

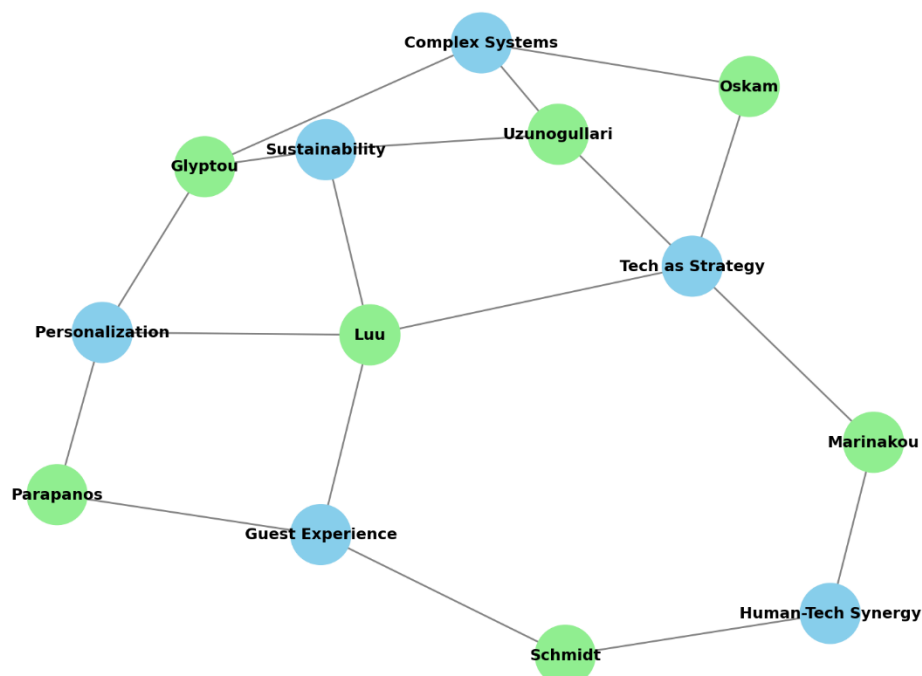
Reimagining Hospitality through Technological Synergies and Strategic Transformation

This special issue of *Strategic Change* delves into the dynamic interplay between technology and hospitality strategy, offering diverse empirical and theoretical contributions that illuminate the multifaceted ways in which technology is redefining the industry. From digital transformation and sustainability to AI-driven HR, gamification, and service robotics, the contributions presented here reflect a sector in flux—rapidly adapting to complexity, embracing innovation, and reimagining the guest experience.

As the hospitality industry continues to respond to a landscape shaped by global disruption, shifting consumer behaviour, and increasing environmental pressures, technology is no longer just an operational asset—it is a strategic cornerstone. The articles in this issue reflect this paradigm shift, exploring how technological tools are enabling competitiveness, resilience, and a more sustainable, personalised form of service delivery.

To provide an overarching view of the contributions, Figure 1 visualises the thematic intersections across the featured papers. Each blue node represents a key theme, while the green nodes represent individual research articles, and the connections illustrate where specific topics—such as sustainability, strategic technology use, or guest experience—are jointly addressed. This visual map highlights the collaborative coherence within the issue while also showcasing the diversity of perspectives and applications.

Fig. 1: Visual representation of how central themes are addressed across the featured articles



Technology as a Strategic Lever

Technology is no longer an optional enhancement to hospitality operations—it has become a core pillar of strategic decision-making. The increasing volatility of the business environment, driven by global health crises, labour shortages, and political instability, has compelled organisations to integrate technology not just for efficiency, but for strategic agility and continuity. Digital transformation is now embedded in revenue management, workforce planning, and customer engagement across the sector.

This strategic framing of technology is evident in several articles in this issue. Oskam's study uses complex systems theory to explore how business travel behaviour has evolved post-COVID, revealing surprising resilience in a sector many believed would be permanently displaced by virtual alternatives. Luu et al. trace how Industry 4.0 technologies—IoT, big data, AI, blockchain—are reshaping the structure and competitive dynamics of tourism supply chains. Marinakou et al. showcase how Greek luxury hotels are adopting AI to strategically overhaul recruitment and talent acquisition, offering both speed and scale in response to labour market pressures. Uzunogullari et al., meanwhile, explore how Greek and Turkish hotels have intensified IT adoption as a deliberate strategic response to geopolitical crises like the Palestinian conflict.

Sustainability Meets Smart Innovation

Sustainability in hospitality is evolving from corporate rhetoric to technologically driven action. Environmental responsibility is no longer the domain of back-end operations or niche branding—it is now a guest-facing, experience-enhancing imperative. Technology plays a critical role in enabling transparent, personalised, and behaviourally informed sustainability initiatives, shifting environmental impact from abstract measurement to user participation.

This transformation is vividly illustrated in Glyptou's article, which introduces a behaviour-based carbon levy calculated through a guest-facing app, allowing individuals to track and offset the environmental impact of their stay. Rather than treating sustainability as a fixed fee or back-end metric, this approach builds guest ownership and environmental literacy into the hospitality experience. Luu's analysis also positions sustainability as a defining lens in the digitalisation of supply chains, where smarter systems reduce waste, enhance traceability, and respond flexibly to ecological pressures. Uzunogullari's work adds depth by situating sustainability within chaotic geopolitical contexts, showing how IT investments can also reflect broader commitments to ethical resilience and responsibility.

Rethinking Guest Experience

In today's digitally saturated world, guests expect more than convenience—they seek immersive, personalised, and interactive experiences. Technology is no longer just about seamless transactions or mobile check-ins; it's about creating emotionally engaging, gamified, and responsive touchpoints that extend the hospitality experience across physical and digital spaces. The hospitality sector is rapidly adopting tools that not only deliver services, but also build relationships, trigger emotions, and encourage return behaviour.

This issue includes compelling examples of this shift. Parapanos and Michopoulou explore how gamified hotel apps can significantly enhance user engagement and loyalty. Rather than merely providing functionality, these apps use interactivity, rewards, and playfulness to shape behaviour and

deepen connection. Schmidt et al. conduct a rare real-world field experiment comparing human vs. robotic service agents, showing that service robots, when deployed thoughtfully, can match human staff in guest satisfaction—particularly in information provision tasks. Luu also emphasises the experiential value of digital supply chains, which enable customised guest offerings based on real-time data and customer preferences.

Complexity, Adaptation, and Behavioural Nuance

The hospitality environment is increasingly recognised as a complex adaptive system, characterised by feedback loops, emergent behaviours, and non-linear change. Whether in response to global crises, shifting guest expectations, or internal organisational dynamics, hotels and tourism businesses must navigate a world where cause and effect are not always predictable, and where small interventions can have disproportionate impacts.

Several papers in this issue embrace this systems-based view. Oskam applies complexity theory to understand the unexpected bounce-back of business travel. Glyptou and Uzunogullari both use fuzzy-set Qualitative Comparative Analysis (fsQCA) to examine behavioural configurations, revealing how combinations of digital literacy, income, and environmental awareness influence willingness to engage with technology or adopt sustainability practices. These studies demonstrate the value of moving beyond linear models, and instead embracing the unpredictable, multifaceted nature of technological change in hospitality.

Human-Tech Symbiosis

Amid rapid automation and AI integration, the role of humans in hospitality remains not only relevant but essential. The future is not about humans *versus* technology, but about collaborative coexistence, where each contributes unique strengths. AI excels at scale, speed, and data analysis; humans remain vital for empathy, creativity, and contextual judgment. This balance is especially important in industries like hospitality, where emotional labour and personalisation are core to value creation.

Marinakou et al. provide a practical framework for how AI can enhance HR processes without replacing human evaluators—especially in the final stages of recruitment. Schmidt et al. show that service robots can effectively supplement human staff, particularly in low-emotion, high-repetition roles like concierge or information assistance. These findings advocate for hybrid hospitality models, where technology augments—not erodes—the guest's connection to the brand.

Toward Personalisation and Empowerment

Today's hospitality guest is not a passive consumer but an active participant in shaping their journey. Personalisation, once limited to loyalty perks or room preferences, has expanded into real-time decision-making, behaviour-linked incentives, and dynamic app-based experiences. Technology now allows for nuanced customisation at every stage of the guest journey—from booking to post-stay feedback—transforming generic services into deeply relevant, individualised experiences.

In this issue, Glyptou's carbon tracking app, Parapanos's gamified mobile interface, and Luu's insights into smart supply chains all demonstrate how personalisation and user control are becoming cornerstones of competitive differentiation. These technologies empower guests to make choices

aligned with their values, preferences, and motivations—resulting in stronger loyalty and more meaningful brand engagement.

In Closing: Technology as Experience, Strategy, and Ethos

The contributions in this issue converge around a shared truth: in today's hospitality landscape, technology is no longer just a tool—it is a strategy, a system, and a cultural mindset. Whether through AI-enhanced HR, gamified apps, behavioural sustainability, or complex systems analysis, these studies offer a comprehensive view of how technology is shaping not only what hospitality organisations do, but who they are and how they relate to their customers and the world.

As the industry faces ongoing challenges and transformations, the lessons from this issue are clear: the future of hospitality lies in human-tech synergy, adaptive strategy, and ethically grounded innovation. We invite readers to explore these articles not just for what they reveal about technology, but for what they suggest about the kind of hospitality we want to build—resilient, responsive, and responsible.

At the same time, this issue opens new avenues for future inquiry. As technologies continue to evolve, there is an urgent need for deeper research into immersive and personalised experiences—how they are designed, how they shape emotional connection and guest loyalty, and how they can balance automation with authenticity. We encourage scholars to further explore how digital tools can foster meaningful, memorable, and ethically conscious hospitality experiences that transcend convenience to create lasting value for both guests and providers.