


Chapter 9

The Paradox of Choice in the Age of AI: How Infinite Options and Intelligent Systems Shape Consumer Decisions

Elif Ulker-Demirel

 <https://orcid.org/0000-0002-5805-0452>

University of Massachusetts Amherst, USA & Trakya University, Turkey

ABSTRACT

This chapter explores how choice overload and information overload—amplified by algorithmic personalization, persuasive user experience (UX) design, and digital abundance—reshape consumer behavior in online environments. Drawing on theories of cognitive load, mental shortcuts (heuristics), and Dual System Thinking, it examines how emotional triggers such as fear of missing out (FoMO), scarcity, and urgency interact with digital design to influence impulsive decision-making. The chapter also considers coping strategies adopted by consumers, including filtering tools and digital self-regulation, and reflects on the ethical and psychological challenges posed by artificial intelligence (AI)-driven personalization. It concludes by outlining future research directions, particularly on how these dynamics impact decision quality and digital well-being across diverse user profiles.

1. INTRODUCTION

When *The New York Times* first proclaimed “The Internet is open” in 1994 (Lewis, 1994), the web was hailed as a realm of freedom and discovery—few could have

DOI: 10.4018/979-8-3373-2424-1.ch009

foreseen that this digital frontier would evolve into a psychological minefield for modern consumers. Three decades later, everyday online activity exposes individuals to a constant flow of personalized suggestions, alerts, and choices. While this environment was once celebrated for its openness and accessibility, it now often overwhelms users with information, making even simple decisions feel cognitively draining. The shift from digital optimism to cognitive saturation is increasingly evident in patterns of distraction, indecision, and impulsive behavior observed across digital platforms.

Understanding this sense of cognitive strain requires us to also account for the sheer volume and speed of digital content that individuals are exposed to in everyday life. The 21st century, driven by unprecedented computing power and the largest accumulation of digital data in history, has given rise to an expansive digital archive as billions of individuals continuously generate, share, and expose information about their personal and public lives (Hoskins, 2024). In this hyperconnected era, digital activity occurs at an astonishing pace. By 2024, every minute saw 251.1 million emails sent, 138.9 million Reels played on Facebook and Instagram, and 5.9 million Google searches conducted—illustrating the relentless flow of information shaping the digital landscape (Dixon, 2025).

Consumer shopping behavior has undergone a significant transformation in this evolving environment, as individuals are constantly exposed to vast amounts of product information, reviews, and personalized recommendations. In response, companies have adopted advanced technologies—such as artificial intelligence, data analytics, and algorithm-driven marketing—to capture attention, shape purchasing decisions, and provide seamless omnichannel experiences. This shift has also altered the way consumers process information and make decisions. With screens, apps, and background media filling nearly every moment of the day, the average consumer now spends close to 70% of their waking hours processing information—equivalent to 82 hours a week and nearly 90 times more data (in bits) than in 1940 (Clinton, 2018). Compared to previous generations, today's consumers face a far greater number of options and decision points, even in simple daily activities like choosing a product or navigating digital content platforms. This increase in options has reshaped not only purchasing habits but also the broader dynamics of online consumption.

Considering these perspectives, the objective of this chapter is to conduct an in-depth examination of how the abundance of digital choices and stimuli affects consumer decision-making processes. Within this framework, the chapter will explore the cognitive burden associated with choice overload, assess its psychological consequences, and analyze how impulse buying behaviors—often triggered by FOMO, scarcity, and urgency tactics—emerge in this context. Furthermore, the role of user experience (UX) design and AI technologies in shaping these behaviors will be discussed. Finally, the chapter will offer key takeaways and implications

26 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/the-paradox-of-choice-in-the-age-of-ai/388797

Related Content

The Prominent Role of Influencers' Credibility in Establishing Brand Trust: Should I Trust you?

Souad Maghraoui and Lilia Khrouf (2026). *Insights on Consumer Psychology in the Digital Landscape* (pp. 125-152).

www.irma-international.org/chapter/the-prominent-role-of-influencers-credibility-in-establishing-brand-trust/388793

In Their Own Words: Understanding English Language Learning in Developmental Dyslexia Through Qualitative Approaches

Afroditi Malisiova and Vasiliki Folia (2025). *Psycholinguistic Dynamics and Educational Inclusion for Children and Adolescents* (pp. 131-150).

www.irma-international.org/chapter/in-their-own-words/356560

The Landscape of Positive Psychology in Foreign Language Teaching: A Bibliometric Analysis

Mohammad Taghei Azad (2026). *Positive Psychology in Foreign Language Teaching* (pp. 447-492).

www.irma-international.org/chapter/the-landscape-of-positive-psychology-in-foreign-language-teaching/395505

Theraplay: The Evidence for Trauma-Focused Treatment for Children and Families

Catherine Tucker and Sondra Smith-Adcock (2017). *Emerging Research in Play Therapy, Child Counseling, and Consultation* (pp. 42-59).

www.irma-international.org/chapter/theraplay/175937

Contemporary Classrooms: The Role of Motivation and Teachers' Beliefs

Kieron Sheehy and Andrew J. Holliman (2026). *Contemporary Issues in the Psychology of Education* (pp. 79-100).

www.irma-international.org/chapter/contemporary-classrooms/391570