the consumer habits.

Due to the above differences, as we discussed, the most common fear around artificial intelligence is the fear of acquisition (Johnson & Verdicchio, 2017). In other words, there is a worry of loss of control by putting on this fraction of the misinformation from social media, as said above, around AI, the anxiety of losing privacy, of somebody watching and knowing every move, our consumer preferences, and science fiction all these years around AI. How robots will take over the world and destroy humanity—all the above multidisciplinary factors increase anxiety, fear, and

misbelief around Artificial Intelligence and its capabilities if we have the proper knowledge around it from an early age, follow up on tech studies, and get informed around it.

2.11. Dimensions of AI anxiety based on integrated fear acquisition theory

Overview

She identified four dimensions of AI anxiety based on the existing literature and recent research by Huang (2020). She proposed a theory of AI anxiety acquisition that illustrates four pathways of AI anxiety acquisition. Each path includes two factors that cause AI anxiety.

Factor 1: Conditioning

- Privacy violation anxiety: i.e., face recognition
- Bias behavior anxiety: i.e., due to specific face or other characteristics, getting to a particular group and getting discriminated

Factor 2: Vicarious

- Job replacement anxiety: i.e., people will be replaced by robots—for example, automated tubes or cars
- Learning anxiety: anxiety of learning. AI is something new and particular. The resistance to change and to learn something new

Factor 3: Transmission of information of instruction

- Existential risk anxiety: propaganda that the super AI will kill all living beings on Earth and robots will conquer the Earth in a few years. Due to a lack of knowledge of information and transmission of information of instruction, this occurs
- Ethics violation anxiety: i.e., how ethical is an AI car to hit an interracial couple or a non-interracial couple if it loses control while driving? Ethics on AI is a significant chapter that needs to be investigated even before the official launches of big AI projects to set the ground and the

rules and avoid future misinterpretations. How ethical is it to fall in love with a robot? The last one derives from films

Factor 4: Inability to recall a pertinent experience

- Artificial Consciousness anxiety: i.e., how AI knowledge will take over and maybe challenge and eventually erase the existing human knowledge
- Lack of transparency anxiety: Sometimes, there is uncertainty if the mistake is derived from the AI or the designer, creating a "black box" and tension.

Conclusion

The above model is a great starting point for understanding human behavior; thus, it has some limitations as it states itself. The AI anxiety model did not consider cultural factors and was only tested in China in limited and inside a specific network of people. Also, it did not include other essential elements capable of "feeding" the fear or anxiety of people around AI, such as religious beliefs, the educational level of participants, and their learning behavior.

2.13. Consumer Psychological Characteristics related to the AI era

Overview

Existing references provide direct evidence of consumer psychological traits expressly associated with the age of AI. Prior research suggests that individual characteristics can impact the connection between customer satisfaction and loyalty (Homburg and Giering, 2000). The satisfaction-loyalty relationship is significantly mediated by age, wealth, and variety seeking (Homburg and Giering, 2000). Furthermore, studies that have looked into how customers feel about online shopping have shown that factors like product details, transaction security, cost, seller reputation, IT know-how, and Internet usage can have a significant impact on consumers' inclination to shop online. Cheung and Liao (2001). It is important to recognize that these studies were conducted prior to the development of AI, which calls for more

research to examine the specific psychological characteristics that might influence consumer behavior in the context of AI.

The Greek Consumer: A Socio-Historical Analysis of Consumption TrendsGreece, or Hellas, is a nation in southeastern Europe renowned for its extensive history and cultural legacy. Its geographical location at the intersection of Europe, Asia, and Africa has profoundly influenced its historical evolution. Geospatial and Demographic Synopsis. The geographical position of Greece has been essential in shaping its history and culture. To the south, it adjoins the Mediterranean Sea and is bordered by the Aegean and Ionian Seas. It comprises numerous islands, peninsulas, and a rough mainland. The nation's geographical variety has cultivated distinct regional identities and traditions. Recent demographic data indicates that Greece encountered many demographic issues. Birth rates are decreasing, and aging is increasingly significant. This demographic shift will influence consumer behavior, as older persons frequently demonstrate significant purchasing patterns. This phenomena also influences the nation's receptivity to change and emerging technologies. Furthermore, as illustrated in the official table below, the average annual income has diminished over the years; the typical consumer is facing everyday challenges and is apprehensive about adopting anything novel.

Έτος έρευνας	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Έτος αναφοράς εισοδήματος	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Μέσο ατομικό εισόδημα σε €	12.051	13.505	13.896	12.637	10.676	9.303	8.879	8.682	8.672	8.800	9.034	9.382	9.993

Source: *Ειδήσεις και νέα – Η κορυφαία εφημερίδα online* (no date) *iefimerida.gr*. Available at: https://www.iefimerida.gr/ (Accessed: 29 December 2024).

2.13 Historical Legacy: Influencing the Greek Psyche

Overview

An examination of contemporary Greek history, mainly 20th-century occurrences, elucidates the psychology of Greek consumers. The Greek Civil War, World War II, and military regimes have influenced cultures marked by tenacity, a robust sense of identity, and a prudent attitude toward swift transformation. This historical experience has engendered pessimism regarding adopting new technology and methodologies immediately.

2.14.The Impact of Varied Nationalities on Greek Consumer Behavior: A Comprehensive Examination

Overview

This section examines in detail the impact of diverse nationalities on Greek consumer profiles, as well as historical parallels, general concerns, and economic implications.

The Greek consumer landscape examines a complex synthesis of cultural norms, historical background, and the influence of the nation's diverse ethnic population. The complexity of Greece's consumer profile is highlighted by examining demographic data from the 2011 Census combined with historical background and previous demographics. This section thoroughly examines how different nationalities affect Greek consumer behavior, looking at common concerns, historical parallels, and economic implications. It also examines the impact of diverse nationalities on Greek consumer profiles.

The apprehension of war can significantly instigate fear and affect consumer behavior. Studies indicate that manifestations of fear, encompassing apprehension of bodily and social injury, might beneficially affect consumer attitudes, intentions, and behaviors (Eshghipour et al., 2020). In anti-obesity commercials, fear appeals can positively influence customer behavior and enhance their resolve to resist the excessive consumption of unhealthy foods (Eshghipour et al., 2020). Likewise, in the context of public health directives for COVID-19, metaphors that instill dread of the virus might effectively enhance compliance with health recommendations (Thurman & Thurman, 2021). Alongside the apprehension of warfare, the significance of artificial intelligence

must also be acknowledged. Consumers' perceptions and actions about AI may be shaped by their fundamental values, including religious convictions (Minton et al., 2022). Comprehending the impact of religion on AI responses can assist marketers in enhancing AI acceptance and utilization (Minton et al., 2022). Furthermore, AI technology can provide innovative product concepts, and customers may exhibit a greater propensity to invest in AI-engineered items, with curiosity serving as a mediating factor (Zhang et al., 2022).

2.15. Apprehension Towards Change and Emerging Technologies: A Common Experience

Overview

It is noteworthy that certain nations exhibit apprehension towards change and emerging technologies. Many of these expatriates have encountered instability, strife, and warfare in their countries of origin. Daily experiences of worry and aversion to change stemming from prior traumatic occurrences may reflect the Greek historical backdrop. Similar to how historical events in Greece influenced society's prudent attitude towards change, these expatriate experiences may foster a communal hesitance to embrace new technology and breakthroughs. It exists. Effects on the Greek economy The varied backgrounds and experiences of Greek natives and foreign inhabitants (Albanians, Pakistanis, Romanians, Africans, etc.) highlight the intricacy of Greece's consumer profile. A confluence of cultural norms, historical legacy, and collective apprehensions can foster a consumer milieu in which the embrace of digital technology encounters opposition. To foster digital acceleration and economic progress, firms and politicians must acknowledge and tackle these intricate implications for consumer behavior.

2.16. The Greek Consumer- history, habits, religion

Overview

The varied origins and experiences of Greek citizens and foreign residents highlight the intricacy of Greece's consumer profile. A confluence of cultural norms, historical legacy, and collective apprehensions might foster a consumer landscape characterized by resistance to the adoption of digital technology. To facilitate digital acceleration and economic progress, firms and policymakers must acknowledge and tackle these intricate implications for consumer behavior.

The presence of foreigners from nations like Pakistan and Albania has significant parallels with Greece's historical context, which, akin to Greece in the 20th century, is frequently marked by instability, violence, and social unrest. Experiencing The resultant common experience of misfortune may engender a social hesitance to embrace change, particularly with technological advancement. Historical traumatic events have rendered these individuals apprehensive about change, psychological phenomena akin to that observed in the Greek populace due to occurrences such as World War II and political instability. Reflects cultural identity and consumer behaviors.

The Greek consumer landscape is a complex synthesis of cultural norms, historical background, and the influence of the nation's diverse ethnic population. The complexity of Greece's consumer profile is highlighted by an examination of demographic data from the 2011 Census combined with historical background and previous demographics. This section provides a thorough examination of how different nationalities affect Greek consumer behavior, looking at common concerns, historical parallels, and economic implications—the impact of diverse nationalities on Greek consumer profiles.

Greek consumer culture is a complicated combination of historical context, cultural norms, and the country's ethnically diverse populace. An analysis of demographic data from the 2011 Census in conjunction with historical context and prior demographics highlights the complexity of Greece's consumer profile. In this section, the impact of various nationalities on Greek consumer profiles is thoroughly examined, with particular attention paid to shared concerns, historical parallels, and economic ramifications.

Greek consumers are impacted by a number of things, such as the nation's ethnically diverse population, cultural norms, and historical background. The complexity of

Greece's consumer profile is demonstrated by an examination of 2011 Census demographic data in conjunction with historical background and previous demographics. In this section, the impact of different nationalities on Greek consumer profiles is thoroughly examined, with particular attention paid to common concerns, historical parallels, and economic consequences.

Greek consumer culture intricately blends historical context, cultural norms, and the ethnic diversity of the country's populace. A comparison of historical context, prior demographics, and 2011 Census demographic data highlights the complexity of Greece's consumer profile. This section discusses in detail how various nationalities affect Greek consumer profiles, paying particular attention to shared problems, historical parallels, and economic ramifications.

Greek consumers are influenced by a variety of factors, such as the nation's ethnically diverse population, cultural norms, and historical background. The intricacy of Greece's consumer profile can be demonstrated by fusing demographic data from the 2011 Census with historical background and previous demographics. This section discusses in detail how different nationalities affect Greek consumer profiles, with an emphasis on common problems, historical parallels, and financial implications.

Cultural Characteristics and Consumption Trends

Consumer behavior is significantly influenced by cultural identity. Greece's conglomerate of countries has produced a market with a wide range of preferences, consumption patterns, and inclinations. As the population grows, Albanian culture is assimilated, which probably influences the demand for particular goods and services that meet their cultural norms. This dynamic demonstrates the complex interplay between cultural contexts and consumer preferences, providing a unique perspective on the Greek consumer scene.

The unwillingness of some Greek immigrants and citizens to adopt digital technology exacerbates the consumer profile. Fear of digital technology and the future is not specific to any one group; rather, it is the product of widespread psychological tendencies triggered by traumatic past experiences. Because of this resistance to innovation, Greece is unable to advance economically and technologically.

The complex nature of the Greek consumer profile has concrete economic consequences. Businesses aiming to succeed in this broad market must manage differing purchasing habits and preferences resulting from cultural convergence. Policymakers must acknowledge the common apprehensions that drive opposition to change and devise policies that promote a culture of gradual adaptation. Enhancing digital literacy and education is essential to mitigate the reluctance towards new technologies rooted in historical narratives and collective experiences

The complex structure of Greece's consumer profile has concrete economic consequences. Companies aiming to succeed in this broad market must address varying consumption habits and preferences resulting from cultural amalgamation. Policymakers must acknowledge the prevalent anxieties that fuel opposition to change and devise policies that promote a culture of gradual adaptation. Initiatives to enhance digital literacy and education are increasingly vital to alleviate concerns regarding new technologies integrated into historical narratives and collective experiences. The Greek consumer profile is a synthesis of historical events, cultural standards, and the impact of many ethnicities. The presence of a diversified expatriate community complicates consumer behavior, as each individual possesses distinct experiences and opinions. By acknowledging common anxieties and aspirations within this heterogeneous framework, stakeholders will strive for a more inclusive and technologically sophisticated economy, tackling the distinct difficulties and opportunities arising from the convergence of cultures and histories. Affirmative. The Greek consumer profile is characterized by a confluence of historical influences, cultural dynamics, and the impact of many ethnicities. The presence of expatriates from various nations amid difficulty reflects Greece's historical evolution, engendering a shared apprehension toward change. The interaction of cultural norms, historical legacies, and technological apprehensions generates a varied consumer environment that necessitates a tailored strategy from businesses and regulators. Comprehending the commonalities and distinctions within this varied ecosystem can assist stakeholders in maneuvering through this intricate landscape towards a more inclusive and digitally enhanced Greek economy.

The impact of religion on Greek consumer behavior overall

Overview

Religion exerts a substantial impact on consumer behavior. Research indicates that religion affects consumer psychology and behavior across multiple aspects, including beliefs, rituals, values, and community (Mathras et al., 2016). Consumers convey their religious identity and demonstrate the intensity of their convictions through their consumption choices (Mathras et al., 2016). Moreover, religiosity, or the degree of religious commitment, can affect certain consumer behaviors and decisions (Mokhlis, 2009). In Islamic banking, religion significantly influences consumer preferences. Research indicates that religion has a positive correlation with consumer engagement and materialism, affecting the selection of religious products and services (Junaidi et al., 2021). Moreover, religion exerts a more significant influence on the Islamic banking choices of Muslim consumers than other determinants, including banking attributes or social motivations (ElMassah and Abou-El-Sood, 2021). Subsequent study should persist in examining the effect of religion on consumer behavior, taking into account the multidimensional nature of religion and its influence on fundamental values and profound psychological significance (Minton et al., 2016). By comprehending the influence of religion on consumer behavior, marketers and decision-makers can design tactics that correspond with consumers' religious convictions and principles. The Greek Orthodox Church profoundly impacted the Greek government, especially regarding educational policy and the development of national identity. The Church significantly influences the overall approach, including educational policy, and is specifically referenced in the Greek Constitution as the state's official religious doctrine (Katsiampoura, 2019). The Church's influence is notably apparent in science education, as it governs the natural sciences curriculum (Katsiampoura, 2019). The Church aims to formulate an official reaction to the marginalization of religion within Greek society, delineating clear distinctions between Greek Orthodoxy and other religious communities as well as secular groupings (Sakellariou, 2022). Furthermore, the Church has opposed governmental efforts to embrace more adaptable positions concerning matters pertaining to the Christian Orthodox faith (Tsaliki, 2017). Nevertheless, there have been occasions when the government has resolutely opposed the Church, exemplified by the removal of religious

affiliation from identity cards (Sakellariou, 2022). The connection between the Greek Orthodox Church and the Greek government is intricate and multidimensional, with the Church wielding considerable influence in numerous areas of governance. Greek Orthodox Christianity has been a fundamental component of Greek society for ages, profoundly influencing its culture, values, and consumer behavior. The majority of Greeks practice the Orthodox faith, which significantly influences their worldview through its teachings and traditions. The conservative essence of religious doctrines frequently influences social standards, resulting in opposition to swift modernization. An illustrative instance of this phenomenon is evident in the apprehension around new technology. Some individuals see artificial intelligence with skepticism due to its divergence from conventional norms. An illustration is the distinctive identification instance employing QR codes in 2000. Apprehensions regarding the unknown and apparent deviations from established norms have challenged the government's plan to implement enhanced identification technologies. The involvement of the Greek Orthodox Church, frequently regarded as a moral guide, once more underscores the intricacies of socio-religious factors that influence consumer opinions. The church especially addressed the populace's fear that the new IDs will bear the mark of the devil, 666. Consequently, this new project was halted, resulting in a cessation of Greece's digital advancement in that domain for two decades, so exacerbating bureaucracy once again.



Source: *Τα μικροπράγματα του Άρη Δημοκίδη* (2024) *Μικροπράγματα*. Available at: https://mikropragmata.lifo.gr/ (Accessed: 29 December 2024).



Almost three decades later, most Greek citizens are still firm in their initial views on introducing new artificial intelligence identification cards (identification cards) that contain advanced technologies such as driver's licenses, tax identification numbers, and criminal record information—the standard of attributes in civilized societies worldwide. In line with their digital transformation strategy, the Greek government announced in June 2023, per EU regulations, that it intends to replace all current Greek ID cards with new EU-compliant versions from September 2023. These newly introduced cards contain artificial intelligence chip technology compatible with other member states' practices. After this official announcement, there was a significant increase in the number of police stations before the ID renewal deadline in September, as it is believed that this preventive measure will allow them to keep their current chipless IDs. The new AI-embedded version is considered a government-controlled mechanism. In September 2023, these future IDs will have a ten-year validity, a euro fee of 10 euros, replace their predecessors, and be the size of a credit card.



July 2023: People queuing to give their old ID card to get a new one and avoid getting a more recent one with the AI chip on September 2023 since they believe it is part of a giant government conspiracy to control them

Source: Georgiopoulou, T. (2023) *Πανικός για τις ταυτότητες: Ουρές για να αποφύγουν το… τσιπ*, *Η ΚΑΘΗΜΕΡΙΝΗ*. Available at: https://www.kathimerini.gr/society/562572634/panikos-gia-tis-taytotites-oyres-gia-na- (Accessed: 29 December 2024).



New ID card on air as of Sept. 2023.



Old ID card



September 2023: A big protest with more than 60.000 people at the second biggest city of Greece, Thessaloniki, took place against the new IDs that will contain chips

Source: Fourlis, A. (2023) *Νέες ταυτότητες: Συλλαλητήρια κόντρα στο 'χάραγμα 666', μοναχός – τράπερ και Αρχάγγελος Μιχαήλ*, *HuffPost Greece*. Available at: https://www.huffingtonpost.gr/entry/nees-taetotetes-sellaleterio-me-eisiterio-17-eero-ieromonachos-traper-kai-archayyelos-michael_gr_64e30870e4b0e366fc367faa (Accessed: 29 December 2024).



Source:

2F&docid=DfZvt2XE9ybxoM&w=1100&h=495&itg=1&q=%CF%80%CE%BF%CF%81%CE%B5%CE%B9%CE%B1%20%CE%B3%CE%B9%CE%B1%20%CF%84%CE%B9%CF%83%20%CF%84%CE%B1%CF%85%CF%84%CE%BF%CF%84%CE%B7%CF%84%CE%B5%CF%83&ved=2ahUKEwiSuYLh856BaxVfi_0HHZc0B_cQMygKegQIARBu



Explaining the technology behind the new IDs

Source:

https://www.youtube.com/watch?v=iVya9FvcpEU&pp=ygUPbmVlcyB0YXV0b3RpdGVz

The momentum for the Greek Public administration now is that the digital transformation of Greek public administration emphasized ICT training for civil servants, the development of digital services, and the implementation of management information systems (Sobaci, 2016). Nonetheless, there are delays in the implementation of digital public services and innovative practices, including marketing and digital transformation, inside Greek public universities (Makrydakis, 2021). The absence of conceptual definition and foundational theoretical and methodological frameworks for the digital transformation of public administration was identified as an issue (Ridei et al., 2022). The sluggish rate of digital transformation in Greece is due to persistent financial issues, insufficient technological resources, and a widespread unfamiliarity with e-government (Kontogeorgis and Varotsis, 2021). Enhancing digital governance necessitates the reduction of operational expenses, the augmentation of transparency, and the adaptation of services to meet citizen needs (Kontogeorgis and Varotsis, 2021). The digital transformation of Greek public administration is essential for enhancing efficiency, transparency, and citizen satisfaction. This may represent a compelling avenue for future research, as analogous psychological factors—such as fear, resistance to novelty, or distrust towards new technologies—may impede the digitalization of Greek public administration among citizens.

Academic Perspective: Examining Greek Consumer Behavior

Overview

A study of consumer behavior in Greece reveals a complex interplay between historical heritage, cultural norms, and contemporary influences. The seminal work of scholars such as Papadopoulos and Heslop (2003) highlights the importance of historical events and cultural values in understanding consumption patterns. Her research highlights how the legacy of the past continues to shape Greek consumer attitudes toward change and newness. Moreover, empirical evidence from recent studies supports the notion that Greek consumers show some degree of caution when adopting new technologies and innovations. A survey by Economides and Siomkos

(2018) found that Greek consumers tend to rely on well-known brands and established products, reflecting a specific resistance to rapid market change.

In a nutshell, the Greek consumers are influenced by their country's rich history, cultural values, and religious beliefs. A consumer profile characterized by a reluctance to embrace change and a preference for familiarity is the result of historical events, current demographic shifts, and the significant influence of the Greek Orthodox Church. This essay seeks to present academic research on these dynamics by referencing both recent and historical studies. Even though technology is advancing quickly in Greece, the intricate relationship between tradition and modernity still influences consumer attitudes and behavior.

Greek consumers' habits and behaviors influence their purchasing decisions and spending patterns. Research has shown that, for example, price discounts, advertising expenditures, store reputation, and distribution intensity are related to brand equity (Gwee, Yah-Ting, et al., 2002). In addition, marketing mix elements influence dimensions of brand equity, including perceived quality, brand loyalty, and brand associations (Trudeau et al., 2016). Greek consumers' online shopping behavior is influenced by experience and satisfaction, influencing their intention to repurchase (Giannakos et al., 2011). In addition, Greek consumers have been found to waste food, and younger people, students, and economically active people are prone to food loss (Filipová et al., 2017). The Greek population also consumes much fish, with at least 77% consuming fish at least once a week (Alexi et al., 2017). These findings provide insights into the habits and preferences of Greek consumers that can inform marketing strategies and efforts to reduce food waste.

Greek consumer personas and personalities can be analyzed through multiple studies that have explored different facets of Greek consumer behavior. The introduction of various foods, such as organic, health-enhancing, and genetically modified options, has been examined (Loizou et al., 2013). A separate survey examined the attitudes of Greek consumers regarding wine and wine producers (Sykalia, 2023). Furthermore, research has examined customer satisfaction with tourism services in Greece, taking into account demographic factors and recreational activities (Tsiotsou and Vasioti, 2006). The influence of CSR on consumer trust and its effect on attitudes

and behaviors has been examined in the Greek telecommunications industry (Glaveli, 2020). A study examined the effects of the COVID-19 pandemic on customer behavior and store operations in Greece (Anastasiadou et al., 2020). These studies offer significant insights into Greek consumers' tastes, behaviors, and views across several sectors, including food, wine, tourism, and telecommunications. Furthermore, a number of factors could make Greek customers nervous. One major concern is the impact of COVID-19 lockdowns on people's knowledge, attitudes, and behaviors related to food waste (Jribi et al., 2020). Customers who experience lockdown situations may experience tension and anxiety as a result of lifestyle changes (Jribi et al., 2020). Moreover, the socioeconomic consequences of lockdowns, such as reduced mobility and income, could make consumers even more concerned (Jribi et al., 2020). According to Coolidge et al. (2008), Greek women also tend to score higher than men on anxiety tests. Fear may also be shaped by the depiction of immigrants as criminals and their adverse living situations in Greece (Figgou et al., 2011). Greek consumer apprehension can be ascribed to various variables, including COVID-19 lockdowns, socioeconomic situations, gender disparities, and preconceptions.

Multiple variables, including religion, tradition, and external influences such as conflict and immigration, affect Greek consumers. Consumer behavior is influenced by faith since people use their purchases to express their religious identity (Mathras et al., 2016). Consumer decisions and lives can be impacted by religiosity and the level of religious engagement (Mokhlis, 2009). Furthermore, religion can affect psychology and consumer behavior through its rituals, beliefs, values, and communities (Mathras et al., 2016).

Additionally, through beliefs, rituals, values, and communities, religion can influence psychology and consumer behavior (Mathras et al., 2016). In Greece, tradition has a big influence on consumer behavior because it upholds conservative views on gender roles and traditional values (Mokhlis, 2009). By changing consumer preferences and economic conditions, external factors like immigration and war may have an impact on Greek consumers' spending habits (Plikas et al., 2116). Greek enterprises are progressively adept in technology adoption, with e-procurement and technological integration serving as the primary catalysts for enhanced sales (Plikas et al., 2116). It is crucial to acknowledge that the technical proficiency and receptiveness

of Greek customers towards new technologies and artificial intelligence may vary and necessitate more examination.

Critical Analysis & Engagement with recent literature review

Recent Literature Engagement: Research on AI adoption has concentrated on technology and usability. Berry & Parasuraman (1996) and Oliver (1999) have initiated research on the emotional and cultural dimensions that significantly influence AI acceptance, particularly in culturally affluent nations such as Greece.

Greek cultural conservatism, religious beliefs, and socio-economic factors influence AI adoption, necessitating further investigation to formulate culturally attuned AI implementation strategies.

The literature review underscores the necessity of examining AI's impact on consumer behavior through the lenses of emotional, cultural, and psychological factors. Future research ought to investigate the cultural ramifications of AI, utilizing Greece as a case study to explore global implications.

Engagement with Contemporary Trends: As AI progresses, it is imperative to remain abreast of the latest technological advancements and their impact on consumer behavior to formulate ethical and effective consumer engagement strategies.

2.19. Overview of Artificial Intelligence (AI)

Overview

Artificial intelligence (AI) pertains to creating computer systems capable of doing activities often necessitating human intelligence. It can profoundly affect economies, nations, and consumers. Automation, an element of AI, may enhance productivity per worker; nevertheless, it concurrently diminishes labor demand and pay (Acemoglu & Restrepo, 2019). Nonetheless, the productivity impacts of automation, capital accumulation, and the intensification of automation may counterbalance these effects and enhance labor demand (Acemoglu & Restrepo, 2019). Artificial Intelligence is regarded as the catalyst of the Fourth Industrial Revolution, necessitating collaboration among governments, manufacturers, academia, and civil society (Fouad, 2019). From the user experience standpoint, AI offers advantages, including health monitoring, tailored recommendations, and enhanced convenience (Puntoni et al., 2020). AI-enhanced consumer experience: B. Data gathering and classification can mutually influence one another and impact the consumer journey (Puntoni et al., 2020). AI instruments presently employed in customer journeys encompass recommendation systems, virtual assistants, and tailored marketing (Puntoni et al., 2020; Kumar et al., 2019). Artificial intelligence is anticipated to be more crucial in future personalized interaction marketing and customer management strategies (Kumar et al., 2019). Concerns regarding AI in the media pertain to employment displacement, privacy issues, and ethical ramifications (Acemoglu & Restrepo, 2019; Puntoni et al., 2020). Education alleviates these challenges by promoting AI literacy, ethical considerations, and the responsible development and use of AI (Fouad, 2019). Artificial intelligence and big data can tackle global pandemics, such as COVID-19, by analyzing large datasets for surveillance, monitoring, forecasting, and resource allocation (Bragazzi et al., 2020).

The disadvantages of AI in the consumer sector include errors and unintended negative consequences arising from the inadequate design of AI systems (Amodei et al., 2016). The management of customer data raises ethical dilemmas, as well as concerns regarding personal autonomy and transparency (Gonçalves et al., 2023).

Customers possess negative perceptions and concerns about AI products and services, stemming from the belief that AI may replace human jobs and blur the lines between humans and machines (Wang et al., 2023). Further issues include the possible manipulation of individuals and its impact on social order (Stahl et al., 2022). Furthermore, using AI voice may compromise identity cohesion, increasing danger perception and aural anxiety (Ni et al., 2023). The recognized shortcomings and concerns highlight the imperative to assess the security, ethical implications, and consumer acceptance of AI (Amodei et al., 2016; Gonçalves et al., 2023; Zhou et al., 2020; Stahl et al., 2022).

Critical Analysis & Future Research

Despite extensive research on the economic ramifications and prospective advantages of AI, thorough studies are scarce addressing the long-term societal effects of extensive AI integration. Future research should focus on developing sustainable AI practices that emphasize ethical considerations and promote an inclusive approach to technological progress. Although a significant amount of research has been conducted to examine AI's economic implications and potential benefits, there is a dearth of comprehensive studies examining the long-term societal impacts of widespread AI integration.

2.20. Public Awareness and Understanding of Artificial Intelligence

Overview

Public comprehension and awareness of artificial intelligence vary. Research suggests that increasing public awareness of AI technology and its applications is essential (Yigitcanlar et al., 2020; Cukurova et al., 2019). In contrast, various studies demonstrate that the public perceives AI positively and recognizes its potential to improve urban sustainability, innovation, accessibility, health, and overall quality of life (Yigitcanlar et al., 2020; Yigitcanlar et al., 2022). Perceptions are shaped by variables including age and previous encounters with AI; younger individuals typically show higher familiarity with AI, while older individuals often demonstrate greater

comfort in its application within healthcare (Cinalioglu et al., 2023). The perception of artificial intelligence among the public may be shaped by knowledge and self-efficacy (Said et al., 2022). What factors impact the public's view of artificial intelligence (AI) needs further research (Yigitcanlar et al., 2022). Understanding the ways in which AI influences consumer behavior is crucial for quantifying consumers' views of the practical benefits of AI (Mussa, 2020). A lack of comprehension regarding AI and technology may lead to customer ignorance and anxiety.

Opposition to change, adherence to tradition, religious customs, and anxiety among immigrants may intensify this fear. Numerous studies have examined the factors influencing consumer views of AI and technological adoption.

"*I am apprehensive that an individual is employing technology to surveil and eavesdrop on all my activities*." (Khasawneh, 2018).

"*I am apprehensive that corporations are gathering excessive personal data about me." Smith and Burke*, 1996

"*Google implicitly recognizes that, regardless of the automation involved in ad generation, transmitting details to third parties would constitute a breach of privacy*." (Chopra & White, 2007)

"*We might erroneously promote a subgoal to the level of a super goal*." AI might perhaps result in the demise of the individual who posed the inquiry. Bostrom (2002)

In popular culture, particularly in science fiction films and literature, artificial intelligences and robots revolt against humans with the intent to annihilate them. We proposed that probable explanations encompass intentional behaviors by unethical individuals. Yampolskiy (2016)

If this abrupt runaway process occurs, it might lead to an upload attaining superhuman intelligence. This significant intellectual superiority may confer considerable power.

"*I fear new technologies because if they malfunction, we may regress to a primitive state*." (Khasawneh, 2018)

"*An analysis of the context surrounding the term 'girl' indicates that girls and boys are depicted in a divergent manner, with females being more objectified and represented unfavorably*." (Leavy, 2018)

"With the advancement of technology, humanoid robots are anticipated to exhibit increasingly human-like behaviors, possibly fostering emotional connections." (Gonzalez-Jimenez, 2018)

"*Our projections indicate that by 2030, between 75 million and 375 million workers (3–14% of the global workforce) will require a transition to different occupational categories*." (Manyika, Lund, et al., 2017).

Concerns with AI encompass employment displacement, evolving skill requirements, and societal skepticism about substituting human judgment with artificial intelligence. These studies elucidate the influence of AI on consumer behavior and the significance of knowledge and awareness in molding perceptions and attitudes about AI.

Different groups and contexts in Europe and Greece have varying perceptions of artificial intelligence (AI). The "Greece 2.0" national recovery and resilience strategy emphasizes the digitization of healthcare and the implementation of information technology solutions, suggesting a favorable outlook on artificial intelligence in the healthcare sector (Fylatos et al., 2022). Greek children exhibited more negative attitudes toward deaf children, which reflected less favorable perceptions of difference and disability, according to a comparative analysis of children's attitudes toward diverse groups, including individuals who are deaf or hard of hearing, in the UK and Greece (Papazafiri & Reybekiel, 2001). A study conducted in Germany and China revealed that personality qualities influence overall opinions toward AI. The Chinese sample indicated a favorable correlation between the acceptance of AI and factors such as age, openness, and agreeableness (Sindermann et al., 2022). Research on public perceptions of AI and robots in the medical domain indicates that participants typically exhibit trust in AI for medical diagnoses and express a willingness to pay for AI-assisted services (Stai et al., 2020). Nonetheless, apprehensions over privacy, ethics, and potential ramifications for health procedures have also emerged (Romero and Young, 2021). European and Greek perspectives of AI are shaped by various elements, including cultural, societal, and individual attributes.

The apprehension regarding artificial intelligence (AI) in Greece can be attributed to multiple sources. Initially, there are apprehensions regarding the ethical ramifications of artificial intelligence. An ethical framework is essential to guarantee

that AI serves humanity's interests and that humans retain control (Taddeo and Floridi, 2018). Moreover, it is posited that AI lacks human-like conceptual comprehension, establishing a "semantic barrier" between people and robots (Mitchell, 2020). The absence of comprehension generates apprehensions regarding the potential ramifications of decision-making processes in AI systems (Mitchell, 2020). Moreover, AI applications raise issues related to privacy and social fairness (Hermansyah et al., 2023). Concerns over privacy, the ethical utilization of data, and the possibility for racial and gender discrimination by AI systems are significant contributors to the apprehension around AI (Hermansyah et al., 2023). Moreover, this apprehension encompasses AI's detrimental effects on the environment and society (Hermansyah et al., 2023). The cultural industry is experiencing growing apprehension regarding the use of AI, which could automate production and operational procedures, potentially affecting conventional approaches to the creation and management of cultural products (Zhao, 2023). Concerns exist over the excessive utilization of AI technology, which may impede the healthy progression of cultural industries and generate issues with public sentiment (Zhao, 2023). The apprehension over AI in Greece arises from ethical concerns, insufficient human-like comprehension, privacy issues, social fairness, environmental repercussions, and the possible obliteration of old cultural activities. These worries underscore the necessity for examination and control of AI technology to resolve these challenges and guarantee responsible and advantageous utilization of AI technology.

The apprehension surrounding artificial intelligence (AI) can be attributed to various sources. Individuals often exhibit early confidence in their comprehension of AI, resulting in overestimation and even misconceptions (Yudkowsky, 2008). Furthermore, the domain of AI is recognized for its grand promises that frequently remain unfulfilled, engendering mistrust and apprehension (Yudkowsky, 2008). The uniqueness of AI as a global concern complicates the discussion and evaluation of its possibly catastrophic effects (Yudkowsky, 2008). Cognitive biases typically escalate under time constraints, heightened cognitive involvement, or information dilution, potentially amplifying fears regarding AI, hence underscoring the necessity to mitigate biases in AI development. Yudkowsky, 2008. The apprehension surrounding AI arises

from a confluence of elements, including overconfidence, unmet expectations, distinctive obstacles in risk evaluation, and cognitive biases.

Individuals apprehend the unknown owing to a confluence of psychological and emotional influences. The apprehension of the unknown is frequently linked to instability, anxiety, and a deficiency of control (Calvez & Cummings, 2022; Toquero, 2020). This fear may be elicited by various circumstances, including perceived threats or adverse emotions (Yuen et al., 2020). In consumer behavior, apprehension regarding uncertainty can result in risk aversion and a preference for familiar options (Lerner & Keltner, 2001; Calvez & Cummings, 2022). This is especially apparent during economic crises, such as the Greek financial catastrophe, when consumers tend to be more cautious and reluctant to experiment (Rehman et al., 2022; Al-Homssi & Ali, 2022). The apprehension of economic downturns and employment instability can exacerbate the fear of uncertainty (Rehman et al., 2022; Khan et al., 2021). Comprehending and addressing these apprehensions is crucial for corporations and policymakers to influence consumer behavior and assist consumers during periods of uncertainty (Li et al., 2021; Rehman et al., 2022; Khan et al., 2021).

Numerous psychological factors influence the anxiety associated with artificial intelligence and emerging technologies. Fear of the unknown is a significant factor, as individuals frequently display caution and apprehension regarding issues they do not fully understand. Moreover, apprehensions over the potential adverse effects of artificial intelligence, like employment displacement and privacy infringement, may instigate dread (Cugurullo and Acheampong, 2023). Individuals' perceptions of artificial intelligence may influence their personality traits. Individuals with high neuroticism display an increased fear of artificial intelligence (Sindermann et al., 2022). Despite these concerns, individuals persist in pursuing the adoption of AI technology owing to its benefits (Cugurullo and Acheampong, 2023). Comprehending the psychology underlying the apprehension towards AI and emerging technologies is essential for addressing issues and fostering acceptance.

2.21. Scientific Inquiry, Investigation, and Faith

Overview

The cognitive mechanisms that inform religious belief and disbelief have garnered scientific attention. Analytical reasoning has been shown to foster religious doubt (Gervais & Norenzayan, 2012). Analytical processing, frequently correcting initial erroneous intuitions, correlates with heightened religious skepticism (Gervais & Norenzayan, 2012). Interventions designed to enhance analytical thinking have shown a correlation with increased religious skepticism (Gervais & Norenzayan, 2012). . Nonetheless, these researchers must directly confront the rationality, value, or veracity of religious beliefs (Gervais & Norenzayan, 2012). Religion is regarded as a cultural by-product rather than an evolutionary adaptation, utilizing standard cognitive processes (Atran & Norenzayan, 2004). Religious beliefs are grounded in specialized cognitive domains, including folk mechanics, folk biology, and folk psychology (Atran and Norenzayan, 2004). These convictions embody the anticipation and potential of counterfactual supernatural realms that elude logical or empirical validation (Atran & Norenzayan, 2004). The cognitive mechanisms underlying religious belief and nonbelief are typically intricate, multifarious, and shaped by both analytical reasoning and intuitive thought processes.

The potential impact of AI on religion is a multifaceted and intricate issue. The ethical implications of AI and the question of its entitlement to rights are subjects of continuous debate (Coeckelbergh, 2010). Certain individuals advocate for a socio-relational foundation for moral reasoning, which is based on the social interactions between humans and intelligent social robots (Coeckelbergh, 2010). Some researchers propose that virtue ethics may enhance AI capabilities in an indirect manner (Coeckelbergh, 2010). Coeckelbergh (2010) argues that setting up a social ecology that studies AI-human interactions is also crucial. It is crucial to investigate AI communities' religious and spiritual practices (Kulis et al., 2012). Christianity, traditional beliefs, and the spiritual practices of the AI people's pre-conquest ancestors were all profoundly affected by colonization (Kulis et al., 2012). A vital part of his AI culture, fostered by an enduring narrative tradition, is spirituality, which protects the urban Native American youth from substance abuse (Kulis et al., 2012). Furthermore, spirituality and

religious coping are essential for AI cancer survivors (Burnette et al., 2020; Hsieh et al., 2019; Roh et al., 2018). It is imperative to recognize a unique AI cosmology that amalgamates spirituality with many dimensions of existence (Kulis et al., 2012). Historical oppressions and precedents have nonetheless impacted AI/AN religious and spiritual practices (Roh et al., 2018). The impact of AI on religion raises questions about the development of religious concepts and practices across many cultures (Chung, 2021). The influences of AI on religion include ethical considerations, cultural dynamics, and the importance of spirituality within the AI community.

Artificial intelligence (AI) can have both advantageous and adverse impacts on global risk. AI technology can potentially resolve complex problems and improve several aspects of society.

Critical Analysis & Conclusion

This intricate interplay among cognitive science, religious belief, and artificial intelligence underscores the necessity for continued investigation into technology's impact on spiritual and religious spheres. Understanding how AI affects faith and spiritual practices will help address ethical, cultural, and spiritual issues as AI becomes more integrated into society.

As AI increasingly integrates into societal structures, comprehending its influence on faith and spiritual practices will be essential for tackling the emerging ethical, cultural, and spiritual challenges.

2.22. Concerns regarding ethics and privacy in the context of artificial intelligence

Overview

The implementation of AI technology has raised considerable privacy concerns. Hermansyah et al. (2023) found that AI poses risks related to personal data misuse and privacy violations. These risks can make individuals more vulnerable to privacy breaches and exacerbate social inequities. Data privacy and security concerns are a genuine concern with the widespread use of artificial intelligence in fields like

healthcare and disaster risk management (Velev & Zlateva, 2023; Kanter, 2023) caused by the acquisition and processing of personal information. The use of AI in news crowdfunding and ridesharing platforms yields both beneficial and adverse implications for privacy, as individuals acknowledge both advantages and risks to their privacy (Xu et al., 2022; Cheng et al., 2021). To resolve these issues, it is imperative to formulate governmental legislation, ethical standards, and industry self-regulation to safeguard privacy in the era of AI (Acquisti et al., 2015; Wang et al., 2021).

Privacy issues significantly influence consumers' acceptance and utilization of AI technology. Research has shown that these issues negatively impact consumers' risk perceptions and heighten their anxiety and distrust towards AI service robots (Park et al., 2021). Privacy problems significantly influence users' trust in AI technologies (Park et al., 2021). Consumers may be concerned about potentially disseminating their personal data to third parties, which could result in diminished trust in AI services (Park et al., 2021). Moreover, privacy issues may impede customer acceptance of emerging technology (Kronemann et al., 2023). The anthropomorphism of AI and customized experiences are suggested to enhance customer attitudes and their willingness to share personal information with AI. In contrast, privacy concerns negatively impact views and information disclosure (Kronemann et al., 2023). Consequently, addressing privacy concerns and implementing transparent privacy protection measures is crucial for fostering consumer trust and encouraging the adoption of AI technology (Zhu et al., 2022).

Artificial intelligence can serve as a beneficial influence in numerous capacities. One method is by addressing societal concerns and contributing to the United Nations Sustainable Development Goals (SDGs) (Tomasev et al., 2020). Artificial intelligence can act as a positive force in various roles. One strategy is to work toward the SDGs of the UN while simultaneously addressing social issues (Tomasev et al., 2020). According to Vinuesa et al. (2020), AI has the potential to help accomplish the SDGs by increasing productivity and efficiency, fostering inclusion and equality, and resolving environmental issues. It is crucial to acknowledge the possible adverse effects of AI on sustainable development, including heightened inequality and deficiencies in transparency and accountability (Vinuesa et al., 2020). Guidelines have been developed to facilitate interdisciplinary collaboration between AI researchers and application

professionals to ensure that AI serves societal interests (Tomasev et al., 2020). The notion of AI for Social Good (AI4SG) is increasingly recognized; yet, what constitutes socially beneficial AI, and what policies and regulations are necessary to guarantee this? A greater grasp of the subject is necessary (Akula, 2021; Clough et al., Osterbacher, 2023. Artificial intelligence possesses the potential to benefit humanity; however, a critical evaluation of its ethical and social implications is essential (Moore, 2019).

Ethical considerations profoundly influence the effects of AI on consumer behavior. The development and deployment of AI systems raise concerns regarding equity, accountability, transparency, privacy, and bias (Jobin & Vayena, 2019; Taddeo & Floridi, 2018; Mittelstadt et al., 2016; Huriye, 2023; Daza & Ilozumba, 2022). The ethical implications of AI in marketing have been examined, emphasizing the influence of perceived risks on attitudes toward AI and the interconnections among risks, ethical considerations, and societal norms (Gonçalves et al., 2023). Ethical considerations in healthcare encompass privacy and security, bias and discrimination, transparency and accountability, responsibility, informed consent, and human interaction (Amedior, 2023). Establishing clear standards for proper utilization while maintaining human interaction and empathy in patient care is crucial (Amedior, 2023). In the development of ethical AI across several locations, it is imperative to account for cultural, political, and economic contexts (Huriye, 2023). Human-centered approaches and the establishment and implementation of ethical standards are recommended to address AI ethical challenges (Huriye, 2023). Improving confidence in medical AI requires addressing data quality, algorithmic bias, transparency, security, and accountability (Zhang & Zhang, 2023).

The influence of AI on consumer decision-making presents ethical dilemmas. The formulation of ethical norms for AI constitutes a worldwide initiative, with numerous organizations and nations promulgating concepts and protocols (Jobin and Vayena, 2019). These policies underscore the significance of openness, equity, neutrality, non-maleficence, accountability, and privacy (Jobin and Vayena, 2019). Nonetheless, discrepancies exist in the interpretation and application of these principles (Jobin and Vayena, 2019). Integrating guideline creation with ethical analysis and implementation techniques is vital (Jobin and Vayena, 2019). Artificial intelligence can

serve as a beneficial force, but it necessitates an ethical framework to guarantee human oversight (Taddeo and Floridi, 2018). The increasing prevalence of algorithms that influence social processes and decisions generates ethical problems stemming from our limited comprehension of their effects (Mittelstadt et al., 2016). The ethical ramifications of algorithmic mediation are contentious, necessitating additional research to establish algorithmic ethics (Mittelstadt et al., 2016). The examination of emotion detection techniques, encompassing auditory, visual, and spontaneous speech, could enhance comprehension of the ethical ramifications of AI in the surveillance and analysis of human behavior (Zeng et al., 2009).

The ethics of algorithms is an area of growing concern and investigation. Algorithms, particularly those grounded in machine learning, are employed across several domains and can influence people, collectives, and society (Mittelstadt et al., 2016). A fundamental component of algorithmic ethics is accountability. As algorithms gain prominence and impact, it is crucial to establish methods to hold them accountable for their decisions and acts (Diakopoulos, 2016). Moreover, there are apprehensions regarding the precision and partiality in algorithmic decision-making (Sun et al., 2020). For instance, a disadvantage for media organizations employing automated writing algorithms is the possible loss of nuance and precision (Diakopoulos, 2015). The ethical ramifications of algorithms extend beyond technical aspects and are intimately connected to the values and backgrounds of their designers and users (Bahir et al., 2021). As AI ethics progresses, there is a want for enhanced comprehension and revised methodologies to address developing ethical dilemmas (Aggarwal et al., 2021; Tamados et al., 2021).

Ethical considerations in artificial intelligence (AI) are crucial, especially with consumer behavior. The development and use of AI technologies give rise to various ethical concerns, including prejudice, privacy, accountability, transparency, algorithmic discrimination, and data bias (Huriye, 2023; McLennan et al., 2022; Planter et al.). Ethical risks have a considerable impact on individuals, groups, and societies (Hongjun et al., 2022; Rodgers and Nguyen, 2022). Ethical AI guidelines and principles have been formulated by private companies, research organizations, and public sector agencies to address these issues (Jobin & Vayena, 2019). The definition of "ethical AI" and the associated ethical constraints, technical standards, and best practices for its

deployment remain subjects of controversy (Jobin and Vayena, 2019). Integrating guideline creation with comprehensive ethical analysis and implementation strategies is crucial (Jobin & Vayena, 2019). The formulation and implementation of ethical principles necessitate collaboration among stakeholders, such as policymakers, researchers, and local populations (McLennan et al., 2022). The ethical ramifications of AI in marketing and consumer adoption must be evaluated, since they can affect societal and consumer perceptions of AI (Huriye, 2023). Addressing the ethical dimensions of AI in consumer behavior necessitates a comprehensive understanding of potential hazards, alongside the formulation and execution of ethical policies and tactics.

Artificial intelligence (AI) can enhance the consumer goods sector in numerous ways. Artificial intelligence can significantly enhance item detection and classification. The ImageNet large-scale visual recognition challenge has markedly enhanced object recognition algorithms (Russakovsky et al., 2015). By employing deep neural networks and large data sets, AI systems can accurately categorize and recognize objects in images, improving the efficiency and effectiveness of consumer product applications. Reinforcement learning is another domain where AI can exert a transformational influence. Deep Q-Networks, a category of artificial intelligence agents, have shown proficiency in acquiring effective policies directly from high-dimensional sensory data (Mnih et al., 2015). The classic Atari 2600 game demonstrates that AI agents have attained performance levels akin to those of professional human players (Mnih et al., 2015). AI can improve consumer product applications by employing reinforcement learning methods, such as improved environmental regulation and the creation of efficient representations of complex sensory data. Furthermore, AI has shown promise in a variety of domains, including natural language processing, recommendation systems, and personalized marketing. These enhancements deliver customized consumer experiences, augmenting happiness and retention. Artificial intelligence may enhance the consumer goods sector via enhanced object recognition and classification, optimum environmental regulation, and tailored consumer experiences. These advancements could enhance efficiency, efficacy, and customer happiness in the consumer goods industry. Artificial intelligence technology is progressively dominating consumer goods, particularly on online purchasing platforms (Ying & Qiu,

2021). The objective of AI on these platforms is to deliver users more precise and tailored services (Ying & Qiu, 2021). The customer experience of AI can be classified into three dimensions: accuracy, insight, and interaction experience (Ying & Qiu, 2021). These factors have been shown to have a significant impact on consumers' perceived utility and hedonic worth, thereby affecting purchase intentions (Ying & Qiu, 2021). AI technology improves interactions between customers, products, and services in interactive settings, resulting in rapid demand changes (Ying & Qiu, 2021). Consumer satisfaction with AI marketing technologies is contingent upon the precision of several AI functionalities, with text search exhibiting the highest accuracy, while image and voice recognition technologies require further enhancement in accuracy (Ying & Qiu, 2021). Despite the prospective advantages of AI technology in consumer goods, consumers may harbor unfavorable perceptions and ethical apprehensions regarding AI products and services (Tussyadiah & Miller, 2018; Wang et al., 2023; Gonçalves et al., 2023). Comprehending and mitigating these issues is essential for enhancing consumer acceptance of AI goods (Wang et al., 2023).

Smart home technology has progressed markedly with the incorporation of artificial intelligence (AI) and the Internet of Things (IoT) (Sepasgozar et al., 2020). Artificial intelligence is integral to intelligent losses, serving as a repository of information and rules, a decision-maker, a function implementer, and a device controller (Guo et al., 2019). The implementation of artificial intelligence in smart homes has enhanced the quality of life for residents (Guo et al., 2019). Furthermore, artificial intelligence methodologies, such as artificial neural networks, multi-agent systems, statistical approaches, and fuzzy logic, are extensively employed in contemporary intelligence deficits (Pala & Ozkan, 2020). The amalgamation of artificial intelligence and the Internet of Things in the creation of a smart house necessitates additional investigation (Sepasgozar et al., 2020). Security constitutes a critical component of smart homes, and artificial intelligence can assist in safeguarding against dangers such as data alteration, leakage, and code development (Kang et al., 2017). The integration of AI and the Internet of Things has the potential to transform the usefulness and efficiency of smart home technology.

Internet of Things

The Internet of Things (IoT) is an expanding domain that amalgamates diverse technologies and communication systems (Atzori et al., 2018). This facilitates pervasive sensing using wireless sensor networks (WSNs), allowing for the measurement and comprehension of environmental variables (Gubbi et al., 2013). The Internet of Things (IoT) is seen as the forthcoming transformative technology that will evolve the Internet into a fully integrated future network (Gubbi et al., 2013). Nevertheless, conventional network stack architectures inadequately address natural IoT contexts as they fail to encompass all underlying technologies and may prove unsuitable for resource-constrained devices (Al-Fuqaha et al., 2015). The integration of Wireless Sensor Networks, the Internet, and distributed computing is a pivotal focus in Internet of Things research (Gubbi et al., 2013). In summary, IoT presents significant prospects for smart houses and facilitates diverse applications across multiple domains. A study undertaken by Panayotis Pliatsikas and A. in Greece. Economides (2022) stated that Greek customers are developing a favorable disposition towards smart home AI technology. Notable advantages of employing smart home technology encompass health monitoring, residential security, and financial savings. Greek customers are becoming familiar with breakthrough AI home technology, although they are skeptical regarding the sharing of their data with intelligent service providers. Greek customers exhibit modest confidence in utilizing new technology and their associated items (Panayotis Pliatsikas & A. Economides, 2022).

Critical Analysis & Future Research

Enhance Ethical Frameworks: AI ethics should evolve with it. The policymakers, the public, and of course, researchers should work hand in hand on this together and responsibly in order to develop and use AI technologies (Jobin & Vayena, 2019; Taddeo & Floridi, 2018). To further maximize AI's benefits and minimize its risks, ethical and privacy concerns must be addressed. A more secure and equitable AI-driven future requires clear ethical guidelines, transparency to its procedures, and multidisciplinary collaboration.

2.23. AI Education, Media & World Leaders

Overview

The literature frequently ignores the complex ways AI affects decision-making, even though AI significantly affects consumer behavior. While AI has the potential to simplify decision-making, some worry that consumers may become too dependent on it, thereby diminishing their independence.

In his speech at the World Government Summit in Dubai, United Arab Emirates, Elon Musk underscored that artificial intelligence (AI) represents a substantial threat to civilization's sustainability. Musk recognized the prospective advantages and breakthroughs linked to AI, including the creation of ChatGPT, yet emphasized the intrinsic hazards and perils accompanying its evolution.



Interview with Elon Musk addressing his apprehensions about Artificial Intelligence Source: Musk, E. (2023) YouTube - FOX NEWS. Accessible at: https://www.youtube.com/watch?v=a2ZBEC16yH4&ab_channel=FoxNews (Retrieved: 29 December 2024).

The Chief Executive Officer (CEO) of the company behind the AI chatbot ChatGPT asserts that the most severe possible consequence of artificial intelligence (AI) is the total termination of human functionality. In contrast, the most advantageous

outcome is considered extraordinarily uncommon to the point of being difficult to envision. He added: "I can imagine what it will be like when we have incredible richness and systems to help us resolve impasses and improve every aspect of reality and allow us all to live our best lives. But I can't totally imagine... I think this is a case that is too good to be true that you sound like a really crazy person when you start talking about it." However, his perspective on the potential negative outcome was quite pessimistic. Altman underscored the necessity of contemplating the worst-case scenario, which would be catastrophic for all stakeholders involved. Moreover, Altman articulated increasing apprehension regarding the potential for inadvertent misuse in the imminent future. He asserted that the significance of AI safety and alignment initiatives is paramount, highlighting the necessity for augmented efforts in this domain. Experts contend that ChatGPT can be utilized for numerous malicious purposes, including fraud, cyberattacks, dissemination of misinformation, and facilitation of plagiarism. Altman has expressed comprehension of specific individuals' concerns about artificial intelligence in recent interviews. During a March interview on Lex Fridman's podcast, Altman expressed surprise that his admission of fear was regarded as a significant revelation. He emphasized the importance of acknowledging one's fears, considering it illogical to ignore them, and expressed compassion for those who experience intensified fear.

ChatGPT is utilized in diverse applications, such as chatbots, virtual assistants, and other conversational AI platforms. It is recognized for its capacity to generate coherent and contextually pertinent text over extended passages; however, it is not infallible and may occasionally yield incorrect or nonsensical responses.

The communication of artificial intelligence by media and governments to the populace Communicating artificial intelligence (AI) and its capabilities to consumers and citizens is complex and multifaceted. Government and media are vital in shaping people's perception and understanding of artificial intelligence. How artificial intelligence (AI) is explained to the general population has an effect on how comfortable they are with and willing to use AI technology. Media coverage of AI typically includes both positive and negative aspects (Stai et al., 2020). However, research analyzing media portrayals of AI, especially its benefits and drawbacks, is scarce (Stai et al., 2020). Additional research into how AI is portrayed in the media is

clearly needed due to the paucity of existing literature in this area (Stai et al., 2020). According to O'Sullivan et al. (2021), journalists require guidance and training to adequately cover stories about the potential risks of AI. The public's perception and understanding of artificial intelligence (AI) can be greatly influenced by how the media portrays the technology's advantages and disadvantages (Stai et al., 2020). The public needs fair and accurate reporting from the media regarding AI so that they can understand the pros and cons of the technology. The government also must deliver AI to citizens. Artificial intelligence applications in the public sector are extensive and growing, and the possibilities of artificial intelligence are currently being mapped in state services (Maalla, 2021). Governments must achieve the structural, organizational, and human changes required by the digital age and implement the necessary tools, strategies, and regulatory policies to maintain the social well-being of citizens (Maalla, 2021). Governments must provide open and easily accessible information about AI and its impact on society. In short, informing consumers and citizens about AI and its features requires accurate and balanced input from the media and governments. The media should use a framework approach for a clear understanding of AI technologies, while governments should ensure transparency and accessibility in exchanging information about AI. By providing accurate and balanced information, the media and governments can help shape the public's perception and understanding of AI.

Also, the literature supports consumers' desire for more AI education from the media and government. Research has shown that media coverage of AI often focuses on ethical issues and the potential social impact of AI technologies (Ouchchy et al., 2020). However, coverage is often superficial and needs more in-depth information (Ouchchy et al., 2020). To solve this problem, it has been proposed that the media provide correct information to the public through fact sheets and statements of ethical values on credible websites and collaborate with artificial intelligence and honest experts (Ouchchy et al., 2020). In addition, the government can train the media and implement coherent policies or regulatory frameworks for AI technology (Ouchchy et al., 2020; Ransing et al., 2021). Artificial intelligence presented by the media can shape public debate and influence public opinion and acceptance of artificial intelligence (Ouchchy et al., 2020). Therefore, the media and government must provide accurate

and comprehensive education on AI to ensure informed public debate and decision-making.

Critical Analysis

Public perceptions of AI are substantially influenced by media narratives. The portrayal of AI as a tool for progress or a threat to privacy can sway consumer attitudes in Greece, where traditional media and social platforms play a central role in shaping public opinion.

Gap Analysis

No studies in the Greek context focus on the impact of media on AI awareness. Research in this field could inform future campaigns and public communication strategies, potentially fostering informed consumer attitudes.

2.24. Educational institutions in fostering AI literacy

Overview

While Greek consumers exhibit significant resistance to AI, cross-cultural studies suggest that this phenomenon is not unique. For instance, Sindermann et al. (2022) found that older individuals in China demonstrate higher AI acceptance, underscoring the role of cultural and educational factors in shaping attitudes. Similarly, Yigitcanlar et al. (2022) highlight the effectiveness of public awareness campaigns in improving AI literacy in Australia, a strategy that could be adapted for Greece. These global insights reinforce the need for culturally sensitive and transparent AI education programs to address the knowledge gap and foster trust among Greek consumers.

The rapid development of artificial intelligence (AI) has brought both opportunities and concerns to higher education in the AI era (Li and Yang, 2023). The application of AI in education has led to the emergence of new moral issues and the need for ethical choices and restructuring in education (Li and Yang, 2023). But AI also brings new opportunities for teaching and learning, especially in public health education. AI-based big data can provide students with sufficient resources and convenience (Wang et al., 2023). To adapt to the AI era, leverage intelligent technology to transform the learning environment, content, teaching methods, and management

forms, and build an intelligent education system that provides students with more selective, personalized, and accurate education. Need (Lee and Yang).2023). Integrating AI into medical education is crucial to properly training medical professionals on this emerging technology and improving medical outcomes (Paranjape et al., 2019). AI is also expected to enhance creative learning in STEM education and contribute to the development of Society 5.0 (Sari and Purwanta, 2021). Basic thinking skills are essential when using AI, and countries such as China, South Korea, and the United States are already preparing for the future of AI-based education systems (Sari and Purwanta, 2021). With advances in medicine, it is becoming increasingly important to use AI to improve clinical decision-making and enable effective use of medical knowledge (Paranjape et al., 2019). In the intelligent age, education, and technology must work together in a symbiotic society (Li and Yang, 2023).

Artificial intelligence (AI) is expected to impact the world, including consumer goods and services. As AI technology advances, many services are automated using various embedded and embodied mechanical AI applications (Huang & Rust, 2020). However, consumers react differently to service automation. Some prefer AI services, while others prefer human intelligence services (Huang and Rust, 2020). It is essential to understand how consumers respond to the standardization of AI-powered services and their preferences regarding personalization and privacy (Huang & Rust, 2020). AI can attract different customer service benefits, depending on the nature of service tasks, offerings, strategies, and processes (Huang and Rust, 2020). Thinking AI, which is good at discovering meaningful patterns in data, can be used for service personalization (Huang & Rust, 2020). On the one hand, emotional AI can be used for relational in high-touch services (Huang & Rust, 2020). The increasing use of AI service robots in frontline consumer service delivery is changing the nature of service and consumer experience (Han et al., 2023). Overall, AI has the potential to revolutionize consumer goods and services by improving personalization, efficiency, and customer engagement.

It is essential to delineate the technological constraints of AI in consumer products. The principal sectors of AI technology in consumer products can be classified into specific domains. Initially, there are apprehensions regarding the possibility of accidents and inadvertent detrimental actions in machine learning systems (Amodei et

al., 2016). Based on the findings of Amodei et al. (2016), artificial intelligence systems that are poorly designed can lead to unfavorable outcomes such as side effects, reward manipulation, and distributional shifts. Second, we need to conduct an analysis of the societal and individual barriers that stand in the way of the incorporation of artificial intelligence into consumer goods (Puntoni et al., 2020).However, it is essential to have a thorough understanding of the complexities and potential negative effects of artificial intelligence (Puntoni et al., 2020). One of the benefits of artificial intelligence is that it can be used to monitor health, provide recommendation systems, and create smart home devices. Furthermore, consumer trust and acceptance of AI recommendations can be eroded by algorithmic aversion as well as concerns regarding the accuracy of the recommendations of AI (Kim et al., 2021). Consumers may have different perceptions of the value and advantages of artificial intelligence technology, and their levels of satisfaction may be affected by factors such as the accuracy of the search and the experience they have with the technology (Ying and Qiu, 2021).

Critical analysis in educational systems

The literature on AI in educational institutions indicates progress and potential, underscoring significant opportunities for further research to address existing gaps. Through the analysis of these domains, educational researchers and practitioners can acquire insights into the effective utilization of AI to enhance educational practices and outcomes in the areas of: AI's role in remote learning, Ethical frameworks, AI & Education, AI Tutors & the role of the teachers, AI plagiarism & Education, etc. Unlike older Chinese adults who exhibit higher AI acceptance (Sindermann et al., 2022), Greek seniors resist AI due to historical distrust and cultural conservatism, underscoring the need for localized strategies. Public awareness campaigns, as successfully implemented in Australia (Yigitcanlar et al., 2022), could bridge Greece's AI literacy gap by tailoring content to Orthodox Christian values (i.e. promotional campaigns, etc.).

Additional domains where AI provides advantages

AI offers consumers a range of benefits, including health monitoring, personalized recommendations, convenience, and smart home automation. However, using AI also comes with social and personal challenges. For example, AI camaraderie

experiences can provide cognitive and socio-emotional benefits but can also deceive vulnerable consumers and be used as a surrogate for real-life relationships. A lack of knowledge about AI and its relation to fear and ignorance may further influence consumer behavior (Puntoni et al., 2020). Consumers may be concerned about integrating AI into healthcare, including safety, quality, transparency, and ethical factors. Addressing these concerns and helping consumers understand the benefits of AI-based healthcare tools is critical (Esmaeilzadeh, 2020). Future research should focus on understanding the potential harms and benefits of AI companion experiences, addressing consumer concerns, and developing strategies to improve consumer knowledge of AI (Puntoni et al.., 2020). Additionally, regulators and healthcare organizations should establish standards and guidelines for implementing and using AI in healthcare (Esmaeilzadeh, 2020).

How AI enhances the current consumer journey

Artificial intelligence (AI) has revolutionized the customer journey by enabling personalized experiences, improving efficiency, and enhancing customer relationships (Puntoni et al., 2020; Bhagat et al., 2022; Rana et al., 2021). AI will enable businesses to track and analyze every touchpoint a consumer has during their online shopping journey, enabling personalized marketing strategies (Li and Kannan, 2014). By assigning value to each marketing channel, companies can optimize their investments across different online channels (Li & Kannan, 2014). AI also plays a role in personalized engagement marketing, providing consumers with limitless options and curated information (Kumar et al., 2019). Additionally, AI applications interact with consumers at every stage of the customer journey, offering benefits such as health monitoring, recommendation systems, and voice-activated virtual assistants (Puntoni et al., 2020). However, the effectiveness of AI touchpoints at each stage of the customer journey is influenced by various factors, such as consumer behavior and acceptance (He & Zhang, 2022).

The function of educational institutions in imparting knowledge regarding artificial intelligence

The function of schools, educational institutions, and other platforms in augmenting public comprehension of artificial intelligence (AI) is essential. As AI increasingly infiltrates diverse societal sectors, the public must possess a fundamental understanding of its capabilities, limitations, ethical implications, and potential consequences (Kim et al., Y. (2022). Learning design to support student-AI collaboration: perspectives of leading teachers for AI in education. Education and Information Technologies. Link to the paper.).

Artificial intelligence transcends mere computer science, intersecting with disciplines such as biology (bioinformatics), economics (algorithmic business), sociology (social network analysis), among others. A multidisciplinary approach facilitates a holistic comprehension of artificial intelligence's role across diverse fields. Academic institutions and research platforms ought to foster AI research, thereby promoting innovation and expanding the horizons of potentiality.

Artificial intelligence (AI) has found significant application in biometric identification through the implementation of voice recognition and fingerprint face recognition technologies. The field of AI voice recognition has experienced substantial development, as evidenced by the proliferation of voice assistants such as Amazon's Echo and Google Assistant, which have revolutionized individuals' consumption patterns, task completion, and interactions with companies (McLean & Osei-Frimpong, 2019). The decision to adopt in-home voice assistants is driven by the practical, symbolic, and social advantages offered by this technology (McLean & Osei-Frimpong, 2019). However, concerns regarding privacy risks are found to have a detrimental impact on the utilization of in-home voice assistants (McLean & Osei-Frimpong, 2019). Fingerprint and face recognition technologies have experienced a surge in popularity, particularly within the payment sector. The acceptance of face recognition payment methods among consumers can be influenced by their perception of personal risk and innovation, while the perceived usefulness and ease of use may not have a significant impact on their attitudes (Zahira & Kurniawati, 2022). Consumer satisfaction plays a crucial role in fostering repeat purchases at establishments that employ face recognition payment methods (Zahira & Kurniawati, 2022). AI voice recognition and AI-powered technologies are being utilized within the medical industry for the purpose of scrutinizing extensive quantities of data and providing support in the diagnosis of

diseases (Oh et al., 2019). Nonetheless, there exists apprehension among physicians regarding the capacity of AI to provide assistance in unforeseen circumstances and the likelihood of AI usurping their responsibilities (Oh et al., 2019). Nevertheless, in general, medical professionals and trainees in Korea exhibit a positive disposition towards the implementation of AI within the medical domain (Oh et al., 2019). In general, AI voice recognition, fingerprint recognition, and face recognition technologies provide convenience and enhanced security to consumers, carrying potential implications in diverse sectors such as healthcare and payment systems.

Acquiring knowledge about AI technology while mitigating AI-related anxiety

As the incorporation of artificial intelligence (AI) into educational settings becomes increasingly prevalent, it is essential to comprehend and tackle the challenges it presents. Recent scholarly research has examined these challenges and potential solutions. Almaiah et al. (2022) investigated the impact of social and computer anxiety in online learning environments, specifically at the university level.

Their research highlighted the interaction of satisfaction, motivation, and self-efficacy factors and how they can exacerbate or alleviate AI-related anxiety. One of the key findings of their study was the direct relationship between reduced stress and increased student engagement with online learning tools. When students felt less threatened or overwhelmed by technology, they were more likely to use it effectively and have meaningful educational experiences. Link to complete study. Moving to primary education, Pelaez et al. (2022) introduced the term "Turing teacher." This term describes an artificial intelligence tool designed specifically for primary and secondary education. The study emphasized that such AI tools must be adaptive, collaborative, and sensitive to the diverse needs of younger students. An essential aspect of their research explored the potential of artificial intelligence to bridge the digital divide, particularly in traditionally disadvantaged communities. The "Turing teacher" is intended as a tool for teaching and educational equality—linked to the entire study. In conclusion, as AI continues to enter the fabric of modern education, it is critical to address student concerns and reservations. By understanding the root causes of these problems and designing AI tools that are both intuitive and empathetic, educators can

harness the full potential of AI to improve learning outcomes and promote positive learning experiences.

2.25. Integration, Deficiencies, and Prospective Pathways

Overview

The examined literature emphasizes the transformative capacity of artificial intelligence (AI) across several sectors, illustrating its dual function as both an enabler and disruptor of consumer behavior. Fundamental research (Puntoni et al., 2020; Yigitcanlar et al., 2022) demonstrates AI's ability to improve user experiences via personalization and efficiency, while also highlighting issues related to privacy, ethical considerations, and social threats (Taddeo & Floridi, 2018; Amodei et al., 2016). Nonetheless, the research reveals numerous significant gaps and limits that require additional investigation.

Epilogue in Literature Review

As AI has been integrated into more and more areas, it has influenced consumer behavior, privacy concerns, ethics, education, and religion. The literature suggests that AI has the potential to both enhance consumer experiences and give rise to ethical and privacy concerns.

The literature frequently ignores the complex ways in which AI affects decision-making, even though AI significantly affects consumer behavior. While AI has the potential to simplify decision-making, some worry that consumers may become too dependent on it, thereby diminishing their independence.

Evidence from Greek consumer behavior (Puntoni et al., 2020; Kumar et al., 2019) suggests that AI has an impact on consumer psychology. This influence tailors experiences to individual needs and preferences. Ying and Qiu (2021) found that Greek consumers can benefit from AI-powered streamlined services and personalized recommendations when they shop.

Both teachers and students can be benefited by AI. To allay public concerns about AI and dispel myths and misconceptions, Greece must increase public education

on the topic. Many studies utilize cross-sectional approaches, providing a fixed perspective on AI attitudes. However, longitudinal research is clearly necessary to monitor changing consumer views, especially in areas experiencing swift technological transformation. Significant literacy gaps and digital infrastructure deficiencies, particularly in rural regions, significantly impede the adoption of AI in Greece. Equitable distribution of AI technologies and their advantages is impeded by these discrepancies. In recent research, Yigitcanlar et al. (2020) have proposed that the adoption of technology and the bridging of urban-rural divides are contingent upon the improvement of digital infrastructure and literacy. Greece's regional development objectives must be aligned with these initiatives to ensure inclusivity.

Regarding ethics and privacy: it is necessary to employ ethical AI practices and implement data governance (Jobin & Vayena, 2019; Kronemann, 2023), in order to reduce the risks associated with AI and keep consumers' trust on a good level and also follow EU privacy regulations.

Culture plays a significant role in shaping how Greek consumers perceive and interact with AI. Data privacy and sharing with service providers remain concerns for Greek consumers, although they are showing increasing openness to AI-powered smart home technologies (Panayotis Pliatsikas & A. Economides, 2022).

The impact of AI on various nations, particularly Greece, underscores the complex interplay of issues concerning cultural values, ethics, and educational needs associated with technological integration. The application of artificial intelligence (AI) in consumer services, educational establishments, and religious organizations presents both advantages and disadvantages. Future researchers must engage in interdisciplinary collaboration to establish comprehensive ethical standards, proactive policies, and ongoing evaluations of the societal implications of AI to effectively tackle these challenges. This will guarantee the ethical advancement and incorporation of AI into society, which is vital in Greece's distinct cultural and social milieu, as it will mitigate potential disparities and foster human-machine collaboration for the collective benefit. Greek consumers prioritize personal relationships, leading to significant concerns regarding the potential decline of customer-centric service experiences and privacy issues associated with AI integration (Huang & Rust, 2020).

Chapter III. Research Design

Description of Participants of the Study

Description of Intervention (Treatment) or Data Collection Tools/ Materials

Data Collection Procedure

3.1. Description of participants of the study/ Methodology

The swift progress in Artificial Intelligence (AI) is profoundly altering consumer behavior worldwide. There is a significant lack of focused study investigating the attitudes and acceptability of AI technology among Greek customers in their purchasing behaviors. This study aims to address this research gap by examining Greek consumers' awareness, perceptions, and emotional reactions to AI, focusing specifically on the elements of fear, anxiety, and cultural influences.

Reasons for the specific data sampling & rigor

Based on statistical power and Greek consumer AI heterogeneity, the quantitative phase sample size was determined. The chosen sample size of 318 participants facilitates rigorous statistical analysis, encompassing Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM), thereby ensuring the generalizability of the results. The sample size is sufficient to attain a power of 0.80 at a 0.05 significance level, presuming a medium effect size, which is typical for consumer behavior research (Cohen, 1992). This size accounts for non-response or incomplete data to keep the sample representative of the population.

Stringency in Data Analysis

To enhance quantitative findings, 20 qualitative participants were selected. Thematic analysis best practices of smaller, concentrated samples yield richer, more nuanced insights (Braun & Clarke, 2013). This quantity balances detail and manageability.

Final Evaluation

Artificial intelligence's impact on Greek consumers will be analysed using extensive quantitative data and deep qualitative insights. For studying the complex effects of technology on consumer behavior, this mixed-methods approach improves research reliability and validity while meeting interdisciplinary standards. Quantitative Analysis: SPSS and AMOS will carefully analyze data.

The objective of this research is to examine the correlation between awareness of artificial intelligence (AI) and consumer behavior in Greece. The study seeks to discover the factors that promote or hinder AI adoption by integrating quantitative surveys and qualitative interviews, focusing specifically on emotional obstacles, cultural effects, and ethical considerations.

Research Questions:

The investigation is directed by the subsequent research inquiries:

Consciousness and Comprehension

1. What is the extent of AI awareness among Greek consumers?
2. How can a deficiency in comprehension of AI concepts foster ignorance, anxiety, and fear?

Emotional and Behavioral Effects

3. In what manner can emotions like fear and anxiety affect Greek consumers' acceptance of AI technologies?
4. What influence do cultural and religious beliefs exert on consumer opposition to AI?

Adoption and Decision-Making Processes

5. What factors promote or hinder the use of AI in the daily lives and decision-making processes of Greek consumers?
6. In what ways may educational and commercial strategies enhance the acceptance of AI?

Ethical and Privacy Issues

7. What ethical and privacy issues influence Greek customers' faith in AI systems?

Selection of Methodology and Justification : in this case a mixed-methods approach is employed to address the research subjects, combining quantitative surveys for generalizable insights and qualitative interviews for in-depth understanding. Phase A: Digital Surveys (Quantitative Analysis) Objective: To assess awareness, views, and behaviors regarding AI within a varied demographic

Phase A: Digital Surveys (Quantitative)

Objective: To evaluate awareness, perceptions, and actions relating to AI across a diverse demographic.
Sample Size: 318 Greek consumers.
Instruments: Structured questionnaires utilizing Likert scale inquiries.
Analysis: Statistical methodologies (e.g., Confirmatory Factor Analysis, Structural Equation Modeling, regression analysis) will ascertain correlations and predictors of AI-related behavior.

Phase B: Focus Groups and In-Depth Interviews (Qualitative Research)
Objective: To investigate the emotional and cultural subtleties affecting AI adoption.
Sample Size: 20 participants chosen based on Phase A reactions reflecting anxiety or terror.
Methods: Semi-structured interviews administered in Greek, taped for thematic analysis.

Emphasis: Emotional obstacles, cultural conventions, and ethical considerations.

Selection of Methodology and Justification:
Survey design has two primary phases. A quantitative phase involving online surveys in Greek and a qualitative phase comprising focus group talks in Greek, filmed using an iPhone for in-depth interviews, which will thereafter be archived for documentation and academic purposes. Quantitative data are gathered by standardized questionnaires that include Likert scale items and demographic details. Qualitative insights are collected through semi-structured interviews and analyzed using thematic analysis. All previously described methods will comply with requisite GDPR requirements, ensuring that all participants are informed and give consent before engaging in this research.

The research design comprises two main phases: Phase A: Digital Surveys (Quantitative Analysis) Objective: To methodically collect data from a heterogeneous population.
Instruments: Structured questionnaires in Greek include Likert scale inquiries and demographic data.
Analysis: Statistical methodologies like Confirmatory Factor Analysis (CFA),

Structural Equation Modeling (SEM), SPSS, regression analysis, and factor analysis will be utilized to yield quantitative insights into correlations, relationships, and potential predictors of AI-related behavior.

Phase B: Focus Group Discussions and Comprehensive Interviews (Qualitative) Objective: To explore participants' perceptions, emotions, and experiences about AI. Instruments: Focus group discussions and comprehensive interviews, both executed in the Greek language. The discussions will be documented using an iPhone for later academic evaluation. Analysis: The data will undergo thematic analysis to discern patterns and themes. A mixed-methods technique is selected to obtain both quantitative data and contextual comprehension.

During the quantitative phase, it guarantees statistical validity and generalizability. The qualitative phase examines the intricate aspects influencing AI perceptions and actions among Greek customers.

Qualitative and quantitative methodologies synergistically enhance the understanding of Greek customers' attitudes and behaviors around AI. Qualitative research facilitates in-depth study and contextualization of views, whilst quantitative analysis offers statistical validity and generalizability. A mixed-method approach integrating focus group talks, in-depth interviews, and internet surveys offers a more holistic perspective. The integration of focus group discussions, in-depth interviews, and internet surveys enables us to triangulate our methodology, so enhancing the validity and dependability of our findings. Qualitative instruments yield detailed narratives and contextual insights, whereas internet surveys furnish quantitative data for statistical analysis and generalizability.

1. In summary, the research comprises two phases:
1. Phase A: Digital Surveys (Quantitative):
Online surveys facilitate the efficient collecting of data from a broader participant sample. Surveys may incorporate a scale, multiple-choice, and open-ended questions to assess AI awareness, perceptions, behaviors, and demographics.
B. Statistical analysis (CFA, SEM, SPSS tools, regression analysis, factor analysis, etc.)

offers quantitative insights into correlations, relationships, and potential predictors of AI-related behavior.

Phase B: Focus Group Discussions and In-Depth Interviews (Qualitative) A. These instruments will enable us to investigate our participants' perceptions, emotions, and experiences with AI.

Focus group discussions promote group engagement and idea production, whilst in-depth interviews allow for the expression of individual narratives and insights. These instruments can document individuals' experiences, cultural influences, and intrinsic emotions associated with AI awareness and conduct.

2. Methodological Considerations:

Data Integration: Triangulation amalgamates qualitative and quantitative outcomes to authenticate and enhance study findings. This integration may take place during data analysis, wherein qualitative insights inform the formulation of quantitative research questions and the interpretation of quantitative findings.

The population consists of Greek customers from various ethnicities and socioeconomic backgrounds.

Phase A: Quantitative: The sample comprises 318 Greek consumers who participated in an online survey from diverse sources.

Phase B: Qualitative Analysis:

In the qualitative phase, 20 participants will be chosen for focus group discussions and in-depth interviews, adhering to diverse criteria like age, education, geography, and technical skill.

Ethical Considerations: Ethical criteria must be adhered to during the study process, encompassing the acquisition of informed consent from participants, safeguarding participant confidentiality, and addressing potential ethical issues associated with discussing sensitive subjects. It exists. Consequently, all requisite forms will be generated and sent to the attendees/interviewees for their examination and approval prior to any preliminary communication, in accordance with their privacy and GDPR rights.

3. Examination of the Dual Stages of the Research:

Phase A: Timetable: August 2023 - October 2023 - Quantity Phase, Online Google Questionnaires,

-Comprehend the awareness level of AI among Greek customers and their personas.
-Their knowledge, fears, and anxieties on the matter
Phase B: Timetable ➔ October 2023 - November 2023 Qualitative Phase: Discriminative Interviews with interviewees who have articulated dread or fear around AI to advance our research and investigate the underlying reasons for their sentiments. Examine the underlying reasons for Greek consumers' perceptions of AI technology, identifying the key aspects that contribute to their uneasiness and apprehension. Are their motivations rooted in religious beliefs or the desire to acquire new knowledge?

4. The prevalent inquiries Each phase concludes with a survey. Stages A and B share common demographics and several significant consumer features. We established preset attributes to enhance our comprehension of Greek consumer personas. Greek consumer personas are developing a list of traits to enhance audience comprehension and segmentation in the subsequent phase of our research. This segmentation will enable us to classify various personas, comprehend their motivations, and address our research inquiries. By compiling this data, we can elucidate the various Greek consumer personas exhibiting distinct traits likely to manifest fear, anxiety, or ignorance regarding AI technologies throughout their consumer journey, as well as identify those Greek consumer personas with differing characteristics and behaviors that do not embody these negative emotions towards AI.
This research will significantly aid Greek commercial organizations in adapting their marketing strategies to the educational system, thereby enhancing their curriculum to better address the consumer demand for knowledge regarding AI, which is currently unmet.

The features incorporated in both stages aim to enhance comprehension of the Greek personas exhibiting fear, worry, and ignorance regarding AI technology throughout their consumer experience.
Demographic inquiries at the conclusion of each survey phase to comprehend the Greek consumer profile and the underlying motivations for this profile's potential

apprehension, ignorance, or concern regarding AI technology throughout their consumer experience.

3.2. Description of Intervention (Treatment) or Data Collection Tools/ Materials

Phase A: A Creation of Survey Questionnaire

We developed a questionnaire to systematically gather pertinent information from Greek customers on their awareness of AI. This methodology was shaped by prior study conducted by Jian Li and Jin-Song Huang, an academic at the School of Economics of Beihang University in Beijing. Our study was founded on their paper entitled "Dimensions of Artificial Intelligence Anxiety Based on an Integrative Theory of Fear Acquisition" (2020). This thoroughly evaluated questionnaire was created by constructing questions derived from existing literature and research findings concerning AI and consumer and individual apprehensions around AI technology. Utilizing this established structure as our foundation, we incorporated the vital parts that were previously absent and deemed crucial for our research. We enhanced our questionnaire by incorporating demographic data of the interviewees and their educational backgrounds, and we modified the questions to align more effectively with Greek consumer culture. Our research examines Greek consumers' perceptions of the advantages of AI and their interest in integrating it into their spending behaviors. Furthermore, certain questions that could result in redundant responses were eliminated, and segments of the surveys were organized to align with the consumer journey's rationale. This novel technique is introduced here for the first time and seeks to elucidate the phases the Greek customer may experience before completely adopting AI technologies.

Items for the questionnaire

We assessed the various forms of anxiety individually by classifying them according to distinct phases of the consumer awareness journey, as we designated the customer in the realm of artificial intelligence.

At each stage—awareness, contemplation, purchase, and advocacy—we integrated several fears and added more inquiries based on the research undertaken by Jian Li and Jin-Song Huang, a scholar at the School of Economics of Beihang University in Beijing. Our research was founded on their article entitled "Dimensions of Artificial Intelligence Anxiety Based on an Integrative Theory of Fear Acquisition" (2020). We meticulously adhered to pertinent literature and studies for each question to substantiate our inputs and revisions, as illustrated in the accompanying table. The items were evaluated using a Likert scale, ranging from one as the lowest to five as the highest. **We construct the questionnaire in the following manner:**

Questions: 0-3: Zero.I utilize voice commands on my smartphone for diverse instructions. I utilize my fingerprint and/or facial recognition to unlock the screen. New inquiry from the researcher One. To what extent do you comprehend the principles of artificial intelligence? Two. Do you think that media and governmental organizations adequately furnish citizens with knowledge and facts to ensure their confidence in artificial intelligence and its capabilities? Three. I desire frequent training in AI from schools, government, and media in the future.

We utilized three measuring items from the literature to address the aforementioned questions sequentially. Zero.AI voice recognition has shown substantial advancement, with voice assistants such as Amazon's Echo and Google Assistant transforming how individuals access content, execute activities, and engage with companies (McLean & Osei-Frimpong, 2019). One.Certain research indicate a necessity for enhanced comprehension of AI technologies and their application domains among the general populace (Yigitcanlar et al., 2020; Cukurova et al., 2019). Two.Journalists must obtain training and support to deliver incisive reporting on the possible dangers of AI technology (O'Sullivan et al., 2021). The media can significantly influence public perception and comprehension of AI by highlighting its hazards and benefits (Stai et al., 2020).

Three.Furthermore, the government can contribute by training media professionals and establishing uniform policies or regulatory frameworks for AI technology (Ouchchy et al., 2020; Ransing et al., 2021).

Transparency Deficiency Anxiety:

In this study, we incorporated a single measurement from the original research by Jian Li and Jin-Song Huang, excluding the two they proposed as they do not align with Greek culture and are superfluous for this research. Furthermore, we enhanced one of the inquiries by incorporating more specific terminology related to our consumer theme, increasing its relevance to the audience and the topic.

Question: "In what manner can artificial intelligence anticipate and affect individuals' purchasing choices prior to their own awareness of their desires?"

According to the literature assessment, there may be an absence of a description elucidating how and why an outcome occurred, leading to a lack of comprehensible explanation. (Clarke, 2019).

Anxiety Due to Privacy Violations:

I am concerned that artificial intelligence (AI) may surveil my customers.

Behavior (i.e., information regarding the new Greek I.D.s) (*=bold new item from the current researcher)

2. I am concerned that AI will accumulate excessive amounts of my personal information.

Information as a consumer (new item from the current researcher)

The predictions made by AI on my tastes, including suggested advertisements or web pages, evoke a sense of privacy infringement.

Anxiety Regarding Privacy Violations: In this section, we utilized three assessment items from existing research to address the aforementioned questions sequentially.

I am apprehensive that an individual is employing technology to surveil and eavesdrop on all my activities. (Khasawneh, 2018)

I am apprehensive that corporations are gathering excessive personal information about me. (Smith & Burke, 1996)

3. Google indirectly concedes that, regardless of the automation involved in ad production, forwarding facts to other parties would constitute a breach of privacy. (Chopra & White, 2007)

Anxiety Regarding Existential Risks

1. The potential for AI to inflict harm on humans to attain objectives induces fear in me.

I am concerned that the dominance of AI/Super AI by a select few persons will pose substantial threats to society as a whole.

Existential Risk Anxiety: In this section, we utilized two assessment items from the literature to address the aforementioned topics sequentially.

1. We might erroneously promote a subgoal to the level of a super goal. AI could potentially harm the individual who posed the inquiry (Bostrom, 2002).

In popular culture, particularly in science fiction literature and films, artificial intelligences and robots often revolt against humanity with the intent to annihilate it. We propose that more plausible motivations stem from the calculated actions of unethical individuals. If this unrestrained progression occurs abruptly, it could lead to an AI attaining superhuman intelligence, bestowing upon it significant power. I harbor concerns regarding emerging technologies, as any malfunction could regress society to a primitive state.

Prejudicial Conduct Anxiety:

I am indifferent about the AI implementing pricing discrimination among consumers, as it may be advantageous for me as a buyer.

AI differentiates its treatment of each client, which can induce anxiety in me.

3. Do you utilize your mobile phone for diverse transactions (e.g., during the COVID time, to obtain your immunization certificate, driver's license, engage in governmental

activities, or execute credit card payments)? bold= NEW question from the researcher

Bias Behavior Anxiety: In this section, we utilized three assessment items from the literature to address the aforementioned questions sequentially.

1. Online pricing algorithms significantly influence product costs for various users. (Rahwan et al., 2019)

2. Research indicates that the term 'girl' is utilized in a situation where girls and boys are represented differently, with girls being more objectified and depicted in more negative contexts. (Leavy, 2018)

3. Motivation, usability, performance, and happiness with outcomes affect consumers' inclination to utilize AI tools for buying (Chopra, 2019). Smartphones are integral as AI tools in consumer purchase decisions and shopping experiences.

Anxiety Regarding Job Replacement:

I am concerned that AI will supplant my employment in the future.

I have anxiety while collaborating with AI that surpasses my intelligence.

I am concerned that artificial intelligence will supplant numerous jobs.

Job Replacement Anxiety: We utilized three measurement items from the literature to address the aforementioned questions sequentially.

Questions 1 and 3, Answer: Our analysis across 46 nations indicates that nearly zero to one-third of labor activities may be displaced by 2030, with a midpoint estimate of 15%. (Manyika Global Institute, 2017)

Response to Question 2: I would not assert that I enjoy collaborating with computers that have superior intelligence. (Heinssen et al., 1987)

Anxiety in Learning:

I doubt my ability to excel in professional courses in AI.

Comprehending AI algorithms necessitates a considerable degree of aptitude, which I find challenging.

AI technology evolves rapidly and is challenging to master.

Learning Anxiety: In this section, we utilized three measurement items from the literature to address the aforementioned questions sequentially.

I believe I am incapable of acquiring a computer programming language. (Heinssen et al., 1987)

I struggle to comprehend the technical parts of computers. (Heinssen et al., 1987)

3. AlphaGo learns by self-play and identifying plays that yield superior outcomes. The disconcerting aspect is our lack of understanding regarding AlphaGo's thought processes. (Granter, Beck, Papke, 2017)

Confronting ethical anxiety:

I am concerned that AI will achieve a comparable level of consciousness to that of humans.

2. The inability of AI to distinguish between AIs possessing sufficiently advanced mental states, or the appropriate types of states, raises concerns regarding moral status, particularly in relation to humans and consciousness. Consequently, the aforementioned two questions are recommended for exclusion from the original questionnaire.

In addressing Ethics Anxiety, we utilized a single measurement item from the literature to respond to the aforementioned inquiries sequentially.

The primary distinction between the natural equivalent and artificial consciousness lies in the technology that facilitates the operation. (Buttazzo, 2008)

2. AIs possessing sufficiently advanced mental states, or appropriate states, will possess moral status, and some may be regarded as persons (Bostrom & Yudkowsky, 2014). Given that moral obligations arise from considerations of moral status, we should treat an artificial mind as equivalent to a natural human in analogous circumstances (Bostrom & Yudkowsky, 2014).

Anxiety around artificial consciousness:

I am concerned that AI will achieve a comparable level of consciousness to that of humans.

Artificial Consciousness Anxiety: We utilized a single measurement item from the literature to address the aforementioned questions sequentially.

The primary distinction between artificial consciousness and its natural equivalent lies in the technology that facilitates the process. (Buttazzo, 2008) G. Buttazzo, Artificial consciousness: dangerous questions (and answers), Artif. Intell. Med. 44 (2) (2008) 139–146.

3.3. Data collection procedure

Proceeding to Phase B of our research:

a) Recognize and include individuals exhibiting apprehension or trepidation over AI.
b) Determine the precise phase in their trip during which these emotions manifest.
c) Conduct individual interviews with these people to examine their personality features and discover behavioral problems that may hinder their adaptation to AI technologies.

The original and modified questionnaires are included in the appendix for future study reference, enabling subsequent researchers to compare, contrast, and comprehend the evolution of the questionnaires across the two studies.

Phase B: Attain a comprehensive grasp of the underlying reasons. What instills worry and concern regarding AI among Greek consumers? What circumstances exacerbate their apprehension towards AI? Is there a distinct consumer persona?

Phase A addresses our second study question: "To what extent does a deficiency in understanding the concept of AI contribute to ignorance, anxiety, and fear in the consumer journey?"What variables exacerbate Greek customers' concern, ignorance, and apprehension around AI?

The aim of this phase:

I. Investigate Varied Perspectives: The research seeks to collect diverse viewpoints from Greek consumers across various demographics, educational levels, and technological proficiency through focus group discussions and comprehensive interviews. The goal is to engage individuals from distinct focus groups that reflect contemporary Greek society, as indicated by data from the Greek Independent Statistical Organization, ensuring an optimal mix of participants for our study, including immigrants, religious individuals, rural residents, and those with differing educational backgrounds. This research seeks to elucidate the contextual factors influencing a Greek consumer's interaction with AI through conversational and narrative interviews, focusing on cultural norms, social influences, and personal experiences that shape their perceptions.

II. Identify motivations and emotions: The qualitative phase seeks to elucidate the motivations, emotions, and fundamental reasons influencing participants' attitudes toward AI. This may encompass fear, misunderstanding, excitement, skepticism, and various emotional responses. Capture Personal Stories: In-depth interviews enable participants to convey personal narratives, anecdotes, and real-life experiences with AI. This qualitative data will assist researchers in comprehending the impact of AI on participants' daily lives. Through qualitative research, the investigator will endeavor to reveal recurring terminology and imagery that exhibit consistent patterns across different interviewees.

III. Qualitatively contextualize quantitative data: Insights obtained during this phase can enhance and elucidate quantitative findings. Qualitative results elucidate the underlying causes for the observed quantitative patterns and correlations in subsequent phases of the study.

IV. Hypothesis Generation: We can derive the hypotheses or theories formulated during the qualitative phase of the literature review.

V. Informing Recommendations: Qualitative insights yield actionable recommendations to address concerns, enhance AI awareness, and promote informed consumer behavior among Greek consumers. Achieving these objectives will add depth, context, and a human dimension to the qualitative phase of the study, uncovering the underlying factors that influence Greek consumer perceptions and behaviors regarding AI.

Qualitative stage:

I. Method: Qualitative analysis.

II. Methods: Focus group talks, in-depth interviews, one-on-one or team interactions, and telephone communications in rural Greek regions.

Individuals will be informed on how to contact the researcher, Fanis Aritzis, who is based in Greece and ranks among the top 10% of podcasters and YouTubers. He will issue an open call for research participants through his platform, utilizing a URL link disseminated via his YouTube-Podcast videos and targeted social media advertisements. This URL link will direct users to a landing page containing comprehensive information, including GDPR notifications. Interested individuals can submit their credentials (email, name, and surname), after which Fanis Aritzis will

reach out to arrange interviews. A total of 30 participants will be selected based on criteria such as educational diversity, geographic location, age, and profession, all in compliance with GDPR regulations. All interviewees will be pre-informed and provided with the necessary documentation.

Rationale: To investigate comprehensively the subtleties of Greek consumers' views, attitudes, and behaviors towards AI. This methodology may reveal the cultural, social, and individual determinants influencing AI awareness and adoption.

Procedures to be adhered to: interviewees from Phase A who wish to engage in Phase B may submit their credentials via the contact form. These interviewees exhibit apprehension or worry regarding any AI technology.

Subsequently, the researcher will gather 20 interviewees from these contacts, aiming for a diverse array of backgrounds to capture a wide range of narratives for the second phase of the research. This will facilitate the exploration of various perspectives regarding the distrust and apprehension surrounding AI technologies. The objective of this research is to identify and comprehend the underlying reasons and to propose effective strategies for addressing these concerns.

Upon identifying the participants, the researcher will facilitate focus group conversations with varied groups of Greek consumers to collect qualitative insights into their perceptions, advantages, disadvantages, and apprehensions related to AI. Perform comprehensive interviews with individuals who demonstrate a lack of knowledge or apprehension regarding AI to ascertain the root causes and possible approaches to mitigate these issues.

Conduct thematic analysis on focus group transcripts and interview data to discern prevalent themes, patterns, and discrepancies.

Keywords: *Greece, Greek Consumers, Artificial Intelligence, Consumer Habits, Perceptions, Attitudes, Fear, Learning, Anxiety, Computer Anxiety*

Introduction: Upholding the credibility and validity of our research is paramount. This section delineates strategies to ensure the reliability and accuracy of our findings. By employing suitable data collection methods and analytical techniques, as well as

formulating clear and comprehensible questions, we enhance the integrity of our research.

Ensuring reliability and validity: To guarantee the reliability and validity of our research, we take into account the following essential factors:

1. Appropriate Analytical approaches: We identify relevant analytical techniques that correspond with your study objectives. This includes quantitative approaches, such as statistical tests, for the quantitative analysis of survey data.
2. Clearly Articulated Questions: In this section, we will formulate clearly articulated questions for the second phase of our research, the interview phase, to guarantee that participants comprehend them uniformly and furnish precise responses.
3. Preparation for Qualitative Research: Following the completion of the initial phase of our quantitative research through the questionnaire survey, we will commence preparations for the subsequent qualitative research phase, which involves interviews. This phase will thoroughly investigate participants' experiences, perspectives, and emotional responses concerning artificial intelligence.
4. Questionnaire Adaptation: We will modify our current questionnaire procedure from the quantitative study to suit the more open-ended format of qualitative research. This will involve integrating open-ended questions that invite participants to articulate their perspectives freely.
5. Participant Selection: We will choose a limited cohort of individuals (about 15–30) embodying unique perspectives and experiences for qualitative research. This approach will enable us to collect comprehensive and varied empirical data.
6. Data Collection Method: Employing in-depth interviews or observations. These techniques yield profound insights into participants' attitudes, opinions, and feelings.
7. Data Analysis: Examining interview transcripts and observations to discern thematic categories and trends. Coding methodologies will facilitate the appropriate organization and categorization of the data.
8. Interpretation and Conclusions: Ultimately, we will analyze the thematic categories and patterns (recurring words, slogans, emotions, images, etc.) identified. Subsequently, we will investigate the relationships between observations and interview responses to enhance our comprehension of the research topic under scrutiny.

9. Integration of Quantitative and Qualitative Research: Ultimately, we will incorporate the qualitative findings into the comprehensive analysis, enhancing the quantitative research outcomes.

The integration of quantitative and qualitative research findings yields a holistic comprehension of our subject, facilitating more nuanced conclusions. As we progress in the preparation and execution of your quantitative and qualitative research, we will modify and incorporate new insights that may arise from our data. We anticipate that this information will enhance our understanding of Greek consumers' perceptions of AI, their apprehensions and aspirations, and the impact of these perspectives on their behavior.

Recording Framework:

The Qualitative Interview

Greetings, I am Fanis Aritzis, a PhD candidate at the European University of Paris. Today marks the commencement of the second phase of my research entitled "The Impact of Artificial Intelligence on the Consumer Behavior of Greeks: Understanding the Awareness of AI Benefits in Their Consumer Journey and How Lack of Knowledge of the Concept of Artificial Intelligence Can Lead to Ignorance, Anxiety, and Fear." Accompanying me is [interviewer's name], and I appreciate your willingness to participate in this study. Your contributions are crucial to our research. Prior to commencing, please verify your name, gender, date of birth, educational attainment, religion, and ethnicity for our records. Furthermore, by engaging in this interview, you are granting your consent to partake in this study.

The formulation of qualitative questions for Phase B.

Similar to Phase A of the quantitative questionnaire, this qualitative phase was constructed by devising questions grounded in the existing literature and research findings concerning AI and consumer and individual apprehensions regarding AI technology. The demographic questions will remain consistent with those in the Phase A questionnaire.

We shall now proceed to the questions and compare them with the literature review:

1. To what extent are you acquainted with the concept of artificial intelligence? Research indicates a deficiency in the public's comprehension of AI technologies and their applications (Yigitcanlar et al., 2020; Cukurova et al., 2019). Yigitcanlar, T., Kankanamge, N., Regona, M., Maldonado, A., Rowan, B., Ryu, A.,... & Li, R. (2020). Artificial intelligence technologies and related urban planning and development concepts: How are they perceived and utilized in Australia? Journal of Open Innovation Technology Market and Complexity, 6(4), 187. https://doi.org/10.3390/joitmc6040187

2. Can you elucidate your daily interactions with artificial intelligence? This may encompass experiences with AI-enhanced products, services, or applications. Pliatsikas, P., & Economides, A. (2022). Factors Influencing the Intention of Greek Consumers to Use Smart Home Technology. Advances in Science and Innovations, 5(1). Link to Full Paper

3. Do you believe that media and governmental organizations sufficiently inform the public regarding artificial intelligence and its functionalities? Please elaborate on your reasoning. Have you come across any information from these entities that has shaped your view of AI? Ouchchy, L., Coin, A., & Dubljević, V. (2020). AI in the headlines: The portrayal of the ethical issues of artificial intelligence in the media. AI & Society, 35(4), 927-936.

4. What function should schools, educational institutions, or other platforms serve in improving public comprehension of artificial intelligence? Are there particular subjects or domains pertaining to AI that warrant more thorough exploration? Kim, J. H., Lee, H., & Cho, Y. (2022). Learning design to support student-AI collaboration: perspectives of leading teachers for AI in education. Education and Information Technologies.

5. What thoughts or emotions arise regarding the utilization of artificial intelligence in your consumer journey? Do you harbor any particular concerns, apprehensions, or uncertainties associated with AI in this context? Artificial intelligence (AI) has transformed the customer journey by facilitating personalized experiences, increasing efficiency, and strengthening customer relationships (Puntoni et al., 2020; Bhagat et al., 2022; Rana et al., 2021).

Do you use Google Maps to locate a store?

7. Do you utilize the new ChatGPT tool? Would you like guidance on its proper usage?

8. Did you utilize the digital transcript for your vaccine during COVID? If so, were you aware that it was generated using AI?

9. Consider a situation in which artificial intelligence customizes pricing for various consumers. For example, certain individuals may obtain discounts while others incur elevated prices based on their online behavior. What is your perspective on such price discrimination facilitated by AI? Online pricing algorithms differentially influence product costs among consumers. (Rahwan et al., 2019). I. Rahwan, M. Cebrian, N. Obradovich, J. Bongard, et al., Machine behavior, Nature 568 (25) (2019) 477–486.

10. Conversely, could you articulate any apprehensions regarding the detrimental effects of artificial intelligence on consumer behavior? For instance, do you have concerns about job displacement, privacy violations, or a perceived erosion of autonomy? I am apprehensive that individuals may exploit technology to surveil my every action. (Khasawneh, 2018), Y. O. Khasawneh, Technophobia: Examining its Hidden Factors and Defining It, Technol. Soc. 54 (2018) 93–100.

11. How do you evaluate your capacity to adjust to the growing incorporation of AI in diverse facets of life? Are there particular challenges you anticipate or competencies you believe are crucial to cultivate in order to navigate this AI-centric environment? I would find it challenging to learn a programming language. (Heinssen et al., 1987) R.K. Heinssen, C.R. Glass, and L.A. Knight, Assessing computer anxiety: development and validation of the computer anxiety rating scale, Comput. Hum. Behav. 3 (1) (1987) 49–59.

12. In light of the prevailing awareness of AI and the associated potential for worry or dread, what strategies may be implemented to enable individuals to confidently adopt AI technologies and make educated consumer choices?

13. Ultimately, do you believe that Greek consumers harbor apprehensions regarding AI?

Advisory for the interviewee:

Your views are invaluable to our research, and your forthright comments are highly appreciated. Thank you for articulating your thoughts and ideas on these significant

issues. Is there anything else you wish to contribute or discuss concerning artificial intelligence and its influence on consumer behavior?

7. Conclusion

This research design employs a mixed-methods approach to address the existing gap in the literature by elucidating Greek consumers' perceptions and behaviors regarding AI. The study's findings are anticipated to yield significant insights and recommendations for both academia and industry.

PHASE B: QUALITATIVE QUESTIONS

1. How familiar are you with the concept of artificial intelligence?

2. Can you describe how you have encountered artificial intelligence daily? This could include experiences with AI-driven products, services, or applications.

3. Do you feel that the media and government agencies adequately educate the public about artificial intelligence and its capabilities? Why or why not? Have you encountered any information from these sources that has influenced your perception of AI?

4. What role should schools, educational institutions, or other platforms play in enhancing public understanding of artificial intelligence? Are there specific topics or areas related to AI that should be covered more extensively?

5. What thoughts or feelings about using artificial intelligence in your consumer journey come to mind? Do you associate any specific concerns, fears, or uncertainties with AI in this context?

6. Do you use Google Maps to find a store?

7a. Do you use the ChatGPT new tool? Would you like someone to show you how to properly use it?

7b. Do you use/ did you use during COVID the digital transcript for your vaccine? If yes, did you know that this was made using AI?

8. Imagine a scenario where AI personalizes prices for different consumers. For instance, some individuals might receive discounts while others pay higher fees based on online behavior. How do you feel about such price discrimination by AI?

10. Conversely, can you share any concerns about artificial intelligence's potential negative impact on consumer behavior? For example, do you worry about job displacement, privacy issues, or a sense of loss of control?

11. How do you perceive your ability to adapt to the increasing integration of AI in various aspects of life? Are there specific challenges you foresee or skills you think are essential to develop to navigate this AI-driven landscape?

12. Considering the current state of AI awareness and the potential for anxiety or fear, what measures could be taken to empower individuals to embrace AI technologies confidently and make informed decisions as consumers?

13. Finally, do you think Greek consumers fear AI?

Communication to the interviewees during the 2nd phase:

For the second phase of the quantitative research, those who had expressed their willingness to participate in the telephone interview were provided with a streamlined process through the researcher's website, www.fanisaritzis.com. An online booking system was established, allowing each participant to schedule a convenient date and time for the interview while providing their contact information. This approach ensured efficient communication and coordination, eliminating any potential delays in setting up appointments. This method proved highly effective, as it allowed all participants to receive immediate updates and minimized the need for additional communication regarding appointment scheduling. Feedback from the interviewees regarding the overall user experience was overwhelmingly positive, as they found the process to be both convenient and hassle-free, resulting in minimal inconvenience or fatigue on their part. The research sent to those people an email-Viber campaign.

Chapter IV. Data Analysis & Presentation of Results & Findings

a) Data Analysis

b) Presentation of Results and findings (in the form but not limited to)

- Surveys Results, interview Results, intervention/observation results, and any other

4.1. Data Analysis

A total of 318 Greek consumers from across the Greek nation participated in the preliminary phase (Phase A) of an online survey hosted on Google Forms. Prior to the official deployment, a pilot phase was conducted to assess feasibility and refine the questionnaire's wording to enhance clarity and user-friendliness. Additionally, the survey commenced with a section dedicated to disclaimers and definitions pertaining to artificial intelligence. This was incorporated to provide participants with a clearer understanding of the subject matter and to streamline the focus of the broader topic.

The researcher used Facebook ads and targeted the population in Greece with the ultimate goal of getting them to answer the questionnaire. Below you will find the data and analysis of the results. Additionally, there were spikes in participation as the researcher sent the questionnaire to Greek influencers with a large number of followers who kindly shared the questionnaire with their thousands of followers, leading to increased participation on specific days. A big thank you to Christos Kogias, Maria Filipou, Angelos Kalfas, and Vicky Vassilakopoulou for sharing the link on their profiles and assisting with this research.

Reasons of sample size

AI experiences and perceptions of 318 Greek consumers were studied. Online platforms and influencers collected diverse demographic data.

Visualizing Descriptive Statistics: Stats describe the sample's sociodemographics. Wide age range suggests technological familiarity and AI perceptions vary. Nearly equal gender distribution revealed AI perspectives from both men and women.

Pie charts and bar graphs will show demographic and shopping preferences. A bar graph shows tech-savvy by age. PCA identified consumer AI attitudes' key factors. The analysis was validated with a Kaiser-Meyer-Olkin value of 0.90, ensuring enough samples. APCA parts were "Implications, Surveillance, and Ethical Issues," "Concerns about Lack of Knowledge about AI," & "Consumer and Social Concerns."

The thematic analysis focused on privacy, AI speed, and AI ethics. Fear of emerging technologies and AI integration's social and ethical effects is why these themes are important.

Critical Literature Link: Smith and Burke (1996) discuss public concerns about rapid technology transition and privacy and autonomy. AI's impact on consumer behavior mirrors Chopra and White's (2007) ethics and transparency concerns. The research shows how age, sociodemographic, and AI anxiety are related. This will illuminate how different groups view AI. Recommendations Based on Results: Critical analysis includes several suggestions : Educational Initiatives: To reduce AI concerns, educational programs should improve AI technology understanding (Cukurova et al. 2019).

4.2. Presentation of Results & Findings

Descriptive Statistics

Sociodemographic characteristics

Table 1 presents the sociodemographic characteristics of the survey's participants. The sample consisted of 318 participants with a total average age of 37.52 (SD = 13.83) and a range of 14-79 years. 308 (96.9%) of the participants were and 224 (70.4%) were Christian Orthodox.

Table 1.

Sociodemographic Characteristics of Participants

	n	*%*
Gender		
Female	157	49.4
Male	153	48.1

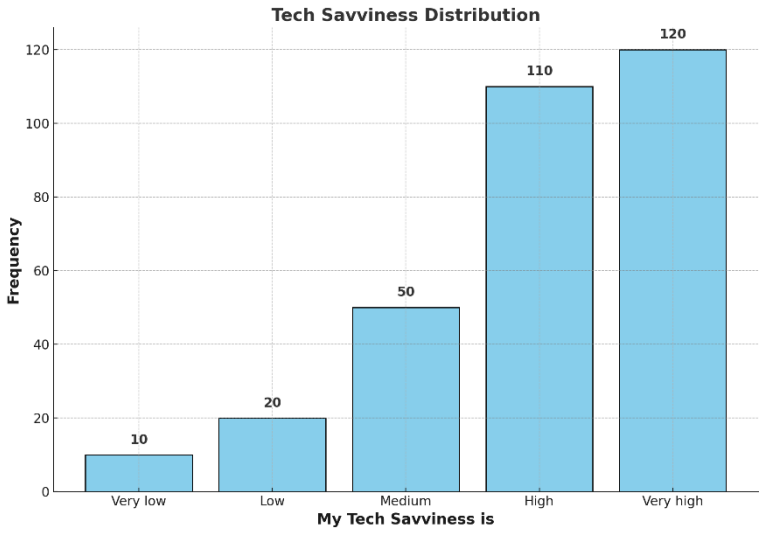
Other	8	2.5
I like shopping		
Clothing: Fashion	103	32.4
Electronics	64	20.1
Food: Refreshments	44	13.8
Nutrition - Health	31	9.7
Decoration	11	3.5
Car Accessories	10	3.1
Other	55	17.3
I shop		
Occasionally	92	28.9
After research	125	39.3
When something appears as an offer	20	6.3
Often	81	25.5
Shopping budget		
A few	64	20.1
Normal	180	56.6
A lot	74	23.3
My online presence is		
I'm only doing my research and having fun	199	62.6
I simply follow influencers	28	8.8
I purchase things and credit offers	91	28.6
I get influenced by		
Offers	49	15.4
Personal research	138	43.4
Online reviews	61	19.2
Friends and their reviews	56	17.6
My Tech Savviness is		
Very low	3	.9
2	15	4.7
3	65	20.4

4	114	35.8
Very high	121	38.1
My Shopping Platform is		
Shops	47	14.8
Online shops	19	6.0
Both	246	77.4
My Lifestyle is		
Technology	74	23.3
Art	55	17.3
Travelling	67	21.1
Sports	32	10.1
Nature	35	11.0
Fashion	15	4.7
Religion and Patriotism	17	5.3
Tradition	23	7.2
Place of residence		
Rural	167	52.5
Urban	151	47.5

In figure can be seen that 135 (73.9%) had at least high tech Savviness.

Figure 1.

Tech Savviness barchart

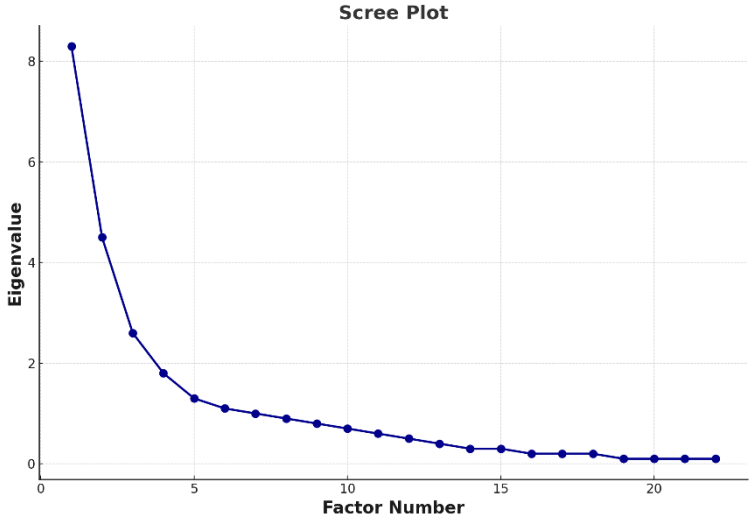


Principal Component Analysis on the items of Artificial Intelligence

Principal components analysis (PCA) was run on the items of artificial intelligence in order to define the significant factors arising from them. The assumptions of performing the PCA were met prior to the analysis with a Kaiser-Meyer-Olkin value of.90, and a statistically significant Bartlett's test of sphericity was ($p < .001$). PCA produced five components that had initial eigenvalues totaling greater or near one, explaining 38.32%, 10.81%, 6.32%, 5.78, and 4.87%, respectively, of the total variance. Scree plot (Figure 2) also suggested five components as well, according to Cattell (1966). However, component number 4 had low Cronbach a levels ($\alpha = .40$), therefore it was rejected. Finally, three components were used that explained a total of 55.44% of the total variance.

Figure 2.

Scree plot suggesting the number of components used



A Varimax orthogonal rotation was used for the interpretation of the data. As seen in Table 2, Component 1 consisted of 6. I'm worried that AI will collect too much of my personal information. 5. I'm afraid that artificial intelligence (AI) will monitor consumer behavior, 7. The forecasting of my preferences by AI makes me feel as though my privacy is in danger; 4. I'm worried that AI will forecast and affect purchasing decisions. 8. AI may harm humans to achieve a goal, which gives me anxiety and 9. I worry that the control of AI/Super AI by a few individuals will introduce great risks to the entire society. Component 2 consisted of 17. Understanding AI algorithms requires a high level of talent, which is difficult for me. 16. I do not think I would be able to perform well in professional courses in AI. 18. AI technology updates too quickly and is very difficult to learn. 1. How well do you understand the concepts of artificial intelligence? 2. Do you believe that media and government agencies provide sufficient knowledge and information to citizens-consumers in order to feel secure about the topic of artificial intelligence and its capabilities? Finally, Component 3 consisted of 19. I worry that people cannot figure out how AI makes decisions when they want to purchase a good or a service. 21. I worry that AI will attain the same level of consciousness as humans. 20. I worry that humans have special feelings (such as love) for super AI, and all of these are against my religion. NEW input from the researcher, 14. I am worried that an AI machine may be brighter than me. 15. I'm worried that AI will replace many people's work and 13. I am worried that AI will

replace my work in the future. According to the aforementioned groups of questions, the final components were named "Implications, Surveillance, and Ethical Issues, «Concerns about lack of knowledge about AI, " and «Consumer and Social Concerns.

Table 2.

Rotated Structure Matrix for PCA

Items	Rotated Component Coefficients		
	Comp. 1	Comp. 2	Comp. 3
6. I'm worried that AI will collect too much of my personal information	.891		
5. I'm afraid that artificial intelligence (AI) will monitor consumer behavior	.804		
7. The forecasting of my preferences by AI makes me feel as my privacy is in danger	.760		
4. I'm worried that AI will forecast and affect purchasing decisions	.724		
8. AI may harm humans to achieve a goal, which gives me anxiety	.628		
9. I worry that the control of AI/Super AI by a few individuals will introduce great risks to the entire society.	.567		
17. Understanding AI algorithms requires a high level of talent, which is difficult for me		.916	
16. I do not think I would be able to perform well in professional courses in AI		.781	
18. AI technology updates too quickly and is very difficult to learn		.558	
1. How well do you understand the concepts of artificial intelligence?		-.535	

2. Do you believe that media and government agencies provide sufficient knowledge and information to citizens-consumers in order to feel secure about the topic of artificial intelligence and its capabilities?	.392
19. I worry that people cannot figure out how AI makes decisions during when they want to purchase a good or a service	-.924
21. I worry that AI will attain the same level of consciousness as humans	-.870
20. I worry that humans have special feelings (such as love) for super AI, and all of these are against my religion. NEW input from the researcher	-.585
14. I am worried that an AI machine may be brighter than me	-.524
15. I'm worried that AI will replace many people's work	-.442
13. I am worried that AI will replace my work in the future	-.403

Scales of AI

Mean scores and standard deviations for the scales created by the component analyses are presented in Table 3 below. Also, it is noted that participants wish schools, governments, and media to train them more and on a more regular basis around AI in the future (M = 4.25, S.D. = .99).

Table 3.

Means, St.Ds., Min. and Max. scores for the Scales of AI

Variable	*Min.*	*Max.*	*Mean*	*St.D.*

Implications, Surveillance, and Ethical Issues (*α* = .90)	**6**	**32**	**22.19**	**6.18**
4. I'm worried that AI will forecast and affect purchasing decisions	1	5	3.56	1.24
5. I'm afraid that artificial intelligence (AI) will monitor consumer behavior	1	5	3.44	1.37
6. I'm worried that AI will collect too much of my personal information	1	5	3.77	1.26
7. Forecasting of my preferences makes me feel as my privacy is in danger	1	7	3.84	1.38
8. AI may harm humans to achieve a goal, which gives me anxiety	1	5	3.76	1.18
9. I worry that the control of AI/Super AI by a few individuals will introduce great risks to the entire society.	1	5	3.82	1.15
Concerns about lack of knowledge about AI (*α* = .56)	**11**	**29**	**18.95**	**3.91**
1R. How well do you understand the concepts of artificial intelligence?	3	7	4.84	1.23
2R. Do you believe that media and government agencies provide sufficient knowledge and information to citizens-consumers in order to feel secure about the topic of artificial intelligence and its capabilities?	3	7	5.87	1.24
16. I don't think I would be able to perform well in professional courses in AI	1	5	2.76	1.44
17. Understanding AI algorithms requires a high level of talent, which is difficult for me	1	5	2.44	1.33
18. AI technology updates too quickly and is very difficult to learn	1	5	3.03	1.24
Consumer and Social Concerns (*α* = .90)	**6**	**30**	**19.11**	**6.70**
13. I am worried that AI will replace my work in the future	1	5	3.14	1.38

14. I am worried that an AI machine may be brighter than me	1	5	3.01	1.44
15. I'm worried that AI will replace many people's work	1	5	3.74	1.19
19. I worry that people cannot figure out how AI makes decisions during when they want to purchase a good or a service	1	5	3.00	1.38
20. I worry that humans have special feelings (such as love) for super AI and all of these is against in my religion. NEW input from the researcher	1	5	3.25	1.36
21. I worry that AI will attain the same level of consciousness as humans	1	5	2.97	1.46

Normality Testing

Normality tests were conducted in order to examine whether the data collected are normally distributed according to the results of the Kolmogorov-Smirnov test. The modalities of «Implications, Surveillance, and Ethical Issues», «Concerns about lack of knowledge about AI», and «Consumer and Social Concerns» were not normally distributed ($p < .001$).

Inferential Statistics

Relation between AI scales and age

For the purpose of examining the correlation between the AI's variables and age, the Pearson correlation was applied after confirming all the necessary prerequisites (Table 4).

Table 4.

Descriptive Statistics and Pearson Correlations

Variables	*n*	1	2	3

1. Implications, Surveillance, and Ethical Issues	318	-		
2. Concerns about lack of knowledge about AI	318	.39***	-	
3. Consumer and Social Concerns	318	66.***	.53***	-
4. Age	318	.03	.09	-.03

***p<.001.

The correlation showed that age was not related to «Implications, Surveillance, and Ethical Issues» (p =.559), «Concerns about lack of knowledge about AI» (p =.110), nor «Consumer and Social Concerns» (p =.672). However, it is noteworthy that «Implications, Surveillance, and Ethical Issues» was related with «Concerns about lack of knowledge about AI» [r(3,314) = .39, p < .001] and «Consumer and Social Concerns» [r(3,314) = .66, p < .001] and that concerns about lack of knowledge about AI was related to «Consumer and Social Concerns» [r(3,314) =.53, p <.001].

Relation between AI scales and Location

An independent sample T- test was performed in order to examine the hypothesis that there are differences between those living in urban and those living in rural areas according to the AI scales' scores (Table 5).

Table 5.

Independent samples t-test scores and values of descriptive statistics for the effect of Location on AI scales

Measure	Location				95% CI for the mean difference	t	df
	Rural		Urban				
	M	*SD*	*M*	*SD*			

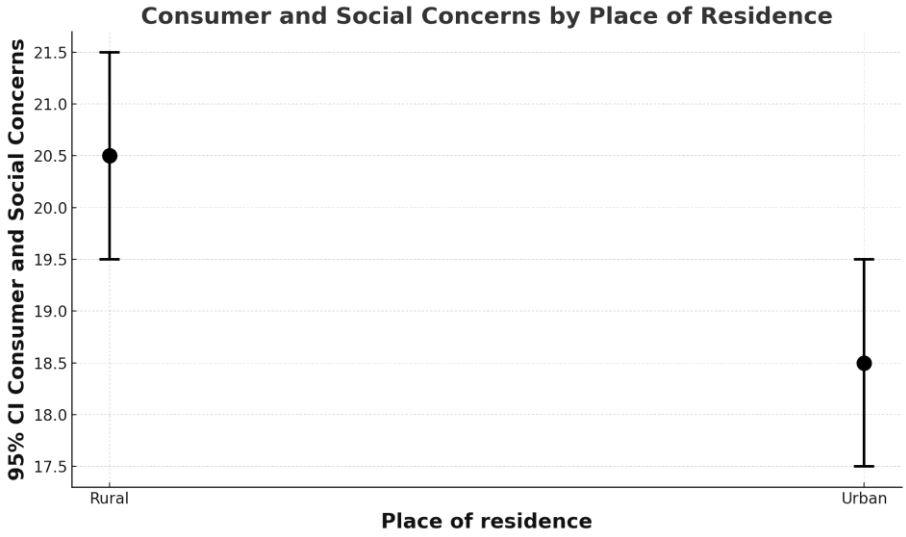
Implications, Surveillance, and Ethical Issues	22.59	6.170	21.74	6.19	-.51	2.22	1.24	316
Concerns about lack of knowledge about AI	19.33	4.143	18.52	3.61	-.05	1.66	1.85	315.59
Consumer and Social Concerns	19.92	6.774	18.22	6.53	.23	3.17	2.27*	316

*p <.05.

The results of the t-test independent samples show that consumer and social concerns differ between people living in rural and urban areas [t(316) = 2.27, p =.024]. Particularly, people in rural areas have higher consumer and social concerns regarding AI compared to people in urban areas (Figure 3). Finally, there were no differences between urban and rural areas in implications, surveillance, and ethical issues (p =.217) and concerns about lack of knowledge about AI (p =.065).

Figure 3.

Confidence Interval Error bar for Consumer and Social Concerns according to Location



Relation between shopping preferences and AI scales

Three-way independent sample analysis of variance was performed in order to evaluate the differences between the AI scales as regards the shopping preferences (Table 6).

Table 6.

One-way ANOVA for the AI scales as regards the shopping preferences

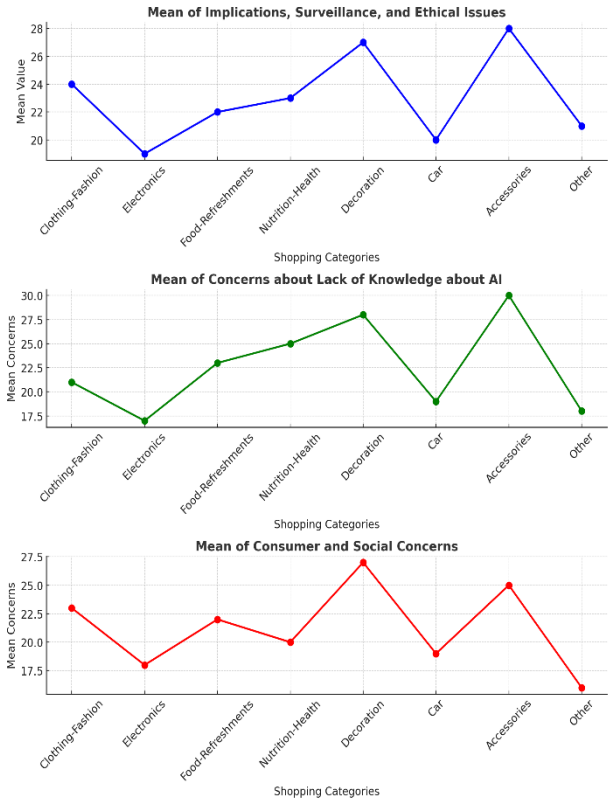
	Implications, Surveillance, and Ethical Issues		Concerns about lack of knowledge about AI		Consumer and Social Concerns	
	M	SD	M	SD	M	SD
Shopping Preferences						
Clothing: Fashion	21.88	6.02	18.63	3.80	18.75	6.23
Electronics	19.56	6.68	17.64	3.36	16.86	6.46
Food: Refreshments	22.41	5.73	19.34	4.36	19.64	7.09
Nutrition - Health	22.84	5.13	19.00	3.70	19.48	5.73
Decoration	25.82	7.07	22.36	5.90	24.18	7.78
Car Accessories	26.40	3.20	21.90	3.14	24.60	3.78

The results show that there are statistically significant differences between the several Shopping Preferences as regards the Implications, Surveillance, and Ethical Issues [$F(6,311) = 4.28$, $p < .001$], the concerns about lack of knowledge about AI [$F(6,311) = 4.13$, $p < .001$], and consumer and social concerns [$F(6,311) = 3.76$, $p < .001$]. The post-hoc comparison, using Tukey method, showed that those that preferred Electronics had

lower Implications, Surveillance, and Ethical Issues compared to those that preferred Decoration (p = .026) and Car Accessories (p = .016). Similarly, those that preferred Electronics had lower concerns about lack of knowledge about AI compared to those that preferred Decoration (p =.003) and Car Accessories (p =.019), and, again, those that preferred Electronics had lower consumer and social concerns compared to those that preferred Decoration (p =.012) and Car Accessories (p =.010) (Figures 4,5 and 6).

Figures 4, 5, and 6.

Mean of AI scales according to shopping preferences



Relation between shopping platforms and AI scales

Three one-way independent sample analyses of variance were performed in order to evaluate the differences between the AI scales as regards the shopping platforms (Table 7).

Table 7.

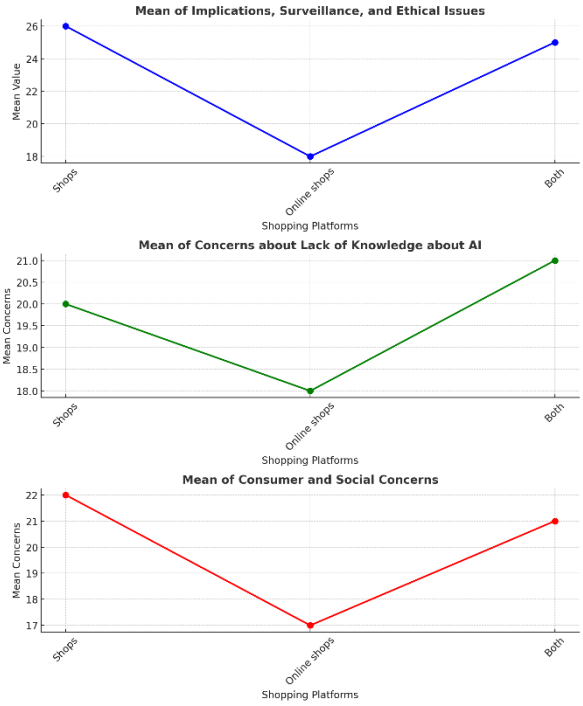
One-way ANOVA for the AI scales as regards the shopping platforms

	Implications, Surveillance, and Ethical Issues		Concerns about lack of knowledge about AI		Consumer and Social Concerns	
	M	SD	M	SD	M	SD
Shopping Platforms						
Shops	24.77	5.14	20.40	4.24	21.32	6.52
Online shops	20.05	6.08	17.63	4.04	19.11	6.59
Both	21.92	6.29	18.81	3.80	18.69	6.72

The results show that there are statistically significant differences between the several shopping platforms as regards the implications, surveillance, and ethical issues [$F(6,311) = 5.56$, $p = .004$], the concerns about lack of knowledge about AI [$F(6,311) = 4.53$, $p = .011$], and consumer and social concerns [$F(6,311) = 3.07$, $p = .048$]. The post-hoc comparison, using the Tukey method, showed that those that preferred shops had higher implications, surveillance, and ethical issues compared to those that preferred online shops ($p = .014$) or both ($p = .010$). Similarly, those that preferred shops had higher concerns about lack of knowledge about AI compared to those that preferred online shops ($p = .025$) or both ($p = .028$). Finally, those that preferred shops had higher consumer and social concerns compared to those that preferred both ($p = .037$) (Figures 7, 8, and 9).

Figures 7, 8, and 9.

Mean of AI scales according to shopping platforms



Relation between religion and AI scales

Three-way independent sample analyses of variance were performed in order to evaluate the differences between the AI scales as regards the religion (Table 8).

Table 8.

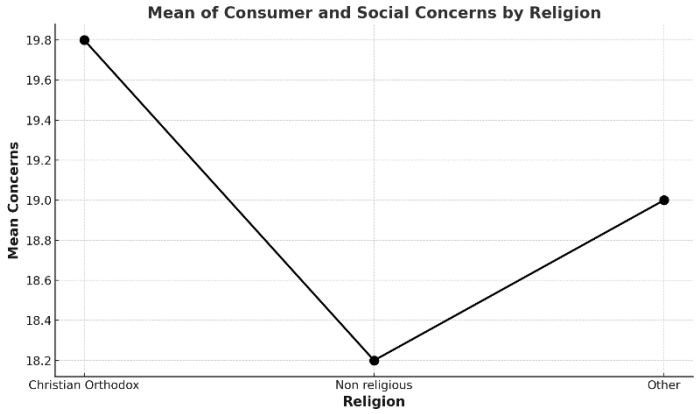
One-way ANOVA for the AI scales as regards the religion

	Implications, Surveillance, and Ethical Issues		Concerns about lack of knowledge about AI		Consumer and Social Concerns	
	M	SD	M	SD	M	SD
Religion						
Christian Orthodox	22.58	6.22	18.86	3.97	19.71	6.59
Non religious	21.54	5.76	18.94	3.77	17.43	6.34
Other	20.55	6.64	19.62	3.86	18.28	7.78

The results show that there are statistically significant differences between the several religions as regards the consumer and social concerns [$F(2,315) = 3.19$, p whereas there are no differences in implications, surveillance, and ethical issues (p =.160) and the concerns about lack of knowledge about (p =.618). The post-hoc comparison, using Tukey method, showed that **Orthodox Christians showed higher consumer and social concerns regarding AI compared to non-religious people (p = .042) (Figure 10).**

Figure 10. =.042)

Mean of Consumer and Social Concerns in AI according to religion



Phase B: Qualitative Phase

Data Collection Methods:

The research employed a combination of interviews and observations via phone or Skype. All interviews are available online for future researchers and are in Greek.

The interviews were semi-structured, permitting flexibility in participants' responses.

Interviews involved one-on-one participant engagement to facilitate comprehensive talks.

Objective:

The primary objective of this research is to explore Greek consumers' perceptions and apprehensions concerning artificial intelligence (AI). Considering the swift progress in AI and its growing incorporation into numerous facets of everyday life, it is essential to comprehend the fundamental variables that contribute to any

apprehensions or anxieties that Greek customers might possess. This study specifically intends to:

1. Contextual Comprehension: Investigate the extensive framework within which Greek customers engage with AI. This encompasses comprehending the cultural, historical, and economical elements that may shape their perceptions.

2. Daily Interactions: Evaluate the degree of AI integration in the everyday lives of Greek customers, particularly concerning purchasing decisions and consumer behavior. This will offer insights into the frequency and contexts in which consumers interact with AI-driven services.

3. Origins of Concerns: Determine the primary factors contributing to Greek consumers' skepticism or apprehension regarding AI. This encompasses apprehensions over privacy and data security, anxieties about job displacement, and a deficiency in comprehension of AI functionality.

4. Recommendations for Enhancement: Solicit consumer opinion regarding potential measures to address their problems. This may encompass recommendations for more transparency in AI systems, educational activities to elevate AI literacy, or regulatory measures to guarantee ethical AI practices. This research seeks to elucidate the dimensions of the Greek consumer's connection with AI, facilitating more informed decisions by corporations, legislators, and educators in the future.

Data Examination:

Thematic analysis was employed to uncover, analyze, and report patterns within the data. The technique was iterative, involving the repeated examination of data to enhance themes.

Population statistics:

The total number of participants in the qualitative research was 20.

Male: 9 | 45%

Female: 11 | 55%

Gender Disparities:

Analysis of the data reveals distinct gender-specific tendencies.

Women and Privacy Concerns: Female participants articulated greater apprehensions regarding data privacy and the potential exploitation of personal information compared to their male counterparts.

Male participants had a greater propensity for comprehending the technical mechanisms of AI, indicating a possible gender disparity in technical knowledge or interest.

Geographical Insights:

Urban versus Rural: Participants from urban locales such as Athens and Thessaloniki exhibited greater familiarity with utilizing AI in everyday tasks, including navigation, shopping, and entertainment. Conversely, individuals from rural regions or smaller municipalities articulated a preference for more localized AI solutions that address their particular requirements and lifestyles.

Education: 45% of participants held a university degree, while 30% had a postgraduate degree. There is also a 25% that holds a PhD degree. The education level of the attendees is really high

Results:

1. **Attitude Towards Technology:** Participants expressed a positive attitude towards using technology, with 70% stating they find it user-friendly.
2. **App Preferences:** The most commonly used applications by participants are social networking apps (60%) and news apps (40%).

Common patterns in responses:

1. Greek people tend to fear new technological advancements and AI due to their socio-economic and educational background

2. Greek people do not understand that they use AI during their consumer journey and when they do, they are afraid of it

A prevalent theme among participants was apprehension or skepticism towards AI. This emotion was frequently associated with apprehensions around data privacy and the possible exploitation of personal information.

Daily Utilization of AI: Notwithstanding the above described apprehensions, numerous participants recognized their engagement with AI in everyday activities, particularly through virtual assistants, recommendation algorithms on streaming services, and navigation applications.

Enhancing AI Perception: A prevalent recommendation from participants was the necessity for greater transparency in AI systems. They articulated a wish to comprehend the decision-making processes of AI, particularly with their personal data.

A considerable proportion of participants, regardless of demographic factors, articulated a worry stemming from the uncertainties associated with AI. This signifies a deficiency in comprehensive understanding and awareness regarding the technology.

Economic Implications: Apprehensions regarding unemployment and economic inequalities were widespread. Participants frequently inquired about the ramifications of AI on the employment landscape, particularly in industries such as manufacturing, customer service, and transportation.

Ethical and Moral Considerations: Numerous participants expressed concerns over the ethical implications of AI, including decision-making in critical situations (e.g., autonomous vehicles during emergencies) and the potential biases inherent in AI systems.

Aspirations for Regulation: A persistent topic was the demand for stringent regulations and standards governing AI development and implementation. Participants articulated the necessity for transparent norms that guarantee the ethical and appropriate utilization of AI.

Prevalent Issues:

Job Displacement: Numerous participants, regardless of age or educational background, expressed apprehensions regarding AI's potential to supplant jobs and induce unemployment, while also recognizing it as a valuable opportunity to enhance their skills in AI.

Dependency: There exists a collective concern of excessive reliance on AI, resulting in a decline of human skills and competencies.

"Irreplaceability of Human Touch": A prevalent sentiment among diverse populations was the inimitability of human emotions, judgment, and intuition. Participants frequently highlighted situations in which they would favor human discernment above an AI's determination.

Participants articulated a strong desire for control over AI-driven systems, highlighting the necessity of "off-switches" and the capacity to override AI judgments.

"AI as an Instrument, Not a Sovereign": A common viewpoint is to regard AI as an instrument to enhance human abilities rather than supplant them. Participants conveyed optimism regarding AI's potential when utilized as an assistant rather than as a decision-maker.

Analysis of word frequency:

Analysis of the replies revealed specific terms and phrases that were notable for their frequency.

"Trust": This term frequently emerged, highlighting its crucial significance in the adoption and acceptance of AI.

"Understand" or "know": These phrases emphasize the aspiration for clarity and comprehension of AI operations.

"Safety" and "Security": These terms underscore the significance of robust AI systems that safeguard user data and privacy.

Frequently Used Phrases:

"I lack technological proficiency": This expression was articulated by numerous participants, particularly those over 40, signifying a possible deficiency in technological literacy.

The desire for assurance regarding safety is a predominant worry among numerous participants, highlighting the importance of the security of AI systems.

Three out of twenty interviewers (two men and one woman) utilized the identical example to elucidate AI and its possibilities. “Artificial intelligence is akin to a knife; it can be employed to slice bread or to inflict harm.”

"Irreplaceability of Human Touch": A prevalent sentiment among diverse populations was the inimitability of human emotions, judgment, and intuition. Participants frequently highlighted situations in which they would choose human judgment over an AI's decision-making.

“Skills advancement”: fifty percent of the respondents indicated that it would be an excellent opportunity to enhance their technological competencies, ranging from computer abilities to artificial intelligence skills.

Participants articulated a strong desire for control over AI-driven systems, highlighting the necessity of "off-switches" and the capacity to override AI judgments.

"AI as an Instrument, Not a Sovereign": A common viewpoint is to see AI as an instrument to enhance human talents rather than supplant them. Participants conveyed optimism regarding AI's potential when utilized as an assistant rather than as a decision-maker.

“Requirement for Adequate Trainers”: Education and appropriate training received exceptionally high ratings from all respondents. There is significant demand among the populace for adequate information regarding AI.

Correlations and Regressions:

Age and Acquaintance with AI:

Age does not influence one's knowledge with AI. Older individuals may possess proficiency in AI, while younger individuals tend to lack such expertise and exhibit greater apprehension and trepidation towards AI technologies. Education on AI throughout the consumer journey is crucial at all ages to alleviate apprehension about AI.

Academic Background and Level of Concern:

A favorable association exists between elevated education levels and the intensity of concerns articulated regarding AI. Individuals possessing doctoral degrees frequently explored the cultural and philosophical ramifications of AI.

Perspectives from Various Interviewees:

Junior Participants: This cohort had a greater willingness to engage with innovative technology, including artificial intelligence. They were also more inclined to associate AI with convenience.

Senior Participants: They articulated greater apprehensions regarding AI, frequently associating technology with possible employment displacement and a deficiency of human interaction in services.

Participants with advanced education: This cohort exhibited a greater propensity to critique AI, insisting on transparency and ethical issues in its implementation.

All respondents concurred that Greek consumers lack trust in AI throughout their consumer experience, despite their awareness and utilization of it.

Comparison of Phase A (Quantitative) and Phase B (Qualitative) of the Research

One. Quantitative Results (Phase A):

Sixty-five percent of respondents recognize the presence of AI in their consumer experience.

Forty percent possess a clear comprehension of the advantages AI offers them as consumers.

Thirty percent reported experiencing anxiety or panic concerning AI's influence on their shopping choices.

Twenty percent acknowledged evading specific items or services owing to their insufficient comprehension of AI.

Qualitative Results (Phase B):

A total of 20 interviews were done.

Forty percent of the respondents indicated that their limited understanding of AI induces anxiety regarding its ramifications.

Forty percent reported feeling overwhelmed by the swift progress in technology and artificial intelligence.

A mere 5% indicated that they have encountered unfavorable narratives regarding AI, which has shaped their perception.

Correlation:

A correlation appears to exist between the deficiency in understanding AI and the degree of anxiety or dread articulated by the respondents. Individuals lacking awareness or possessing insufficient knowledge regarding AI often exhibit heightened unfavorable emotions towards it.

Insights from literature:

Evidence suggests a positive correlation between inadequate understanding of artificial intelligence (AI) and increased anxiety or fear levels. Empirical research indicates that persons who lack understanding or familiarity with AI often display more unfavorable emotional reactions towards it (Kwak et al., 2022). This lack of comprehension may lead to anxiety and discomfort concerning the future consequences

of AI, especially its possible effects on employment (Xu et al., 2023). Moreover, academic research has revealed a tenuous association between anxiety and insufficient understanding of AI (Lemay et al., 2020). These findings highlight the importance of fostering education and understanding regarding AI to mitigate the fear and worry it generates. Enhancing knowledge and familiarity with AI may foster more favorable views and diminish negative feelings towards it (Kwak et al., 2022).

In this context, our research theme, "The Impact of Artificial Intelligence on Greek Consumer Behavior: Analyzing Awareness of AI Benefits in Their Consumer Journey and the Consequences of Insufficient Knowledge of Artificial Intelligence, Including Anxiety, Ignorance, and Fear," is validated. The Greek consumer's journey is markedly shaped by their awareness and comprehension of AI, as demonstrated by our data. Their apprehensions and reservations, arising from insufficient information, not only corroborate our research premise but also highlight the pressing necessity for focused educational initiatives. These initiatives can potentially close the knowledge gap, alleviate unfounded worries, and promote a more educated and constructive customer interaction with AI-driven platforms and services.

Two. Emotional Reaction to Artificial Intelligence:

Quantitative (Phase A): 30% reported anxiety or panic concerning AI's influence on their consumer choices.

Qualitative (Phase B): Numerous respondents expressed feelings of being overwhelmed by swift technological progress, with some referencing negative narratives about AI as a source of their anxiety.

Observation:

The qualitative insights contextualize the quantitative data. The anxiety and fear are not mere abstractions; they arise from genuine apprehensions over the ramifications of AI, its swift advancement, and the possible adverse outcomes of its misuse.

Insights from literature:

The apprehensions and adverse sentiments expressed by customers over the swift progression of artificial intelligence (AI) are justified. Studies have shown that customers are concerned about the potential misuse of their personal information by AI systems (Rajaobelina et al., 2021). Concerns regarding privacy and a deficiency of trust in AI systems foster negative perceptions of AI products and services (Wang et al., 2023; Kronemann et al., 2023). Furthermore, consumers may demonstrate reluctance to the adoption of AI in some areas, such as healthcare, owing to concerns regarding the potential disregard for human uniqueness and the inability of AI to account for particular features and circumstances (Longoni et al., 2019). Concerns and negative emotions can profoundly affect consumer behavior and their readiness to engage with AI services (Jin et al., 2021). Nonetheless, it is crucial to recognize that AI possesses potential advantages, like personalization and enhanced customer service, which can elicit pleasant emotions and cultivate attachment to AI-driven services (Pantano & Scarpi, 2022). Businesses and regulators must consider the legitimate worries and adverse sentiments articulated by consumers regarding AI to foster trust, mitigate privacy issues, and maintain ethical standards.

Given these insights, our research theme, "The Impact of Artificial Intelligence on Greek Consumer Behavior: Analyzing Awareness of AI Benefits in Their Consumer Journey and the Consequences of Insufficient Knowledge of Artificial Intelligence, Including Anxiety, Ignorance, and Fear," is strongly validated. The Greek consumer environment, as indicated by our study, is profoundly influenced by their understanding, or lack thereof, of AI. Their fears and misunderstandings, stemming from a lack of information, not only support our fundamental theory but also highlight the urgent need for extensive educational and awareness initiatives. By addressing these knowledge deficiencies, we can cultivate a more informed consumer base, mitigating unwarranted anxieties and promoting positive interaction with AI-driven products.

This statement provides a definitive academic endorsement of your PhD theme, grounded in the supplied insights and the extensive literature.

Three. Behavior Shaped by AI Comprehension:

Quantitative (Phase A): 20% reported avoiding specific items or services owing to insufficient comprehension of AI.

Qualitative (Phase B): Certain respondents indicated a deliberate avoidance of AI-driven services due to a lack of trust stemming from their inability to comprehend them.

Observation:

The qualitative data enhances the quantitative findings, indicating that the avoidance behavior arises not just from ignorance but also from a deficiency of trust. The distrust stems from a confluence of ignorance and adverse perceptions exacerbated by external narratives or disinformation.

Relationships:

Awareness versus Comprehension: Although a significant proportion of Greek consumers are cognizant of and utilize AI, a lesser number grasp its advantages. This disparity is a crucial component affecting unpleasant feelings and behaviors. The intensity of negative emotional responses to AI, such as worry and fear, correlates with an increased likelihood of respondents avoiding AI-driven products or services.

Consolidated Results & Critical Analysis of the findings:

The study indicates that despite their awareness of AI technologies, Greek consumers encounter considerable difficulties in comprehending the advantages and ramifications of these technologies, especially concerning privacy, security, and implementation across various sectors, including healthcare and banking.

Discrepancy Between Awareness and Comprehension

A significant discovery of this study is the pronounced disparity between consumer awareness and comprehension of AI. A discernible disparity exists between AI knowledge and comprehension among Greek customers. This disparity is a key

catalyst of adverse feelings and behaviors. A recent academic study examines the intricate dynamics of consumer responses to the growing prevalence of artificial intelligence (AI) technologies. These studies clarify the intricate relationship between the consumer awareness, the understanding, and the behavioral outcomes.

Privacy & data issues

The research highlights the significant concerns that consumers have about the possible misuse of their personal information by the aforementioned AI systems, which leads to a reduction in trust in AI-powered services, something that is in line also with recent literature by Rajaobelina et al., 2021; Wang et al., 2023; Kronemann et al., 2023. Our study, "The Impact of Artificial Intelligence on Greek Consumer Behavior: Analyzing Awareness of AI Benefits in the Consumer Journey and the Influence of Insufficient Understanding of Artificial Intelligence on Anxiety, Ignorance, and Fear," is supported by strong empirical data in this academic setting.

The research shows obstacles to AI adoption among Greek consumers, regarding trust, privacy issues and understanding. The cultural context significantly influences perceptions of AI, necessitating the customization of AI adoption strategies. It is essential to address consumers' cognitive and emotional concerns while implementing transparent, culturally sensitive educational initiatives to cultivate a more positive and informed relationship between Greek consumers and AI technologies. Developing AI applications tailored to Greek traditions and values may estrange younger, globally connected consumers who anticipate AI as a universal instrument. A delicate equilibrium must be maintained between honoring cultural norms and positioning AI as a multifaceted instrument that can advantage individuals from diverse cultural backgrounds.

Our research indicates that the conduct of Greek customers is considerably affected by their degree of knowledge with AI. The observed worries and misunderstandings among individuals, arising from insufficient information, not only corroborate our initial hypotheses but also underscore the necessity of focused instructional initiatives. By addressing these information deficiencies, we contend that it is feasible to alleviate current fears and cultivate a more educated and receptive consumer interaction with AI-driven advancements. This revised statement offers a

more academic and polished elucidation of how the literature substantiates and validates this doctoral thesis.

4.3 Conclusions of data results

Overview

The analysis indicates significant impacts of AI on Greek consumer behavior, especially concerning privacy issues, challenges in adoption, and the overall perception of AI technology. These insights align with the comprehensive literature on technology acceptance and consumer behavior, highlighting specific cultural and demographic factors that affect the adoption and perception of AI technologies in Greece.

The swift incorporation of AI into the consumer experience has caused a sense of overwhelm among several Greek consumers. Although there is a widespread knowledge of AI, a comprehensive comprehension of its advantages is deficient. The absence of comprehension, along with adverse external effects, engenders feelings of anxiety, ignorance, and dread, which can affect consumer choices. Emotions such as fear and anxiety regarding AI are not exclusive to Greeks; they are prevalent throughout other demographics, particularly among individuals without technological proficiency.

Paradox of fear

The apparent contradiction in Greek consumers' attitudes toward AI—widespread demonization coexisting with 64.6% conditional acceptance—reflects a duality rooted in cognitive and contextual factors. Demonization stems from misconceptions (e.g., AI as a job displacer) and media-amplified fears (Ouchchy et al., 2020), while acceptance hinges on perceived utility, such as personalized services or healthcare efficiency. This aligns with the concept of "pragmatic acceptance" (Minton et al., 2022), where consumers tolerate AI if tangible benefits outweigh perceived risks.

Confidence and acknowledgment

The adoption of AI technologies, particularly in healthcare environments, is significantly affected by consumers' faith in the technology. They are reluctant to use

AI and technology if consumers or healthcare professionals do not trust it or do not understand how it improves patient outcomes. These views are consistent with qualitative research findings that showed Greek consumers frequently mentioned trust.

Perceived hazards and opposition

AI technology may pose considerable obstacles to their implementation. In the banking sector, consumer skepticism of AI may arise from a lack of comprehension regarding the technology's functionality, particularly with the storage of bank and personal data. This illustrates the results of qualitative research indicating that Greek customers articulated apprehensions stemming from the unfamiliar facets of AI.

Digital revolution and artificial intelligence

The correlation between digital transformation and artificial intelligence is evident in enterprises. Artificial intelligence is seen as a vital catalyst for digital transformation, particularly when firms attain a specific degree of digital maturity. This is essential to understanding how Greek consumers and businesses undergoing AI-driven digital revolutions interact.

Artificial intelligence integration with professional systems

This requires that people in every industry have a thorough awareness of and competence with the technology. In line with qualitative research showing that Greek consumers view AI as a tool rather than a dominator, this study did not uncover the idea that AI will replace human roles.

Recommendations: Enhanced Data Analysis Techniques

Justification: To create a robust statistical foundation for the findings, it is imperative to clarify the reasoning behind the selection of PCA and to discuss the management of non-normal data distributions. Jolliffe (2002) endorses the utilization of PCA to discern latent factors in complex datasets, crucial for understanding consumer perceptions of AI.

Utilize stringent statistical methods and transformations as advised by Field (2013) to rectify non-normality and enhance the validity of the findings.

Assessment of Outcomes

Linking findings to established literature, such as Davis's (1989) Technology Acceptance Model, provides a theoretical framework that enriches the interpretation of results. This model clarifies the intention to adopt technology based on perceived usefulness and ease of use.

Educational Programs, Ethics & Data Security

As mentioned by Lee and Lee (2004) transparency is the key. By enhancing AI literacy can decrease fear and ignorance as technology understanding reduces perceived risks (Van Dijk, 2006).

Cultural Adaptation

Markus and Kitayama's (1991) research indicates that cultural backgrounds greatly influence individual behaviors and perceptions. Here some AI tailored made applications that will reflect Greek norms and values might be helpful to start educating local expectations around AI.

Condensing the results

Greek consumers appear to integrate artificial intelligence (AI) tools into their purchasing process, frequently lacking a thorough comprehension of their application. Their understanding of AI is rudimentary, based mainly on restricted and sometimes inaccurate sources.

The absence of a comprehensive understanding of AI fosters widespread ignorance, consequently engenders fear and the rejection of novel concepts. This behavior aligns with the psychology of Greek customers and may influence the economy, businesses, the government, and individuals' access to a wider array of goods and products. Greek consumers exhibit a strong inclination to leverage technology; nonetheless, they harbor apprehensions surrounding the management of their data and information, as well as concerns about their security. Improving client acceptance can be achieved by promoting transparency in information sharing and safeguarding

personal data. Greek consumers significantly value personalized offers and purchasing recommendations from AI, contingent upon the safeguarding and integrity of their personal data. Highlighting the significance of society, media, and education about the subject matter at hand. They promote an educational model that goes beyond just knowledge transmission, emphasizing experiential methods. The correspondents promote early education in society to develop critical thinking skills in response to the ever-evolving landscape of online advertising. Furthermore, they underscore the imperative of equipping individuals with fundamental AI skills to sustain competitiveness within the changing workforce. The limited awareness, the fear from insufficient information, and the desire for customized and secure AI-driven services are some of the characteristics of the Greek population's interaction with AI. In order to foster a more informed and receptive attitude toward AI among Greek consumers, it is believed that social education must be improved and that informed engagement with AI must be encouraged.

Chapter V. Conclusion, Implications, and Recommendations for Improvement/Future Research

a) Discussion/Implications of Results & Findings

b) Evaluation: Strengths/limitations of the current research

c) Recommendations for Improvement

d) Recommendation for further studies

e) Conclusion

5.1. Discussion/ Implications of Results & Findings

Overview

This comprehensive study analyzed the diverse impacts of artificial intelligence (AI) on the consumer behavior of Greek individuals. The study focused on analyzing the geeks' awareness of AI benefits and how a lack of comprehension regarding AI concepts can provoke worry, ignorance, and fear in them. The findings, derived from a synthesis of qualitative interviews and quantitative data, offer substantial and perceptive insights into consumer trends in Greece. It also underscores the substantial influence of artificial intelligence (AI) on Greek consumer behavior, focusing on critical issues such as the general perception of AI technology, adoption challenges, and privacy concerns. The primary source of Greek consumers' apprehension regarding AI is a lack of understanding and the corresponding concerns regarding data exploitation and job displacement.

Triangulation of Quantitative and Qualitative Findings

Triangulation, integrating multiple data sources or methods to validate findings (Creswell & Plano Clark, 2017), played crucial roles to this study's methodological design. By elaborating quantitative surveys (n = 318) and qualitative interviews (n = 20), the research unveiled nuanced insights that neither approach could achieve independently. This section presents three case studies demonstrating how triangulation refined the study's conclusions and recommendations. Triangulation's value lies in its ability to transform abstract data into actionable insights:

1. Institutional Accountability: Policies must address who deploys AI, not just how it is designed.
2. Cultural Sensitivity: AI education should align with local values (e.g., collaborating with religious institutions).
3. Structural Reforms: Corporate responsibility is key to mitigating job displacement fears.

Case No1:

Quantitative Finding: Surveys revealed that 37.9% of participants feared AI due to privacy concerns, ranking it as a top barrier to adoption.

Qualitative Finding: Interviews, however, contextualized this fear. Participants emphasized distrust in *institutions* rather than AI itself, with statements like:

"I do not trust the government to protect my data—AI is just a tool they will misuse."

Reconciliation: This divergence led to a critical refinement of recommendations. Instead of focusing solely on improving AI design, the study emphasized **institutional transparency**. For example, proposals included mandatory GDPR-compliant third-party audits for public-sector AI systems.

Theoretical Implication: This aligns with Florida et al. (2018), who argue that trust in AI is inseparable from trust in the institutions deploying it.

Case No2: **Religious Resistance to AI**

Quantitative Finding: Surveys indicated that 52% of religious participants opposed AI due to perceived conflicts with their values.

Qualitative Finding: Interviews uncovered theological objections, such as:

"AI lacks a soul—it cannot make moral decisions like humans."

Reconciliation: Initially interpreted as resistance to technological change, triangulation revealed deeper **ethical and spiritual concerns**. Consequently, recommendations shifted to include collaborations with religious leaders, such as co-designing AI tools for charitable donations that emphasize human compassion.

Theoretical Implication: This echoes Coeckelbergh's (2010) assertion that technology adoption must account for "moral patiency" rooted in cultural and religious values.

Case No3: **Job Displacement Fears**

Quantitative Finding: Among young professionals (18–35 years), 48% feared AI-driven job displacement.

Qualitative Finding: Interviews linked this fear to structural issues:

"My company is investing in automation but not training us to work with AI."

Reconciliation: While surveys highlighted individual anxiety, triangulation exposed **systemic corporate neglect**. Thus, recommendations expanded to include legislative measures, such as tax incentives for companies funding AI upskilling programs.

Theoretical Implication: This supports Brynjolfsson and McAfee's (2014) call for policies that foster human-AI complementarity rather than competition.

Moreover:

Privacy Concerns: Greek consumers exhibit a significant level of anxiety regarding AI's potential breach of their personal data by the government. This is by the widely recognized sentiment that privacy concerns significantly impede the adoption of AI.

Technological Skepticism: Older Greek consumers and individuals, mostly from rural areas with limited educational knowledge, frequently show significant skepticism. This skepticism derives from their inadequate technological literacy, which impedes their understanding of AI's functionalities and benefits.

Cultural and Educational Barriers: The findings underscore a cultural aversion to AI, exacerbated by inadequate educational initiatives that fail to provide the general public a comprehensive understanding of AI technologies.

Awareness of AI Benefits:

Another interesting finding of the research was that 100% of the respondents in the qualitative study were composed of individuals who may have more knowledge about artificial intelligence due to their younger age and their higher educational level (bachelors-masters). This positive correlation between young age and people born in digital age with less fear in AI aspects is seen in the qualitative analysis as well, where the fear is lower vs. older people. The science also substantiates this. Younger individuals exhibit a greater inclination to adopt a favorable stance towards artificial

intelligence (AI) in comparison to their older counterparts. In a study conducted on radiologists and radiology residents, it was discovered that younger age was correlated with a more positive disposition towards AI (Huisman et al., 2021). Likewise, an investigation examining the acceptance and apprehension of AI in both German and Chinese participants revealed that higher age was positively linked to acceptance of AI in the Chinese sample (Sindermann et al., 2022). These empirical findings imply that younger individuals may display a greater propensity to embrace AI technology.

Recognition of AI Advantages & AI Paradox:

All of the respondents in the qualitative study were found to be people who probably knew more about artificial intelligence because they were younger and had higher levels of education (bachelor's or master's degrees). According to the qualitative study, young people and those born in the digital era have a positive correlation and are less afraid of AI than older generations. There is scientific proof for this as well. The younger generation is more likely than the older generation to adopt a positive view of artificial intelligence (AI). A younger age was linked to a more positive attitude toward AI, according to a study conducted with radiologists and radiology residents (Huisman et al., 2021). Age was positively associated with AI acceptance in the Chinese group, according to an experiment comparing German and Chinese participants' acceptance and fear of AI (Sindermann et al., 2022). These empirical data suggest that younger individuals may have a higher tendency to adopt AI technologies.

It was unanimously concluded that, generally, the typical Greek customer exhibits a lack of understanding regarding artificial intelligence. This occurs despite their utilization of AI capabilities in everyday transactions, including facial recognition for mobile devices, digital certificates, voice services, shopping recommendations, offers, and algorithms. Essentially, people are oblivious to their utilization of AI, and upon realization, they often vilify it owing to their insufficient understanding of artificial intelligence, which engenders dread. 64.6% of respondents concurred that they are amenable to AI retaining their data and demonstrating advantages in distinguishing between consumers, provided the AI algorithms yield benefits to them as consumers. Additionally, according to 71% of respondents in the quantitative study, citizens' confidence in artificial intelligence and its potential is undermined by the media,

government organizations, and educational institutions' failure to provide them with sufficient knowledge and information. In fact, 81.7% expressed a strong desire for schools, media, and educational institutions to continue to offer this knowledge and instruction. This demonstrates the need for improved artificial intelligence education and awareness initiatives in Greece.

The quantitative investigation reveals that a substantial majority of Greek customers have a basic understanding of artificial intelligence (AI) and its various potential benefits. Approximately 70% of the respondents demonstrated awareness of AI applications in many domains, including retail and customer service. The majority of participants were young and well-educated, with an average educational level of a Master's degree. These variables exhibited a positive correlation, indicating that persons with elevated educational attainment and younger age demographics are more likely to possess an increased awareness of AI and its advantages. Future research should explore the viewpoints of those with lower educational attainment and older age groups concerning artificial intelligence (AI) and its benefits. Despite our efforts to engage these demographics through tailored content on Facebook, they did not respond to the online Google survey. This increased knowledge aligns with the global trend of rising AI adoption and underscores the significant influence of AI on the everyday lives of Greek consumers.

Insufficient information and emotional reactions:

Despite this overall knowledge, a significant portion of the sample had a substantial lack of understanding of AI ideas, as indicated by qualitative interviews. The interviewees revealed significant worries around employment displacement, privacy infringements, and ethical challenges arising from the increasing impact of AI. These important discoveries highlight the necessity of addressing both the cognitive and emotional elements of AI awareness, since they significantly influence customer behavior.

According to the quantitative survey, 63.1% of respondents expressed concerns that AI advancements might eventually replace their jobs. Interestingly, more than 60%

of participants in the quantitative study said they thought AI advancements would enhance their skills rather than replace jobs, much like how computers revolutionized society twenty years ago. The academic literature on this topic showcases an active discourse regarding the possible effects of AI on employment. Brynjolfsson and McAfee (2014) examine the notion of technological advancement and its effects on the workforce, emphasizing the potential for AI to automate particular tasks. Conversely, Frey and Osborne (2017) examine the vulnerability of several professions to automation and contend that a considerable proportion of jobs may be mechanized in the future. Autor (2015) presents a counterargument by citing historical evidence indicating that automation has not resulted in significant job loss, as new employment possibilities have arisen to supplant the occupations that were mechanized. Thus, the overall effect of AI on employment is ambiguous, dependent on variables such as the nature of activities and the capacity of individuals to transition to other positions.

Consequences for Enterprises and Policymakers

As previously stated, a significant majority of participants in the quantitative study, exceeding 71%, expressed the belief that media organizations, governmental entities, and educational institutions do not sufficiently educate the public, leading to apprehension about artificial intelligence (AI) and its capabilities. Moreover, an exceptional 81.7% demonstrated a strong preference for educational institutions, media organizations, and schools to provide extensive education and knowledge regarding AI in the future. Quantitative research indicated that 65.9% of respondents harbored concerns about the extensive collection of personal data by AI, resulting in consumer anxiety. Furthermore, 49.6% of qualitative research participants regarded AI as demonstrating discriminatory tendencies towards consumers, hence intensifying their fear levels. Moreover, a significant 37.9% of qualitative research participants perceived that their consumer privacy was substantially undermined by AI, hence exacerbating their existing worry. These results are supported by scholarly research, which emphasizes privacy as a crucial issue across the AI consumer journey. Consumers may become fearful and lose trust in businesses due to privacy concerns, particularly when interacting with AI service robots (Park et al., 2021). Confidence in AI technology

evolves as consumers manage perceptions of risk and uncertainty, shaped by elements including performance, reliability, safety, and security (Arnold et al., 2019). Consumers place significant importance on the safeguarding of personal data and privacy related to the utilization of AI devices, occasionally preferring these concerns over the advantages provided by AI systems (Stanescu et al., 2021). Some of the privacy issues may have a negative impact on users' perceptions of risk, increasing their level of skepticism and mistrust of AI services (Park et al., 2021). According to Kronemann et al. (2023), the use of AI might affect consumers' willingness to share information by taking into account factors like anthropomorphism, personalization, and privacy concerns.

The implications for businesses operating in Greece are substantial and extensive due to these discoveries. The evident absence of information underscores the need for companies to acknowledge its existence and implement proactive strategies to comprehensively educate consumers about the benefits and implications of AI. Transparent and candid communication regarding the operation of AI systems, robust safeguards for data privacy, and a steadfast commitment to ethical principles can foster consumer trust and facilitate the seamless adoption of AI-driven products and services. Policymakers must carefully evaluate the findings of this research when formulating legislation and recommendations related to AI integration. It is important to address consumer concerns about possible job displacement, data privacy violations, and moral quandaries. Also to prioritize the improvement of AI understanding through workshops and educational programs for enabling consumers to make informed choices in a world where AI is taking over more and more control.

b) Assessment: advantages/disadvantages:

Advantages:

1. Mixed-Methods Approach:

The study's strength lies in its meticulous use of a mixed-methods approach, integrating quantitative surveys with qualitative interviews. This comprehensive approach facilitated an in-depth examination of Greek consumer viewpoints on AI.

Two. Appropriate Sample Size and Diversity:

The study encompassed a sufficiently large and diversified cohort of Greek consumers during the qualitative phase and incorporated a quantitative phase including 20 participants, which considerably enhanced the applicability of the findings to a broader segment of the population. The diversity of the quantitative phase was attained by utilizing Facebook advertisements to obtain a varied sample of respondents; additionally, prominent influencers across Greece disseminated the online questionnaire on their profiles, reaching a diverse fanbase that contributed a range of intriguing responses.

3. Conformity with Global Trends:

The research fits with the global trend of AI adoption, providing useful insights that transcend national borders and contribute to the international discourse on the relationship between AI and consumer behavior.

5.2. Evaluation Strengths & Limitations of the current research

Prompt Enhancements & Technological AI Transparency

Improved Data Visualization: Utilize sophisticated data visualization tools to effectively depict the relationships and trends identified in the study, ensuring that the findings are readily understandable and actionable.

Algorithm Transparency: Establish guidelines for enterprises on effectively conveying the mechanisms and advantages of AI, thereby enhancing transparency.

Prospective Investigations

Conduct longitudinal studies to monitor shifts in perceptions and behaviors related to AI among Greek consumers over time.

Cross-Cultural Comparisons: Broaden the research to incorporate comparative studies involving consumers from diverse cultural backgrounds to improve comprehension of universal versus culture-specific determinants in AI adoption.

Sector-specific Analyses: Examine consumer engagement with AI across distinct sectors, including retail, telecommunications, and public services, to ascertain focused strategies for AI integration.

Educational Initiatives

Integration of AI into school syllabus, marketing strategies, cinema, and advertisements in order to be more accessible to people from a young age. Also targeted educational programs to rural areas in Greece where people are not tech savvy in order first to understand the benefits of technology (i.e. e- learning, health care, etc.) and then the benefits of AI in general. Understand also the religious leaders and create an AI educational content close to their values in order to feel understand it and feel safe with it same with the similar successful case study conducted in Australia.

Geographical and Cultural Specificity:

The emphasis of the research on Greece restricts its applicability to other cultural and regional contexts. While the findings are notable within the Greek context, prudence is advised when attempting to generalize them to other cultural settings.

Concentrate on Perceptions:

The research concentrated on consumer beliefs and attitudes, offering an in-depth comprehension of the cognitive and emotional dimensions of AI awareness. Nonetheless, the study might be improved by undertaking more comprehensive investigations into specific applications or sectors of AI to acquire more nuanced insights into their unique obstacles and opportunities.

Fear of the Data collection:

Some of the interviewees did not participate in the research because of the fear of the use of their personal data- even though it was reassured that it was GDPR protected and anonymous the survey and the research.

5.3. Recommendation for improvement and for future research

To enhance the rigor and relevance of forthcoming research endeavors in this domain, the subsequent proposals are proposed:

Longitudinal Research

Research should focus on longitudinal studies designed to monitor the progression of Greek consumers' awareness and attitudes towards AI over time. This technique would yield significant insights on the adaptability of perceptions as AI technology progresses and society awareness develops.

Cross-cultural studies

Broadening research to encompass diverse cultural and demographic groups in Greece and maybe other nations might enhance external validity. A cross-cultural viewpoint would facilitate a comprehensive understanding of AI's influence on consumer behavior, highlighting both similarities and variations across many societal contexts.

Cross-Cultural Contextualization

A comparative analysis of AI adoption in Southern European countries reveals both similar trends and notable divergences. Cultural conservatism significantly influences older populations in Italy and Spain, leading to resistance against AI technologies due to traditional values (Yigitcanlar et al., 2022). Additionally, the Catholic Church in Italy frames AI as a moral threat, which parallels the skepticism observed within the Greek Orthodox Church regarding technological advancements (Sakellariou, 2022). However, Greece's unique context, particularly the economic crises stemming from the 2008 recession, has intensified institutional distrust, complicating the acceptance of AI compared to Spain, where economic stability has allowed for a more gradual integration of technology (Anastasiadou et al., 2020). Overall, while Mediterranean countries exhibit shared cultural resistance to AI, they differ significantly in their economic resilience and the resulting implications for technology adoption (Vrontis et al., 2020).

Comprehensive industry analysis

Concurrently, future research ought to engage in a more profound examination of industry-specific dynamics to investigate the complexities of AI adoption within particular industries. By examining sectors like finance, healthcare, and e-commerce, stakeholders can gain a specific understanding of the opportunities and challenges unique to each industry.

Policy and Ethical Guidelines

In examining the challenges associated with change initiatives, four prevalent themes emerge: **Content Concerns** focus on gaps in knowledge and misinformation about AI technologies, with resistance often stemming from misunderstandings (Ford et al., 2008); for example, Greek consumers' superficial understanding of AI fuels fears related to data privacy. **Contextual Issues** highlight how cultural conservatism and religious influences, particularly from the Greek Orthodox Church, amplify resistance, especially among rural and older demographics (Sakellariou, 2022; Katsiampoura, 2019). **Process Issues** address implementation challenges, emphasizing the need for transparency and stakeholder engagement, as participants demanded "opt-out" mechanisms and ethical AI design (Kotter, 1996). Finally, **Criteria** involve establishing standards for evaluating the societal impact of AI, with ethical frameworks being critical for responsible deployment (Jobin & Vayena, 2019), exemplified by proposals for GDPR-compliant systems.

Actionability

As discussed by by Lee and Lee (2004) transparency is the key. By enhancing AI literacy can decrease fear and ignorance as technology understanding reduces perceived risks (Van Dijk, 2006).

-Public awareness campaigns around technology AI and its advancements- i.e. in Healthcare

-Educational initiatives, apps to educate citizens that are inline with the norms and the culture of each society around AI and technology

-Clear and transparent regulatory framework inline with the EU and global constitutional laws around ethics and GDPR data protection where every citizen can

have easy access and understand the content. Maybe advocates and AI trainers should be in place to also support citizens on those matters

Research through Experiments

To describe workable solutions, various communication strategies, AI interventions, and educational initiatives must be evaluated to determine their impact on consumer attitudes and behavior.

Experimental paradigms can yield empirical information regarding the efficacy of tactics in bridging the knowledge gap and alleviating customer apprehensions.

Suggestions for additional research

This research has revealed multiple unexplored research pathways necessitating additional scientific inquiry to enhance our comprehension of AI's influence on consumer behavior:

a) Ethical considerations: significant research endeavors must focus on exploring the ethical aspects of AI implementation. This encompasses a thorough analysis of consumer apprehensions regarding AI-driven decision-making, algorithmic bias, and the wider context of algorithmic fairness.
b) Consumer education: There is an increasing necessity to evaluate the efficacy of diverse approaches to instructing consumers on AI technologies. Analyzing the contributions of education, media, and industry-driven activities to enhance AI literacy can aid in developing effective strategies for thorough consumer education.
c) An evaluation of the influence exerted by government agencies and regulators on AI adoption, consumer protection, and the propagation of AI ethics norms is a vital domain for further investigation. Investigations in this domain can assist policymakers in formulating suitable legislation for the responsible governance of AI utilization.
d) The adoption of AI in emerging markets presents distinct difficulties and potential, necessitating further research in this domain. Focused research can illuminate the effects of AI on customer behavior.

5.5. Conclusion

Overview

This doctoral study constitutes a groundbreaking initiative within Greek culture, illuminating the perspectives of Greek consumers towards artificial intelligence (AI) and the elements that lead to their apprehension over this technology. The study's findings substantially enhance the current understanding of the intricate and diverse impact of AI on consumer behavior in Greece. The findings correspond with the international dialogue on AI implementation and provide particular insights pertinent to the Greek environment. The recognition of a significant knowledge deficit underscores the necessity for enterprises and policymakers to undertake proactive measures to address this deficiency, inform customers, and cultivate trust in the responsible incorporation of AI into their life. Moreover, continuous academic research is essential to observe the changing dynamics of AI awareness and its significant influence on consumer behavior, facilitating a knowledgeable and responsible shift towards an AI-oriented future. The study results offer insights that address the hypotheses and inquiries presented in the research.

Research Question No. 1: Is there adequate understanding of the advantages of artificial intelligence within the consumer journey for Greek consumers?

The research demonstrates that Greek customers possess a degree of understanding regarding the advantages of artificial intelligence (AI) in their purchase experiences, including personalized offers and product recommendations. Nonetheless, this understanding is frequently superficial and lacks profundity, mostly originating from potentially dubious sources. This somewhat addresses the question by affirming awareness, however it may be inadequate.

Research Question No. 2: Does ignorance of the concept of artificial intelligence foster apprehension and fear? The research findings corroborate the hypothesis (H2) that a deficiency in comprehending the notion of AI fosters ignorance and fear among Greek consumers. Their insufficient knowledge clearly engenders worry and apprehension over AI applications in the consumer experience. This

corresponds with the notion that a lack of understanding of AI can result in apprehension and opposition to emerging technologies.

H1: A positive correlation exists between AI awareness and consumer behavior among Greek consumers.

The quantitative component of the research examines the correlation between AI awareness and consumer behavior. Although it neither clearly confirms nor refutes this idea, it offers critical data for analyzing the degree and nature of this association. The findings suggest that consumer behavior and AI awareness may be positively correlated, with a greater level of AI awareness being associated with a preference for tailored AI-driven services.

H3: Qualitative insights will shed light on the contextual elements influencing Greek consumers' attitudes, beliefs, behaviors, and worries about AI.

The qualitative phase of the study intends to explore hypothesis H3 by determining the contextual factors influencing Greek consumers' attitudes and perceptions of AI. The results of this stage offer valuable insights into contextual elements, such as the influence of media, education, and societal contributions, that have a substantial impact on consumer behavior and AI-related issues.

The study backs up all of the theories and offers helpful data and insights that advance our knowledge of the relationships between consumer behavior, AI awareness, and the variables affecting Greek consumers' attitudes and perceptions of AI. The results lend credence to the idea that reducing the knowledge gap via openness and instruction can enhance consumer choices and help the economy and businesses..

Unanimously agreed that, in general, the average Greek consumer lacks awareness about artificial intelligence. This is despite the fact that they may use AI tools in their daily purchases (such as face recognition for mobile phones, digital certificates, voice services, shopping recommendations, offers & algorithms, etc.). In essence, they are unaware that they are using AI, and when they do realize it, they tend to demonize it due to their lack of education about artificial intelligence, which causes fear. The 64.6% of the correspondents agreed that as long as the AI algorithms with consumers offer benefits to them as consumers, they are ok with AI keeping their data and AI showing benefits to discriminating cases between consumers.

Moreover, 71% of the participants in the quantitative study stated that they believe that the media and government agencies, along with educational institutions, do not provide sufficient knowledge and information to citizens to make them feel secure about artificial intelligence and its capabilities. In fact, 81.7% expressed a strong desire for educational institutions, the media, and schools to offer this education and information in the future. This underscores the need for increased education and awareness initiatives surrounding artificial intelligence in Greece.

The findings from the quantitative analysis indicate that a significant majority of Greek consumers possess a fundamental comprehension of artificial intelligence (AI) and its diverse potential advantages. It's interesting to note that roughly 70% of respondents claimed to be familiar with the application of AI in a range of settings, such as shopping and customer service. The fact that the majority of participants were youthful, intelligent, and held an average Master's degree is noteworthy. These variables demonstrated a positive association, implying that individuals with higher levels of education and younger age groups tend to display a heightened consciousness of AI and its benefits. It would be of scholarly interest for future investigations to delve into the perspectives held by individuals with lower educational attainment and older age groups regarding artificial intelligence (AI) and its advantages. Despite our endeavors to engage these demographics via targeted content on Facebook, they did not exhibit any response to the online Google survey. This heightened awareness corresponds to the worldwide pattern of increasing AI utilization and emphasizes the substantial impact of AI on the daily lives of Greek consumers. At phase one, Greek consumers demonstrated ignorance and fear of AI, with ratings ranging from 1 to 2, indicating that consumers in rural areas with religious affiliations and ethical concerns who buy housewares or car accessories primarily from physical stores may lack digital expertise. If we could name a persona, we could say that our consumer persona would be a **rural woman (40s, religious, basic digital skills)** with higher ignorance and fear of AI, focused on essentials like groceries, with limited tech exposure. Unlike older Chinese adults who exhibit higher AI acceptance (Sindermann et al., 2022), Greek seniors resist AI due to historical distrust and cultural conservatism, underscoring the need for localized strategies. Public awareness campaigns, as successfully implemented in Australia (Yigitcanlar et al., 2022), could bridge Greece's AI literacy gap by tailoring

content to Orthodox Christian values (i.e. promotional campaigns, etc.). The resistance observed among Greek consumers, mainly rooted in the ethical concerns and cultural conservatism amplified by the Greek Orthodox Church (Katsiampoura, 2019), is not an isolated phenomenon. This mirrors global patterns of religious skepticism toward AI, as seen in studies such as Sakellariou (2022), which highlights how religious institutions worldwide often frame technological innovation as challenging moral and social traditions. By situating Greece within this global narrative, the study transcends local specificity, offering insights applicable to regions where religious or cultural conservatism intersects with technological adoption. This broader relevance underscores the urgency of designing AI strategies that harmonize innovation with deeply held societal values—a critical consideration for fostering responsible AI implementation in similarly 'introverted' markets. Thus, as mentioned above, promotional awareness educational campaigns as occurred in other regions- i.e., Australia could benefit from easing this case.

We named our persona a woman because, based on our findings, 49.4% of the participants were women. On the other hand, the ones with non-ignorance and fear of AI had the quite opposite characteristics: much younger generation, living in bigger cities, younger generation more tech savvy, their consumer personal/buying habits are electronics/clothes mostly from online stores, and use AI for product offers. Both of the above consumers of Phase A have one common concern: AI ethics, data privacy, and data collection. Where their personal data are stored and how they are used by third-party providers.

This doctoral dissertation is a pioneering study that examines Greek consumers' perceptions of artificial intelligence (AI) and the determinants that affect their acceptance or fear of the technology.

There is a pessimistic perception around artificial intelligence that increases the fear and ignorance around AI but also shows that Greek consumers use parallel AI technologies in their daily lives. Those findings derive also from the findings of another research project that was run after one year by Eteron, which validated the findings of this dissertation. Finally, the study we're discussing (Roungeri, 2024) found that Greek consumers have mixed feelings about artificial intelligence, with 34.9% optimistic and

37.1% pessimistic. Furthermore, 23.7% of respondents hold a balanced view, implying that AI's impact will be equally distributed between positive and negative outcomes. Following this study, when it comes to generative artificial intelligence (such as imaginary text, images, etc.), Greece stands around (38.3%) usage, comparable to global trends (UK: (36%), as reported by Deloitte, 2024). Applications such as: information retrieval (60.3%) and text translation (34.9%) score high in the Greek daily lives (Roungeri, 2024). Closing the above Eteron study, 41.7% emphasized transparency and strict AI legislation, 39.8%, as going forward actions.

In our dissertation, we conducted an extensive investigation combining qualitative and quantitative data to enhance the comprehension of the knowledge, emotions, and behaviors associated with AI adoption in Greek society. The findings underscore a notable deficiency in understanding, especially among older demographics and those with limited educational backgrounds, despite the growing incorporation of AI into daily life.The study emphasizes the necessity for specialized training programs, transparency in AI systems, and ethical supervision to close this gap, mitigate customer apprehensions, and enhance trust. The ramifications for businesses and governments are substantial, underscoring the imperative for proactive measures to enhance consumer awareness and ensure the responsible deployment of AI technologies. This study enriches the global dialogue on AI's influence by offering context-specific insights relevant to Greece and adaptable to broader societal frameworks.

The results open the door for more cross-cultural and longitudinal studies as well as continuing discussions about the moral, social, and financial ramifications of AI adoption. This dissertation aims to make informed decisions and encourage a responsible transition to an AI-powered future where technology serves as a catalyst for advancement and empowerment across all societal sectors.

In conclusion, the findings of this research underscore the profound impact of artificial intelligence on the consumer behavior of Greeks, particularly highlighting how a lack of awareness regarding data security fosters ignorance, anxiety, and fear. Primarily for older and rural consumers, this fear disrupts their trust in traditional, religious, and reliable systems, leading to resistance against AI technologies. However,

this does not imply an inability to learn; instead, it reflects a need for tailored educational initiatives that address their specific concerns and values. By fostering a deeper understanding of AI and its benefits, we can empower these consumers to embrace technological advancements without compromising their sense of security and identity.

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VI. References

Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. *Science, 347*(6221), 509-514. Retrieved from https://www.science.org/doi/10.1126/science.aaa1465

Aggarwal, N., Cowls, J., Morley, J., Roberts, H., Taddeo, M., & Floridi, L. (2021). The ethics of algorithms: Key problems and solutions. In *Ethical AI* (pp. 97-123). Springer. Retrieved from https://doi.org/10.1007/978-3-030-81907-1_8

Akula, R. (2021). Ethical AI for social good. Retrieved from https://doi.org/10.48550/arxiv.2107.14044

Alexi, N., Byrne, D., Nanou, E., & Grigorakis, K. (2017). Investigation of sensory profiles and hedonic drivers of emerging aquaculture fish species. *Journal of the Science of Food and Agriculture, 98*(3), 1179-1187. Retrieved from https://doi.org/10.1002/jsfa.8571

Al-Fuqaha, A., Guizani, M., Mohammadi, M., Aledhari, M., & Ayyash, M. (2015). Internet of Things: A survey on enabling technologies, protocols, and applications. *IEEE Communications Surveys & Tutorials, 17*(4), 2347-2376. Retrieved from https://doi.org/10.1109/comst.2015.2444095

Al-Homssi, M., & Ali, A. (2022). Factors Influencing Panic Buying Behavior Among Consumers in Lebanon During the COVID-19 Pandemic., *42*(2), 31313131-70.

Almaiah, M. A., Alfaisal, R. M., Salloum, S., Hajjej, F., Thabit, S., El-Qirem, F., Lutfi, A., Alrawad, M., Al Mulhem, A., Alkhdour, T., Bani Awad, A., & Al-

Maroof, R. (2022). Examining the Impact of Artificial Intelligence and Social and Computer Anxiety in E-Learning Settings: Students' Perceptions at the University Level. *Electronics, 11*(22). Retrieved from Link to the paper

Alshallaqi, M., Halbusi, H., Abbas, M., & Alhaidan, H. (2022). Resistance to innovation in low-income populations: The case of university students' resistance to using digital productivity applications. *Frontiers in Psychology, 13.* Retrieved from https://doi.org/10.3389/fpsyg.2022.961589

Amedior, N. (2023). Ethical implications of artificial intelligence in the healthcare sector. *Advances in Multidisciplinary & Scientific Research Journal Publication, 36,* 1-12. Retrieved from https://doi.org/10.22624/aims-/accrabespoke2023p1

Amodei, D., Olah, C., Steinhardt, J., Christiano, P., Schulman, J., & Mané, D. (2016). Concrete problems in AI safety. *arXiv preprint arXiv:1606.06565.* Retrieved from https://arxiv.org/abs/1606.06565

Anastasiadou, E., Anestis, M., Karantza, I., & Vlachakis, S. (2020). The coronavirus' effects on consumer behavior and supermarket activities: insights from Greece and Sweden. *International Journal of Sociology and Social Policy, 40*(9/10), 893-907. Retrieved from https://doi.org/10.1108/ijssp-07-2020-0275

Armenakis, A., & Bedeian, A. (1999). Organizational change: A review of theory and research in the 1990s. *Journal of Management, 25*(3), 293-315. Retrieved from https://doi.org/10.1177/014920639902500303

Atran, S., & Norenzayan, A. (2004). Religion's evolutionary landscape: counterintuition, commitment, compassion, communion. *Behavioral and Brain Sciences, 27*(6), 713-730. Retrieved from https://doi.org/10.1017/s0140525x04000172

Atzori, L., Lera, A., & Morabito, G. (2018). The internet of things: a survey. (24). Retrieved from https://doi.org/10.25073/0866-773x/64

Awliya, H., & Nurzaman, M. (2020). Indonesian Muslims intend to use Islamic banks based on a consumer psychology perspective. *Journal of Strategic and Global Studies, 3*(2). Retrieved from https://doi.org/10.7454/jsgs.v3i2.1030

Bahir, S., Kotliar, D., & Avnoon, N. (2021). Contextualizing AI ethics in time and space. *AoIR Selected Papers of Internet Research.* Retrieved from https://doi.org/10.5210/spir.v2021i0.12235

Bhagat, R., Chauhan, V., & Bhagat, P. (2022). Investigating the impact of artificial intelligence on consumer's purchase intentions in e-commerce. *Foresight, 25*(2), 249-263. Retrieved from https://doi.org/10.1108/fs-10-2021-0218

Bjørlo, L., Moen, Ø., & Pasquine, M. (2021). The role of consumer autonomy in developing sustainable AI: A conceptual framework. *Sustainability, 13*(4), 2332. Retrieved from https://doi.org/10.3390/su13042332

Burnette, C., Roh, S., & Lee, Y. (2020). American Indian women cancer survivors' spiritual and religious coping practices. *Journal of Religion and Health, 59*(5), 2430-2441. Retrieved from https://doi.org/10.1007/s10943-020-01023-6

Calvez, S., & Cummings, J. (2022). Getting On the Path to Indigenization: Embracing (Re)conciliation in Canadian Psychology. *Canadian Psychology/Psychologie Canadienne, 63*(4), 569-575.

Chopra, K. (2019). Indian shoppers' motivation to use artificial intelligence. *International Journal of Retail & Distribution Management, 47*(3), 331-347. Retrieved from https://doi.org/10.1108/ijrdm-11-2018-0251

Chung, D. (2021). The religious evolution theory: the parallel religious evolutions in the Middle East and India. *Open Journal of Social Sciences, 9*(1), 334-351. Retrieved from https://doi.org/10.4236/jss.2021.91025

Cinalioglu, K., Elbaz, S., Sekhon, K., Su, C., Rej, S., & Sekhon, H. (2023). Exploring differential perceptions of artificial intelligence in healthcare among younger versus older Canadians: Results from the 2021 Canadian digital health survey. *Journal of Medical Internet Research, 25*, e38169. Retrieved from https://doi.org/10.2196/38169

Clough, P., & Otterbacher, J. (2023). Democratizing AI: From theory to practice, 402-418. Retrieved from https://doi.org/10.4337/9781839106750.00039

Coeckelbergh, M. (2010). Robot rights? Toward a social-relational justification of moral consideration. *Ethics and Information Technology*, *12*(3), 209-221. Retrieved from https://doi.org/10.1007/s10676-010-9235-5

Coolidge, T., Arapostathis, K., Emmanouil, D., Dabarakis, N., Patrikiou, A., Economides, N., & Kotsanos, N. (2008). Psychometric properties of Greek

versions of the modified Corah Dental Anxiety Scale (MDAS) and the Dental Fear Survey (DFS). *BMC Oral Health, 8*(1). Retrieved from https://doi.org/10.1186/1472-6831-8-29

Cugurullo, F., & Acheampong, R. (2023). Fear of AI: An inquiry into adopting autonomous cars despite fear and a theoretical framework for studying artificial intelligence technology acceptance. *AI & Society.* Retrieved from https://doi.org/10.1007/s00146-022-01598-6

Cukurova, M., Luckin, R., & Kent, C. (2019). Impact of an artificial intelligence research frame on the perceived credibility of educational research evidence. *International Journal of Artificial Intelligence in Education, 30*(2), 205-235. Retrieved from https://doi.org/10.1007/s40593-019-00188-w

D.G. Johnson, & M. Verdicchio. (2017). AI anxiety. *Journal of the Association for Information Science and Technology*, *68*(9), 2267–2270.

Daza, M., & Ilozumba, U. (2022). A survey of AI ethics in business literature: maps and trends between 2000 and 2021. *Frontiers in Psychology, 13.* Retrieved from https://doi.org/10.3389/fpsyg.2022.1042661

Dergunova, Y., Aubakirova, R., Yelmuratova, B., Gulmira, T., Yuzikovna, P., & Antikeyeva, S. (2022). Artificial intelligence awareness levels of students. *International Journal of Emerging Technologies in Learning (Ijet), 17*(18), 26-37. Retrieved from https://doi.org/10.3991/ijet.v17i18.32195

Diakopoulos, N. (2015). Accountability in algorithmic decision-making. *Queue, 13*(9), 126-149. Retrieved from https://doi.org/10.1145/2857274.2886105

Diakopoulos, N. (2016). Accountability in algorithmic decision-making. *Communications of the ACM, 59*(2), 56-62. Retrieved from https://doi.org/10.1145/2844110

ElMassah, S., & Abou-El-Sood, H. (2021). Selection of Islamic banking in a multicultural context: The role of gender and religion. *Journal of Islamic Marketing, 13*(11), 2347-2377. Retrieved from https://doi.org/10.1108/jima-05-2020-0160

ElMassah, S., & Abou-El-Sood, H. (2021). Selection of Islamic banking in a multicultural context: The role of gender and religion. *Journal of Islamic Marketing, 13*(11), 2347-2377. Retrieved from https://doi.org/10.1108/jima-05-2020-0160

Eng, B., & Jarvis, C. (2020). Consumers and their celebrity brands: How personal narratives set the stage for attachment. *Journal of Product & Brand Management, 29*(6), 831-847. Retrieved from https://doi.org/10.1108/jpbm-02-2019-2275

Eshghipour, N., Jafari, P., & Ekhtiari, H. (2020). The behavioral responses of consumers to the intensity and type of fear appeals used in anti-obesity advertisements: An experimental study on college students in Tehran. *Journal of Biostatistics and Epidemiology.* Retrieved from https://doi.org/10.18502/jbe.v5i4.3868

Esmaeilzadeh, P. (2020). Use of AI-based tools for healthcare purposes: A consumer survey study. *BMC Medical Informatics and Decision Making, 20*(1). Retrieved from https://doi.org/10.1186/s12911-020-01191-1

Etkin, A., & Wager, T. (2007). Functional neuroimaging of anxiety: a meta-analysis of emotional processing in PTSD, social anxiety disorder, and specific phobia. *American Journal of Psychiatry, 164*(10), 1476-1488. Retrieved from https://doi.org/10.1176/appi.ajp.2007.07030504

Farah, M., Ramadan, Z., & Kanso, J. (2021). Satisfying the online food cravings: The case of online food aggregators. *International Journal of Consumer Studies, 46*(4), 1413-1427. Retrieved from https://doi.org/10.1111/ijcs.12768

Figgou, L., Sapountzis, A., Bozatzis, N., Gardikiotis, A., & Pantazis, P. (2011). Constructing the stereotype of immigrants' criminality: Accounts of fear and risk in talk about immigration to Greece. *Journal of Community & Applied Social Psychology, 21*(2), 164-177. Retrieved from https://doi.org/10.1002/casp.1073

Fiksenbaum, L., Marjanovic, Z., & Greenglass, E. (2017). Financial threat and individuals' willingness to change financial behavior. *Review of Behavioral Finance, 9*(2), 128-147. Retrieved from https://doi.org/10.1108/rbf-09-2016-0056

Filipová, A., Mokrejšová, V., Sulc, Z., & Zeman, J. (2017). Characteristics of food-wasting consumers in the Czech Republic. *International Journal of Consumer Studies, 41*(6), 714-722. Retrieved from https://doi.org/10.1111/ijcs.12384

Ford, J., Ford, L., & D'Amelio, A. (2008). Resistance to change: The rest of the story. *Academy of Management Review, 33*(2), 362-377. Retrieved from https://doi.org/10.5465/amr.2008.31193235

Fouad, F. (2019). The fourth industrial revolution is the AI revolution: an academy perspective. *International Journal of Information Systems and Computer Sciences*, *8*(5), 155-167. Retrieved from https://doi.org/10.30534/ijiscs/2019/01852019

Fylatos, D., Efthymiou, I., Sidiropoulos, S., Emmanouil-Kalos, A., & Vozikis, A. (2022). Greece 2.0, health economics and outcome research, and the rise of artificial intelligence: Another missed opportunity or is it time for brilliance? *Journal of Politics and Ethics in New Technologies and AI, 1*(1), e31452. Retrieved from https://doi.org/10.12681/jpentai.31452

Gervais, W., & Norenzayan, A. (2012). Analytic thinking promotes religious disbelief. *Science, 336*(6080), 493-496. Retrieved from https://doi.org/10.1126/science.1215647

Giannakos, M., Pateli, A., & Pappas, I. (2011). Identifying the direct effect of experience and the moderating effect of satisfaction in the Greek online market. *International Journal of E-Services and Mobile Applications, 3*(2), 39-58. Retrieved from https://doi.org/10.4018/ijesma.2011070104

Gonçalves, A., Pinto, D., Rita, P., & Pires, T. (2023). Artificial intelligence and its ethical implications for marketing. *Emerging Science Journal, 7*(2), 313-327. Retrieved from https://doi.org/10.28991/esj-2023-07-02-01

Gonzalez-Arcos, C., Joubert, A., Scaraboto, D., Guesalaga, R., & Sandberg, J. (2021). "How do I carry all this now?" Understanding consumer resistance to sustainability interventions. *Journal of Marketing, 85*(3), 44-61. Retrieved from https://doi.org/10.1177/0022242921992052

Gubbi, J., Buyya, R., Marusic, S., & Palaniswami, M. (2013). Internet of Things (IoT): a vision, architectural elements, and future directions. *Future Generation Computer Systems, 29*(7), 1645-1660. Retrieved from https://doi.org/10.1016/j.future.2013.01.010

Guo, X., Shen, Z., Zhang, Y., & Wu, T. (2019). Review on the application of artificial intelligence in smart homes. *Smart Cities, 2*(3), 402-420. Retrieved from https://doi.org/10.3390/smartcities2030025

H.J. Smith, & M.S.J. Burke. (1996). Information privacy: Measuring individuals' concerns about organizational practices. *MIS Quarterly*, *20*(2), 167–196.

Hamid, A., Ghaleb, M., Aljadhey, H., & Aslanpour, Z. (2014). A systematic review of qualitative research on the contributory factors leading to medicine-related problems from the perspectives of adult patients with cardiovascular diseases and diabetes mellitus. *BMJ Open, 4*(9), e005992. Retrieved from https://doi.org/10.1136/bmjopen-2014-005992

Han, B., Deng, X., & Fan, H. (2023). Partners or opponents? How mindset shapes consumers' attitude toward anthropomorphic artificial intelligence service robots. *Journal of Service Research, 26*(3), 441-458. Retrieved from https://doi.org/10.1177/10946705231169674

Hanson, S., Hunter, L., Bormann, J., & Sobo, E. (2009). Paternal fears of childbirth: A literature review. *The Journal of Perinatal Education, 18*(4), 12-20. Retrieved from https://doi.org/10.1624/105812409x474672

Hassanzadeh, R., Abbasalizadeh, F., Meedya, S., Charandabi, S., & Mirghafourvand, M. (2020). Fear of childbirth, anxiety, and depression in three groups of primiparous pregnant women not attending, irregularly attending, and regularly attending childbirth preparation classes. *BMC Women's Health, 20*(1). Retrieved from https://doi.org/10.1186/s12905-020-01048-9

Hermansyah, M., Najib, A., Farida, A., Sacipto, R., & Rintyarna, B. (2023). Artificial intelligence and ethics: Building an artificial intelligence system that ensures privacy and social justice. *International Journal of Science and Society, 5*(1), 154-168. Retrieved from https://doi.org/10.54783/ijsoc.v5i1.644

Hongjun, G., Liye, D., & Aiwu, Z. (2022). Ethical risk factors and mechanisms in artificial intelligence decision-making. *Behavioral Sciences, 12*(9), 343. Retrieved from https://doi.org/10.3390/bs12090343

Hsieh, Y., Roh, S., & Lee, Y. (2019). Spiritual well-being, social support, and depression among American Indian women cancer survivors: The mediating effect of perceived quality of life. *Families in Society: The Journal of Contemporary Social Services, 101*(1), 83-94. Retrieved from https://doi.org/10.1177/1044389419853113

Huang, M., & Rust, R. (2020). Engaged to a robot? The role of AI in service. *Journal of Service Research, 24*(1), 30-41.

Huriye, A. (2023). The ethics of artificial intelligence: Examining the ethical considerations surrounding the development and use of AI. *American Journal of Technology, 2*(1), 37-45. Retrieved from https://doi.org/10.58425/ajt.v2i1.142

Hwang, G. (2021). The effects of psychological distance on sport consumers' purchase intentions. *Journal of Marketing and Consumer Research.* Retrieved from https://doi.org/10.7176/jmcr/80-03

I. Rahwan, M. Cebrian, N. Obradovich, J. Bongard, et al. (2016). Machine behaviour. Retrieved from http://arxiv.org/abs/1610.07997

Jobin, A., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence, 1*(9), 389-399. Retrieved from https://doi.org/10.1038/s42256-019-0088-2

Jribi, S., Ismail, H., Doggui, D., & Debbabi, H. (2020). Covid-19 virus outbreak lockdown: What impacts on household food waste? *Environment Development and Sustainability, 22*(5), 3939-3955. Retrieved from https://doi.org/10.1007/s10668-020-00740-y

Junaidi, J., Wicaksono, R., & Hamka, H. (2021). The consumers' commitment and materialism in Islamic banking: The role of religiosity. *Journal of Islamic Marketing, 13*(8), 1786-1806. Retrieved from https://doi.org/10.1108/jima-12-2020-0378

Kang, W., Moon, S., & Park, J. (2017). An enhanced security framework for home appliances in smart homes. *Human-Centric Computing and Information Sciences, 7*(1). Retrieved from https://doi.org/10.1186/s13673-017-0087-4

Karim, K., & Tajibu, M. (2021). The influence of emotional motives on the decision to use a credit card. *Hasanuddin Economics and Business Review, 5*(2), 41. Retrieved from https://doi.org/10.26487/hebr.v5i2.2951

Katsiampoura, G. (2019). Orthodox church and science education policy in modern Greece. *Advances in Historical Studies, 8*(2), 99-106. Retrieved from https://doi.org/10.4236/ahs.2019.82007

Khan, K., Niazi, A., Nasir, A., Hussain, M., & Khan, M. (2021). The effect of COVID-19 on the hospitality industry: The implications for open innovation. *Journal of Open Innovation Technology Market and Complexity*, *7*(1), 30.

Kim, J. H., Lee, H., & Cho, Y. (2022). Learning design to support student-AI collaboration: Perspectives of leading teachers for AI in education. *Education and Information Technologies.* Retrieved from [Link to the paper]

Klaus, P. (2013). The case of Amazon.com: Towards a conceptual framework of online customer service experience (OCSE) using the emerging consensus technique (ECT). *Journal of Services Marketing, 27*(6), 443-457. Retrieved from https://doi.org/10.1108/jsm-02-2012-0030

Kontogeorgis, G., & Varotsis, N. (2021). Reinstating Greek e-governance: A framework for e-government benchmarking, improvement, and government

policies. *Public Administration Issues, 0*(6), 103-127. Retrieved from https://doi.org/10.17323/1999-5431-2021-0-6-103-127

Kronemann, B., Kizgin, H., Rana, N., & Dwivedi, Y. K. (2023). How does AI encourage consumers to share their secrets? The role of anthropomorphism, personalization, and privacy concerns and avenues for future research. *Spanish Journal of Marketing, Esic, 27*(1), 3-19. Retrieved from https://doi.org/10.1108/sjme-10-2022-0213

Kulis, S., Hodge, D., Ayers, S., Brown, E., & Marsiglia, F. (2012). Spirituality and religion: Intertwined protective factors for substance use among urban American Indian youth. *The American Journal of Drug and Alcohol Abuse, 38*(5), 444-449. Retrieved from https://doi.org/10.3109/00952990.2012.670338

Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding the role of artificial intelligence in personalized engagement marketing. *California Management Review, 61*(4), 135-155.

L.D. Rosen, D.C. Sears, & M.M. Weil. (1987). Computerphobia. *Behavior Research Methods Instruments & Computers, 19*(2), 167–179.

Lee, H., & Park, J. (2022). Do parasocial relationships and the quality of communication with AI shopping chatbots determine middle-aged women consumers' continuance usage intentions? *Journal of Consumer Behaviour, 21*(4), 842-854. Retrieved from https://doi.org/10.1002/cb.2043

Lemon, K., & Verhoef, P. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing, 80*(6), 69-96. Retrieved from https://doi.org/10.1509/jm.15.0420

Lerner, J., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology, 81*(1), 146-159.

Li, B., Li, H., Sun, Q., & Chen, X. (2020). Evolutionary game analysis between businesses and consumers under the background of internet rumors. *Concurrency and Computation: Practice and Experience.* Retrieved from https://doi.org/10.1002/cpe.5897

Li, J., Jin, X., Zhao, T., & Ma, T. (2021). Conformity, consumer behavior, and external threats: An empirical analysis in China during the Covid-19 pandemic. *Sage Open, 11*(3), 21582440211032152.

Li, X., Hu, F., & Zhang, Z. (2020). Exploring the impact of artificial intelligence on the financial industry: Evidence from the Chinese stock market. *Electronic Commerce Research and Applications, 40,* 100972. Retrieved from https://doi.org/10.1016/j.elerap.2019.100972

Li, Y., & Yang, P. (2023). Higher education worries and response in the era of artificial intelligence. *Education.*

Li, Y., Zhong, Z., Zhang, F., & Zhao, X. (2022). Artificial intelligence-based human-computer interaction technology applied in consumer behavior analysis and

experiential education. *Frontiers in Psychology, 13.* Retrieved from https://doi.org/10.3389/fpsyg.2022.784311

Lwin, M., & Williams, J. (2021). Can an artificial intelligence (AI) chatbot promote skin self-examination for early melanoma detection? Examining the role of user personality and extraversion. *Journal of Business Research, 128,* 1-9. Retrieved from https://doi.org/10.1016/j.jbusres.2021.06.052

Lysonski, S., & Durvasula, S. (2013). Consumer decision-making styles in retailing: Evolution of mindsets and psychological impacts. *Journal of Consumer Marketing, 30*(1), 75-87. Retrieved from https://doi.org/10.1108/07363761311290858

Makrydakis, N. (2021). Perceptions of marketing and digital transformation in Greek public higher education organizations in the context of digital Darwinism. *Journal of Management and Entrepreneurship Research, 2*(1). Retrieved from https://doi.org/10.34001/jmer.2021.6.02.1-18

Mandel, N., Rucker, D., Levav, J., & Galinsky, A. (2017). The compensatory consumer behavior model: How self-discrepancies drive consumer behavior. *Journal of Consumer Psychology, 27*(1), 133-146. Retrieved from https://doi.org/10.1016/j.jcps.2016.05.003

Marouli, M., Mylona, S., & Tsakonas, A. (2020). Attitudes towards artificial intelligence in education: Insights from Greek educators. *Education Sciences, 10*(11), 307. Retrieved from https://doi.org/10.3390/educsci10110307

Mathias, D., Cohen, A., Mandel, N., & Mick, D. (2016). The effects of religion on consumer behavior: A conceptual framework and research agenda. *Journal of Consumer Psychology, 26*(2), 298-311. Retrieved from https://doi.org/10.1016/j.jcps.2015.08.001

McLennan, S., Fiske, A., Tigard, D., Müller, R., Haddadin, S., & Buyx, A. (2022). Embedded ethics: A proposal for integrating ethics into the development of medical AI. *BMC Medical Ethics, 23*(1). Retrieved from https://doi.org/10.1186/s12910-022-00746-3

Minton, E., Kahle, L., Jiuan, T., & Tambyah, S. (2016). Addressing criticisms of global religion research: A consumption-based exploration of status and materialism, sustainability, and volunteering behavior. *Journal for the Scientific Study of Religion, 55*(2), 365-383. Retrieved from https://doi.org/10.1111/jssr.12260

Minton, E., Kaplan, B., & Cabano, F. (2022). The influence of religiosity on consumers' evaluations of brands using artificial intelligence. *Psychology and Marketing, 39*(11), 2055-2071. Retrieved from https://doi.org/10.1002/mar.21727

Mitchell, M. (2020). On crashing the barrier of meaning in artificial intelligence. *AI Magazine, 41*(2), 86-92. Retrieved from https://doi.org/10.1609/aimag.v41i2.5259

Mittelstadt, B., Allo, P., Taddeo, M., Wachter, S., & Floridi, L. (2016). The ethics of algorithms: Mapping the debate. *Big Data & Society, 3*(2), 205395171667967. Retrieved from https://doi.org/10.1177/2053951716679679

Mnih, V., Kavukcuoglu, K., Silver, D., Rusu, A., Veness, J., Bellemare, M., & Hassabis, D. (2015). Human-level control through deep reinforcement learning. *Nature*, *518*(7540), 529-533. Retrieved from https://doi.org/10.1038/nature14236

Mokhlis, S. (2009). Relevancy and measurement of religiosity in consumer behavior research. *International Business Research, 2*(3).

Mol, L., & Birgelen, M. (2019). Customer acceptance of artificial intelligence-powered services: An empirical study on chatbot services. *Journal of Service Management*, *30*(4), 532-554. Retrieved from https://doi.org/10.1108/JOSM-02-2019-0059

Moore, J. (2019). AI is all right. *Frontiers in Big Data, 2.* Retrieved from https://doi.org/10.3389/fdata.2019.00032

Nature. (2019). Artificial intelligence: risks and opportunities. *Nature*, *568*(25), 477–486.

Oreg, S. (2003). Resistance to change: Developing an individual differences measure. *Journal of Applied Psychology*, *88*(4), 680-693. Retrieved from https://doi.org/10.1037/0021-9010.88.4.680

O'Sullivan, K., Nickel, B., Dakin, T., Maher, C., Albarqouni, L., McCaffery, K., & Moynihan, R. (2021). Journalists' views on media coverage of medical tests and overdiagnosis: A qualitative study. *BMJ Open, 11*(6), e043991. Retrieved from https://doi.org/10.1136/bmjopen-2020-043991

Ouchchy, L., Coin, A., & Dubljević, V. (2020). AI in the headlines: the portrayal of the ethical issues of artificial intelligence in the media. *AI & Society, 35*(4), 927-936. Retrieved from https://doi.org/10.1007/s00146-020-00965-5

Pala, Z., & Ozkan, O. (2020). Artificial intelligence helps protect smart homes against thieves. *Dümf Mühendislik Dergisi.* Retrieved from https://doi.org/10.24012/dumf.700311

Pelaez, A., Jacobson, A., Trias, K., & Winston, E. R. (2022). The Turing Teacher: Identifying core attributes for AI learning in K-12. *Frontiers in Artificial Intelligence.*

Pflanzer, M., Traylor, Z., Lyons, J., Dubljević, V., & Nam, C. (2022). Ethics in human-AI teaming: Principles and perspectives. *AI and Ethics, 3*(3), 917-935. Retrieved from https://doi.org/10.1007/s43681-022-00214-z

Pliatsikas, P., & Economides, A. (2022). Factors influencing the intention of Greek consumers to use smart home technology. *Advances in Science and Innovations, 5*(1).

Plikas, J., Plikas, H., & Plikas, H. (2016). Modeling the adoption of e-procurement and technology, marketing, and social media by-products from Greek

businesses and their effect on electronic sales. *International Journal of Strategic Innovative Marketing, 2*(3).

Prasad, A., & Govindarajan, V. (2019). The five rules of megaplatform strategy. *Harvard Business Review, 97*(5), 40-48.

Puntoni, S., Reczek, R., Giesler, M., & Botti, S. (2020). Consumers and artificial intelligence: An experimental perspective. *Journal of Marketing, 85*(1), 131-151.

Rajaguru, R., & Matanda, M. (2020). Extending the mental representation of the store with augmented reality: The effects on perceived retail identity, place attachment, and retail patronage. *Journal of Retailing and Consumer Services, 57.*

Ramkumar, V., Devadasan, S. R., & Choudhury, H. (2021). Artificial intelligence applications in marketing: A systematic literature review. *Journal of Business Research, 128,* 280-292. Retrieved from https://doi.org/10.1016/j.jbusres.2021.06.026

Ransing, R., Menon, V., Kar, S., & Arafat, S. (2021). Artificial intelligence-based models for augmenting media reporting of suicide: Challenges and opportunities. *Global Psychiatry Archives, 4*(2), 123-129. Retrieved from https://doi.org/10.52095/gp.2021.3037.1017

Ray, S., & Mukherjee, A. (2021). Adoption of artificial intelligence-based technologies in the hospitality industry: A study of customers' perspectives.

Journal of Hospitality and Tourism Technology, 14(5), 677-697. Retrieved from https://doi.org/10.1108/JHTT-11-2020-0225

Rehman, S., Hamza, M., Nasir, A., Ullah, A., & Arshad, N. (2022). Impact of COVID-19 and consortium factors on mental health: Role of emotional labor strategies in achieving sustainable development goals. *Frontiers in Psychology, 13.*

Ridei, N., Tytova, N., & Stepanenko, L. (2022). Digital transformation of public administration: Sociocultural forms of organization in education, science, and innovation. *Cuestiones Políticas, 40*(73), 868-882. Retrieved from https://doi.org/10.46398/cuestpol.4073.50

Rodgers, W., & Nguyen, T. (2022). Advertising benefits from ethical artificial intelligence algorithmic purchase decision pathways. *Journal of Business Ethics, 178*(4), 1043-1061. Retrieved from https://doi.org/10.1007/s10551-022-05048-7

Roh, S., Burnette, C., & Lee, Y. (2018). Prayer and faith: Spiritual coping among American Indian women cancer survivors. *Health & Social Work, 43*(3), 185-192. Retrieved from https://doi.org/10.1093/hsw/hly015

Rumagit, M. (2022). Factors influencing consumer buying behavior in Uniqlo retail stores. *International Journal of Accounting & Finance in Asia Pacific, 5*(1). Retrieved from https://doi.org/10.32535/ijafap.v5i1.1414

Russakovsky, O., Deng, J., Su, H., Krause, J., Satheesh, S., Ma, S., & Fei-Fei, L. (2015). ImageNet large-scale visual recognition challenge. *International Journal of Computer Vision, 115*(3), 211-252. Retrieved from https://doi.org/10.1007/s11263-015-0816-y

S. Chopra, & L. White. (2007). Privacy and artificial agents, or is Google reading my email? *Proceedings of the 20th International Joint Conference on Artificial Intelligence.*

S.R. Granter, A.H. Beck, & Papke, AlphaGo Jr. (2017). Deep learning and the future of the human microscopist. *Archives of Pathology and Laboratory Medicine, 141*(5), 619–621.

Said, N., Potinteu, A., Brich, I., Buder, J., Schumm, H., & Huff, M. (2022). An artificial intelligence perspective: How knowledge and confidence shape risk and opportunity perception. Retrieved from https://doi.org/10.31234/osf.io/5zvha

Sakellariou, A. (2022). Investigating fundamentalist trends in the Orthodox Church of Greece: Balancing traditionalism and fundamentalism. *Zeitschrift für Religion, Gesellschaft und Politik, 7*(1), 59-79. Retrieved from https://doi.org/10.1007/s41682-022-00110-7

Sepasgozar, S., Karimi, R., Farahzadi, L., Moezzi, F., Shirowzhan, S., & Aye, L. (2020). A systematic content review of artificial intelligence and the Internet of Things applications in smart homes. *Applied Sciences, 10*(9), 3074. Retrieved from https://doi.org/10.3390/app10093074

Sharma, A., Yadav, S., & Mohan, P. (2022). Factors influencing consumers' attitudes towards artificial intelligence in banking services. *Journal of Financial Services Marketing, 27*(3), 213-228. Retrieved from https://doi.org/10.1057/s41264-021-00111-1

Shepperd, J., Howell, J., & Logan, H. (2013). A survey of barriers to screening for oral cancer among rural Black Americans. *Psycho-Oncology, 23*(3), 276-282. Retrieved from https://doi.org/10.1002/pon.3415

Sindermann, C., Yang, H., Elhai, J., Yang, S., Quan, L., Li, M., & Montag, C. (2022). Acceptance and fear of artificial intelligence: Associations with personality in a German and a Chinese sample. *Discover Psychology, 2*(2), 20.

Sirgy, M., & Su, C. (2000). Destination image, self-congruity, and travel behavior: Toward an integrative model. *Journal of Travel Research, 38*(4), 340-352. Retrieved from https://doi.org/10.1177/004728750003800402

Sobaci, M. (2016). Social media and local governments. Retrieved from https://doi.org/10.1007/978-3-319-17722-9

Stai, B., Heller, N., McSweeney, S., Rickman, J., Blake, P., Vasdev, R., & Weight, C. (2020). Public perceptions of artificial intelligence and robotics in medicine. *Journal of Endourology, 34*(10), 1041-1048. Retrieved from https://doi.org/10.1089/end.2020.0137

Sultan, A. (2019). Identifying brand touchpoints to increase switching costs in the banking industry. *The International Journal of Bank Marketing, 38*(3), 718-736. Retrieved from https://doi.org/10.1108/ijbm-07-2019-0255

Sun, W., Nasraoui, O., & Shafto, P. (2020). Evolution and impact of bias in human and machine learning algorithm interaction. *PLOS ONE, 15*(8), e0235502. Retrieved from https://doi.org/10.1371/journal.pone.0235502

Sun, Y., Ding, W., Weng, C., Cheah, I., & Cai, H. (2021). The effect of consumer resistance to innovation on innovation adoption: The moderating role of customer loyalty. *Asia Pacific Journal of Marketing and Logistics, 34*(9), 1849-1863. Retrieved from https://doi.org/10.1108/apjml-12-2020-0865

Taddeo, M., & Floridi, L. (2018). How AI can be a force for good. *Science, 361*(6404), 751-752. Retrieved from https://doi.org/10.1126/science.aat5991

Talke, K., & Heidenreich, S. (2013). How to overcome pro-change bias: Incorporating passive and active innovation resistance in innovation decision models. *Journal of Product Innovation Management, 31*(5), 894-907. Retrieved from https://doi.org/10.1111/jpim.12130

Thurman, E., & Thurman, E. (2021). The influence of symbolic frames on Americans' adherence to COVID-19 public health guidelines. *Journal of Student Research, 10*(4). Retrieved from https://doi.org/10.47611/jsrhs.v10i4.1902

Tomasev, N., Cornebise, J., Hutter, F., Mohamed, S., Picciariello, A., Connelly, B., & Clopath, C. (2020). AI for social good: Unlocking the opportunity for positive impact. *Nature Communications, 11*(1). Retrieved from https://doi.org/10.1038/s41467-020-15871-z

Toquero, C. (2020). Will COVID-19 bring the Armageddon? Expanding psychosocial support and environmental care: An autoethnographic research. *Aquademia, 4*(2), ep20022.

Tsaliki, E. (2017). Religious education in Greece falls under the scope of interculturalism. *Journal of Education and Training, 4*(1), 40. Retrieved from https://doi.org/10.5296/jet.v4i1.9923

Tsamados, A., Aggarwal, N., Cowls, J., Morley, J., Roberts, H., Taddeo, M., & Floridi, L. (2021). The ethics of algorithms: Key problems and solutions. *AI & Society, 37*(1), 215-230. Retrieved from https://doi.org/10.1007/s00146-021-01154-8

Tussyadiah, I., & Miller, G. (2018). Perceived impacts of artificial intelligence and responses to positive behavior change intervention. In *Lecture Notes in Computer Science* (pp. 359-370). Springer. Retrieved from https://doi.org/10.1007/978-3-030-05940-8_28

V. Yampolskiy, M. Roman, & S. Spellchecker. (2016). Artificial intelligence safety and cybersecurity: A timeline of AI failures. Retrieved from http://arxiv.org/abs/1610.07997

Vargas-Hernández, J., & Cervantes-Guzmán, J. (2020). Consumer behavior. In *The Palgrave Handbook of Humanitarian Logistics and Supply Chain Management* (pp. 141-174).

Verhoef, P., Lemon, K., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. (2009). Customer experience creation: Determinants, dynamics, and management strategies. *Journal of Retailing, 85*(1), 31-41. Retrieved from https://doi.org/10.1016/j.jretai.2008.11.001

Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., Dignum, V., Domisch, S., & Nerini, F. (2020). The role of artificial intelligence in achieving sustainable development goals. *Nature Communications, 11*(1). Retrieved from https://doi.org/10.1038/s41467-019-14108-y

Vrontis, D., Papasolomou-Doukakis, I., & Thrassou, A. (2020). Technology and value co-creation: A study of smart technologies. *Journal of Business Research, 106,* 22-32. Retrieved from https://doi.org/10.1016/j.jbusres.2019.08.028

Walsh, G., Hennig-Thurau, T., Wayne-Mitchell, V., & Wiedmann, K. (2001). Consumers' decision-making style as a basis for market segmentation. *Journal of Targeting, Measurement, and Analysis for Marketing, 10*(2), 117-131. Retrieved from https://doi.org/10.1057/palgrave.jt.5740039

Wang, X., Zhu, H., Jiang, D., Xia, S., & Xiao, C. (2023). “Facilitators” vs. “substitutes”: The influence of artificial intelligence products’ image on consumer evaluation. *Nankai Business Review International, 14*(1), 177-193. Retrieved from https://doi.org/10.1108/nbri-05-2022-0051

Wirtz, J., Patterson, P., Kunz, W., Gruber, T., Lu, V., Paluch, S., & Teo, C. (2018). Brave new world: Service robots in the frontline. *Journal of Service Management, 29*(5), 907-931. Retrieved from https://doi.org/10.1108/JOSM-02-2018-0049

Wu, Y. (2023). Research on factors influencing consumer buying behavior. In *Proceedings of the 10th International Conference on Business, Economics, Management, and Sustainability (BEMAS 2023)* (pp. 1113-1120). Retrieved from https://doi.org/10.2991/978-94-6463-098-5_125

Y. O. Khasawneh. (2018). Technophobia: Examining its hidden factors and defining it. *Technology in Society, 54,* 93–100.

Yigitcanlar, T., Degirmenci, K., & Inkinen, T. (2022). Drivers behind the public perception of artificial intelligence: Insights from major Australian cities. *AI & Society.* Retrieved from https://doi.org/10.1007/s00146-022-01566-0

Yin, J., & Qiu, X. (2021). AI technology and online purchase intention: Structural equation model based on perceived value. *Sustainability, 13*(10), 5671. Retrieved from https://doi.org/10.3390/su13105671

Yudkowsky, E. (2008). Artificial intelligence as a positive and negative factor in global risk. In *Global Catastrophic Risks* (pp. 308-345). Oxford University Press. Retrieved from https://doi.org/10.1093/oso/9780198570509.003.0021

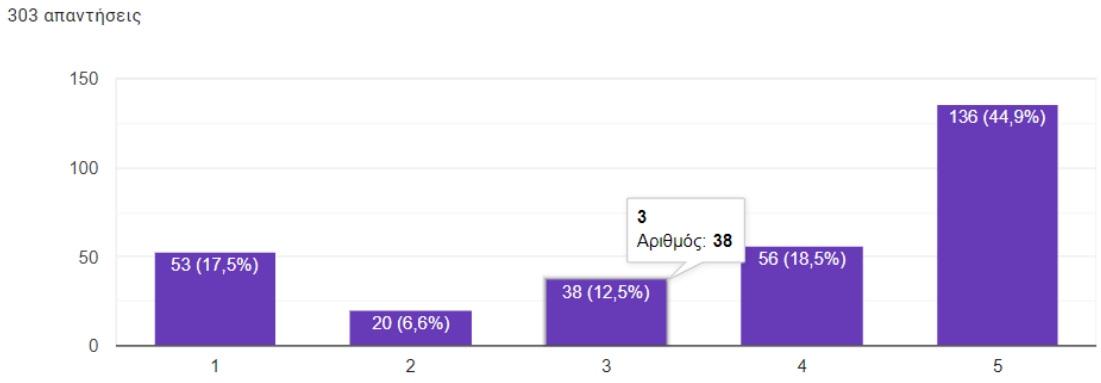
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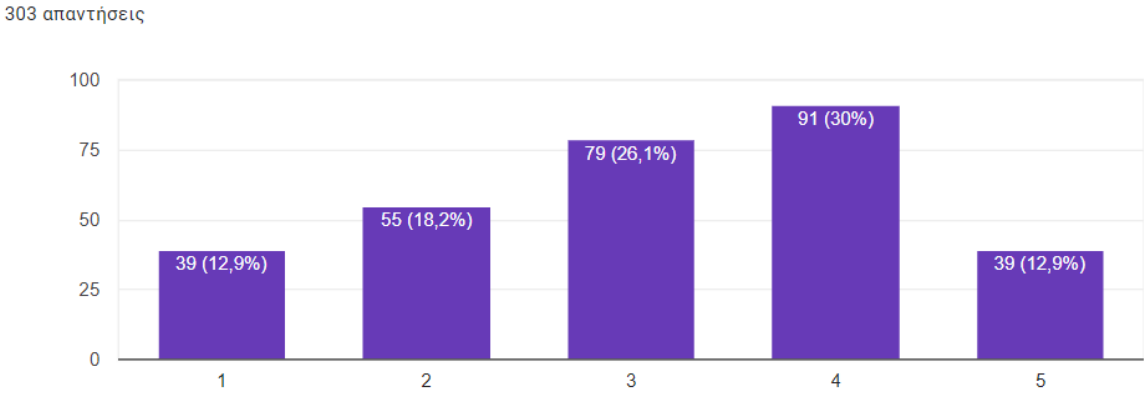
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- **arXiv.org**: https://arxiv.org/abs/2107.14044
- **Journal of the Science of Food and Agriculture**: https://doi.org/10.1002/jsfa.8571
- **IEEE Communications Surveys & Tutorials**: https://doi.org/10.1109/comst.2015.2444095
- **MDPI Electronics**: https://www.mdpi.com/2079-9292/11/22/3695
- **Frontiers in Psychology**: https://doi.org/10.3389/fpsyg.2022.961589
- **BMC Oral Health**: https://doi.org/10.1186/1472-6831-8-29
- **AI & Society**: https://doi.org/10.1007/s00146-022-01598-6
- **PLOS ONE**: https://doi.org/10.1371/journal.pone.0235502
- **Nature Communications**: https://doi.org/10.1038/s41467-020-15871-z
- **Emerging Science Journal**: https://doi.org/10.28991/esj-2023-07-02-01
- **Journal of Retailing and Consumer Services**: https://doi.org/10.1016/j.jretai.2008.11.001
- **Springer Lecture Notes**: https://doi.org/10.1007/978-3-030-05940-8_28
- **International Journal of Consumer Studies**: https://doi.org/10.1111/ijcs.12768
- **Journal of Service Management**: https://doi.org/10.1108/JOSM-02-2018-0049
- **Journal of Islamic Marketing**: https://doi.org/10.1108/jima-12-2020-0378
- **BMJ Open**: https://doi.org/10.1136/bmjopen-2020-043991
- **Journal of Business Research**: https://doi.org/10.1016/j.jbusres.2021.06.026
- **Journal of Product Innovation Management**: https://doi.org/10.1111/jpim.12130
- **Journal of Travel Research**: https://doi.org/10.1177/004728750003800402

VII. Appendices

0. I use voice commands on my smartphone for various instructions. I also use my fingerprint and/or my face to unlock the screen.

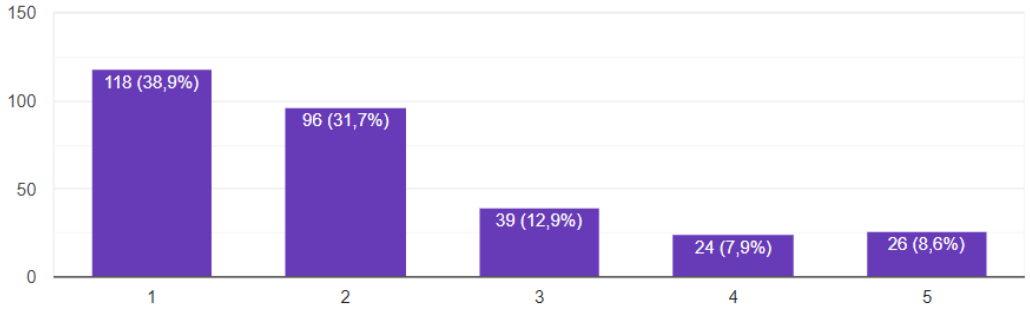


1. How well do you understand the concepts of artificial intelligence?

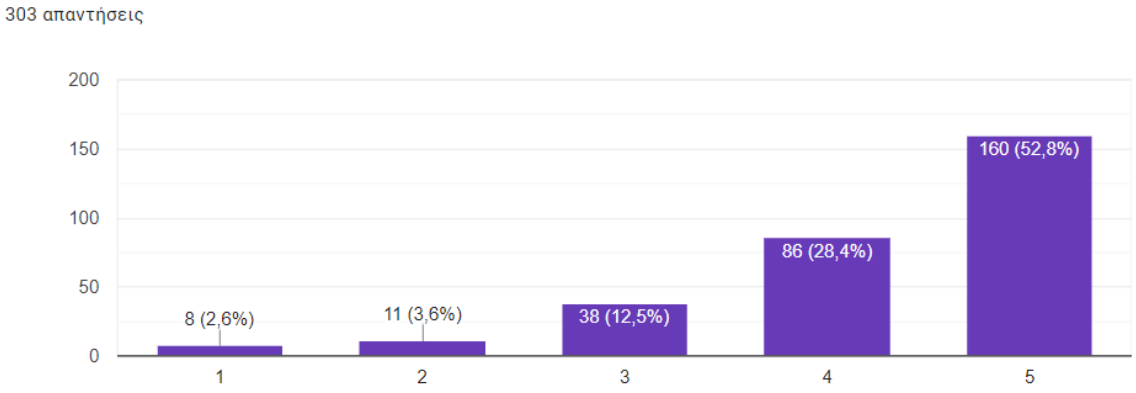


2. Do you believe that media and government agencies provide sufficient knowledge and information to citizens-consumers in order to feel secure about the topic of artificial intelligence and its capabilities?

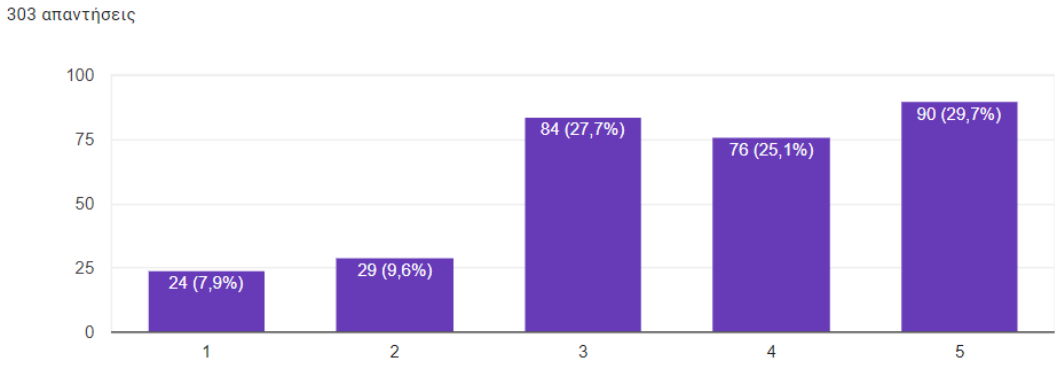
303 απαντήσεις



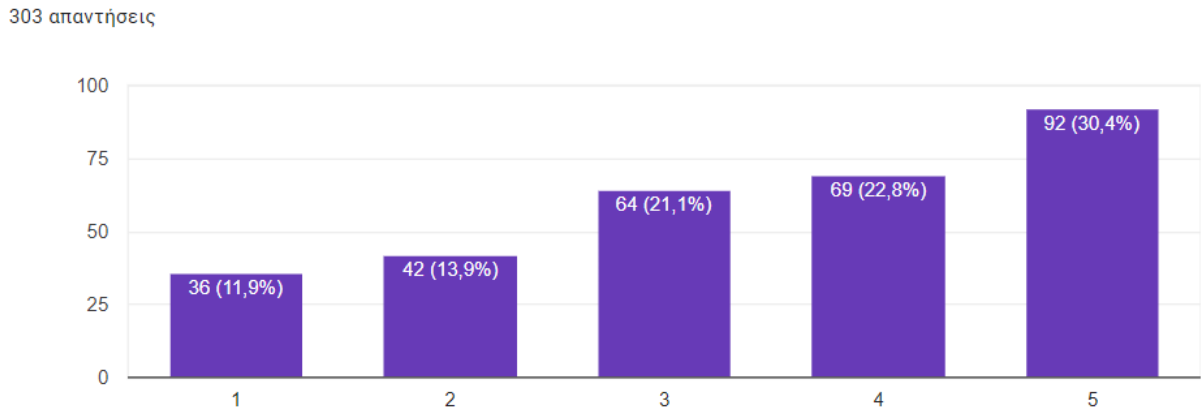
1. I would like schools, government, and media to train me more and on a regular basis around AI in the future.



2. I worry that people cannot figure out how AI makes decisions during when they want to purchase a good or a service (= new item from the researcher)

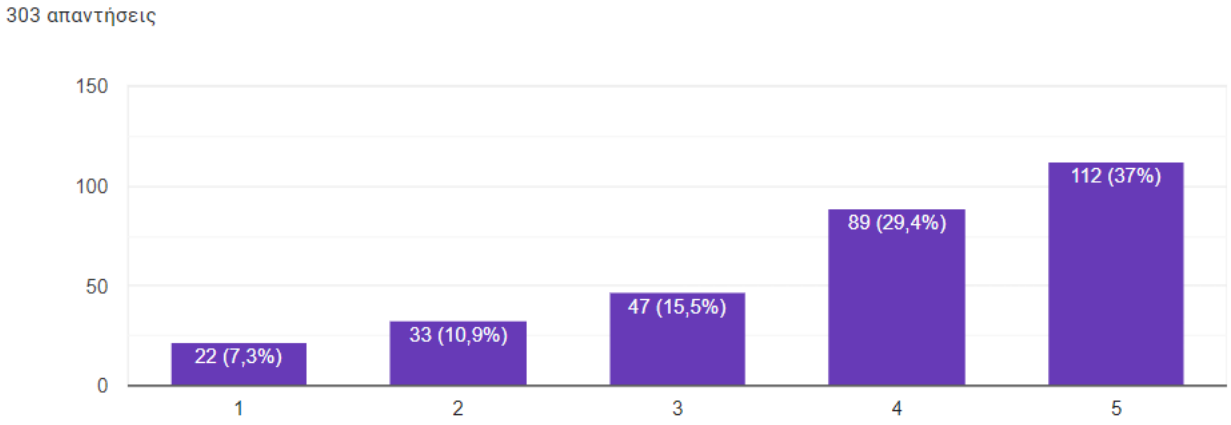


5. I'm afraid that artificial intelligence (AI) will monitor my consumer behavior



6. I’m worried that AI will collect too much of my personal

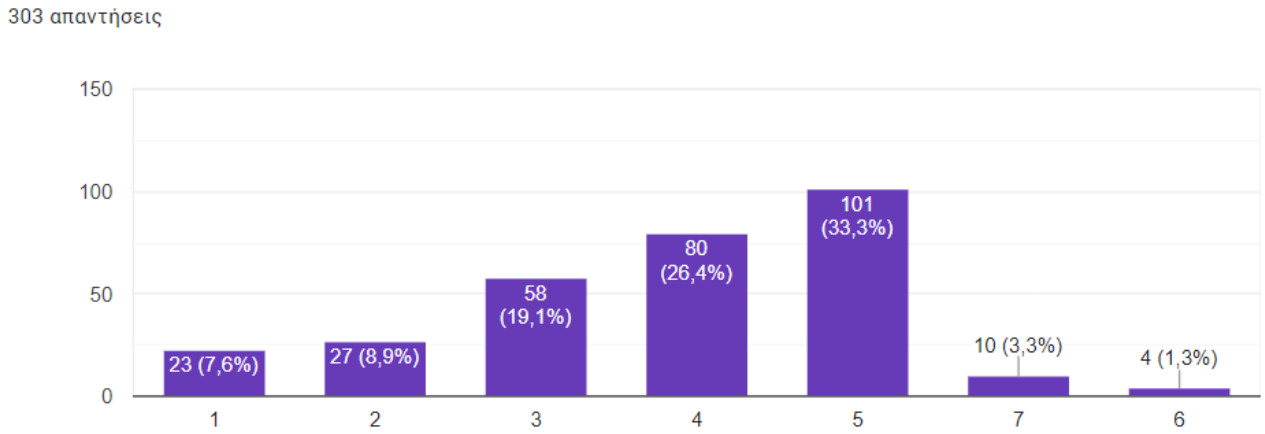
Information



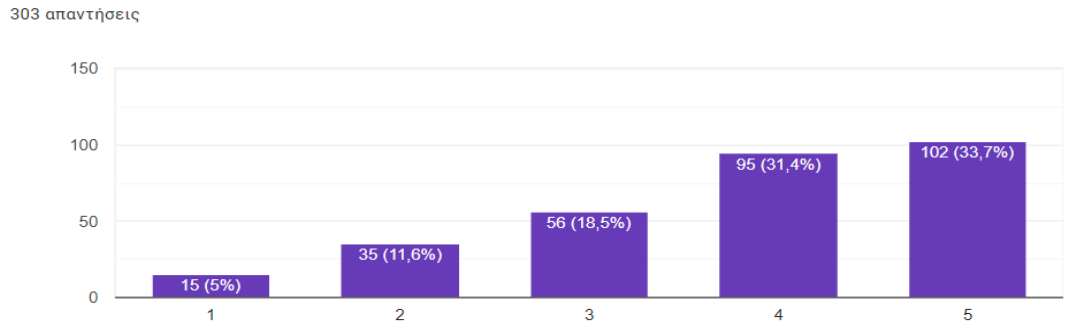
7. AI’s predictions of my preferences, such as

recommended ads or web pages, make me feel that my privacy

is violated. (the above question accidentally had more likkert scales; we will merge the percentages to have from scale 1 to 5)

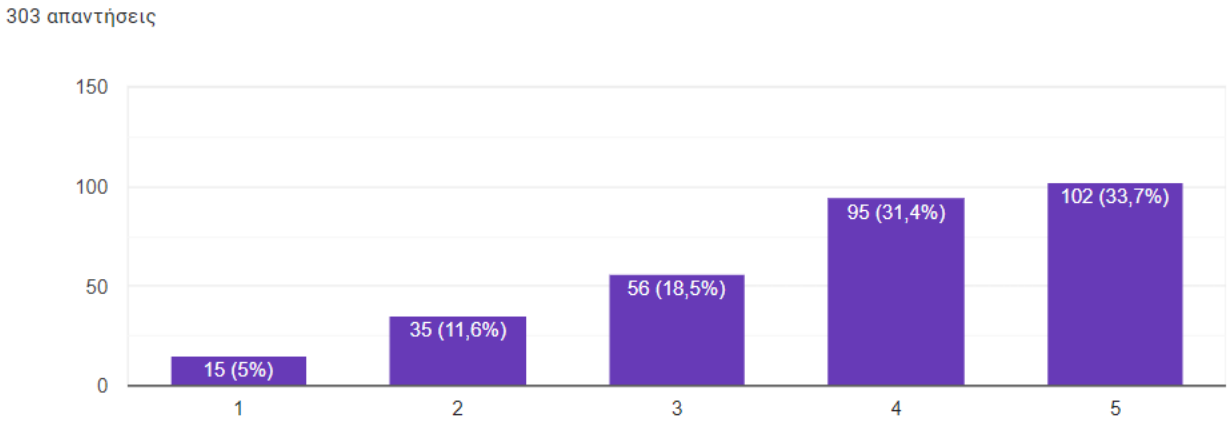


8. I don’t mind if the AI sets different prices (price discrimination) for different people, which is unfair because it might benefit me as a consumer

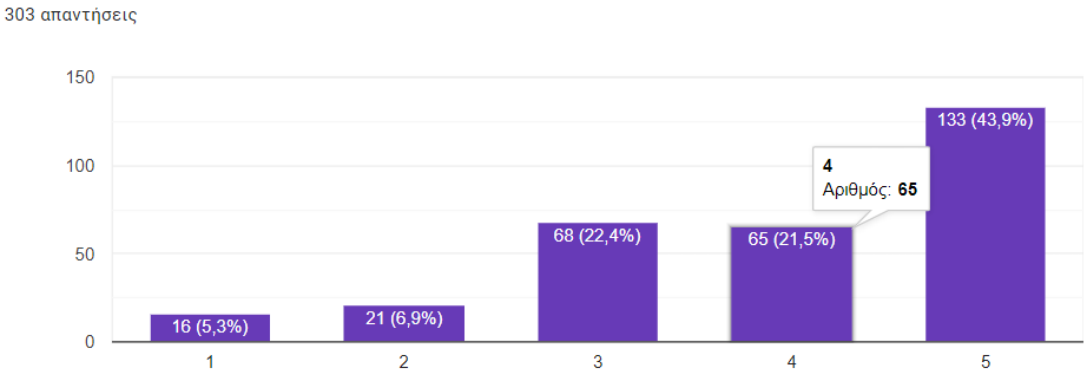


9. AI may harm humans to achieve a goal, which gives me

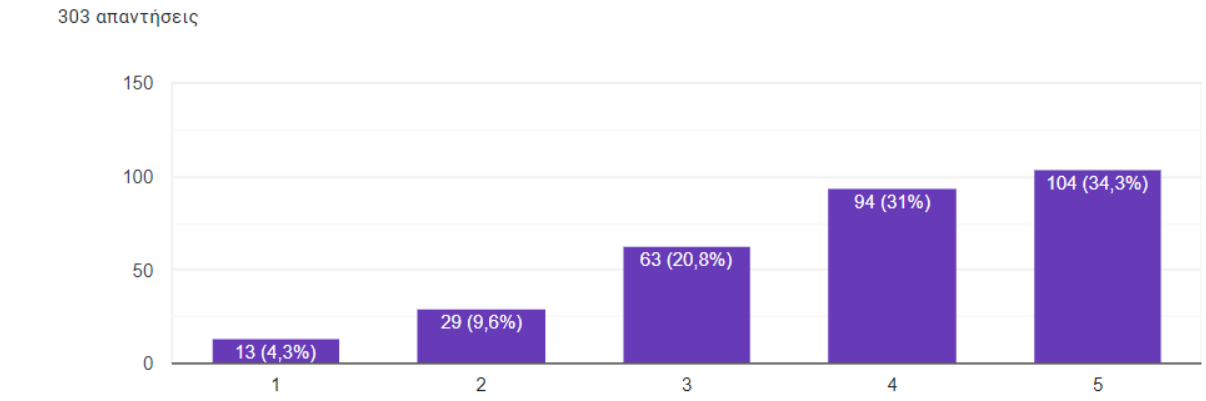
anxiety



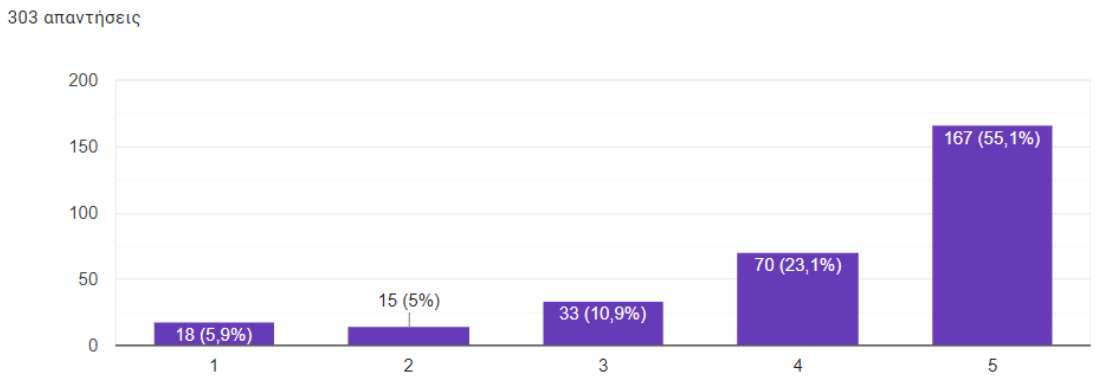
10. I don’t mind if the AI sets different prices (price discrimination) for different people, which is unfair because it might benefit me as a consumer



11. I worry that the control of AI/Super AI by a few individuals will introduce great risks to the entire society.

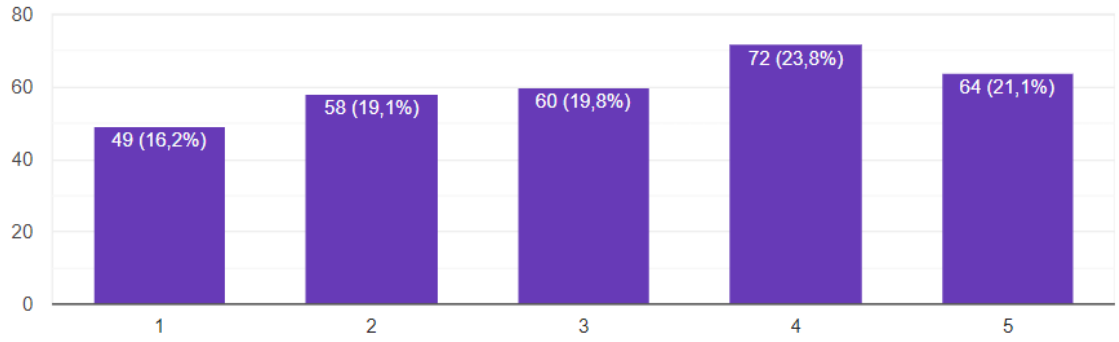


12. Do you use your mobile phone for various transactions (e.g., during the COVID period, to have your vaccination certificate, driver's license, conduct transactions with the government, or make payments with your credit card)?



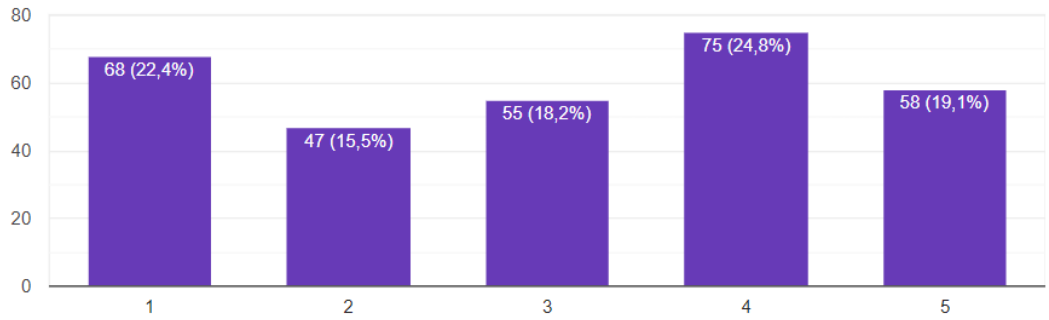
13. I'm worried that AI will replace many people's work

303 απαντήσεις



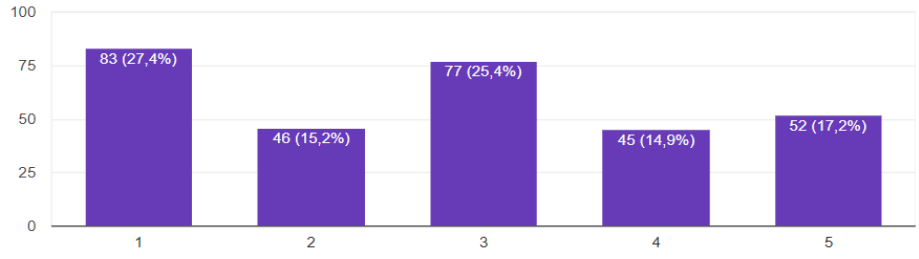
19. I feel anxious working with AI that is smarter than me

303 απαντήσεις



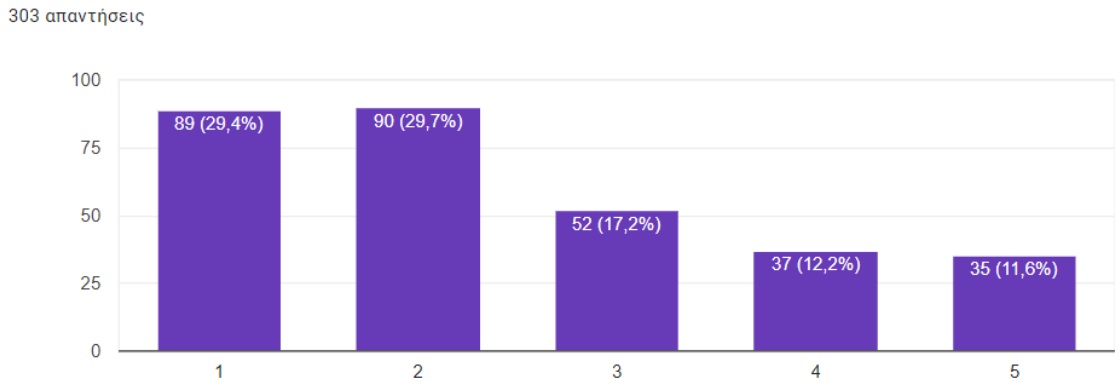
20. I do not think I would be able to perform well in professional courses in AI

303 απαντήσεις

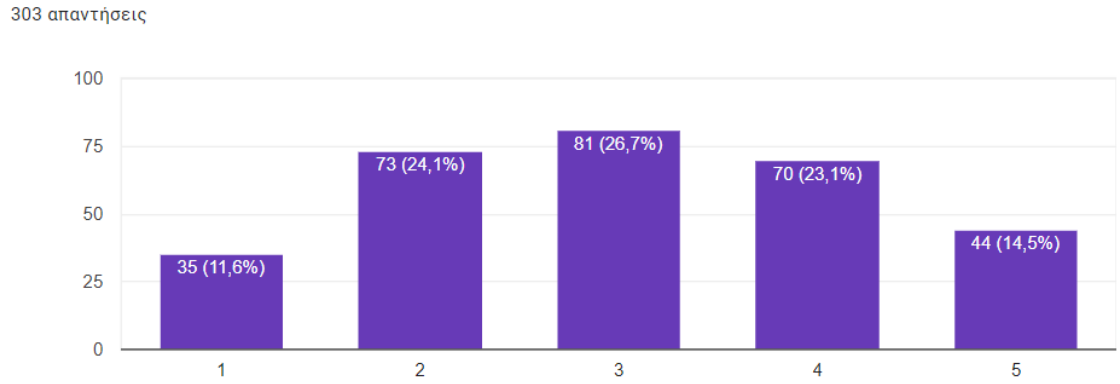


21. Understanding AI algorithms requires a high level of talent.

which is difficult for me

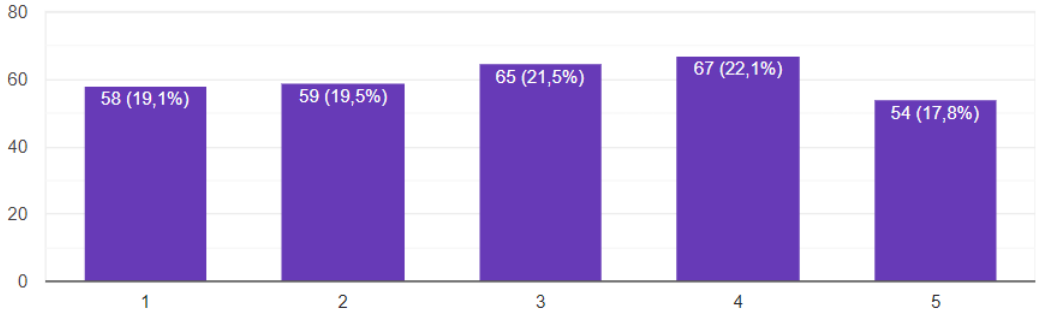


22. AI technology updates too quickly and is very difficult to learn



23. I worry that humans have special feelings (such as love or adoration) for super AI and all of these is against in my religion. NEW input from the researcher

303 απαντήσεις



19. I worry that AI will attain the same level of consciousness as humans

303 απαντήσεις

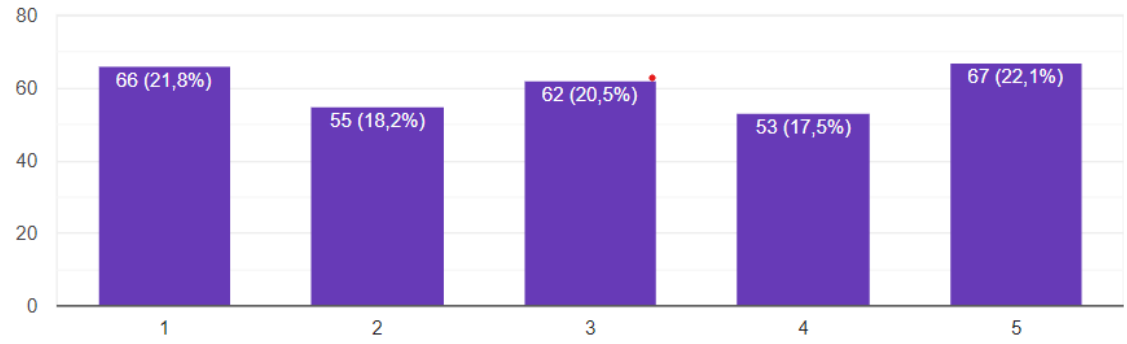


Table 1: Factor Analysis results and supporting literature

Awareness about Artificial Intelligence/ What is it AI?	**Supporting literature**	
0. I use voice commands on my smartphone for various instructions. I also use my fingerprint	AI voice recognition has seen significant growth, with voice	McLean, G. and Osei-Frimpong, K. (2019) Hey alexa ... examine the
1. How well do you understand the concepts of artificial intelligence?	Some studies suggest that there is limited understanding of AI	Yigitcanlar, T., Kankanamge, N., Regona, M., Maldonado, A., Rowan, B., Ryu,
2. Do you believe that media and government agencies provide sufficient knowledge and	It is important that journalists receive training and support to	O'Sullivan, K., Nickel, B., Dakin, T., Maher, C., Albarqouni, L., McCaffery, K.,
3. I would like schools/ government/ media to train me more and in regular basis around AI in	Additionally, the government can play a role in training media	
Awareness about Artificial Intelligence/ Lack of Transparency Anxiety	**Supporting literature**	
2. I worry that people cannot figure out how AI makes decisions during when they want to	A description of how and why an outcome came about may not	R. Clarke, Why the world wants controls over Artificial Intelligence,
Consideration about Artificial Intelligence/ Privacy Violation Anxiety	**Supporting literature**	
1. I'm afraid that artificial intelligence (AI) will monitor my consumer	I am fearful that someone is using technology to watch and listen	Y. O. Khasawneh Technophobia: Examining its hidden factors and defining
2. I'm worried that AI will collect too much of my personal	I'm concerned that companies are collecting too much personal	H.J. Smith, M.S.J. Burke, Information privacy: measuring individuals'
3. AI's predictions of my preferences, such as well	Google then, implicitly acknowledges that, however automated	S. Chopra, L. White, Privacy and artificial agents, or, is google reading my
Consideration about Artificial Intelligence/ Existential Risk Anxiety	**Supporting literature**	
1. AI may harm humans to achieve a goal, which gives me	We could mistakenly elevate a subgoal to the status of a super	[20] N. Bostrom, Existential risks: analyzing human extinction scenarios
2. I worry that the control of AI/ Super AI by a few individuals will	In popular culture (science fiction movies/books) AIs/Robots rebel	Yin, J., & Qiu, X. (2021). AI technology and online purchase intention:
Purchase with Artificial Intelligence/ Bias Behavior Anxiety	**Supporting literature**	
1. I don't mind if the AI sets different prices (price discrimination) for different people, which is	Online pricing algorithms shape the cost of products differentially	I. Rahwan, M. Cebrian, N. Obradovich, J. Bongard, et al., Machine
2. AI treats differently each consumer (people) differently, which can make me	In an analysis of the context of the use of the term 'girl', research	S. Leavy, Gender Bias in Artificial Intelligence: the Need for Diversity and
3. "Do you use your mobile phone for various transactions (e.g., during the COVID period, to	Motivation, ease of use, performance and satisfaction with the	C hopra, K. (2019). Indian shopper motivation to use artificial intelligence.
Retention with Artificial Intelligence/ Job Replacement Anxiety	**Supporting literature**	
1. I am worried that AI will replace my work in the future	Our scenarios across 46 countries suggest that between almost	McKinsey Global Institute, Jobs Lost, Jobs Gained: Workforce Transitions in
2. I feel anxious working with AI that is smarter than me	I dislike working with machines that are smarter than I am.	R.K. Heinssen, C.R. Glass, L.A. Knight, Assessing computer anxiety:
3. I'm worried that AI will replace many people's work	Our scenarios suggest that by 2030, 75 million to 375 million	McKinsey Global Institute, Jobs Lost, Jobs Gained: Workforce Transitions in
Advocacy with Artificial Intelligence/ Learning Anxiety	**Supporting literature**	
1. I do not think I would be able to perform well in	I do not think I would be able to learn a computer programming	R.K. Heinssen, C.R. Glass, L.A. Knight, Assessing computer anxiety:
2. Understanding AI algorithms requires a high level of talent,	I have difficulty in understanding the technical aspects of	R.K. Heinssen, C.R. Glass, L.A. Knight, Assessing computer anxiety:
3. AI technology updates too quickly and is very difficult to	By playing itself and determining which moves lead to better	S.R. Granter, A.H. Beck, Papke Alpha Go Jr., Deep learning, and the future of
Advocacy with Artificial Intelligence/ Against Ethics Anxiety	**Supporting literature**	
1. I am disturbed that AI can deceive (for example, enticing	The Turing-esque goal—of fooling customers into thinking that the	[58] D.J. Gunkel, The Machine Question: Critical Perspectives on AI,
2. I worry that humans have special feelings (such as love or	as technology evolves it is expected that these humanoid robots	H. Gonzalez-Jimenez, Taking the fiction out of science fiction: (Self-aware)
Advocacy with Artificial Intelligence/ Artificial Consciousness Anxiety	**Supporting literature**	
1. I worry that AI will attain the same level of consciousness as	the main difference with respect to the natural counterpart	G. Buttazzo, Artificial consciousness: hazardous questions (and answers),

"*Dimensions of Artificial Intelligence Anxiety Based on an Integrative Theory of Fear Acquisition*" (2020)

Table 1
Factor analysis results and supporting literatures.

Items NO.	Items	supporting literature(original)	Mean	Factor loading	AVE	CR (rho)	alpha
	Privacy Violation Anxiety						
PVA1	(1) I'm afraid that artificial intelligence (AI) will monitor my behavior [26].	I am fearful that someone is using technology to watch and listen to everything that I do. (Khasawneh,2018)	5.000	0.894	0.753	0.901	0.893
PVA2	(2) I'm worried that AI will collect too much of my personal information [76].	I'm concerned that companies are collecting too much personal information about me. (Smith&Burke,1996)	5.204	0.947			
PVA3	(3) AI's predictions of my preferences, such as well recommended ads or web pages, make me feel that my privacy is violated [34].	Google then, implicitly acknowledges that, however automated the process(generation of ads), if details were forwarded on to third parties, a violation of privacy would occur.(Chopra&White,2007)	4.881	0.751			
	Bias Behavior Anxiety						
BBA1	(1) It is unacceptable if AI is racially discriminatory [50].	A greater percentage of Instant Checkmate ads using the word "arrest" appeared for black-identifying first names than for white first names. (Sweeney,2013)	5.000	0.727	0.698	0.873	0.864
BBA2	(2) AI sets different prices (price discrimination) for different people, which is unfair [17].	Online pricing algorithms shape the cost of products differentially across consumers. (Rahwan et al., 2019)	4.850	0.860			
BBA3	(3) AI treats different people differently, which can make me anxious [31].	In an analysis of the context of the use of the term 'girl', research has shown that girls and boys are represented differently with girls being more objectified and portrayed in more negative contexts. (Leavy,2018)	4.755	0.908			
	Job Replacement Anxiety						
JRA1	(1) I am worried that AI will replace my work in the future [5].	Our scenarios across 46 countries suggest that between almost zero and one third of work activities could be displaced by 2030, with a midpoint of 15%. (Manyika Global Institute,2017)	4.457	0.805	0.635	0.838	0.834
JRA2	(2) I feel anxious working with AI that is smarter than me [50].	I dislike working with machines that are smarter than I am. (Heinssen et al., 1987)	4.215	0.876			
JRA3	(3) I'm worried that AI will replace many people's work [5].	Our scenarios suggest that by 2030, 75 million to 375 million workers (3–14% of the global workforce) will need to switch occupational categories. (Manyika, Lund et al., 2017)	4.860	0.700			
	Learning Anxiety						
LA1	(1) I do not think I would be able to perform well in professional courses in AI [50].	I do not think I would be able to learn a computer programming language. (Heinssen et al., 1987)	3.897	0.844	0.742	0.896	0.895
LA2	(2) Understanding AI algorithms requires a high level of talent, which is difficult for me [50].	I have difficulty in understanding the technical aspects of computers. (Heinssen et al., 1987)	4.160	0.897			
LA3	(3) AI technology updates too quickly and is very difficult to learn [3].	By playing itself and determining which moves lead to better outcomes, AlphaGo literally learns by teaching itself. And the unsettling thing is that we don't understand what AlphaGo is thinking. (Granter, Beck,Papke, 2017)	4.302	0.842			
	Existential Risk Anxiety						
ERA1	(1) AI may harm humans to achieve a goal, which gives me anxiety [20].	we could mistakenly elevate a subgoal to the status of a super goal. AI may in the process killing the person who asked the question. (Bostrom,2002)	4.012	0.734	0.623	0.832	0.831
ERA2	(2) I worry that the control of AI by a few individuals will introduce great risks to the entire society [65].	In popular culture (science fiction movies/books) AIs/Robots rebel against humanity and decide to destroy it. We suggested that much more likely reasons include deliberate actions of not-so-ethical people ('on purpose'). (Yampolskiy,2016)	4.571	0.779			
ERA3	(3) The runaway of super AI will reduce the amount of time that humans stay on earth and will even result in human extinction, which is terrible [20,26].	If this runaway process is sudden, it(AI) could result in one upload reaching superhuman levels of intelligence. Such enormous intellectual superiority may well give it correspondingly great power. (Bostrom, 2002) I am afraid of new technologies because if something goes wrong with it (if it stopped working for some reason) we will go back to the Stone Age. (Khasawneh,2018)	4.144	0.851			
	Against Ethics Anxiety						
AEA1	(1) I worry that humans have special feelings (such as love or adoration) for super AI [67].	as technology evolves it is expected that these humanoid robots will act in a more human like manner that will potentially lead to emotional bonds. (Gonzalez-Jimenez, 2018)	4.178	0.663	0.553	0.710	0.701
AEA2	(2) I am disturbed that AI can deceive (for example, enticing people to buy goods) [68].	The Turing-esque goal—of fooling customers into thinking that the supplier really cares about their satisfaction and will accommodate requests to ensure it—is closer by the upgrade. (Gunkel, 2012)	4.530	0.816			
	Artificial Consciousness Anxiety						
ACA1	(1) I worry that AI will attain the same level of consciousness as humans [53].	the main difference with respect to the natural counterpart (artificial consciousness) depends on the hardware that generates the process. (Buttazzo, 2008)	4.119	0.810	0.710	0.880	0.880
ACA2	(2) The fact that AI that cannot tell the difference between humans and being conscious makes me uneasy [69].	AIs with sufficiently advanced mental states, or the right kind of states, will have moral status, and some may count as persons. (Bostrom&Yudkowsky,2014)	4.532	0.823			
ACA3	(3) AI has the same level of consciousness as humans, thus challenging the status of humans, which makes me anxious [69].	Insofar as moral duties stem from moral status considerations, we ought to treat an artificial mind in just the same way as we ought to treat a qualitatively identical natural human mind in a similar situation. (Bostrom&Yudkowsky,2014)	4.273	0.892			

"*Dimensions of Artificial Intelligence Anxiety Based on an Integrative Theory of Fear Acquisition*" (2020)

Jian Li and Jin-Song Huang,

The School of Economics of Beihang University in Beijing

https://linkinghub.elsevier.com/retrieve/pii/S0160791X20300476

Pliatsikas, P., & Economides, A. (2022). Factors Influencing the Intention of Greek Consumers to Use Smart Home Technology. *Advances in Science and Innovations*, 5(1). Link to Full Paper

Appendix A

Table A1. Perceived usefulness of smart home technology.

Items for Perceived Usefulness of Smart Home Technology	Not at All		A Little Bit		Moderate		Very		Very Much		M	SD
	n	%	n	%	n	%	n	%	n	%		
I find that using smart home services and devices helps me to control the operation of my home, because I can monitor it even when I am away from home using my smartphone.	1	0.9%	3	2.8%	14	13.0%	38	35.2%	52	48.1%	4.3	0.9
I prefer to use services in areas such as home security that will be based on new technologies (e.g., security cameras) instead of traditional security methods such as standard alarms.	4	3.7%	4	3.7%	29	26.9%	32	29.6%	39	36.1%	3.9	1.1
I find the energy information and electricity management services useful.	42	38.9%	23	21.3%	19	17.6%	11	10.2%	13	12.0%	2.4	1.4
I find it useful to control the interaction and operation of home appliances (e.g., Google Nest).	37	34.3%	22	20.4%	25	23.1%	13	12.0%	11	10.2%	2.4	1.3
I find the e-payment services useful (e-banking).	3	2.8%	3	2.8%	9	8.3%	30	27.8%	63	58.3%	4.4	1.0
I find the utility information services useful.	25	23.1%	18	16.7%	27	25.0%	15	13.9%	23	21.3%	2.9	1.4
I find the smart entertainment devices useful (smart TV, headphones, speakers, etc.).	2	1.9%	4	3.7%	11	10.2%	18	16.7%	73	67.6%	4.4	1.0
I find the smart smoke detectors useful.	56	51.9%	17	15.7%	23	21.3%	6	5.6%	6	5.6%	2.0	1.2
I find it useful to control smart white devices (smart air conditioners, refrigerators, dishwashers, and washing machines).	23	21.3%	11	10.2%	23	21.3%	17	15.7%	34	31.5%	3.3	1.5
I find the smart lighting useful.	35	32.4%	18	16.7%	17	15.7%	18	16.7%	20	18.5%	2.7	1.5
I find the telemedicine useful.	40	37.0%	17	15.7%	25	23.1%	14	13.0%	12	11.1%	2.5	1.4
I find the network devices useful (routers, smartphones, printers, etc.).	5	4.6%	7	6.5%	11	10.2%	13	12.0%	72	66.7%	4.3	1.2
I find the smart thermostats useful.	47	43.5%	16	14.8%	27	25.0%	9	8.3%	9	8.3%	2.2	1.3
I find the household robots and robotic cleaning devices useful.	56	51.9%	17	15.7%	22	20.4%	9	8.3%	4	3.7%	2.0	1.2
Perceived Usefulness											3.0	0.7

Table A2. Perceived ease of use of smart home technology.

Items for Perceived Ease of Use of Smart Home Technology	Not at All		A Little Bit		Moderate		Very		Very Much		M	SD
	n	%	n	%	n	%	n	%	n	%		
I am able to use the smart devices of my home without learning or technological specialization.	1	0.9%	9	8.3%	22	20.4%	41	38.0%	35	32.4%	3.9	1.0
It is not difficult for my parents to operate smart home appliances such as the use of a smart refrigerator.	9	8.3%	39	36.1%	31	28.7%	15	13.9%	14	13.0%	2.9	1.2
It is easier to use services such as telemedicine for people with mobility difficulties or advanced age than to visit a doctor or hospital that requires transportation.	4	3.6%	4	3.6%	13	11.7%	28	25.2%	62	55.9%	4.3	1.0
Perceived Ease of Use											3.7	0.7

Table A3. Perceived compatibility of smart home technology.

Items for Perceived Compatibility of Smart Home Technology	Not at All	A Little Bit		Moderate		Very		Very Much		M	SD
	n	n	%	n	%	n	%	n	%		
The use of smart services and devices is compatible with my daily activities.	16	19	17.6%	25	23.1%	25	23.1%	23	21.3%	3.2	1.4
Using a voice command service like Google Nest or Apple Siri is great for interacting with my home devices.	11	18	16.7%	35	32.4%	30	27.8%	14	13.0%	3.2	1.2
I feel comfortable with electronic payment services like e-banking because I can manage my mobile accounts at any time without any problem.	4	4	3.7%	12	11.1%	27	25.0%	61	56.5%	4.3	1.0
Perceived Compatibility										3.5	0.9

Table A4. Perceived cost of smart home technology.

Items for Perceived Cost of Smart Home Technology	Not at All	A Little Bit		Moderate		Very		Very Much		M	SD
	n	n	%	n	%	n	%	n	%		
The cost of installing, repairing, and maintaining smart home technology is high for me.	4	12	11.1%	46	42.6%	24	22.2%	22	20.4%	3.4	1.1
I can meet my needs by paying lower prices than those of smart home services.	5	11	10.2%	33	30.6%	28	25.9%	31	28.7%	3.6	1.1
Using smart home technology helps me save money through technology applications.	2	4	3.7%	28	25.9%	42	38.9%	32	29.6%	3.9	9.9
Perceived Cost										3.7	0.9

Table A5. Social influence regarding smart technology.

Items for Social Influence Regarding Smart Technology	Not at all	A Little Bit		Moderate		Very		Very Much		M	SD
	n	n	%	n	%	n	%	n	%		
If someone from my social environment buys a state-of-the-art device like the latest smartphone, it will affect me in terms of buying.	13	27	25.0%	32	29.6%	25	23.1%	11	10.2%	2.9	1.2
The new 13033 messaging service recommended by the state during the lockdown period leads me to use my mobile phone more and more.	31	16	14.8%	20	18.5%	24	22.2%	17	15.7%	2.8	1.5
I want to be the first to buy a new product, because I will stand out from the rest who use older technology devices.	65	18	16.7%	14	13.0%	3	2.8%	8	7.4%	1.8	1.2
Social Influence										2.5	0.9

Table A6. Trust in new technologies.

Items for Trust in New Technologies	Not at All	A Little Bit		Moderate		Very		Very Much		M	SD
	n	n	%	n	%	n	%	n	%		
I am afraid to use services like telemedicine because it may not serve me like the physical presence of a doctor.	10	23	21.3%	31	28.7%	24	22.2%	20	18.5%	3.2	1.2

Pliatsikas, P., & Economides, A. (2022). Factors Influencing Intention of Greek Consumers to Use Smart Home Technology. *Advances in Science and Innovations*, 5(1). Link to Full Paperthe Intention

Table A6. *Cont.*

Items for Trust in New Technologies	Not at All	A Little Bit		Moderate		Very		Very Much		M	SD
	n	n	%	n	%	n	%	n	%		
I am afraid to use electronic payment services such as e-banking, for fear of intercepting my data.	45	30	27.8%	17	15.7%	10	9.3%	6	5.6%	2.1	1.2
I consider it safe to provide my information to smart device interaction control providers such as Google Nest or Apple Cloud.	16	15	13.9%	33	30.6%	24	22.2%	20	18.5%	3.2	1.3
Trust										2.8	0.9

Table A7. Perceived enjoyment from the use of smart home technologies.

Items for Perceived Enjoyment from the Use of Smart Home Technologies	Not at All	A Little Bit		Moderate		Very		Very Much		M	SD
	n	n	%	n	%	n	%	n	%		
Using smart home services and entertainment devices (e.g., smart TV) is fun when I have to spend many hours at home (e.g., during the lockdown period).	3	1	0.9%	16	14.8%	25	23.1%	63	58.3%	4.3	1.0
The use of devices makes me feel comfortable during the lockdown period because I get in touch with anyone I want via the internet using a smartphone or tablet.	0	4	3.7%	6	5.6%	23	21.3%	75	69.4%	4.6	0.8
I can watch the same movie or listen to the same music on different devices by connecting them to the home network.	1	2	1.9%	16	15.1%	21	19.8%	66	62.3%	4.4	0.0
Perceived Enjoyment										4.4	0.7

Table A8. Intention to use smart home technologies.

Items for Intention to Use Smart Home Technologies	Not at All		A Little Bit		Moderate		Very		Very Much		M	SD
	n	%	n	%	n	%	n	%	n	%		
I intend to use energy information and electricity management services.	16	14.8%	13	12.0%	23	21.3%	24	22.2%	32	29.6%	2.9	1.4
I intend to control the interaction and operation of home appliances (e.g., Google Nest).	10	9.3%	9	8.3%	26	24.1%	29	26.9%	34	31.5%	3.1	1.3
I intend to use e-payment services (e-baking).	2	1.9%	4	3.7	13	12.0%	19	17.6%	70	64.8%	4.5	0.8
I intend to use utility information services.	14	13.0%	14	13.0%	23	21.3%	24	22.2%	33	30.6%	3.4	1.3
I intend to use smart entertainment devices (smart TV, headphones, speakers, etc.).	4	3.7%	2	1.9%	12	11.1%	18	16.7%	72	66.7%	4.5	0.8
I intend to use smart security cameras and locks.	7	6.5%	5	4.6%	21	19.4%	19	17.6%	56	51.9%	3.3	1.3
I intend to use smart smoke detectors.	24	22.2%	7	6.5%	14	13.0%	23	21.3%	40	37.0%	2.8	1.4
I intend to use smart white devices (smart air conditioners, refrigerators, dishwashers and washing machines).	7	6.5%	4	3.7%	15	13.9%	18	16.7%	64	59.3%	3.8	1.4
I intend to use smart lighting.	7	6.5%	1	0.9%	14	13.0%	22	20.4%	64	59.3%	3.6	1.3
I intend to use telemedicine.	9	8.3%	3	2.8%	11	10.2%	28	25.9%	57	52.8%	3.3	1.5
I intend to use network devices (routers, smartphones, printers, etc.).	2	1.9%	3	2.8%	7	6.5%	19	17.6%	77	71.3%	4.4	0.9
I intend to use smart thermostats.	13	12.0%	10	9.3%	16	14.8%	25	23.1%	44	40.7%	3.0	1.4
I intend to use household robots and robotic cleaning devices.	14	13.0%	6	5.6%	15	13.9%	15	13.9%	58	53.6%	2.9	1.5
Intention to Use											3.7	0.7

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Table A9. Benefits of using smart home technology.

Importance of Benefits of Using Smart Home Technology	Not at All		A Little Bit		Moderate		Very		Very Much		M	SD
	n	%	n	%	n	%	n	%	n	%		
Monitoring and management of patients and the elderly.	2	1.9%	1	0.9%	6	5.6%	36	33.3%	63	58.3%	4.5	0.8
Storage of health records and electronic prescriptions.	0	0.0%	1	0.9%	9	8.3%	35	32.4%	63	58.3%	4.5	0.7
Reduction of costs and time of care due to telemedicine.	10	9.3%	4	3.7%	21	19.4%	25	23.1%	48	44.4%	3.9	1.3
Energy use control and management.	3	2.8%	5	4.6%	14	13.0%	30	27.8%	56	51.9%	4.2	1.1
Improving the user's sociability and dealing with the feeling of isolation.	7	6.5%	9	8.3%	20	18.5%	24	22.2%	48	44.4%	3.9	1.2
Remote control of house temperature.	2	1.9%	6	5.6%	19	17.6%	38	35.2%	43	39.8%	4.1	0.9
Simultaneous use of different entertainment systems.	2	1.9%	2	1.9%	16	14.8%	30	27.8%	58	53.7%	4.3	0.9
Improving home security systems.	2	1.9%	1	0.9%	9	8.3%	35	32.4%	61	56.5%	4.4	0.8
Automated control of white devices.	4	3.7%	8	7.4%	18	16.7%	30	27.8%	48	44.4%	4.0	1.1
Save money compared to using older methods.	1	0.9%	3	2.8%	10	9.3%	29	26.9%	65	60.2%	4.4	0.8

Table A10. Barriers to the use of smart home technology.

Importance of Barriers of Using Smart Home Technology	Not at All		A Little Bit		Moderate		Very		Very Much		M	SD
	n	%	n	%	n	%	n	%	n	%		
The complexity of installing and managing smart technology.	2	1.9%	10	9.3%	22	20.4%	50	46.3%	24	22.2%	3.8	0.9
Possible breach of security data.	4	3.7%	14	13.0%	14	13.0%	34	31.5%	42	38.9%	3.9	1.2
Connectivity of devices between different brands.	3	2.8%	6	5.6%	44	40.7%	26	24.1%	29	26.9%	3.7	1.0
Lack of network connection.	8	7.4%	14	13.0%	30	27.8%	25	23.1%	31	28.7%	3.5	1.2
Lack of awareness of legal coverage.	4	3.7%	21	19.4%	29	26.9%	23	21.3%	31	28.7%	2.5	1.2
Installation, maintenance, and repair costs	4	3.7%	6	5.6%	26	24.1%	36	33.3%	36	33.3%	3.9	1.1
Help from specialist.	4	3.7%	15	13.9%	31	28.7%	33	30.6%	25	21.1%	3.6	1.1
Lack of awareness and resistance to change.	3	2.8%	8	7.4%	19	17.6%	29	26.9%	49	45.4%	4.0	1.1

Table A11. Cronbach's reliability coefficient results by dimension of the questionnaire.

Dimension	Cronbach Index α
Perceived compatibility	0.818
Perceived ease of use	0.781
Perceived usefulness	0.689
Perceived cost	0.703
Social influence	0.812
Perceived enjoyment	0.774
Trust	0.695
Intention to use	0.852
Attitude	0.655

Table A12. Sample demographical characteristics.

		N	%
Gender	Female	49	45.4%
	Male	59	54.6%
Age	16–25 years old	42	38.9%
	26–35	42	38.9%
	36–45	7	6.5%
	46–55	7	6.5%
	56 and above	10	9.3%
Educational level	Primary education	4	3.7%

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Table A12. *Cont.*

		N	%
	Secondary education	9	8.3%
	Higher	67	62.0%
	Master's degree	28	25.9%
	PhD	0	0.0%
Employment situation	Unemployed	9	8.3%
	Student	30	27.8%
	Retired	8	7.4%
	Private employee	29	26.9%
	Public servant	13	12.0%
	Self-employed, Freelancer	15	13.9%
	Other	4	3.7%
Annual income (euros)	0–5000	50	46.3%
	5001–10,000	25	23.1%
	10,001–15,000	18	16.7%
	15,001–20,000	6	5.6%
	20,001 and above	9	8.3%

Table A13. *t*-test results for the differentiation of factors and intention to use services in terms of gender.

	Gender				t	*p*
	Male		Female			
	M	SD	M	SD		
Perceived usefulness	3.3	0.7	2.9	0.7	2.033	0.003
Intention to use	3.9	0.7	3.5	0.7	3.169	0.002
Perceived ease of use	3.9	0.7	3.5	0.7	2.442	0.016
Perceived compatibility	3.7	0.9	3.4	0.8	1,522	0.131
Perceived cost	3.7	0.6	3.6	0.7	0.936	0.451
Social influence	2.5	1.0	2.5	0.8	0.165	0.870
Trust	2.7	0.9	2.9	0.8	−1.649	0.102
Perceived enjoyment	4.5	0.6	4.4	0.8	1.052	0.295

Table A14. *t*-test results for the differentiation of factors and intention to use services according to the age group.

	Age								F	*p*
	Up to 25		26–35		36–55		56+			
	M	SD	M	SD	M	SD	M	SD		
Perceived usefulness	2.9	0.6	3.2	0.7	3.1	0.5	3.1	1.3	1.209	0.310
Intention to use	3.6	0.7	3.8	0.7	3.8	0.7	3.6	0.9	0.528	0.664
Perceived ease of use	3.6	0.7	3.7	0.7	3.8	0.8	4.0	0.9	1.239	0.299
Perceived compatibility	3.6	0.9	3.5	0.8	3.4	0.8	3.9	1.0	0.802	0.496
Perceived cost	3.6	0.6	3.6	0.7	3.9	0.4	3.7	0.8	0.859	0.465
Social influence	2.4	0.8	2.5	0.9	2.6	0.7	3.2	1.1	2.478	0.070
Trust	2.9	0.8	2.9	0.9	2.3	0.6	2.6	1.2	2.273	0.084
Perceived enjoyment	4.4	0.7	4.4	0.8	4.7	0.4	4.4	0.7	1.069	0.366

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Table A15. Results of *t*-test for the differentiation of factors and intention to use services in terms of educational level.

	Education						F	p
	Up to Secondary		Tertiary		Postgraduate			
	M	SD	M	SD	M	SD		
Perceived usefulness	2.9	0.9	3.0	0.7	3.1	0.6	0.286	0.752
Intention to use	3.6	0.8	3.7	0.8	3.8	0.5	0.562	0.572
Perceived ease of use	3.4	0.8	3.7	0.8	3.7	0.6	1.337	0.267
Perceived compatibility	3.2	1.1	3.6	0.9	3.4	0.8	1.450	0.239
Perceived cost	3.5	0.7	3.8	0.7	3.5	0.6	1.649	0.197
Social influence	2.7	0.8	2.5	0.9	2.6	0.9	0.453	0.637
Trust	2.8	0.7	2.8	0.9	2.8	0.7	0.026	0.974
Perceived enjoyment	4.0	1.0	4.5	0.6	4.4	0.7	3.030	0.053

Table A16. Results of *t*-test for the differentiation of factors and intention to use services in relation to the annual family income.

	Income (Euros)								F	p
	Up to 5000		5001–10,000		10,001–15,000		15,000+			
	M	SD	M	SD	M	SD	M	SD		
Perceived usefulness	2.9	0.7	3.1	0.6	3.1	0.9	3.4	0.7	2.749	0.047
Intention to use	3.6	0.7	3.8	0.7	3.5	0.8	3.9	0.7	1.130	0.341
Perceived ease of use	3.6	0.8	3.5	0.6	4.0	0.6	4.8	0.6	2.137	0.100
Perceived compatibility	3.4	1.0	3.6	0.7	3.6	0.8	3.8	0.9	1.026	0.384
Perceived cost	3.7	0.7	3.7	0.7	3.5	0.5	3.8	0.5	0.689	0.561
Social influence	2.3	0.8	2.9	0.9	2.6	1.2	2.7	0.6	2.891	0.039
Trust	2.9	0.9	3.0	0.8	2.6	0.8	2.4	0.8	2.297	0.082
Perceived enjoyment	4.4	0.8	4.4	0.6	4.5	0.5	4.6	0.7	0.396	0.756

Table A17. Effects of correlation between factors and intention to use smart technology services.

		Perceived Usefulness	Perceived Ease of Use	Perceived Compatibility	Perceived Cost	Social Influence	Trust	Perceived Enjoyment	Intention to Use
Perceived usefulness	r	1							
	p								
	N	108							
Perceived ease of use	r	0.470 **	1						
	p	0.000							
	N	108	108						
Perceived compatibility	r	0.438 **	0.598 **	1					
	p	0.000	0.000						
	N	108	108	108					
Perceived cost	r	0.025	0.333 **	0.254 **	1				
	p	0.796	0.000	0.008					
	N	108	108	108	108				
Social influence	r	0.356 **	0.247 **	0.254 **	0.117	1			
	p	0.000	0.010	0.008	0.226				
	N	108	108	108	108	108			
Trust	r	0.199 *	0.200*	0.093	0.200 *	0.378 **	1		
	p	0.039	0.037	0.340	0.038	0.000			
	N	108	108	108	108	108	108		
Perceived enjoyment	r	0.171	0.465 **	0.467 **	0.416 **	0.011	−0.028	1	
	p	0.079	0.000	0.000	0.000	0.911	0.778		
	N	108	108	108	108	108	108	108	
Intention to use	r	0.778 **	0.443 **	0.462 **	0.031	0.290 **	0.124	0.221 *	1
	p	0.000	0.000	0.000	0.748	0.002	0.199	0.023	
	N	108	108	108	108	108	108	108	108

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

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Appendix- Phase B Qualitative Research findings

Consumer No1: Martha

Martha's Background:

- Female
- Born in 1990
- Holds a postgraduate degree in agriculture
- Christian Orthodox, originally from Thessaly

Martha's Interaction with AI:

- Recognizes the practical utility of AI tools in daily life
- Particularly appreciates AI's role in mobile device security (unlocking)
- Cautious about sharing additional biometric data with AI services
- Concerned about potential security risks if her mobile device is lost or hacked
- Apprehensive about the prospect of AI surpassing human intelligence and taking over jobs, though not worried about her own occupation
- Relies on the internet and academic articles for AI-related information
- Expresses skepticism about the adequacy of AI information from mainstream media and government sources
- Open to AI-generated personalized offers, viewing them as complementary to her research efforts

Martha's Consumer Profile & Views about AI and how Greek Consumer sees it:

- Displays a tendency to make few purchases
- Generally practices modest spending habits
- Prefers spending on electronic goods
- Enjoys traveling
- Emphasizes the significance of education in acquainting hesitant Greeks with AI
- Views AI as an inevitable and integral part of modern life, necessitating enhanced familiarity through education.

Consumer No. 2: Horo

- **Hros Background:**
    - Female
    - Born in 1997
    - Kindergarten teacher
    - Works in a private school
    - Engages in both online and in-store shopping
    - Moderate purchasing capacity for clothing and household items
    - Nature enthusiast
    - Christian Orthodox
    - Resides in Thessaloniki, Greece
- **Her relationship with Artificial Intelligence (AI) is basic, but she has explored the ChatGPT technology to some extent**
    - Tech-savvy at a normal level
    - Unlocks her mobile device with a fingerprint scan
    - Expresses concerns about the lack of sufficient AI awareness in Greece
    - Notes the absence of adequate AI education

Her Attitude Towards Technology and AI & How Greek Consumers See AI:

- Believes that the Greek mindset tends to fear new technological advancements and change
- Foresees greater emphasis on AI education in schools in the future
- Not concerned about AI holding her data and providing her with offers
- Thinks AI could potentially become dangerous, especially in the future

- Advocates for the inclusion of ethical considerations in AI development
- Believes that older generations in Greece tend to fear AI more than younger generations, who see it as a personal benefit
- Holds the view that having basic knowledge of mobile devices and computers makes it relatively easy to learn about AI

Consumer No3: Anna

Her Background:

- Female
- Born in 1986
- Holds a postgraduate degree in humanities
- Works as a secondary education teacher
- Resides in Thessaloniki, Greece
    - Atheist
- **Consumer Behavior:**
    - Shops both online and at physical stores, with a preference for clothing when there are discounts
    - Typically, she tends to spend conservatively
    - Enthusiastic about the arts
    - Utilizes technology for her shopping needs
    - Believes technology enhances her shopping experience
- **Her Attitude Towards Technology and AI & How Greek Consumers See AI:**
    - Possesses limited knowledge about Artificial Intelligence (AI)
    - Unlocks her mobile device with a fingerprint scan

- Is unconcerned about personal data retention for personalized advertising and offers
- Observes a lack of adequate information from media, government bodies, and schools
- Advocates for greater societal progress facilitated by technology
- Utilizes technology to simplify her life
- Doesn't fear technology or AI
- Believes AI could replace some professions, such as cashiers, but not all
- Stresses the importance of establishing boundaries and ethical guidelines for AI in the job market
- Acknowledges that basic AI knowledge is attainable, but its ease of acquisition depends on age and educational background
- Emphasizes that all technological advancements should serve humanity's interests
- Advocates for critical thinking, suggesting that individuals should not be easily influenced by consumer advertisements
- Regards digital literacy as indispensable in primary and secondary education for fostering AI knowledge and comprehension
- Deems digital literacy a fundamental skill to promote understanding of AI and technology in general, with critical thinking as a secondary but essential component

Consumer No. 4: Eirini

Her Background:

- Female
- Born in 1985
- Educational background in pedagogy

- Holds a postgraduate degree
- Works as an educator
- Resides in Athens, Greece
- **Consumer Behavior:**
    - Shops both online and at physical stores, with a preference for groceries and household items
    - Typically spends normally but is influenced by discounts, reviews, recommendations from friends, and satisfaction with a product, such as detergent
    - Enjoys arts and technology, showing interest in topics like CERN
    - Highly familiar with technology, using it for market research and shopping

Her Attitude Towards Technology and AI & How Greek Consumers See AI:

- Holds a vaccination certificate on her mobile device
- Is not inclined to use Face ID or Finger ID due to personal preference
- Demonstrates a more traditional approach to certain aspects
- Possess knowledge about Artificial Intelligence (AI) through her work and personal research
- Considers AI an exceptional tool but laments the lack of information from government and media sources
- Believes that every educator should be aware of the dangers and parameters of AI to assess students' work authentically
- Expresses concerns about AI-driven personalized advertisements in markets but acknowledges its inevitability
- Highlights the necessity of digital literacy in the digital age and emphasizes the importance of adapting to technological advancements

- Worries about job displacement but believes adaptability is crucial in today's fast-paced world
- Advocates for ethical use of AI, setting limits, and avoiding excessive admiration of technology
- Believes that anyone can learn about AI, considering it a matter of choice
- Uses Google Maps, ChatGPT, and other AI programs to facilitate daily life
- Believes AI is here to stay and will become increasingly global in the coming years
- Greeks are cautious about AI
- References "The Matrix" as a prophetic portrayal of our relationship with technology, suggesting that living within this framework is essential for societal integration

Consumer No. 5: Kostis

The Background:

Born in the 90s

- Profession: Actor
- Bachelor Degree in Fine Arts
- Male
- Christian Orthodox religion
- Comes from Aigio rural area, Greece

Consumer Behavior:

- Shops both online and from physical stores
- Frequently purchases food, books, and exercise equipment
- In a typical manner spends in a normal way but is influenced by friends, market research, and promotional materials

- Has a stronger affinity for the arts

His Attitude Towards Technology and AI & How Greek Consumers See AI:

- He is familiar with artificial intelligence (AI)
- Uses fingerprint unlock on his mobile device but is cautious about data collection and potential hacking
- Has a COVID vaccination certificate despite his negativity about this AI strategy
- Consider AI a tool, comparing it to a knife that can be used for various purposes
- Expresses concerns about the lack of information on AI, especially regarding the sharing of personal data- GDPR issues
- Believes that education and awareness, combined with AI, can lead to both overconsumption and helpful advancements of AI
- Advocates for more education and certification programs on AI, emphasizing open dialogue and critical thinking around AI
- AI's personalized advertisements do not bother him but are seen as a potential privacy concern- again the AI ethical issue here
- Fears AI may replace jobs, citing examples like background actors in the US case here
- It suggests that Greeks may initially resist AI due to lower education levels but may ultimately accept it for survival instincts and other reasons
- Uses Google Maps for navigation during his daily life

Consumer No. 6: Sofia

Her background:

- Born in 1983
- Female
- Holds a postgraduate degree
- Lives in Athens, Greece

- Christian Orthodox religion
- Works in a quality department

Consumer Behavior:

- Prefers shopping in physical stores over online ones
- Buys more food items and conducts price research before purchasing other products
- Spends a significant amount of money
- Nature enthusiast
- Proficient in using smartphones and tablets

- **Her Attitude Towards Technology and AI & How Greek Consumers See AI:**
- Believes that technology generally makes life easier
- Knowledgeable about artificial intelligence (AI)
- Think Greeks are cautious about AI in their shopping habits because it doesn't work perfectly yet, giving an example of irrelevant advertisements after buying a baby stroller
- Finds follow-up advertisements annoying (after "capturing" her cookies)
- Doesn't mind AI holding her data and providing recommendations but wants accurate search results and factual information
- Believes that AI needs a lot of improvement in customer service
- Advocates for government, media, and educational institutions to provide more information and education about AI
- Considers AI challenging to handle
- Concerned about job displacement due to AI, especially in customer service roles

- Believes there should be ethical boundaries in AI, although powerful entities may not impose them willingly
- Notes issues with online shopping, including lack of product interaction and concerns about job loss in distribution

Consumer No7: Zisis

His Background:

- Born in 1951
- Male
- Holds a Ph.D. in Geology
- Lives in Thessaloniki, Greece
- Christian Orthodox religion

Consumer Behavior:

- Shops both from online and in physical stores
- Primarily buys food and household items- but not exclusively
- Conducts internet research for dietary requirements and price comparisons, either alone or with his spouse
- Spends considerably on daily expenses
- Mostly Nature enthusiast

His Attitude Towards Technology and AI & How Greek Consumers See AI:

- Limited knowledge of artificial intelligence (AI), primarily informed through university lectures, media, and the internet- only from reliable resources
- Uses biometric methods such as fingerprint and face recognition for authentication regarding Artificial Intelligence as a tool
- Believes that technology, when mastered, aids daily life and shopping and offers good to humanity

- Observes that Greeks are somewhat hesitant to embrace new technology and AI quickly in their daily life
- Advocates for improved education and awareness about AI by government, media, and schools, especially for the younger generation should be applauded
- Concerned about privacy infringements caused by excessive data collection but doesn't mind AI providing relevant offers and assistance. GDPR issues.
- Skeptical about AI taking over human jobs in the future, believes in a middle ground where people learn how to use AI and develop skills through education. It is important to understand the ethical AI here
- Utilizes COVID certificates, Google Maps, and AI as a navigation system

Consumer No. 8: Benia

Her Background:

- Born in 1984
- Benia
- Currently lives in Argolis, Greece
- Holds a university degree and is pursuing postgraduate studies
- Focused on a professional career
- Agnostic as a religon

Consumer Behavior:

- Prefers shopping for food more often via online platforms
- Shops both online and in physical stores
- Conducts market research before making purchases
- Allocates a significant portion of her expenses to shopping, with frequent purchases comprising 70% of her expenses

- Self-identifies more as a technology enthusiast

Her Attitude Towards Technology and AI & how Greek consumers see AI

- Has knowledge of artificial intelligence (AI) and its impact on daily life and the potential for overuse
- Utilizes mostly face recognition on her tablet but not on her mobile device
- Concerned about the lack of information and education about AI from media, educational institutions, and government bodies
- Believes that the right deeper education around AI is important in order not to fall into hoaxes and misleading traps
- Thinks also that ethical AI and and boundaries are necessary along with regulation
- Doesn't believe AI will replace humans but will rather change the nature of work, allowing people to transition to other fields with AI's assistance
- Believes that that Greeks are generally using technology and AI in their daily lives, although many are hesitant and have concerns
- Advocates for increased education and awareness about AI from society, government, and educational institutions

Consumer No. 9: Pavlos

His Background:

- Born in 1953
- Holds a doctoral degree
- Retired
- Christian Orthodox religion
- Lives in Athens, Greece

Consumer Behavior:

- Shops both in physical stores and online, depending on the products he wants to purchase every time
- Prefers purchasing electronic items online, often seeking deals and discounts
- Has a normal spending pattern
- Identifies more as a technology-oriented person

His Attitude Towards Technology and AI & how Greek consumers see AI

- Has sufficient knowledge of artificial intelligence (AI)
- Has not yet explored face recognition technology
- Believes that AI is more used by younger Greek people, while others are generally hesitant due to a lack of understanding
- Expresses concern about the insufficient information and education regarding AI provided by the government, media, and educators
- Advocates for creating short educational videos that explain what AI is, to be broadcasted widely
- Emphasizes the need for training educators in AI awareness
- Believes that avoiding unnecessary purchases requires consumers to be cautious
- Regarding privacy concerns, she dismisses them as conspiracy theories
- Thinks AI will impact certain jobs but expects a balance to be found over time
- Believes that learning AI can be challenging for individuals who are not technology enthusiasts

Consumer No. 10: Giorgos

His Background:

- Born in 1944
- Retired Educator
- Holds a degree from a university.
- Lives in Athens, Greece.
- Greek Orthodox religion

Consumer Behavior:

- Shops both at physical stores and online, depending on the products, but prefers online shopping.
- Purchases mainly groceries and clothing.
- Spends money regularly.
- Enjoys traveling and being in nature.

His Attitude Towards Technology and AI & how Greek consumers see AI

- Good knowledge around AI
- Reads a lot around AI on Facebook
- Uses fingerprint recognition to unlock their mobile phone.
- Acknowledges some fear regarding online shopping but considers it helpful.
- Holds a positive view of artificial intelligence and believes it is beneficial for humans.
- Observes a fear of and a lack of information about artificial intelligence from the government, mass media, and educators.
- Advocates for proper education and information dissemination about artificial intelligence.
- Has some concerns around privacy issues but believes that online shopping in combination with AI has a lot to offer to consumers

- AI will involve more and will benefit humanity as a whole

Consumer No. 11: Nikos

His Background:

- Name: Nikos
- Birth Year: 2003
- Occupation: Computer Science student at ASOEE University, Athens, Greece
- Religion: Greek Orthodox Christian

Consumer Habits:

- Nikos shops both online and at physical stores, with a preference for online shopping, especially after the COVID-19 pandemic.
- He primarily buys technology products, fashion items, and jewelry.
- Nikos is a tech-savvy individual with a passion for technology and nature.

His Attitude Towards Technology and AI & how Greek consumers see AI

- Nikos uses various AI tools, including Claude, ChatGPT, Open Assistant, and META Alpaca, as part of his university studies.
- He believes that the government, educational institutions, and the mass media do not provide sufficient information and education about artificial intelligence in Greece.
- Nikos thinks that there is bias and conspiracy theory thinking in Greece related to technology.
- He advocates for the introduction of a "prompt engineering" course to filter AI-generated content and create AI assistants. Nikos believes this education should be targeted, especially at younger individuals.

- Nikos notes that many Greeks have fears and prejudices about technological advancements, particularly for religious reasons. He believes there should be a balanced approach to recognizing the potential risks and benefits of AI.
- He emphasizes the importance of ethical and legal regulations for AI, particularly in areas related to intellectual property rights (e.g., DALL-E for images).
- Nikos believes AI will inevitably change the job market, but it will also create new opportunities and enhance human learning and development.
- He thinks that AI will serve as an assistant rather than fully replacing human professionals, offering examples like medical assistants in diagnostic processes.

Consumer No12: Panos

His Background:

- Male
- Birth Year: 1974
- Education: Postgraduate studies
- Religion: Greek Orthodox Christian
- Location: Athens, Greece
- Occupation: Works in telecommunications

Consumer Habits:

- Panos shops both online and at physical stores.
- He mainly purchases clothing and apparel.
- He is willing to spend a significant amount of money on his shopping.
- Panos is a traveler who enjoys exploring new places.

His Attitude Towards Technology and AI & how Greek consumers see AI

- Panos is aware of artificial intelligence and its applications in daily life, such as autocorrect, advertisements, and friend suggestions on social media.
- He believes that the government, educational institutions, and mass media should provide more information and education about artificial intelligence to the public, especially the younger generation.
- Panos suggests that the government could use short advertisements to inform the general public about AI.
- He notes that many Greek consumers are unaware of artificial intelligence and cannot explain it. However, AI is pervasive and cannot be avoided, even in consumer experiences.
- Panos finds advertisements annoying but acknowledges their usefulness in discovering similar products for comparison and research. However, he wants more control over the ads he sees and suggests a way to stop receiving the same advertisement repeatedly after making a purchase.
- Panos expresses ethical concerns about the sale of personal data to advertising companies and calls for ethical boundaries and regulations.
- He uses a digital vaccination certificate on his mobile device and also uses Google Maps.
- Panos believes that while some jobs may be affected by AI, new opportunities will arise, and certain sectors like medicine and agriculture will benefit from increased efficiency.
- He emphasizes the importance of teaching basic AI principles to the younger generation.
- Panos sees AI as a tool, like a knife, capable of both positive and negative outcomes. He points out the psychological risk of information overload leading to incomplete experiences in life.

Consumer No13: Pigi

- Female
- 1983
- Education: Postgraduate
- Profession: Special Education Teacher
- Religion: Atheist
- Location: Athens, Greece

Consumer Habits:

- Makes purchases both from physical stores and online, but mainly from physical stores.
- Primarily buys clothing and home items.
- Spends money moderately on purchases.
- Uses the internet for research before making purchases, especially after the COVID-19 pandemic.
- Enjoys leisure and free time.

His Attitude Towards Technology and AI & how Greek consumers see AI

- Is aware of artificial intelligence and believes that education and awareness about AI are insufficient, provided by the government, educational institutions, and media.
- Thinks that society consumes artificial intelligence without fully understanding it and emphasizes the need for more education and knowledge about AI.
- Stresses the importance of educating the public, especially younger generations, on the fundamental concepts of artificial intelligence.

- Expresses concerns about how AI is used in other areas, such as social media and privacy, without sufficient public understanding.
- Mentions that rather than becoming a "detective" in the field of AI, there is a desire for protection and transparency regarding the use and processing of personal data.
- Emphasizes the need for ethical and secure practices in artificial intelligence and believes there should be checks for accuracy and fairness for the benefit of consumers.
- Believes that artificial intelligence should be taught in basic concepts, and individuals should become familiar with it from a young age.

Consumer No14: Stelios

Gender: Male

Year of Birth: 1990

Educational Level: Postgraduate

Location: Lives in Thessaloniki

Religion: Christian Orthodox

Consumer Behavior:

- Shows a balanced approach to shopping both online and at physical stores
- making purchases both from physical stores and online platforms.
- His physical store purchases are primarily food-related, while online, he tends to buy electronic items.
- He spends considerably and relies mostly on personal research before making a purchase
- Identifies himself as a traveler and a fitness enthusiast, suggesting that he might be inclined towards purchasing travel-related services or fitness equipment.

His Attitude Towards Technology and AI & how Greek consumers see AI

- He is well informed about artificial intelligence entails.
- The government, educational institutions, and the media are not providing adequate information about AI.
- He emphasizes the need for education to offer more insights into AI for the general public.

Concerns about AI:

- Has significant concerns about the violation of personal data and dislikes the intrusive nature of targeted advertisements.
- He feels that his consumer **privacy is** being compromised. He foresees a future where most jobs are under the influence of AI and stresses the importance of setting boundaries and adhering to ethical principles. He believes that many jobs will be replaced by AI in the future.
- Actively uses AI-driven tools like Google Maps and the COVID wallet. He finds AI beneficial, especially when it simplifies tasks for him. He uses face recognition on his mobile and doesn't mind if AI offers him a deal tailored to his preferences, differentiating him from another user
- Opines that most Greeks are unaware that they are using AI in their daily lives. Even if they believe they are using it, there's a prevalent fear associated with it.

Examples and Detailed Insights:

Consumer Behavior in E-commerce: Stelios's behavior of purchasing electronic items online can be correlated with the global trend where electronics and gadgets are among the top categories in online shopping. His reliance on personal research suggests that he might be using product reviews, comparison sites, and perhaps even AI-driven recommendation systems without realizing it.

AI in Daily Utilities: Stelios's use of Google Maps and face recognition on his mobile phone is a testament to how integrated AI has become in daily utilities. These tools use complex AI algorithms to provide real-time traffic updates or secure access, respectively.

AI and Data Privacy: Stelios's concerns about data privacy echo a global sentiment. With AI-driven platforms collecting vast amounts of user data, there's a growing

demand for transparent data handling and storage protocols. His discomfort with targeted ads suggests that while AI can personalize the user experience, it can sometimes feel too intrusive.

Future of Work with AI: Stelios's perspective on AI replacing many jobs in the future is a valid concern. As AI systems become more sophisticated, there's potential for them to take over tasks across various sectors, from manufacturing to customer service.

In conclusion, Stelios represents a segment of the population that recognizes the benefits of AI but remains cautious due to concerns about data privacy and the broader implications of AI on employment and society. Addressing these concerns through public awareness campaigns, education, and robust regulatory frameworks will be crucial.

Consumer No 15: Michalis

- Male
- Location: Athens, Greece
- Education: Postgraduate
- Profession: Teacher
- Birth Year: 1973
- Religion: Agnostic

Consumer Habits:

- Enjoys arts and cultural products.
- Prefers to purchase clothing items and primarily shops in physical stores to have direct contact with the products.
- During COVID-19, I downloaded a digital certificate on the mobile phone but it does not use fingerprint or face recognition for unlocking.
- Utilizes technology only when necessary and prefers to keep it simple.
- Views on artificial intelligence:

His Attitude Towards Technology and AI & how Greek consumers see AI

- Lacks general knowledge about artificial intelligence but started experimenting with ChatGPT for fun.
- Believes that the majority of Greeks are unfamiliar with AI and, as a result, tend to fear it.
- Sees artificial intelligence as a neutral tool whose impact depends on how individuals use it. (Example: with the knife, it is how you use it.)
- Acknowledges that technological advancements may replace certain jobs but views this as an opportunity for professional evolution rather than a threat.
- Advocates for people of all ages to learn the basics of artificial intelligence, as there is no age limit to acquiring this knowledge.
- Expresses the opinion that mass media, educational institutions, and the government do not provide sufficient information and education about artificial intelligence.

In summary, Michalis, a teacher in Athens, Greece, has limited knowledge of artificial intelligence but recognizes its potential. He emphasizes the need for public education and believes that AI is a tool whose impact depends on individual usage. He views technological advancements as opportunities for professional growth and encourages people of all ages to learn the basics of AI.

Consumer No. 16: Vicky

Consumer No. 17: Katerina

Consumer No. 18: Zoe

- Female
- Year of Birth: 1987
- Educational Level: Postgraduate in Special Education
- Location: Thessaloniki, Greece
- Religion: Preferred not to mention

Consumer Behavior:

- Zoe identifies herself as an individual passionate about the arts and travel.
- Since the onset of the COVID-19 pandemic, she has shifted more towards online shopping, finding it convenient as a mother.
- Her online purchases range from food, clothing, toys, electronic items, and home essentials. Before making a purchase, Zoe typically conducts market research to find the best price, enjoying the process of scrolling through options.
- While she is not influenced by influencers' recommendations, she might be swayed by ads on platforms like Facebook, even leading her to buy additional items she might not need. She acknowledges the addictive nature of scrolling and consumerism, emphasizing the importance of critical thinking in the digital age.

His Attitude Towards Technology and AI & how Greek consumers see AI

- Zoe is aware of artificial intelligence.
- She observes that many Greeks fear and demonize AI, attributing this fear to ignorance. Despite their apprehensions, she notes that many unknowingly use AI in their daily lives. She uses features like fingertip unlocking on her phone, although she was initially hesitant. She also uses tools like Google Maps.
- Zoe expresses concerns about privacy online, sharing experiences where companies she engaged with sold her personal data, leading to unsolicited emails from other firms. She believes there needs to be a solid foundation for AI, backed by ethics. She feels that the government, educational institutions, and media do not provide sufficient information about AI, emphasizing the need for more comprehensive education on the topic.

Examples for Research:

- Consumer Behavior Post-COVID: Zoe's shift to online shopping post-pandemic, especially as a mother, can be explored to understand changing consumer behaviors in the new normal.
- Influence of Ads: Her susceptibility to ads on platforms like Facebook can be a case study on the effectiveness of targeted advertising and its implications on consumer behavior.
- Privacy Concerns: Zoe's experience with companies selling her data can be delved into to understand the broader concerns about data privacy in the age of AI and digital transactions.
- Public Perception of AI: Her observations about the Greek public's fear and misunderstanding of AI can be a starting point to study the societal implications and challenges of introducing AI in various sectors.

Consumer No. 19: Lina

Consumer No. 20: Panagiotis

- Male
- Year of Birth: 1988
- Educational Level: Postgraduate - PhD Candidate in Pedagogy
- Location: Thessaloniki, Greece
- Religion: Christian Orthodox

Consumer Behavior:

- Panagiotis is an active consumer who shops both in physical stores and online.
- His primary shopping interests include clothing, food items, and home essentials. Before making a purchase, he conducts personal research to ensure he's making informed decisions.

- Panagiotis has a keen interest in fitness and is influenced by online advertisements when considering a purchase.

His Attitude Towards Technology and AI & How Greek Consumers See AI:

- Interestingly, Panagiotis is unaware of the concept of artificial intelligence, even though he uses features like fingerprint unlocking on his mobile, which is underpinned by AI.
- He believes that the government, educational institutions, and media do not provide sufficient information about AI.
- He emphasizes the importance of a more comprehensive and experiential form of education to make AI more understandable to the masses.
- Panagiotis uses tools like Google Maps and, during the COVID period, utilized a vaccination certificate system based on AI, unaware of its technological foundation.
- When it comes to online shopping, he's comfortable with personalized offers driven by AI, as long as he's given consent. He believes that one's financial capability determines the effectiveness of such offers.
- On the ethical side of AI, Panagiotis believes that its direction and impact are in human hands.
- He stresses that AI should be channeled for the greater good and the advancement of humanity.
- He observes that many Greeks are unaware of AI's role in their daily lives and shopping habits.
- He attributes the fear of AI among Greeks to ignorance, drawing a parallel with the current situation in Greece concerning the new identity card deniers. For Panagiotis, AI is not a threat but a tool that, with proper education, can simplify many consumer processes.

Examples for Research:

- Fingerprint Technology: Panagiotis's use of fingerprint technology without realizing its AI foundation can be a starting point to understand how embedded AI is in daily life.

- Personalized Offers: His comfort with AI-driven personalized offers, given proper consent, can be explored further to understand consumer trust levels with AI in e-commerce.
- AI in Public Services: Panagiotis's use of the AI-driven vaccination certificate system can be a case study on how AI can be integrated into public services without causing public apprehension.
- Public Perception: His observation about the new identity card deniers in Greece can be a lens to study how misinformation or lack of information can shape public perception about technology.

Appendix

Factor Analysis

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
VAR00001	3,6635	1,50603	318
VAR00002	3,1604	1,22901	318
VAR00003	2,1289	1,24292	318
VAR00004	4,2516	,99188	318
VAR00005	3,5629	1,23850	318
VAR00006	3,4371	1,36915	318
VAR00007	3,7673	1,25688	318
VAR00008	3,8396	1,38129	318
VAR00009	3,7579	1,18129	318
VAR00010	3,8208	1,14664	318
VAR00011	3,9057	1,20353	318
VAR00012	3,4119	1,29429	318
VAR00013	4,1541	1,16664	318
VAR00014	3,1415	1,37649	318
VAR00015	3,0126	1,43629	318
VAR00016	3,7358	1,18589	318
VAR00017	2,7642	1,43998	318
VAR00018	2,4434	1,32732	318
VAR00019	3,0283	1,23914	318
VAR00020	2,9969	1,37462	318
VAR00021	3,2484	1,32600	318
VAR00022	2,9748	1,45793	318

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,901

Bartlett's Test of Sphericity	Approx. Chi-Square	4008,634
	df	231
	Sig.	,000

Communalities

	Initial	Extraction
VAR00001	,276	,313
VAR00002	,414	,395
VAR00003	,272	,269
VAR00004	,202	,297
VAR00005	,537	,551
VAR00006	,713	,702
VAR00007	,744	,802
VAR00008	,579	,578
VAR00009	,691	,653
VAR00010	,548	,519
VAR00011	,380	,437
VAR00012	,522	,597
VAR00013	,143	,140
VAR00014	,683	,716
VAR00015	,624	,621
VAR00016	,718	,657
VAR00017	,502	,555
VAR00018	,749	,888
VAR00019	,593	,459
VAR00020	,757	,802
VAR00021	,589	,587
VAR00022	,735	,757

Extraction Method: Principal Axis Factoring.

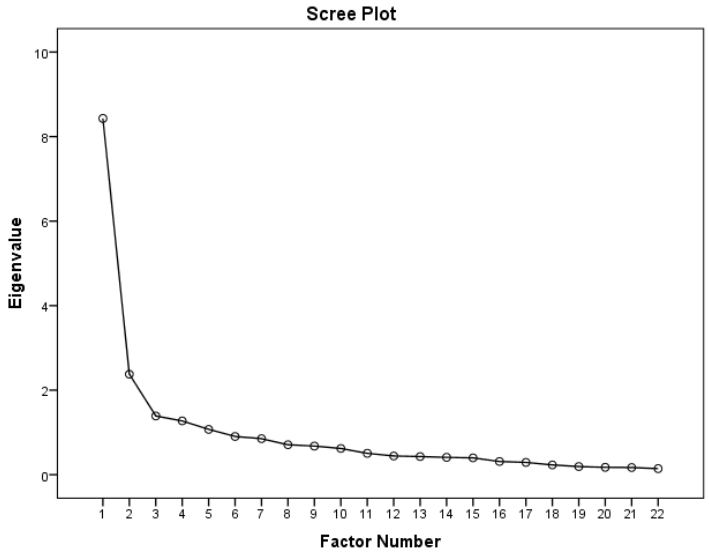
Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings [a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	8,429	38,315	38,315	8,072	36,691	36,691	6,529
2	2,378	10,810	49,126	1,968	8,945	45,635	4,647
3	1,390	6,318	55,444	,917	4,169	49,804	6,011
4	1,272	5,782	61,226	,729	3,313	53,117	1,075
5	1,072	4,874	66,101	,608	2,764	55,881	1,386
6	,905	4,114	70,214				
7	,852	3,873	74,087				
8	,708	3,219	77,307				
9	,677	3,078	80,385				
10	,620	2,817	83,202				
11	,506	2,299	85,501				
12	,442	2,011	87,512				
13	,428	1,945	89,457				
14	,411	1,866	91,323				
15	,398	1,808	93,132				
16	,312	1,416	94,548				
17	,290	1,319	95,867				
18	,230	1,046	96,913				
19	,192	,873	97,786				
20	,175	,793	98,580				

21	,169	,767	99,347				
22	,144	,653	100,000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor				
	1	2	3	4	5
VAR00014	,772				
VAR00006	,760				
VAR00016	,754				
VAR00009	,740	-,309			
VAR00007	,737	-,444			
VAR00020	,730		-,439		
VAR00015	,726				
VAR00021	,722				
VAR00022	,703		-,405		

VAR00005	,662				
VAR00012	,648				-,314
VAR00018	,641	,621			
VAR00010	,632	-,338			
VAR00008	,611	-,405			
VAR00019	,559	,337			
VAR00002	-,506				
VAR00017	,492	,410	,355		
VAR00001		,381		,314	
VAR00003	,316	,363			
VAR00004				,517	
VAR00013				,334	
VAR00011	,396				-,426

Extraction Method: Principal Axis Factoring.

a. 5 factors extracted. 9 iterations required.

Pattern Matrix[a]

	Factor				
	1	2	3	4	5
VAR00007	,891				
VAR00006	,804				
VAR00008	,760				
VAR00005	,724				
VAR00009	,628				
VAR00010	,567				
VAR00018		,916			
VAR00017		,781			
VAR00019		,558			
VAR00002		-,535			
VAR00003		,392			
VAR00020			-,924		

VAR00022			-,870		
VAR00021			-,585		
VAR00015			-,524		
VAR00016	,391		-,442		
VAR00014	,389		-,403		
VAR00004				,551	
VAR00013				,362	
VAR00001		,314		,343	
VAR00011					-,569
VAR00012	,346				-,462

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 8 iterations.

Structure Matrix

	Factor				
	1	2	3	4	5
VAR00007	,880		-,442		-,383
VAR00006	,833	,396	-,514		
VAR00009	,774	,310	-,557		
VAR00008	,742		-,333		-,344
VAR00005	,717	,387	-,452		
VAR00010	,686		-,478		-,335
VAR00016	,679	,377	-,675	-,356	
VAR00012	,621	,365	-,459		-,550
VAR00018	,322	,935	-,540		
VAR00017		,734	-,331		
VAR00019	,378	,656	-,457		
VAR00002	-,344	-,561	,368		
VAR00003		,464			
VAR00020	,468	,453	-,893		
VAR00022	,449	,466	-,860		

VAR00015	,534	,569	-,736		
VAR00021	,546	,456	-,725		
VAR00014	,647	,538	-,704		
VAR00004				,530	
VAR00001		,371		,376	
VAR00013				,370	
VAR00011	,392				-,603

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

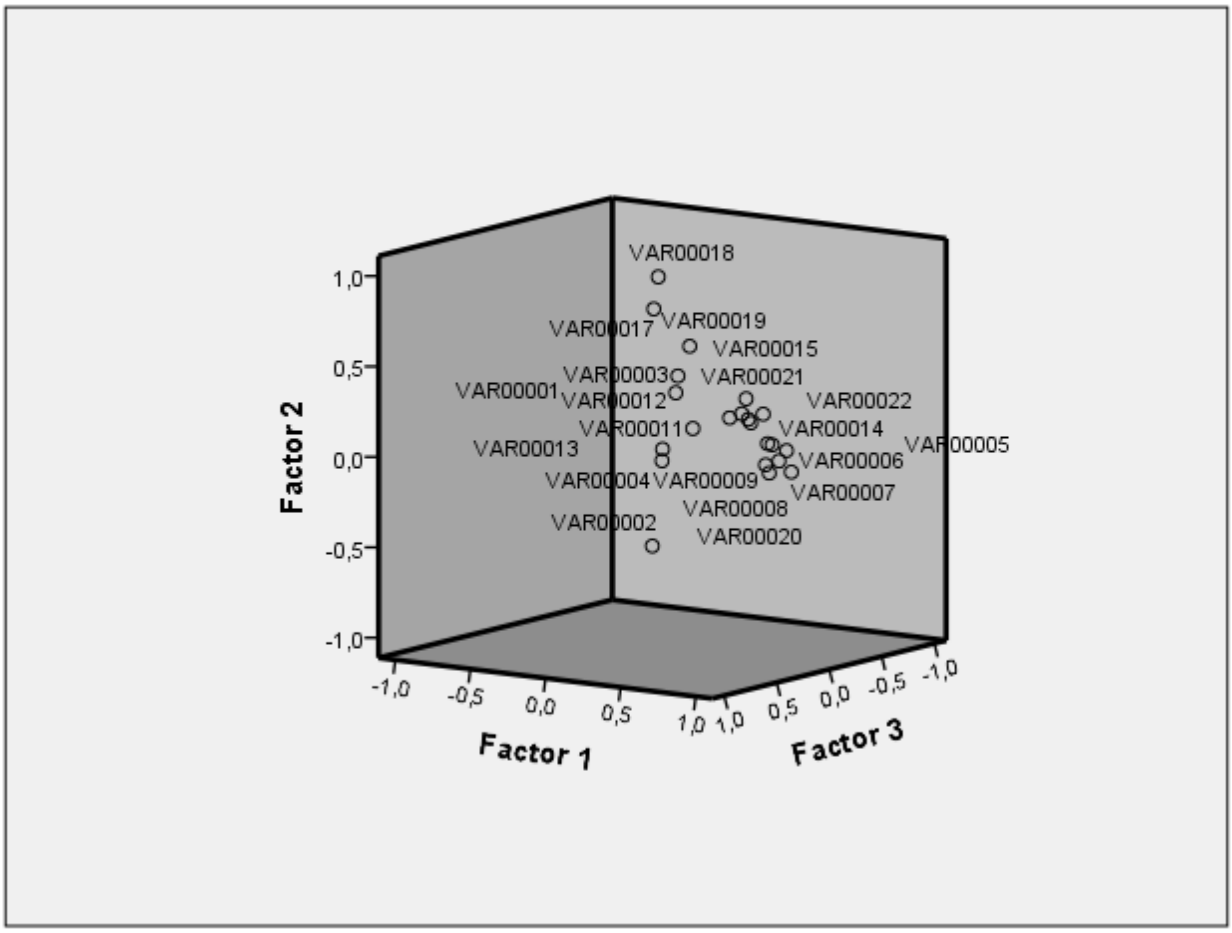
Factor Correlation Matrix

Factor	1	2	3	4	5
1	1,000	,390	-,562	-,172	-,282
2	,390	1,000	-,516	,024	,059
3	-,562	-,516	1,000	,051	,061
4	-,172	,024	,051	1,000	,186
5	-,282	,059	,061	,186	1,000

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

Factor Plot in Rotated Factor Space



Explore

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Implications, Surveillance, and Ethical Issues	318	100,0%	0	0,0%	318	100,0%
Concerns about lack of knowledge about AI	318	100,0%	0	0,0%	318	100,0%
Consumer and Social Concerns	318	100,0%	0	0,0%	318	100,0%

Descriptives

			Statistic	Std. Error
Implications, Surveillance, and Ethical Issues	Mean		22,19	,347
	95% Confidence Interval for Mean	Lower Bound	21,50	

		Upper Bound	22,87	
	5% Trimmed Mean		22,51	
	Median		23,00	
	Variance		38,227	
	Std. Deviation		6,183	
	Minimum		6	
	Maximum		32	
	Range		26	
	Interquartile Range		9	
	Skewness		-,570	,137
	Kurtosis		-,384	,273
Concerns about lack of knowledge about AI	Mean		18,95	,219
	95% Confidence Interval for Mean	Lower Bound	18,51	
		Upper Bound	19,38	
	5% Trimmed Mean		18,79	
	Median		18,00	
	Variance		15,319	
	Std. Deviation		3,914	
	Minimum		11	
	Maximum		29	
	Range		18	
	Interquartile Range		5	
	Skewness		,543	,137
	Kurtosis		-,119	,273
Consumer and Social Concerns	Mean		19,11	,376
	95% Confidence Interval for Mean	Lower Bound	18,37	

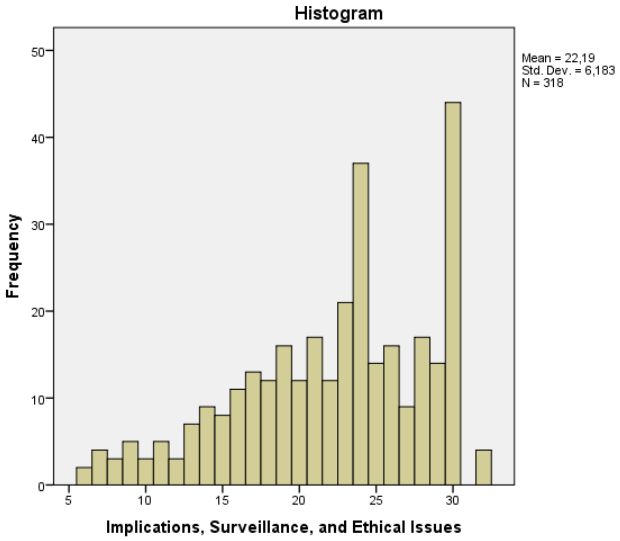
	Upper Bound	19,85	
	5% Trimmed Mean	19,21	
	Median	19,00	
	Variance	44,931	
	Std. Deviation	6,703	
	Minimum	6	
	Maximum	30	
	Range	24	
	Interquartile Range	10	
	Skewness	-,106	,137
	Kurtosis	-,885	,273

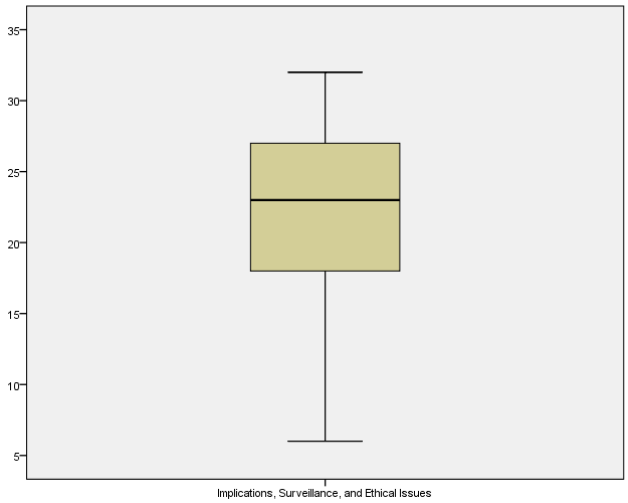
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Implications, Surveillance, and Ethical Issues	,106	318	,000	,949	318	,000
Concerns about lack of knowledge about AI	,099	318	,000	,966	318	,000
Consumer and Social Concerns	,069	318	,001	,967	318	,000

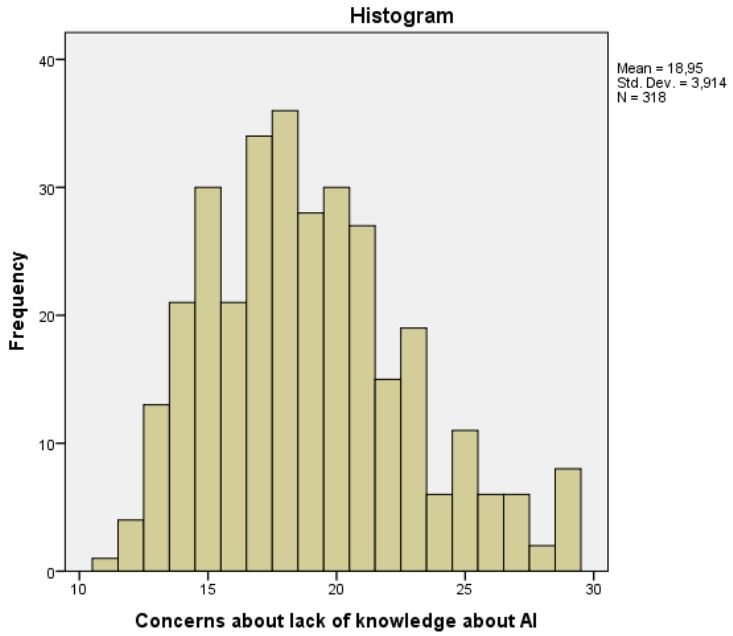
a. Lilliefors Significance Correction

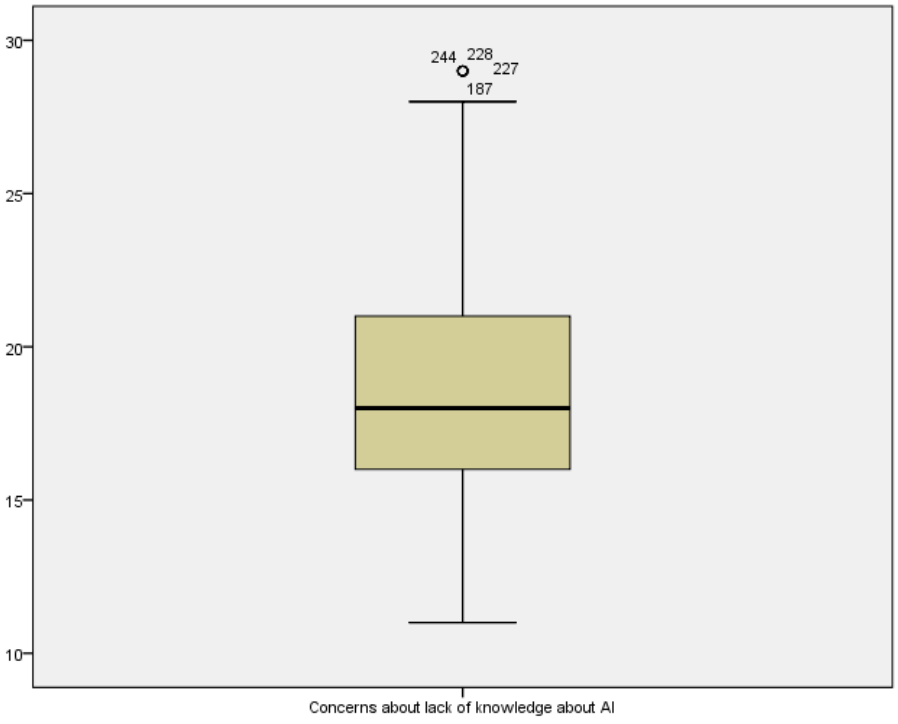
Implications, Surveillance, and Ethical Issues



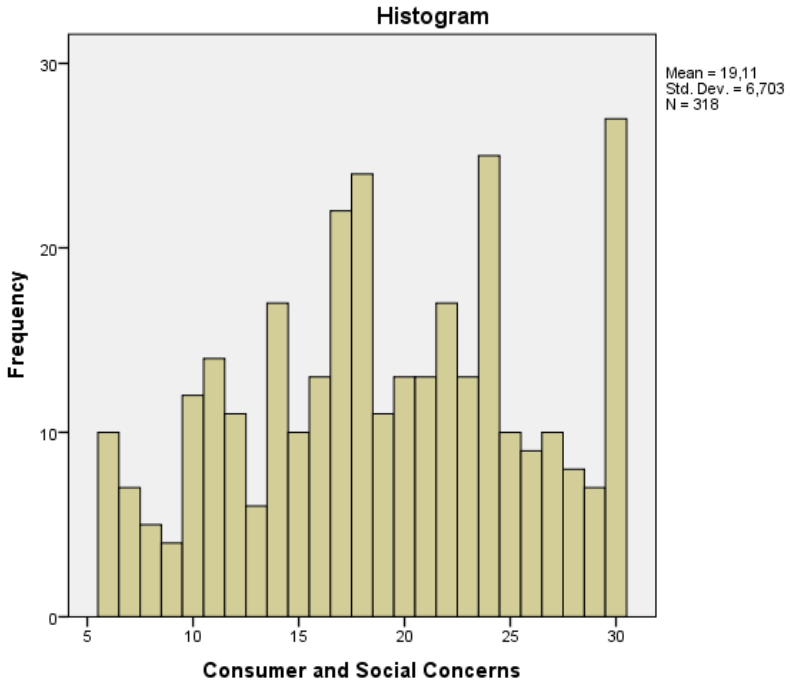


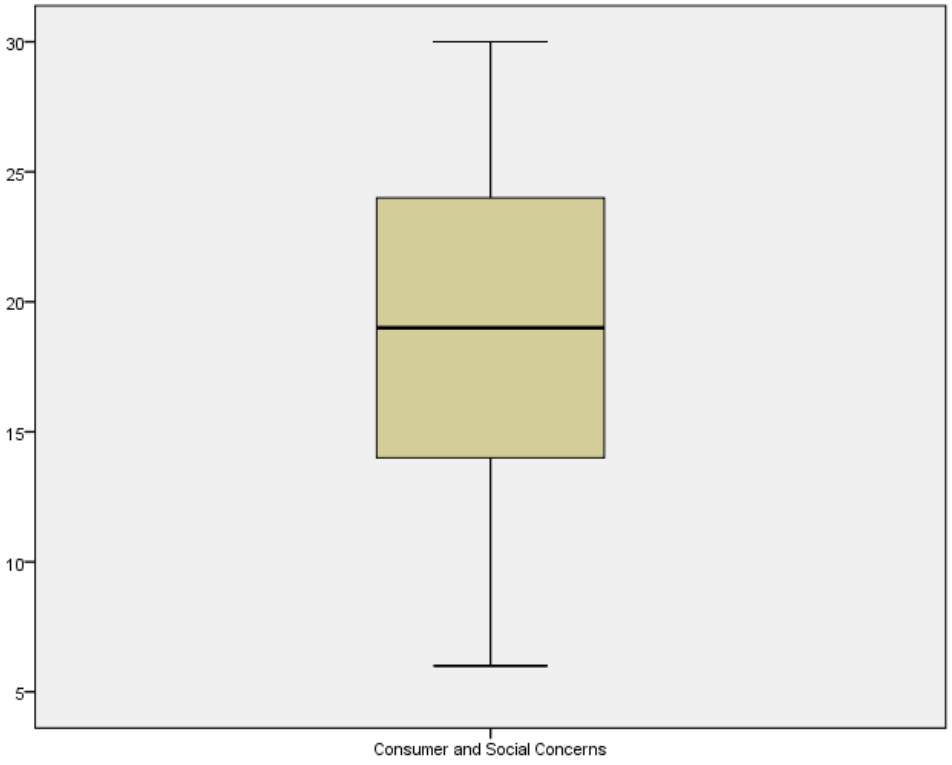
Concerns about lack of knowledge about AI


Histogram
Mean = 18,95
Std. Dev. = 3,914
N = 318
Frequency
40
30
20
10
0
10
15
20
25
30
Concerns about lack of knowledge about AI

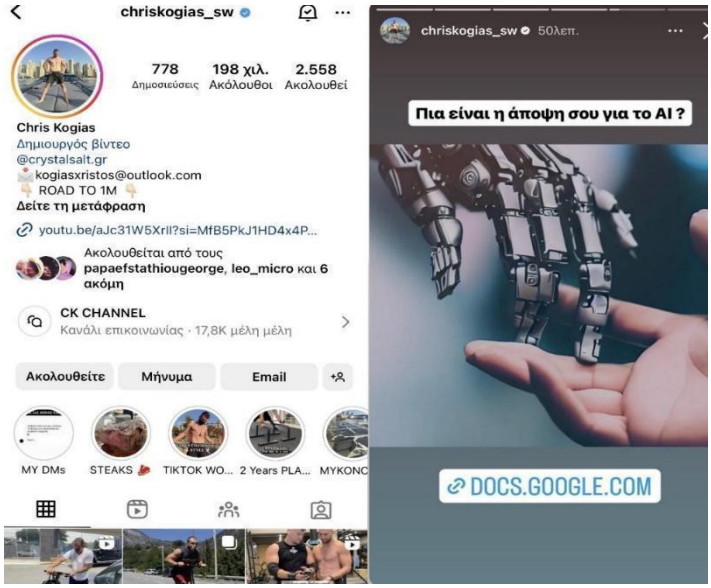

30
25
20
15
10
244
228
227
187
Concerns about lack of knowledge about AI

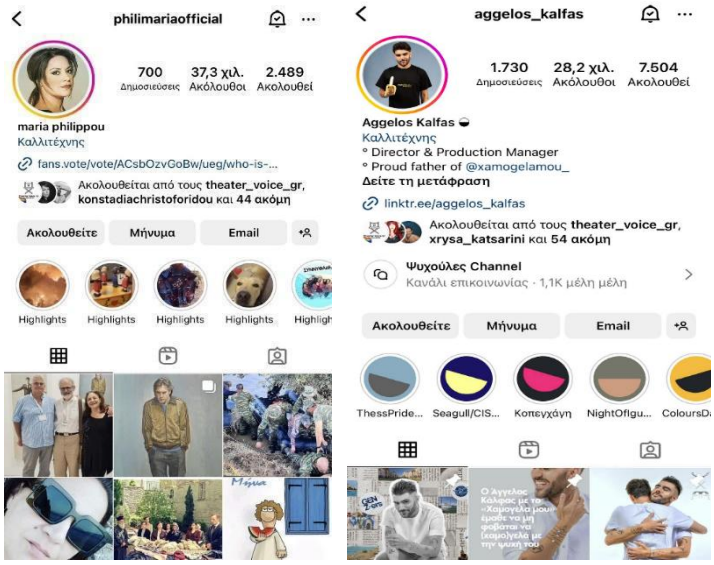
Consumer and Social Concerns



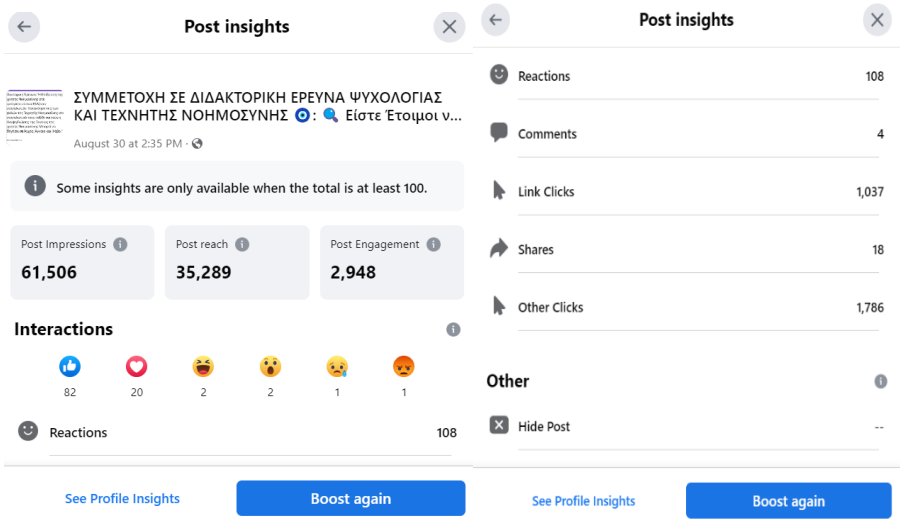

30
25
20
15
10
5
Consumer and Social Concerns

Influencers that shared the questionnaire on their profile and created awareness:





Targeted Facebook Ads by the researcher with the link of the research:


Post insights
ΣΥΜΜΕΤΟΧΗ ΣΕ ΔΙΔΑΚΤΟΡΙΚΗ ΕΡΕΥΝΑ ΨΥΧΟΛΟΓΙΑΣ ΚΑΙ ΤΕΧΝΗΤΗΣ ΝΟΗΜΟΣΥΝΗΣ 🧿: 🔍 Είστε Έτοιμοι ν...
August 30 at 2:35 PM ·
Some insights are only available when the total is at least 100.
Post Impressions
61,506
Post reach
35,289
Post Engagement
2,948
Interactions
82
20
2
2
1
1
Reactions
108
See Profile Insights
Boost again
Post insights
Reactions
108
Comments
4
Link Clicks
1,037
Shares
18
Other Clicks
1,786
Other
Hide Post
--
See Profile Insights
Boost again

QUESTIONS(*mandatory):

I like to shop (i.e., drop-down list):	Electronics Fashion/Apparel Food and Beverage Home and Decor Health and Wellness Automotive, etc.
I shop (drop-down list):	Frequent Shopper Occasional Shopper Research-Driven Shopper Impulse Buyer
My shopping budget is (drop-down list):	Frequent Shopper Occasional Shopper Research-Driven Shopper Impulse Buyer
My budget preference is (drop-down list):	Premium Brands Mid-Range Options Budget-Friendly Choices
My online presence is (drop-down list):	Active on Social Media Follower of Influencers Regular Online Research
I get influenced by (drop-down list):	Recommendations from Friends/Family Online Reviews and Ratings Brand Reputation Religion beliefs My web research
My Tech Savviness is (drop-down list):	Comfortable with Technology Relies on Mobile Apps/Websites
My Brand Loyalty is (drop-down list):	Traditional Loyal to Specific Brands Open to Trying New Brands

My Shopping Platform is (drop-down list):	Physical Stores Online Retailers Both
My Lifestyle is (drop-down list):	Spiritual Traditional Active Lifestyle Health-Conscious Tech Enthusiast Outdoor Adventurer
When I shop, I am seeking (drop-down list):	Seeking Deals and Discounts Quality and Performance Oriented Eco-Friendly Choices Convenience-Oriented Traditional consumer goods
I Get informed about offers from (drop-down list):	Social Media Platforms Email Mobile Apps Physical Stores TV Radio
My Profession is (drop-down list):	Accountant
Place of residence (drop-down list)	Attica
Citizenship:	Greek
Sex:	Male/ Female/ Other
Religion (drop-down list)	Greek Orthodox

**GDPR Disclaimer: This is an anonymous questionnaire.*



Διδακτορική Έρευνα: "Η Επίδραση της Τεχνητής Νοημοσύνης στη Συμπεριφορά των Ελλήνων Καταναλωτών: Κατανόηση της των Οφελών της Τεχνητής Νοημοσύνης στο Καταναλωτικό τους ταξίδι και πώς η Έλλειψη Γνώσης της Έννοιας της Τεχνητής Νοημοσύνης Μπορεί να Οδηγήσει σε Άγχος, Άγνοια και Φόβο."

Αγαπητοί συμμετέχοντες,

Σας προσκαλούμε να
λάβετε μέρος σε
αυτό το επιστημονικό ερωτηματολόγιο, το
οποίο αποτελεί μέρος της διδακτορικής έρευνας με τίτλο: *'The Impact of Artificial Intelligence on the Consumer Behavior of Greeks: Understanding the Awareness of AI Benefits in Their Consumer Journey and How Lack of Knowledge of the Concept of Artificial Intelligence Can Lead to Anxiety, Ignorance and Fear'* που διεξάγεται στα πλαίσια του
European International University Paris (https://eiu.ac/)του υποψήφιου Διδάκτορα Φάνη Αριτζή, με επιβλέπουσα Καθηγήτρια την **Dr. Katina Grigorakos-**
Dr. of Human & Organizational Psychology.

Η συμμετοχή σας σε αυτό το ερωτηματολόγιο θα συμβάλει στην κατανόηση της σημασίας της τεχνητής νοημοσύνης στην καταναλωτική συμπεριφορά των Ελλήνων καταναλωτών, καθώς και στον τρόπο που η ανεπάρκεια γνώσης σχετικά με την έννοια της τεχνητής νοημοσύνης μπορεί να οδηγήσει σε άγνοια και φόβο.

Το ερωτηματολόγιο αυτό απαιτεί λιγότερο από 10 λεπτά από τον χρόνο σας για να συμπληρωθεί και δεν πρόκειται να σας κουράσει καθόλου. Η συμβολή σας ωστόσο στην επιστήμη θα είναι σημαντική.

Λίγα λόγια για το ερωτηματολόγιο που θα συμπληρώσετε:

Στο πρώτο μέρος διαλέγετε και απαντάτε από τις
21 πολύ απλές και σύντομες ερωτήσεις πολλαπλής επιλογής και
στο δεύτερο μέρος διαλέγετε και συμπληρώνετε τις
άλλες υπόλοιπες 15 δημογραφικές ερωτήσεις. Όλες οι απαντήσεις και οι συμμετοχές φυσικά είναι ανώνυμες.

Δεν υπάρχουν σωστές και λάθος απαντήσεις. Ο καθένας απαντάει βάση των πιστεύω του.

Β΄ ΦΑΣΗ ΤΗΣ ΕΡΕΥΝΑΣ:

Μπορείτε αν θέλετε δεν είναι υποχρεωτικό να συμμετέχετε και
στην δεύτερη φάση της έρευνας στο τέλος του ερωτηματολογίου.

Συγκεκριμένα, εάν επιθυμείτε να συμμετάσχετε στο δεύτερο
μέρος της έρευνάς μας, που περιλαμβάνει μια ηχογραφημένη συνέντευξη μέσω τηλεφώνου, Microsoft Teams ή Skype, παρακαλούμε αφήστε τα στοιχεία σας (ονοματεπώνυμο, κινητό αριθμό τηλεφώνου, περιοχή διαμονής) στο τέλος του ερωτηματολογίου. Η συμπλήρωση των στοιχείων αυτών υποδηλώνει την συγκατάθεσή σας για την επικοινωνία εκ μέρους του ερευνητή για το δεύτερο μέρος της έρευνας και ο ερευνητής θα επικοινωνήσει μαζί σας σε δεύτερο χρόνο ώστε να γίνει η ηχογραφημένη συνέντευξη.

Όλα τα παρεχόμενα στοιχεία θα παραμείνουν ανώνυμα,
σύμφωνα με τους κανόνες προστασίας δεδομένων του GDPR. Δεν πρόκειται να μοιραστούν σε τρίτα μέρη και είναι αποκλειστικά για τους λόγους της έρευνας.

Σας ευχαριστούμε εκ των προτέρων για τη συμμετοχή σας και
την συνεισφορά σας σε αυτήν τη σημαντική έρευνα.

Με εκτίμηση,

Φάνης Αριτζής

faritzis @ gmail.com

Υποψήφιος Διδάκτορας- European International University in Paris

Welcome Letter to participate in the research



(ENGLISH)

Dear participants,

We invite you to take part in this questionnaire, which is part of the doctoral research titled "The Impact of Artificial Intelligence on the Consumer Behavior of Greeks: Understanding the Awareness of AI Benefits in Their Consumer Journey and How Lack of Knowledge of the Concept of Artificial Intelligence Can Lead to Ignorance and Fear." This research is conducted within the framework of the European International University Paris - Doctor of Psychology (Psy.D.) program.

Your participation in this questionnaire will contribute to understanding the significance of artificial intelligence in the consumer behavior of Greek consumers, as well as how a lack of knowledge about the concept of artificial intelligence can lead to ignorance and fear.

Completing this questionnaire will take less than 10 minutes. All provided information will remain anonymous, in accordance with the data protection regulations of GDPR.

If you wish to participate in the second part of our research, which involves a 1-2-1 recorded interview via phone, Microsoft Teams, or Skype, please leave your contact details (name, mobile number, residence area) at the end of the questionnaire. Providing these details implies your consent for the researcher to contact you regarding the second part of the research.

We thank you in advance for your participation and contribution to this important research.

Best regards,

Fanis Aritzis

THANK YOU FOR YOUR PARTICIPATION

Αγαπητοί συμμετέχοντες,

Σας προσκαλούμε να λάβετε μέρος σε αυτό το ερωτηματολόγιο, το οποίο αποτελεί μέρος της διδακτορικής έρευνας με τίτλο "The Impact of Artificial Intelligence on the Consumer Behavior of Greeks: Understanding the Awareness of AI Benefits in Their Consumer Journey and How Lack of Knowledge of the Concept of Artificial Intelligence Can Lead to Ignorance and Fear." που διεξάγεται στο πλαίσιο του European International University Paris - Doctor of Psychology (Psy.D.).

Η συμμετοχή σας σε αυτό το ερωτηματολόγιο θα συμβάλει στην κατανόηση της σημασίας της τεχνητής νοημοσύνης στην καταναλωτική συμπεριφορά των Ελλήνων καταναλωτών, καθώς και στον τρόπο που η ανεπάρκεια γνώσης σχετικά με την έννοια της τεχνητής νοημοσύνης μπορεί να οδηγήσει σε άγνοια και φόβο.

Το ερωτηματολόγιο αυτό απαιτεί λιγότερο από 10 λεπτά για να συμπληρωθεί. Όλα τα παρεχόμενα στοιχεία θα παραμείνουν ανώνυμα, σύμφωνα με τους κανόνες προστασίας δεδομένων του GDPR.

Εάν επιθυμείτε να συμμετάσχετε στο δεύτερο μέρος της έρευνάς μας, που περιλαμβάνει μια 1-2-1 ηχογραφημένη συνέντευξη μέσω τηλεφώνου, Microsoft Teams ή Skype, παρακαλούμε αφήστε τα στοιχεία σας (ονοματεπώνυμο, κινητός αριθμός επικοινωνίας, περιοχή διαμονής) στο τέλος του ερωτηματολογίου. Η συμπλήρωση των στοιχείων αυτών υποδηλώνει την συγκατάθεσή σας για την επικοινωνία εκ μέρους του ερευνητή για το δεύτερο μέρος της έρευνας.

Σας ευχαριστούμε εκ των προτέρων για τη συμμετοχή σας και την συνεισφορά σας σε αυτήν τη σημαντική έρευνα.

Με εκτίμηση,

Φάνης Αριτζής

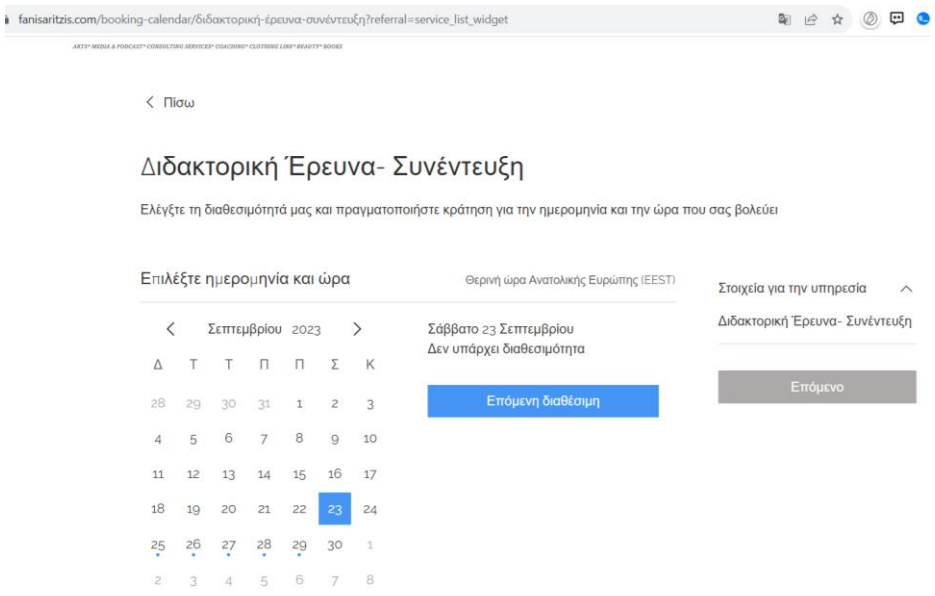
THANK YOU FOR YOUR PARTICIPATION

PHASE A: ONLINE GOOGLE DOC QUESTIONNAIRE

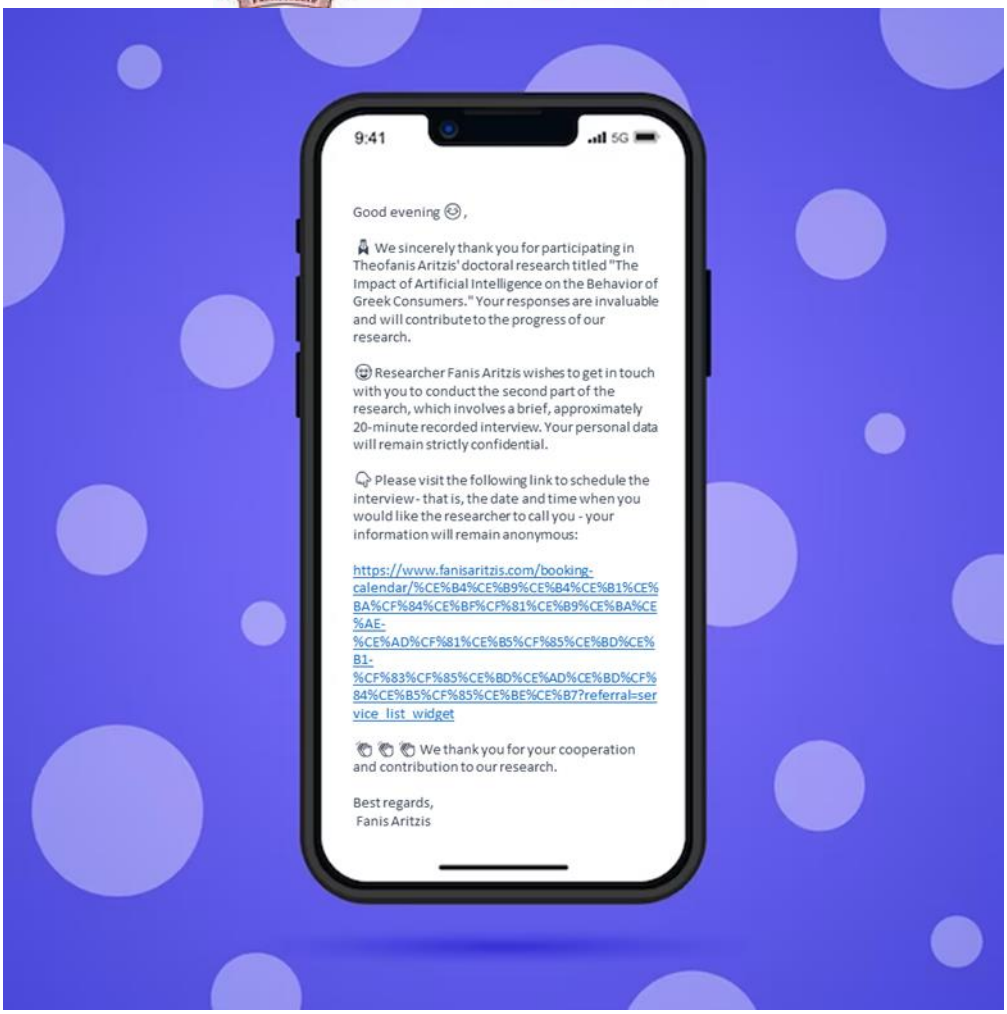
(click the image to open in excel)


EUROPEAN
INTERNATIONAL
UNIVERSITY

Book your appointment here:



Email communication to interviewees to participate in Phase B of the research:



Acronyms and Abbreviations

AI: Artificial Intelligence=**CEM:** Customer Experience Management

CJ: Customer Journey

CSR: Corporate Social Responsibility

CRM: Customer Relationship Management

II: (Latin for number 2)

ICT: Information and Communication Technology

IoT: Internet of Things

ID: Identity Card(s)

GDPR: General Data Protection Regulation

GR: Greece

SEM stands for "Search Engine Marketing," and it refers to online marketing strategies aimed at increasing a website's visibility in search engine results pages

SPSS stands for "Statistical Package for the Social Sciences," which is a software used for statistical analysis and data manipulation in various fields of research

STEM: Science, Technology, Engineering, and Mathematics

URL: Uniform Resource Locator

WSNs: Wireless Sensor Networks

ChatGPT: GPT (Generative Pre-trained Transformer): This is a category of artificial intelligence model designed for the interpretation and generation of human-like language. It is based on the Transformer architecture, which has become the foundation for many advanced natural language processing (NLP) models.

The GPT model undergoes “pre-training” on extensive text datasets prior to being fine-tuned for specific tasks. This pre-training enables the model to acquire verbal skills, factual information, cognitive capacities, and a degree of common sense.

Subsequent to pre-training, the model can be “fine-tuned” on particular tasks or datasets to enhance its proficiency in those areas. ChatGPT is specifically designed for conversational exchanges, rendering it more appropriate for chatbot applications.

Generative: The model can produce text based on the provided input. This indicates that it does not just choose responses from a predetermined list; rather, it generates responses dynamically based on its training.

Transformer Architecture: This is the essential neural network framework employed by GPT. The Transformer design excels at managing sequential data, especially text, rendering it very appropriate for natural language processing tasks.