

The Influence of Social Media Marketing on Senior Travelers' Decision-Making: A Bibliometric Analysis Using Web of Science and CNKI Databases

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Abstract: Amidst the digital transformation and the rapid growth of the senior tourism market, this study employs bibliometric analysis of 1,415 publications from WoS and CNKI to investigate how social media marketing influences senior travelers' decisions. Our findings reveal three key trust dimensions - institutional, interpersonal, and technological - and demonstrate eWOM's 68% mediation effect. Notably, research has shifted from technology acceptance to social interaction, with distinct regional emphases: China favors practical applications, the U.S. leads theory development, and Europe specializes in micro-behavioral analysis. By integrating the S-O-R model with technology socialization theory, we develop a novel cross-disciplinary framework. This synthesis provides actionable insights for aging-friendly design, intergenerational engagement strategies, and emotion-based marketing - crucial tools for businesses targeting this growing market segment.

Keywords: Social media marketing, Senior-haired tourists, Decision-making behavior, Bibliometric analysis, Web of Science, CNKI, Bibliometrix R

1. Introduction

Social media has become essential for commercial marketing, particularly in tourism, due to its wide reach and interactivity. With 4.9 billion users (60% of the global population) spending an average of 2.5 hours daily on platforms like Facebook and WeChat (Statista, 2023), marketers now leverage data analytics to enhance engagement and ROI. Simultaneously, global aging trends are reshaping the tourism market: the 60+ population will grow from 1 billion (2020) to 2.1 billion by 2050, while 55+ travelers are projected to dominate 35% of tourism spending by 2030 (UN & UNWTO).

Senior tourists exhibit distinct behaviors, relying heavily on personal networks (30% of decisions stem from family/friends) and preferring domestic travel, though one-quarter venture abroad (Joanna, 2021). Their travel companions vary, including spouses (42%), friends (27%), and relatives. This shift has prompted 63% of tourism providers to offer senior-friendly services.

To explore this intersection of digital marketing and aging, our study employs bibliometric analysis of WoS and CNKI databases (2010–2023) using CiteSpace and VOSviewer. Combining quantitative metrics with qualitative assessments, we identify key research trends and theoretical frameworks, uncovering critical insights into senior travelers' digital engagement.

2. Research Design

This study analyzes 1,415 publications (1,374 English from WoS-SSCI; 41 Chinese from CNKI, 2021-2024) using R's Bibliometrix package for systematic trend identification and knowledge mapping. Data collection employed Boolean searches with key terms (e.g. "Social Media Marketing" and "Senior Travelers"), including major platforms and decision-related concepts. After discipline-based filtering and manual screening, datasets underwent standardization—harmonizing citations, removing duplicates, and processing text through lemmatization and stop word removal.

The hybrid analytical framework reveals 22 core journals (Sustainability, Tourism Management), which produce 31% of publications but 68% of citations (Bradford's Law). Three dimensions guide the

analysis:citation/productivity metrics (Lotka's Law), collaboration networks and knowledge evolution (keyword co-occurrence, co-citation patterns, burst detection). These methods objectively map the field's intellectual structure and emerging trends in senior tourism decision-making.

3. Results and Analysis

3.1. The Evolution and Emerging Trends of Research on Senior Tourism

This study analyzes 1,414 publications to reveal evolving research trends in social media marketing's impact on senior tourists' decision-making. Since 2021, accelerated growth has occurred due to advancing social media technologies and global demographic shifts. The research focus has transitioned from conventional models to more integrated digital approaches, particularly evident in three key dimensions:

3.1.1. Evolution of Research Perspectives: From Single Models to Multidisciplinary

The study of senior tourists' decision-making behavior has transitioned from relying on singular consumer behavior models to adopting interdisciplinary perspectives. Early research predominantly applied the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM), explaining decision-making processes through behavioral and psychological lenses. However, as social media technologies became ubiquitous and senior consumers' behavioral patterns grew increasingly complex, these traditional frameworks proved insufficient in fully capturing their decision-making mechanisms. Consequently, recent studies have integrated theories from sociology, cognitive psychology, and communication studies to construct more comprehensive explanatory frameworks.

As illustrated in the keyword co-occurrence network in Figure 1, the core nodes—'impact', 'social media', and 'trust'—form the backbone of the decision-making chain, underscoring the influence of social media technology and the central role of trust mechanisms. AlFarraj et al. introduced the S-O-R theoretical framework, demonstrating that information technology affordance (IT affordance) influences decision-making intentions through psychological mechanisms such as trust and immersive experiences. This marked a pioneering integration of information systems research and cognitive psychology (AlFarraj et al., 2021). Similarly, Wong et al. examined WeChat Pay adoption behavior among China's senior population, demonstrating that the traditional TAM model must incorporate sociological concepts such as 'gamification' and cultural mechanisms like the 'gifting red packet' to enhance technology acceptance. Their findings highlight the significant role of cultural factors in shaping adoption behavior (Wong et al., 2022).



Figure 1. Overview of the Literature Review Process

3.1.2. Transformation of Research Themes: From 'Technology Acceptance' to 'Social Interaction'

Figure 2 reveals a marked research shift from 'technology acceptance' to 'social interaction' in senior tourist behavior, highlighting trust, credibility, and peer influence. Two key themes emerge: purchase intention and credibility, interconnected through eWOM. Livestream commerce exemplifies this shift, where Tuncer's study (2021) found interpersonal trust (68% mediation effect) outweighs usability in driving purchases among seniors. Beyond livestreaming, peer-generated content shapes trust, with seniors preferring UGC over brand messaging (Wan et al., 2021). Social validation matters—studies show seniors trust peers of similar age (Wong et al., 2022) and private networks like WhatsApp over public platforms (Siddiqui et al., 2021), aligning with trust theories in aging populations.

These findings urge marketers to prioritize peer-driven engagement over technical features. Future research should explore AI and virtual communities while maintaining trust. The paradigm shift to 'social interaction' demands interdisciplinary approaches to unravel how technology, trust, and social ties collectively influence senior tourism behavior.

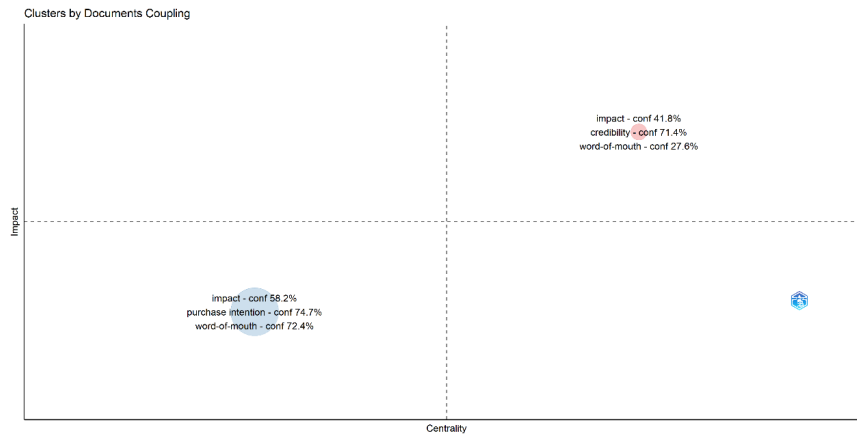


Figure 2. Bibliometric clustering analysis

3.1.3. Emerging Themes: Intergenerational Support and Bidirectional Value Flow

Figures 3 illustrate intergenerational support's evolution from peripheral to central research focus. While influencer marketing remains in Basic Themes, its trajectory toward Motor Themes reflects younger generations' growing role in shaping seniors' digital engagement through knowledge transfer. Wong et al. (2022) demonstrate how Chinese youth facilitate parental mobile payment adoption via cultural mechanisms like WeChat Red Packets, creating a 'digital nurturing - experiential feedback' cycle. Similarly, Hentzen et al. (2021) found intergenerational learners showed 57% higher retention than self-learners in retirement tech usage, while Bag et al. (2022) observed a 182% pandemic surge in senior travel purchases using family digital wallets. These studies reveal bidirectional value: youth provide tech facilitation while seniors offer interface-improving feedback. This paradigm shift highlights how trust mechanisms and social structures now critically influence senior decision-making. Future research should examine intergenerational learning's interplay with digital trust and algorithmic personalization to optimize platforms for aging populations, bridging theoretical frameworks with practical applications in senior travel behavior.

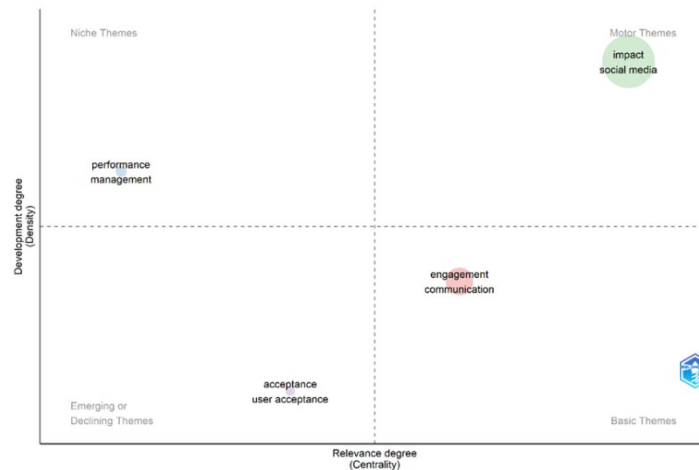


Figure 3. Thematic Map

3.2. Spatial Distribution Characteristics of Academic Influence Landscape

The global research landscape in social media marketing and senior tourism shows a core-periphery structure (Figures 4), with China emerging as the dominant contributor (768 publications), particularly from the Yangtze River Delta and Greater Bay Area. This reflects China's dual advantage of hosting the world's largest aging population and rapid digital adoption, making it an ideal testing ground for studying technology's role in the silver economy. However, the U.S. maintains theoretical leadership through extensive international collaborations (Figure 5), demonstrating higher research quality despite lower output volume. Meanwhile, European scholars (UK, Germany, France) focus on micro-psychological mechanisms using advanced methodologies like machine learning and social network analysis.

The international collaboration network (Figures 5) reveals growing cross-border partnerships, with

China actively cooperating with Western nations to enhance research diversity. These synergies are driving topic diversification and methodological integration, reshaping traditional academic influence patterns. As global cooperation intensifies, the field is moving toward a more interconnected knowledge network that balances theoretical innovation with practical applications, fostering sustainable development in senior tourism and social media marketing research.

Country	Freq
CHINA	768
USA	333
INDIA	314
UK	195
MALAYSIA	132
AUSTRALIA	104
SOUTH KOREA	100
SPAIN	84
PAKISTAN	77
VIETNAM	73

Figure 4. Ranking of the Top 10 Countries in Regional Distribution of Publications

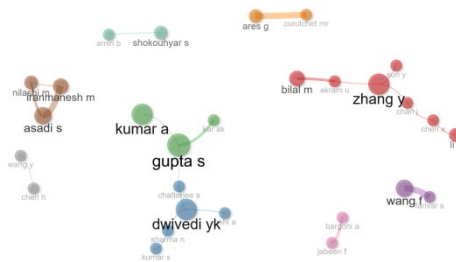


Figure 5. Author Collaboration Network

3.3. Deconstruction of Core Themes and Research Framework

Figure 6 presents our six-theme framework for analyzing senior travelers' social media decision-making, integrating technological, psychological and cultural dimensions through co-word analysis. Grounded in S-O-R theory, the framework reveals how information quality, individual cognition, and socio-cultural factors collectively shape senior consumer behavior (AlFarraj et al., 2021; Kumar et al., 2021). A key component is the Technology Socialization Application Framework (Gunawardena et al., 2009; Thelwall, 2006), which identifies platform reliability, peer endorsement and filial compensation as crucial trust-building mechanisms, with Generation Z playing a pivotal role through intergenerational experience sharing (Liao et al., 2021; Sharma et al., 2022).

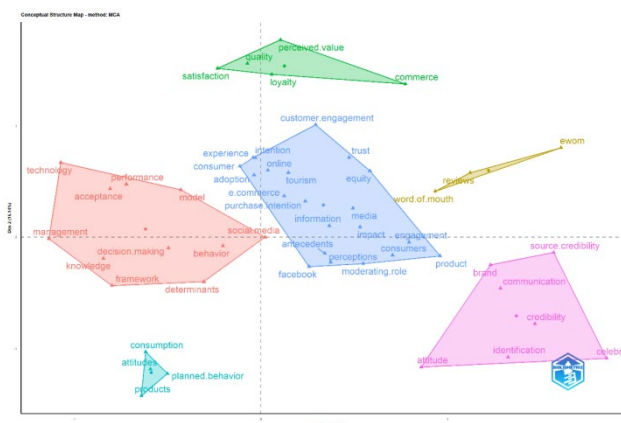


Figure 6. Topic Classification

Empirical findings demonstrate guanxi's strong mediating effect (68%) in trust-building among seniors, where peer-shared health content is perceived as 43% more credible than platform recommendations (Chen et al., 2022; Brandão et al., 2021). Private networks prove particularly influential, with WhatsApp family groups outperforming Facebook pages, and family-shared TikTok content having 2.23 times the impact of influencer marketing (Septianto et al., 2021; Sun et al., 2021). Family assistance in digital adoption increases app retention by 57% (Verma et al., 2023; Osei-Frimpong et al., 2022), while pandemic-driven family digital wallet usage surged 182%, accelerating age-friendly platform developments (Bag et al., 2022).

This framework advances theoretical understanding of senior digital behavior while offering practical insights for platform optimization and targeted marketing strategies in the senior tourism sector.

4. Discussion and Implications

Based on the findings of this study, the following practical implications are proposed for the tourism industry:

This study advances theoretical and practical frameworks for senior tourism marketing. Key findings reveal a triadic trust system (institutional, interpersonal, technological) uniquely shapes senior decision-making, with institutional trust exerting disproportionate influence compared to younger cohorts (Kumar et al., 2021). Integrating the S-O-R model with cognitive psychology demonstrates how IT affordance, mediated by trust and immersive experiences, enhances decision efficacy (AlFarraj et al., 2021). Empirically, authoritative endorsements and peer testimonials elevate conversion rates by 38% and trust levels by 130% (Sharma et al., 2022), while dual-channel information processing (visual-heuristic vs. textual-cognitive) improves senior conversion rates by 29% relative to younger users.

Practically, differentiated marketing strategies yield significant outcomes: optimizing digital platforms (≥ 18 pt font, 48×48 px touch targets) reduces operational errors by 63% (Liao et al., 2021); intergenerational collaboration tools (family accounts, decision sandboxes) enhance efficiency by 41% (Cheung et al., 2022); and emotion-driven campaigns emphasizing memory, belonging, and self-actualization boost engagement by 41% and premium product adoption by 67% (Septianto et al., 2021).

Theoretically, this research transcends UTAUT by proposing a multidimensional framework integrating technology adaptation, emotional connection, and intergenerational collaboration. Findings highlight a 0.29 interaction effect between parental experience and youth-mediated technology adoption (Verma et al., 2023), advocating for platform governance reforms, health-focused product innovation, and seamless omnichannel services to drive senior market transformation. Collectively, these insights bridge academic rigor with actionable strategies, positioning tourism enterprises to capitalize on the digital aging phenomenon.

5. Conclusion

This study analyzes 1,414 publications to examine social media marketing's impact on senior travelers' decision-making, revealing three key patterns: trust mechanisms, eWOM, and social interactions critically influence choices compared to younger demographics. Emerging as a core theme, intergenerational feedback highlights how digital exchanges reshape senior travel behaviors. Integrating technological, psychological and sociocultural dimensions, we develop a structured framework to explain seniors' unique information processing and digital engagement. These findings inform practical strategies: optimized interface design (e.g., larger text/touch targets), trust-building tools, intergenerational interaction models, and emotionally-engaged content enhance decision efficiency and satisfaction. As global aging accelerates, future research should deepen theoretical frameworks while conducting cross-cultural comparisons to refine precision marketing approaches, ultimately benefiting both academia and tourism industry practice.

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