

# A STEEPLE Analysis and Information Technology Professionals' Interview Insights Regarding the Platform Economy

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## ABSTRACT

The rise of the platform economy, also known as the sharing economy, has generated new business models that increasingly shape global economic activity. This study provides an overview of how emerging digital platforms are transforming economic, social, and regulatory landscapes. It examines the platform economy through a social, technological, economic, environmental, political, legal, and ethical analysis to offer a comprehensive understanding of its multifaceted effects on key external factors. The platform economy leverages advancements in information technology, social media communities, and consumer awareness to facilitate direct transactions between businesses and consumers. By exploring these dynamics, the study identifies both the advantages and challenges of platform-based models, emphasizing gaps in their integration with traditional markets. Furthermore, it incorporates insights from interviews with industry experts to present a detailed analysis of the platform economy's broader implications for societal and economic structures, highlighting its strengths and weaknesses.

## KEYWORDS

Platform Economy, Sharing Economy, Digital Economy, Crowdsourcing, STEEPLE Analysis

## INTRODUCTION

The platform economy is an emerging phenomenon of significant technological and economic relevance, facilitated by advancements in information and communication technologies (ICTs), collaborative social media communities, and increasing consumer awareness of commerce and sharing (Hamari & Lehdonvirta, 2010). The platform economy and its marketing channel remain in their infancy (Gonzalez-Padron, 2017). Related terms for the platform economy include the sharing economy, collaborative economy, collaborative consumption, on-demand economy, gig economy, freelance economy, peer economy, access economy, crowd economy, and digital economy (Botsman,

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2013; Rinne, 2017). These terms are often used interchangeably, with their conceptualization depending on the origin of the term (Görög, 2019). Hamari et al. (2016) defined collaborative consumption as “the peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community based online service” (p. 1).

The platform economy is a broad concept that emerged from various technological advancements, facilitating the sharing of physical goods and services. This development has been driven by digital online platforms that enable activities such as renting, swapping, and trading (Hamari & Lehdonvirta, 2010). Digital technology is a vital component of the platform economy and operates through the Web 2.0 philosophy, which emphasizes stakeholder engagement and active bottom-up participation (Siakas et al., 2014). Martin et al. (2017) argued that commercial success stories have fueled the growing interest in the platform economy as a catalyst. Furthermore, digital technologies provide significant opportunities for new venture creation across multiple sectors (Briel et al., 2018). The advancement of ICTs, together with the rise of Web 2.0, has enabled the development of online platforms that support user-driven sharing, collaboration, and user-generated content (Kaplan & Haenlein, 2010). Gawer (2014) stated that:

*Platforms can be usefully conceptualized as evolving organizations or meta-organizations that (a) federate and coordinate constitutive agents who can innovate and compete; (b) create value by generating and harnessing economies of scope in supply or/and in demand; and (c) entail a modular technological architecture composed of a core and a periphery. (p. 1)*

Schreieck et al. (2021) observed that organizations across industries are shifting toward emerging platform ecosystems by capitalizing on new computing technologies and collaborating with diverse third-party developers. This ecosystem comprises actors interconnected through complementary economic and social activities, where the value created by each actor influences the value produced by others (Wang, 2021).

Wirtz et al. (2019) emphasized that the platform provider orchestrates value co-creation and manages platform governance, while service providers and customers use the platform for service delivery and consumption. Complementors accessible through the platform offer supplementary services that enhance the core offerings. Additional entities within and around the ecosystem—such as regulators, policymakers, and society—also influence the workflow in various ways. These external forces shape actor behavior and the course of events, making them particularly relevant to this study.

Moreover, triadic business relationships, or triads, emerge through complex interactions among suppliers, business-to-business buyers, and customers (Fletcher-Chen, 2022). Within the platform economy triad, the platform company serves as the intermediary. Li et al. (2022) identified three types of uncertainty in the platform economy: task complexity, intense competition, and task administration, which require greater use of ICTs and automation. Knowledge management, together with information technology (IT) professionals, must identify information-processing mechanisms to automate tasks, detect patterns, improve decision-making, and increase knowledge accessibility. These mechanisms enable platforms to organize and analyze large datasets, extract insights, and deliver real-time information to users, thereby enhancing organizational efficiency and competitive advantage. Examples of such outcomes include:

- Open-source software repositories such as SourceForge and GitHub.
- Online collaboration and communication platforms such as the Wikipedia encyclopedia and content-sharing sites like Facebook, Instagram, and YouTube.
- Peer-to-peer financing initiatives such as Kiva microloans and Kickstarter crowdfunding services.

Other types of platforms within the platform economy include innovation platforms that offer a common technological framework upon which others can build, as well as labor market platforms such as Freelancer. These platforms create new opportunities for innovation and economic growth across various types of organizations (Magni & Maruping, 2019; Zervas et al., 2017).

The platform economy has been examined from various perspectives, including crowdfunding (Howe, 2006), the collaborative consumption or sharing economy (Hamari & Lehdonvirta, 2010), the roles of actors in digital platforms (Sutherland & Jarrahi, 2018), peer-to-peer platforms (Bardhi & Eckhardt, 2012), e-governance, and business viewpoints (Täuscher & Laudien, 2018). It has primarily been analyzed from an economic perspective, which views platforms as double-sided markets, and from a technological perspective that focuses on platform architectures (Gawer, 2014). However, the platform economy encompasses many other domains within a complex ecosystem. Its broad scope and the challenge of integrating these diverse perspectives motivated this study. Although numerous investigations have explored the platform economy from multiple viewpoints, to our knowledge, no study has examined the mutual influence between external sociocultural, technological, economic, environmental, political, legal, and ethical (STEEPLE) factors and the platform economy. This research seeks to address this gap by exploring how the platform economy affects external macro-environmental factors through the lens of Web 2.0 philosophy and business perspectives using the STEEPL framework.

Business professionals use the acronym STEEPL as a tool to recognize, assess, structure, and monitor major external factors that may influence businesses and markets, thereby enhance strategic thinking and support the development of strategies and actions (More et al., 2015). The STEEPL framework is a multidimensional, multi-faceted strategic analysis tool that facilitates environmental scanning to identify the strengths, weaknesses, gaps, and impacts of STEEPL factors on a given topic (e.g., business change) as well as the topic's influence on those factors (Georgiadou et al., 2020; More et al., 2015). The purpose of this study is to examine the impact of the platform economy on external STEEPL factors at the macro level. The research objectives are to:

- Provide a theoretical understanding of the importance of STEEPL factors in the platform economy.
- Identify the strengths, weaknesses, gaps, and impacts of the platform economy.
- Present empirical data on the current status of the platform economy.

This paper is structured as follows: first, an overview of existing literature on the platform economy is presented. Next, the research methodology is described in detail to clarify each step undertaken. To provide a clearer representation of the outcomes, the results section analyzes and discusses the data for each STEEPL factor individually. Finally, the theoretical and practical implications are outlined, and conclusions are drawn.

## RELATED WORK

The Internet, digital connectivity technologies, and cloud computing have enabled business operations on a global scale. Platforms play a vital role in global economies (Feng et al., 2020). Platform-based economies are generating new entrepreneurial opportunities and driving the reorganization of markets, work structures, and value creation. Digital software and data are easily modified and combined, creating extensive opportunities for third-party innovation. Moreover, digital platforms influence organizational strategy. Platforms involving switching sides adopt a simultaneous entry approach, whereas those without switching sides follow a sequential entry strategy (Schirmmacher et al., 2017).

Crowdsourcing lies at the core of platform and sharing economy business models used by companies such as Uber, Airbnb, and Facebook. Howe (2006, p.1) defined crowdsourcing as “the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call.” Crowdsourcing includes multiple types—such as crowdfunding, crowd wisdom, and macro-tasking—and three main

categories: (a) knowledge-focused, (b) funding-focused, and (c) resource-focused crowdsourcing (Sivula, 2016; Sivula & Kantola, 2016).

Hamari and Lehdonvirta (2010) mapped 254 platforms that employed collaborative consumption. The activities on these platforms involved “access over ownership” (e.g., lending or renting) across 191 platforms or “transfer of ownership” (e.g., donating or exchanging) across 139 platforms. Seventy-six platforms overlapped between both modes. Sutherland and Jarrahi (2018) identified six technological affordances, referring to the roles commonly assigned to digital platforms in the platform economy:

- **Generating flexibility:** The ability of platform economy systems to create flexibility for users through rapid and dynamic access (Sutherland & Jarrahi, 2018). Participants can contribute in various roles, and resources, work, or labor can be accessed on demand.
- **Match-making:** A coordinating digital platform in a highly dynamic environment that connects a large number of participants in real time based on what they offer (service providers with excess resources) or need (users/customers), across an extensive network according to specific attributes (Benoit et al., 2017). This matching process is optimized through search, evaluation, and filtering. Increased automation enhances speed while reducing user responsibility (Sutherland & Jarrahi, 2018). However, automation of interpersonal relationships while maintaining user autonomy has introduced challenges (Möhlmann & Zalmanson, 2017). For instance, Uber and Lyft drivers often have no choice of clients and may be assigned to drive long distances for short trips, resulting in minimal profit (Raval & Dourish, 2016).
- **Extending reach:** Expanding global scale, diversity of users, and access to underutilized assets (Cusumano, 2014; Lampinen et al., 2015).
- **Managing transactions:** Platform-economy firms monitor transaction logistics by providing virtual workspaces for task completion. Examples include:
  - **Upwork:** a digital work diary that tracks freelancers’ tasks and hours (Spreitzer et al., 2017).
  - **Mechanical turk:** a platform that provides tasks to be completed within a webpage (Deng et al., 2016).
  - **Routing applications used in ridesharing** (Teubner & Flath, 2015).
- **Trust building:** Platform-economy firms establish legitimacy and promote confidence among peers through platform regulations and peer-rating systems. Sharing often involves personal interactions; thus, features such as rating systems, user reviews, and profiles with photos and biographical details foster trust (Ikkala & Lampinen, 2015; Ma et al., 2017). Most platforms also provide information about past stakeholder behavior, enhancing perceived trustworthiness and reducing risk.
- **Facilitating collectivity:** Platform-economy firms encourage collective action and social capital within communities, neighborhoods, or professional networks. Participation is interwoven with broader social movements in which all stakeholders share a collective interest. A sense of community, shared purpose, or lifestyle strengthens engagement and participation (Pee et al., 2018; Sutherland & Jarrahi, 2018).

A business model built on sharing through the use of platforms offers multiple benefits, including economic appeal, social recognition, collective well-being, community, and sustainability (Gurven, 2006; Kang et al., 2019; Tussyadiah & Pesonen, 2018), the promotion of non-hierarchical community structures that bypass central intermediaries (Carroll & Bellotti, 2011), and increased environmental sustainability (Belk, 2010; Botsman & Rogers, 2010; Marukawa, 2019). Kude et al. (2012) examined the motivations of spokes to participate in partnership networks. In the enterprise software industry, large providers, referred to as hubs, promote partner networks with smaller companies, or spokes, to complement their platforms. From an input-oriented perspective, spokes enter inter-firm arrangements to access external resources and capabilities.

Motivational factors for individuals to participate in the platform economy range from practical considerations—such as reducing expenses and increasing convenience (Bardhi & Eckhardt, 2012)—to ideological concerns, including sustainable consumption and anti-consumerism (Hamari et al., 2016). Moreover, self-benefits, together with intrinsic and extrinsic motivations, influence satisfaction and engagement in novel experiences that provide enjoyment and fulfillment (Kim et al., 2015).

A key success factor in this business model is the flexibility it offers, allowing participants to engage irregularly, as needed (Ke, 2017). Additionally, the platform economy encourages both consumption and contribution from users (Chen & Sheldon, 2016; Philip et al., 2015). Most platforms allow open registration, simplifying participation. However, rating systems may disadvantage new users who struggle to establish reputations within the network (Einav et al., 2016). Prayag et al. (2018) noted that it is nearly impossible to delete a guest review, even if it contains personal attacks or demonstrably false statements. Guest evaluations and criticism of their services can cause significant stress for providers. In the following seven subsections, this study presents the findings from the literature based on each of the STEEPLE factors. Accordingly, the nature of the platform economy is analyzed from multiple perspectives.

### **Sociocultural Dimension**

The sociocultural dimension and human perspective of the platform economy reveal a dual reality of opportunities and challenges that affect workers, consumers, and society. For workers, it provides flexibility but often entails precarious employment, low wages, and limited traditional labor protections. For consumers, it offers convenience and a broader range of services, though often at the expense of data privacy and autonomy. This human dimension also raises concerns about social justice, workers' rights, and the need for regulation to address vulnerabilities created by algorithmic management and platform-based labor.

In this context, the self-employed individual becomes central to exchanges within a network that functions without a defined center. Unlike traditional employees, owners, or partners, platform participants often have minimal interaction with company representatives and may not internalize the organization's cultural values (Thorne & Quinn, 2017). The platform economy also faces challenges related to trust (Kang et al., 2019), safety and insurance, information asymmetry, environmental impacts, rising rental prices (Dredge & Gyimóthy, 2015), and instability within the shared economic system. Market failures may also emerge as new regulations attempt to preserve existing infrastructure (Sundararajan, 2014).

### **Technological Dimension**

The Internet and mobile applications function as match-making platforms. Technical issues associated with these platforms include ease of installation, protection against malware, secure payment systems, and privacy policies safeguarding user information (Harris et al., 2016). Consumers increasingly encounter situations where they have limited understanding of platform technologies, such as algorithms governing ratings and rankings (Gössling & Hall, 2019). The platform economy requires proficiency in using its technological tools, which can be challenging for new employees and collaborators. Workers' backgrounds affect their ability to use systems and adopt appropriate practices. Stakeholders' capability to use information systems (IS) within organizations is crucial for the platform economy. The effective use of ICT tools can be assessed by examining IS capabilities at the organizational level through branches such as organizational intelligence (business intelligence, cognition, learning, and memory); organizational development (human resource and work development, management of knowledge assets, knowledge-based competition, and process development); information systems (communication, information sharing, collaboration, enterprise models, process models, data representation, and product models); knowledge representation; and information processing (information refineries, data mining, hardware) (Naaranoja, 2001).

## Economic Dimension

Öberg (2018) noted that the structural dimensions of economic ties are characterized by interconnectivity similar to Web 2.0 networks. Chen and Sheldon (2016) observed that Uber's dynamic pricing mechanism, known as surge pricing, motivates drivers to operate more frequently during high-demand periods. In general, dynamic pricing is expected to improve the efficiency of emerging platforms. Geissinger et al. (2017) emphasized that a major impact of the platform economy is the emergence of a second cycle of platform-driven entrepreneurship operating in parallel with traditional entrepreneurship, which must adapt to platform-based competition.

## Environmental Dimension

Reduced consumption through access to underutilized resources is generally viewed as a positive development, with favorable effects on the environment, traffic, and overcapacity (Marukawa, 2019). Sharing assets can reduce resource use—such as water, energy, and materials—and decrease waste generation (Palgan et al., 2017). However, Frenken and Schor (2017) and Dyllick and Rost (2017) described these as first-round effects, noting that income generated from sharing may lead to reinvestment in new physical products, creating rebound effects that harm the environment. Tussyadiah and Pesonen (2016) suggested that peer-to-peer accommodation increases travel frequency and duration, raising greenhouse gas emissions. Similarly, Dyllick and Rost (2017) argued that many platform-based businesses neglect life-cycle considerations such as material efficiency, design quality, and resource optimization.

## Political Dimension

Political and ethical issues vary across countries due to cultural and regulatory differences. Uber began operations in China in 2014 and introduced shared bicycles in 2016 (Marukawa, 2019), which were regarded as environmentally beneficial innovations. Japan, by contrast, has been less responsive to the platform economy; Airbnb listings there dropped from 62,000 to 13,800 in 2018 after new legislation required private lodgings to register with local authorities (Marukawa, 2019).

## Legal Dimension

Research on the platform economy has highlighted multiple legal challenges, including the classification of employment relationships, access to private property, and protection of personal data (Thorne & Quinn, 2017). Lutz et al. (2018) found that privacy concerns extend beyond traditional e-commerce and social media contexts to include data misuse, harassment, stalking, and discrimination, as well as threats to physical privacy stemming from shared spaces. Unregulated firms may overlook health and safety standards, including insurance and fire regulations, thereby increasing risks to consumers and businesses (Gurran & Phibbs, 2017). Cortez (2014) described *regulatory disruption* as the emergence of business models that fall outside current regulatory frameworks. The platform economy, by challenging existing schemes, disrupts established regulations. Gonzalez-Padron (2017) argued that platform-based firms gain an unfair advantage by avoiding regulations applied to traditional companies. Governmental resistance to resource sharing—such as housing, vehicles, and parking—often results in regulatory restrictions and prohibitions (Westerlund, 2020).

## Ethical Dimension

The ethical implications of the platform economy encompass the local regulatory environment, independent-provider misconduct, consumer protection, provider compensation, and international expansion (Gonzalez-Padron, 2017). Responsibilities are distributed among the community, users, and service providers. Community responsibilities rest with legislators and local authorities to address threats to traditional firms while promoting public acceptance of peer-to-peer sharing (Kathan et al., 2016). Resistance from disrupted traditional businesses manifests through protests and lobbying for

restrictive laws (Keszthelyi, 2016; Verbergt & Schechner, 2015). User responsibilities concern misconduct and rule violations by providers. When service quality fails to meet expectations, users must report issues to the platform company, which may lead to legal actions and penalties (Jonas, 2015). Relying on independent providers for consistent service quality introduces uncertainty that can erode customer trust and damage a platform’s reputation. Platform-provider responsibilities involve fair treatment of independent contractors who supply assets and services. Thorne and Quinn (2017) identified three ethical concerns—property rights, data privacy, and employment classification. Maintaining equilibrium between flexibility for independent providers and compliance with legal and user requirements is essential for sustainable platform governance.

### Related Outcomes

The main aspects of the seven external factors in the theoretical STEEPLE framework related to the platform economy, as identified in the literature, are summarized in Table 1.

**Table 1. Main Aspects of Each Dimension of the Theoretical STEEPLE Framework**

Dimension	Main aspects
Socio-cultural	<ul style="list-style-type: none"> <li>● Self-employed individuals constitute the mainstream of platform participants.</li> <li>● Values and attitudes of service providers and users/customers vary across platforms.</li> <li>● Weak organizational culture arises from limited interaction with platform representatives.</li> <li>● The network operates as a decentralized delivery unit without a defined center.</li> <li>● Instability of the platform-economic system and potential market failures have resulted from new regulatory measures.</li> <li>● Rising rental prices and issues related to safety, trust, insurance, and information asymmetry persist.</li> </ul>
Technical	<ul style="list-style-type: none"> <li>● The Internet and mobile applications function as match-making platforms.</li> <li>● Key technical concerns include:                             <ul style="list-style-type: none"> <li>○ Secure payment services.</li> <li>○ Protection from malware that cause harm to a user, their data, or devices.</li> <li>○ Privacy policies for protection of user information.</li> <li>○ Usability issues, such as the ease of installing and using apps.</li> </ul> </li> <li>● Consumers have no insight into the technical functioning of platforms.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>● Economic interconnectivity ties, such as Web 2.0 interconnections.</li> <li>● Generation of a second cycle of platform driven entrepreneurship through service providers adapting to platforms and copying strategies.</li> <li>● Traditional businesses adjust to the platform economy businesses.</li> <li>● Surge (dynamic) pricing may considerably increase the efficiency of platform economies</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>● Positive effects on environment:                             <ul style="list-style-type: none"> <li>○ Sharing of assets and providing access to underutilized resources reduce resource use (e.g. water, energy, materials, and waste).</li> </ul> </li> <li>● Negative effects on environment, overcapacity problems and greenhouse gases:                             <ul style="list-style-type: none"> <li>○ Income generated through sharing underutilized resources may stimulate reinvestment in other physical products with a rebound effect (first-round effect).</li> <li>○ Peer-to-peer accommodation is cheaper and as a result it may increase travel frequency and length of accommodation.</li> <li>○ Platform economy products usually lack environmental awareness regarding material use, product design, and resource efficiency.</li> </ul> </li> </ul>
Dimension	Main aspects
Political	<ul style="list-style-type: none"> <li>● Differences in political, cultural, and ethical viewpoints in different countries give rise to different rules and regulations.</li> </ul>

*continued on following page*

Table 1. Continued

Dimension	Main aspects
Legal	<ul style="list-style-type: none"> <li>● Platform-economy businesses tend to involve in unfair competition by not following the existing regulations for incumbent firms. Regulatory disruption concerns business models are not compatible with existing regulatory schemes. New regulations are needed regarding:                             <ul style="list-style-type: none"> <li>○ Classification of employment relationships.</li> <li>○ Access to and use of private property.</li> <li>○ Health and safety (insurance, fire regulations, safety issues).</li> <li>○ Data privacy and security.</li> <li>○ Physical privacy threats.</li> </ul> </li> </ul>
Ethical	<ul style="list-style-type: none"> <li>● The ethical dimension includes:                             <ul style="list-style-type: none"> <li>○ Local regulatory environment.</li> <li>○ Independent-provider misconduct.</li> <li>○ Consumer protection.</li> <li>○ Provider compensation.</li> <li>○ International expansion.</li> <li>○ Equilibrium must be maintained by the platform-economy firm regarding the flexibility that attracts independent service providers and compliance.</li> </ul> </li> </ul>

## METHODS

This qualitative study was conducted in consecutive stages following the standard multi-case study procedure outlined by Yin (2018). The initial phase involved designing the study and preparing for empirical data collection. Interview questions were developed based on existing literature and are included in Appendix 1. This small-scale exploratory qualitative research employed a recognized case-study method and thematic analysis to examine IT professionals' experiences, perspectives, and viewpoints on the platform economy. Aspers and Corte (2019, p.17) defined qualitative research as “an iterative process in which improved understanding to the scientific community is achieved by making new significant distinctions resulting from getting closer to the phenomenon studied.” Lim (2025, p.1) emphasized that qualitative research “delves into the rich textures of human experience and perspective, capturing contexts and nuances often lost in numerical translation.” Qualitative inquiry enables researchers to connect with participants' subjective experiences and to explore the depth of social phenomena—including context, attitudes, meaning, and subjectivity (Lim, 2025). These characteristics provide a unique lens through which the complexities of social phenomena can be examined and interpreted.

A qualitative approach was deemed the most suitable, as it allows for an in-depth understanding of complex social processes and generates insights that are both meaningful and credible (Sim et al., 2018). Moreover, this approach supports the analysis of data derived from both literature and interviews. To achieve a comprehensive understanding of aspects related to the platform economy, findings from the literature were examined in detail and compared with interview results.

A convenience sampling strategy was used to select participants who volunteered to take part in the study. Participants were required to be IT professionals in leadership positions within their organizations and to have experience with the platform economy. Interviewees were identified through the researchers' professional networks. Although the number of participants was small, limiting generalizability, this was mitigated by comparing interview findings with existing literature through thematic analysis. Hennink and Kaiser (2022), who conducted a systematic review of 23 empirical studies on saturation in qualitative research, concluded that 9–17 interviews are typically sufficient to reach saturation. Saturation is an adaptive process encompassing code saturation, where no new issues emerge, and meaning saturation, where no further insights are obtained (Sim et al., 2018). As Ahmed (2025) noted, saturation should be treated as a guiding principle that varies across studies depending on design, sample diversity, and research objectives.

Empirical data were collected through interviews with 10 IT professionals and experts from diverse industries. These participants were chosen for their specialized expertise and leadership roles in their respective fields. The interviewees represented sectors including information technology, municipal technical services, tourism, academia, health care, chambers of commerce and industry, research and development (R&D) in the wood-processing industry, and market research. They were based in Austria, Finland, Greece, Hungary, and the United Kingdom. Table 2 presents detailed characteristics of the participants.

**Table 2. Description of the Interviewees**

No.	Type of company	Title/Role	Country
1	Academia	IT professor	Austria
2	Wood processing industry	IT manager R&D	Finland
3	Health care	IT group security manager	Finland
4	Municipal technical services	Director of IT services	Finland
5	Chamber of commerce & industry	ICT manager	Greece
6	Chamber of commerce & industry	Technical support manager	Greece
7	IT industry	Scrum master	Greece
8	Tourism	IT analyst	Greece
9	Market research	IT director R&D	Hungary
10	IT industry	Database manager	United Kingdom

IT: Information Technology, R&D: Research and Development, and ICT: Information and Communication Technology.

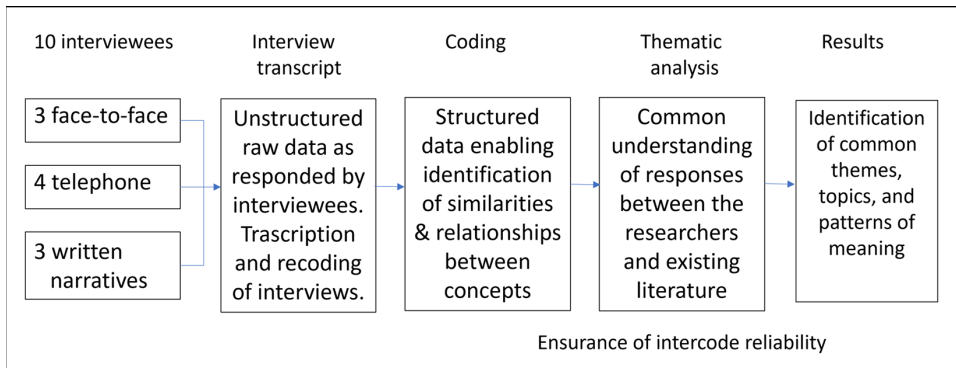
Each interview, lasting approximately one hour, was conducted either face-to-face (three participants), by telephone (four participants), or through written narratives (three participants). All interviewers used the same set of questions, and the study topic was explained at the start of each session. The face-to-face and telephone interviews were recorded and transcribed into personal documents containing demographic details and responses arranged beneath each question. The three written narratives were obtained after an email describing the study was sent to potential participants. Those who consented received a document with the open-ended questions.

Coding of the 10 responses began once all interviews were completed and the data collected. This stage aimed to transform unstructured raw data into a structured format to identify similarities and relationships among concepts. Interview transcripts were processed using descriptive tags and labels, color highlights, and detailed comments. A systematic thematic analysis was then conducted to explore how IT professionals and experts perceive the platform economy. Each researcher reviewed the responses from the structured documents and highlighted key points relevant to each thematic question. After individual reviews, all responses were jointly examined and discussed to achieve shared understanding between the researchers and to relate findings to existing literature.

The coding process enabled rigorous analysis and interpretation of results. To ensure inter-coder reliability, the thematic analysis was performed collaboratively by all researchers. Inter-coder reliability safeguards consistency in coding decisions, enhances shared understanding of concepts, improves transparency and analytical rigor, and allows equitable distribution of workload without compromising the internal cohesion of the analysis (O'Connor & Joffe, 2020). Although time-consuming, this process validated the reliability of the findings and facilitated the identification of common themes, topics,

and patterns of meaning presented in the results section. The overall research process is illustrated in Figure 1.

Figure 1. The Explorative Qualitative Research Process Used in This Study



## RESULTS

The results of the expert interviews are presented in this section as introductions to each key factor, reflecting the interviewees' perspectives and collectively interpreted insights extracted from the personal interview documents and summarized in tables. Each subsection provides a brief introduction to the corresponding STEEPLE dimension, focusing primarily on the external factors influencing organizations.

### Sociocultural Impact

The impacts of the platform economy include the unsocialized nature of relationships, which remain primarily transactional and connect users to the platform rather than to individual actors. Trust has also changed in meaning, becoming associated mainly with economic transactions. Table 3 presents the interview results from a social impact perspective.

**Table 3. Social Impact of the Platform Economy According to Interviewed Experts**

<b>Social Impact</b>	
<ul style="list-style-type: none"> <li>• Required skills of users: digital literacy, organizational ability, reliable Internet access, a personal computer and/or smartphone, and the ability to make online payments (e.g., by credit card).</li> <li>• Required skills and knowledge of service providers: contextual awareness, business acumen, innovation, ICTs, security, leadership, negotiation, and social competence. Stakeholder involvement is essential for achieving social impacts within the platform economy. Revising the Code of Conduct requires a shared understanding of the opportunities introduced by change.</li> </ul>	
Positive impact	Negative impact
<ul style="list-style-type: none"> <li>• Increased on-line connectivity.</li> <li>• Easy access to wider population and disadvantaged groups.</li> <li>• User access to a wider range of services and products allowing comparison.</li> <li>• Customer opinion being taken into consideration both by service providers and customers.</li> <li>• Employment structure (less monopoly – more sharing).</li> </ul>	<ul style="list-style-type: none"> <li>• Decreased face-to-face connectivity.</li> <li>• Lack of education and training in using platform economy applications.</li> <li>• Potential personal data misuse.</li> <li>• Level of knowledge seems to influence level of trust.</li> <li>• Income level prevents the possibility to be part of the platform economy if one does not have the required tools e.g. computer or smartphone.</li> <li>• Loss of culturally beautiful shopping areas.</li> </ul>

ICT: Information and Communication Technology.

The interview findings align with broader literature indicating that stakeholders in the platform economy share a common attitude rooted in genuine practices of sharing and cooperation in the production and consumption of goods and services (Schor, 2016). This attitude reflects social appeal— attracting users through social inclusion and opportunities to meet new people—and acceptance— fostered by customer reviews and ratings (Palgan et al., 2017). It also involves a desire for collective products, emphasizing shared access and its influence on employment structures, and bonding, defined as a sense of connection based on shared experiences or interests that facilitates access to broader communities. Sharing strengthens social relations and reinforces cultural practices (Belk, 2014). However, negative effects include security risks, the digital divide, and reduced face-to-face interaction. Socio-cultural effects are multifaceted and not universally beneficial.

The literature further suggests that the platform economy may drive societal change while introducing new risks and ethical concerns (Keith Ming et al., 2025). For instance, many platform workers are classified as independent contractors rather than employees and thus lack basic protections such as minimum wage, overtime pay, health insurance, pensions, unemployment benefits, and paid leave. This issue was not mentioned by the interviewees. Platforms also collect vast amounts of user and worker data, raising critical questions about data use, control, and algorithmic transparency. Review systems can influence user behavior and reshape trust formation. The interviews highlighted concerns about potential misuse of personal data and varying levels of trust.

**Technological Impact**

Platform-economy firms employ Internet-based and mobile applications as match-making systems. Trends, patterns, and associations in human behavior and interaction are systematically extracted and analyzed using contemporary artificial-intelligence and machine-learning techniques applied to large consumer data sets across diverse platforms. These analyses aim to computationally generate consumer profiles for targeted marketing. Table 4 presents the interview results from a technological-impact perspective.

**Table 4. Technological Impact of the Platform Economy According to Interviewed Experts**

Technological impact	
<ul style="list-style-type: none"> <li>Recent and emerging technologies in the platform economy include the IOT machine learning, artificial intelligence, sensing, predictive analytics, blockchain solutions, and value-chain optimization.</li> <li>Additional developments involve encryption and the protection of sensitive personal data. Gaming is evolving from room-limited formats to environment-enabled modes, allowing free movement that benefits areas such as mobility-as-a-service, security research, and e-sports. A continuing dilemma exists between operator-centric (cloud-based) services and the requirements of the general data protection regulation.</li> </ul>	
Positive impact	Negative impact
<ul style="list-style-type: none"> <li>High reliability.</li> <li>Facilitates the emergence of technologies built on the platform-economy ecosystem (e.g., Airbnb-related services).</li> <li>Stimulates R&amp;D of innovative, context-specific technologies.</li> <li>Digital and mobile services increasingly designed to meet business needs.</li> <li>Enhances integration between IT and business functions (finance, transport, and product/service consumption).</li> <li>Promotes knowledge-intensive leadership.</li> <li>Introduces flexible work arrangements, such as remote work.</li> </ul>	<ul style="list-style-type: none"> <li>Generates distrust.</li> <li>Creates disruptive effects that weaken competitors' technologies.</li> <li>Encourages extraordinarily long working hours.</li> <li>Leads to non-standard employment forms (e.g., part-time, on-call, zero-hour, and temporary-agency work).</li> </ul>

IT: Information Technology and R&D: Research and Development.

The interviews, consistent with the literature, emphasized that developments in innovative ICTs and collaborative bottom-up social media have enabled the rise of the platform economy (Hamari & Lehdonvirta, 2010). At the same time, consumers have shown growing interest in the common good and in sharing, reflecting a socio-cultural impact. In the platform economy, consumers gain on-demand access to excess capacity through digital platforms. Affordable, user-friendly smartphones; cloud computing; machine learning; big data; and artificial intelligence—alongside market enablers such as logistics networks, trading, payment, and surveillance systems—have collectively driven the rapid expansion of the platform economy. Emerging technologies increasingly integrated into platform models were mentioned by both the interviewees and the literature (Guerreiro Augusto et al., 2024; Wu et al., 2025). However, negative aspects, such as issues of data integrity, cooperation, and resource distribution, were more extensively discussed in the literature (Ma et al., 2025).

The interviewees noted that negative technological impacts stem partly from the immaturity of the platform economy as a disruptive model. Traditional businesses may face operational and competitive challenges arising from platform-based firms. Reports also suggest that individuals sometimes display distrust or exclusion when selecting trading partners or collaborators within the platform economy (Schor, 2016). Interviewees acknowledged that distrust remains a recurring concern.

### *Economic Impact*

The platform economy has influenced business and entrepreneurship by generating a second cycle of platform-driven innovation. Entrepreneurship evolves through adaptation to platforms and imitation strategies among service providers. Competition occurs not only between traditional and platform markets but also among providers within the platform environment. Traditional firms often join platforms to gain customer access and increase market share. Businesses exposed to rating systems have become more service-oriented, emphasizing delivery and payment reliability. Relationships within the platform economy are characterized by governance-dominant mechanisms, involving intermittent or repeated exchanges of goods and services. Cognitive processes in these markets are primarily based on complementary resources.

Economic and commercial factors in the platform economy remain subjects of debate among both supporters and critics, addressing issues such as market empowerment, micro-entrepreneurship, income generation, and job creation (Palgan et al., 2017). Interviews confirmed competition between legacy and platform markets as well as among service providers. Experts highlighted that leading platform firms operate globally, often undermining local businesses and reducing tax revenues, since matchmaking payments are typically processed through companies registered abroad. Product and service quality tends to improve through ratings and rankings, while prices remain low due to competition and reduced transaction costs. Additional economic effects identified include rising rents in areas with intensive accommodation sharing, which increase homeowners' monthly income through daily all-inclusive rates.

The platform economy offers business opportunities for owners of underutilized assets and introduces new work arrangements. Internet platforms allow consumers to locate desired products and services quickly and easily, standardize transactions through contracts, and process payments online, thereby substantially lowering transaction costs. Accommodation sharing remains the most profitable segment of the platform economy, with wealthier homeowners benefiting most. However, home-sharing has challenged many major cities already facing housing shortages, unaffordable home prices, and high rents, especially in desirable neighborhoods. Table 5 presents the interview results from an economic-impact perspective.

**Table 5. Economic Impact of the Platform Economy According to Interviewed Experts**

<b>Economic Impact</b>	
Smaller, less powerful companies tend to join the platform economy. Larger companies use services of a platform company in non-core activities (quasi-outsourcing as e.g. Amazon Cloud Service – AWS). Traditional competitors of the new platform companies do not use the platform (e.g. hotels vs. Airbnb); instead, they try to protect themselves and their business models.	
Positive Impact	Negative Impact
<ul style="list-style-type: none"> <li>• Cheaper products/services</li> <li>• Re-use is increasing</li> <li>• Waste is decreasing</li> <li>• Lower requirements in investments in design and market</li> <li>• New business models (platform businesses)</li> <li>• Rational/fact-based decision making</li> </ul>	<ul style="list-style-type: none"> <li>• Payments to technology company</li> <li>• Establishment of major technology companies in the global market (monopoly)</li> <li>• The platform economy firms operate mainly on a global level, which may undermine local companies and bring less tax income</li> </ul>

The platform ecosystem comprising actors connected through complementary economic and social activities (Schreieck et al., 2021). However, the perspectives of the interviewees and the literature appear somewhat contradictory. In practice, traditional firms in the platform economy may either transition toward platform-based ecosystems or seek to preserve and defend their established business models. Many traditional organizations adapt by adopting platform logic, connecting users, suppliers, and partners rather than focusing solely on producing and selling products.

***Environmental Impact***

The platform economy contributes to both positive and negative environmental outcomes related to carbon emissions and overall ecological footprints. These impacts are often difficult to identify and measure due to complex causal chains and rebound effects. Table 6 presents the interview results from an environmental-impact perspective.

**Table 6. Environmental Impact of the Platform Economy According to Interviewed Experts**

Environmental Impact	
<ul style="list-style-type: none"> <li>• There are contractionary outcomes regarding CO<sup>2</sup> emission/carbon footprint. Waste can be minimized when the whole chain is connected.</li> <li>• Optimization of logistic network between several parties. GIS, BIM, CMMS and MAAS together provide new paths for IoS &amp; IoT – Servitization (the strategy of creating value by adding services to products)</li> </ul>	
Positive Impact	Negative Impact
<ul style="list-style-type: none"> <li>• Recycling tendency</li> <li>• Sharing tendency</li> <li>• Decreased use of transportation means by users for shopping/visiting banks</li> <li>• Possible to make new type of collaboration e.g. virtual meetings that decreases the need of travelling</li> <li>• Production of plastic-free commodities and biofuels use of the circular economy</li> </ul>	<ul style="list-style-type: none"> <li>• Increased flying due to cheaper accommodation and cheaper flights</li> <li>• Increased transport of goods</li> <li>• Increased packaging</li> <li>• Overconsumption</li> </ul>

Environmental benefits are most evident in car- and ride-sharing initiatives (Schor, 2016). The interviewees emphasized that the carbon footprint is a multifaceted dilemma that cannot be accurately measured without examining the entire consumption chain—from raw-material extraction to production, distribution, use, and disposal—because emissions are embedded at every stage of a product’s life cycle. The overall environmental effects of the platform economy may be smaller than they appear due to rebound effects. For instance, lower accommodation prices can increase consumption and travel, thereby offsetting potential benefits (Palgan et al., 2017).

Despite these complexities, experts generally agreed that sharing is less resource-intensive. It is considered eco-friendly because it ostensibly reduces demand for new products and services. Reasoning about environmental impacts often focuses on the substitution of products or services that employ different contemporary technologies in their production (e.g., eco-cars). This reasoning constitutes partial-equilibrium analysis because it considers only first-round effects (Schor, 2016). To understand the full carbon footprint and ecological impact, it is essential to analyze all system-wide effects triggered by practices within the platform economy.

### *Political Impact*

International expansion can create political and ethical challenges in countries with varying cultures and regulatory frameworks. Under pressure from trade associations, many local governments have imposed strict rules on private lodging and other platform-based businesses. Airbnb and Uber exemplify major market leaders within the platform economy. Table 7 presents the interview results from a political-impact perspective.

Political responses differ across countries according to national cultures and governance traditions (Siakas & Siakas, 2020). Governmental roles are pivotal, as decision-making structures directly shape policy outcomes related to stakeholder involvement when regulatory changes occur. Policies and regulations must protect traditional legacy enterprises, uphold the rights of legitimate service providers engaged in lawful sharing, and safeguard consumers who utilize goods and services within the platform economy.

**Table 7. Political Impact of the Platform Economy According to Interviewed Experts**

Political Impact	
<ul style="list-style-type: none"> <li>• There is a growing need for regulations addressing issues such as fair competition, taxation, and social security. Policy implications for stakeholder involvement emerge whenever modifications to existing policies are required.</li> <li>• The Finnish comprehensive security model—a crisis management approach in which all societal actors contribute to national security—ensures that vital functions remain safeguarded. Implementing solutions that support community-wide operations can enhance collective performance by promoting resource efficiency, strengthening mutual trust, improving resilience, and reducing procedural inefficiencies.</li> </ul>	
Positive Impact	Negative Impact
<ul style="list-style-type: none"> <li>• Voters on Facebook and Twitter can share knowledge, information, and news</li> <li>• Opportunities for governments to design new policies (they can offer basic things and let companies build professional service based on that, e.g. refugee housing)</li> <li>• The government through its decision-making system influences the crisis management model</li> <li>• Easier access to information and forms</li> <li>• Faster turnaround in interactions with authority</li> <li>• Adds value to security research</li> </ul>	<ul style="list-style-type: none"> <li>• Fake news on social media spreads quickly</li> <li>• Hard to collect taxes if the physical base is ambiguous</li> <li>• Sometimes conflicts between traditional business and platform economy businesses (e.g. taxi owners/ drivers vs. Uber, hotels vs. Airbnb)</li> <li>• Security concerns</li> <li>• Increase in unfair competition</li> </ul>

Political decisions determine how platforms are regulated, influencing competition, consumer protection, labor rights, and privacy. Governments face ongoing challenges in balancing innovation with public interests, often alternating between enforcement, new regulation, deregulation, and toleration depending on sectoral context and national or local priorities. Zhu et al. (2025) highlighted that new challenges continuously emerge as digital platforms evolve, including “centralized monopoly, technological barriers, and algorithmic discrimination.” Regulation is necessary to address these issues; however, overly strict measures may hinder digital-platform development, reducing innovation, efficiency, productivity, and consumer benefit. To counter unfair competition and prevent practices that compromise user interests—issues also noted by the interviewees—Zhu et al. (2025) suggested that multiple stakeholders, including consumers and industry associations, should participate in creating fair and effective regulatory frameworks.

**Legal Impact**

The platform economy is governed by complex networks of relationships among emerging businesses, service providers, customers, end users, and government regulators. Its institutional environment encompasses both formal rules (laws and contracts) and informal norms (habits, cultural attitudes, and values). Misconduct by service providers diminishes consumer trust, damages reputation, and can lead to lawsuits and penalties. Table 8 presents the interview results from a legal-impact perspective. There is a growing need for new international legislation to address platform-economy operations. Criticism includes (a) the lack of regulation concerning monopolistic tendencies among established global platforms and (b) the unfair disparity between professional companies that comply with taxation and regulations and those that evade them (Schor, 2016).

**Table 8. Legal Impact of the Platform Economy According to Interviewed Experts**

Legal Impact	
<ul style="list-style-type: none"> <li>• Several dilemmas must be addressed at the European level to establish uniform regulations for platform companies.</li> <li>• Concerning individual rights and obligations, it is essential to uphold the protections provided by national laws and European Union directives. Critical development inputs that influence commercial success can originate outside the organization, such as through crowdsourcing initiatives.</li> <li>• The accessibility directive and corresponding national legislation require public authorities to ensure that digital services remain accessible to all users. Furthermore, issues related to the encryption and security of sensitive personal data, as well as the protection of intellectual property rights, remain central to the sustainable governance of the platform economy.</li> </ul>	
Positive impact	Negative impact
<ul style="list-style-type: none"> <li>• Government has a clear role.</li> <li>• Enrichment of the constitution with new decrees.</li> </ul>	<ul style="list-style-type: none"> <li>• Possible inconsistency of laws and regulations between different states.</li> </ul>

The literature underscores a persistent regulatory gap, as technological and business-model innovations evolve more rapidly than regulatory frameworks. Moreover, most existing laws were designed for traditional organizations and must be revised to address digital platforms, particularly regarding business models, labor relations, and consumer protection (Eckardt, 2025). Appropriate standards should be established, and strict regulations must be enforced and followed (Ferrari et al., 2024; Lafuente et al., 2024). Within the European Union, a high-level expert group has recommended reforms for digital platforms, including the development of a skilled workforce to support digitalization, management of new labor relations, and creation of contractual structures tailored to digital workers (Goos et al., 2019). The interviewees focused primarily on the legal implications of platform-economy organizations without comparing them to traditional firms or examining the platform economy from digital workers’ perspectives.

**Ethical Impact**

Dependence on independent service providers to sustain service quality and consistency can increase risk and uncertainty for platform-economy firms, potentially eroding customer trust and damaging corporate reputation. Table 9 presents the interview results from an ethical-impact perspective.

**Table 9. Ethical Impact of the Platform Economy According to Interviewed Experts**

Ethical impact	
<ul style="list-style-type: none"> <li>• There is a clear need to strengthen privacy and security measures.</li> <li>• Organizations that generate new knowledge, develop dynamic capabilities, and optimize resource utilization should be recognized as co-owners of innovation.</li> <li>• Under municipal ownership, the benefits of innovation can be shared equitably among residents, communities, businesses, and public authorities.</li> </ul>	
Positive impact	Negative impact
<ul style="list-style-type: none"> <li>• Mutual rating between customer and service provider.</li> <li>• Transparency.</li> <li>• Higher awareness of responsible consumption patterns.</li> </ul>	<ul style="list-style-type: none"> <li>• Unfair competition.</li> <li>• Copyright when ownership shared.</li> <li>• Companies may favor international companies rather than local ones.</li> </ul>

Ethical concerns—including property rights, data privacy, and employment classification—extend across multiple stakeholders: the community and local legislators, platform companies, service providers, and users. For communities and legislators, ethical challenges arise from the threats posed to traditional firms due to increasing user acceptance of platform-based models. For platform companies, fair treatment of independent service providers and the exercise of social responsibility comparable to ISO 26000 standards practiced by traditional firms are essential (Zompras & Siakas, 2015). Service providers possessing excess assets must ensure fair treatment of users and demonstrate consistent social responsibility, while users must exhibit acceptable behavior aligned with social norms and report misconduct or rule violations by service providers. Existing industry models and best practices can help guide ethical behavior. Transparency—achieved through mutual reviews and rating systems between customers and service providers—enhances trust and accountability.

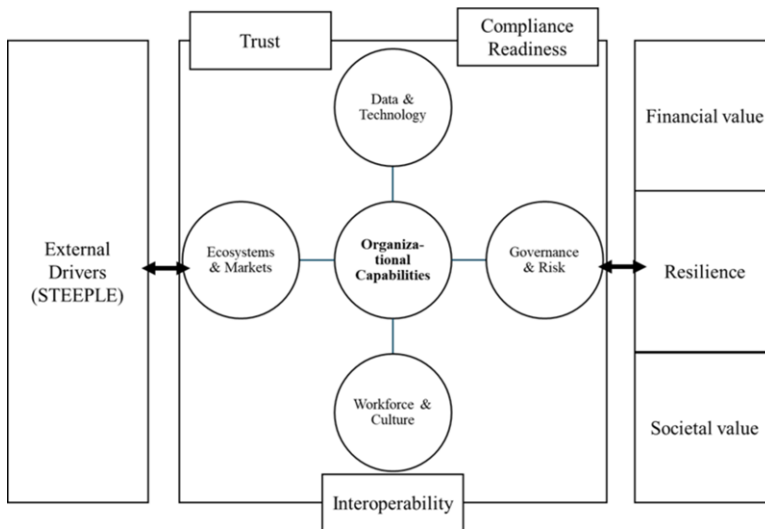
Transparency was also emphasized by the interviewees as a central feature of the platform economy. As digital platforms increasingly rely on artificial intelligence, concerns over transparency and accountability have intensified. Mirghaderi et al. (2023) identified three major dimensions of non-transparency in digital platforms: (a) the lack of clarity regarding who contributes to platforms; (b) insufficient visibility about those working behind platforms, including their contributions and working conditions; and (c) the opacity of algorithm development and governance. Similarly, Tan et al. (2021) categorized ethical concerns into three groups: (a) the “new type of work (what is done),” (b) the “new nature of work (how it is done),” and (c) the “new status of workers (who does it),” encompassing issues of classification and discrimination.

### **Integrated Platform Economy STEEPLE Synthesis Framework**

Digital platforms operate at the complex intersection of technological, economic, social, and regulatory factors that shape their governance and strategic trajectories. While the STEEPLE framework offers a structured lens for analyzing these external drivers, it does not inherently provide an integrative model connecting environmental pressures with organizational capabilities and performance outcomes. To address this limitation, the integrated platform economy STEEPLE synthesis (IPESS) framework is proposed to translate the study’s findings into a dynamic, theory-driven structure. The framework links external drivers to organizational capabilities and integrates trust and compliance readiness. This approach advances conceptual understanding while establishing a practical foundation for managerial action and policy design within platform-based ecosystems.

The IPESS framework (Figure 2) comprises several interrelated components. External drivers, derived from the STEEPLE analysis, represent the key factors shaping platform ecosystems. These drivers influence organizational capabilities across four domains: Data and technology (e.g., infrastructure, interoperability, cybersecurity); Governance and Risk (e.g., rules, compliance, assurance); Ecosystems and Markets (e.g., pricing models, ecosystem engagement, risk sharing); and Workforce and Culture (e.g., skills, ethical literacy, agile practices).

Figure 2. The IPES Framework



The impact of these capabilities on performance is mediated by trust, compliance readiness, and interoperability, which collectively determine a platform’s capacity to operate responsibly. Resulting outcomes extend beyond financial value to encompass resilience and societal benefit, underscoring the broader accountability of platform firms. The IPES Framework can be applied in practice through initiatives such as targeted training programs and the development of clearly articulated rules and procedures.

### Implications for Research and Practice

The platform economy has the potential to transform contemporary markets by reshaping value creation, consumption patterns, and business models across sectors, thereby contributing to the evolution of a market-oriented society (Zander et al., 2025). It can redefine traditional practices and ensure that supply aligns with increasing demand (Cullen & Farronato, 2021). Recent research has emphasized its flexible and multifaceted nature, encompassing peer-to-peer exchanges, hybrid business models, and blockchain-enabled ecosystems, while simultaneously raising questions related to ethics, governance, and sustainability (Abdalla et al., 2025; Khodayari et al., 2025; Tan & Salo, 2025). Studies have also demonstrated the integration of emerging technologies, such as blockchain and distributed artificial intelligence systems, into the platform economy (Guerreiro Augusto et al., 2024; Wu et al., 2025). However, these advancements present new challenges, including data integrity, cooperation, and equitable resource distribution, which require deliberate attention (Ma et al., 2025).

Beyond its economic implications, the platform economy contributes to sustainability objectives through energy efficiency, green innovation, and resource optimization (Dai et al., 2025; Sadiq et al., 2023; Zhang et al., 2023). Nevertheless, it can also generate societal transformations that introduce new risks and concerns (Keith Ming et al., 2025) while fundamentally altering organizational structures and the nature of work (Kuhn & Maleki, 2017; López et al., 2025; Rafélis de Broves et al., 2024). Consequently, there is a pressing need to revise digital legislation to address the scope and complexity of the platform economy (Eckardt, 2025). Appropriate standards must be defined, and strict regulatory compliance ensured (Ferrari et al., 2024; Lafuente et al., 2024).

Although the platform economy affects enterprises of all sizes, several contextual factors—such as demographics, management systems, infrastructure, and education—must be considered (Zuhroh et al., 2025). As traditional business models and strategies continue to be transformed through digital

integration, competition within the platform economy intensifies (Zhan et al., 2025). Innovation thus remains a central driver of competitiveness, progress, and differentiation in platform-based markets (Belezas & Daniel, 2023). However, while firms pursue innovation globally, equal attention must be paid to job satisfaction and worker fulfillment within the platform economy (Lay-Raby, 2025).

To fully understand the influence of the platform economy, it is necessary to evaluate its effects across all STEEPLE dimensions. The analysis in this study therefore carries implications for both research and practice, particularly given the field's emergent nature. The following section outlines these implications and discusses the study's limitations.

### **Implications for Research**

This study demonstrates that further research on the platform economy is necessary across macroeconomic, social, policy, regulatory, taxation, business, environmental, and labor domains, as well as in areas concerning value creation and capture, market dominance, competition, and workforce training. Globalization, examined from multiple perspectives within the platform economy, also warrants closer investigation, particularly in relation to the long-tail effects observed in social networks. By presenting both the positive and negative dimensions of the platform economy, this study contributes to a clearer understanding of its business models overall. The platform economy exerts both beneficial and adverse impacts on organizations and continues to influence companies across diverse industries.

More multidisciplinary research examining the platform economy from diverse perspectives is essential to advance this field of study. To develop a comprehensive understanding of the platform economy, future investigations should address several key themes: (a) the responsibilities of global corporations, (b) the regulatory frameworks needed to establish clear and consistent rules, (c) the expectations concerning employee rights and responsibilities, and (d) the technical dimensions of platforms, including encryption, security, and copyright protection.

### **Implications for Practice**

The practical implications of this study highlight the need to develop infrastructure and technology—such as affordable, user-friendly smartphones, cloud computing, big data, and artificial intelligence solutions—while considering both environmental and socio-cultural perspectives, along with key market enablers such as trading platforms, logistics networks, and payment and surveillance systems. A major implication concerns digital entrepreneurship driven by ICTs and its contribution to the platform economy, as well as the persistent digital, social, and economic divides that call for targeted training and support mechanisms. Furthermore, this study offers an opportunity to analyze existing products within companies. Examining both the positive and negative perspectives provides a useful framework for understanding current and emerging platform-based products and services.

### **Limitations of this Study**

The main limitation of this study lies in its relatively small sample size. However, rather than employing a survey in which a large number of respondents rank predefined parameters established by the researchers, this study adopted a qualitative approach that allowed participants with expertise in the platform economy to share their experiences, beliefs, insights, and practical knowledge. Consequently, instead of being constrained by predetermined questions, participants were able to develop specific insights and introduce new perspectives that might not have emerged through a quantitative tool using closed-ended questions. The exploratory nature of this study provided distinct advantages, including a deeper understanding of complex phenomena, the ability to capture rich contextual insights from participants' viewpoints, and a more holistic comprehension of the topic—all of which added significant theoretical and analytical value to the research.

## CONCLUSIONS AND FURTHER WORK

This paper examined the platform economy and its relationship with society from multiple perspectives using the STEEPLE framework as a guiding analytical tool in interviews. While the platform economy presents numerous opportunities and positive outcomes, it also entails several adverse effects. Based on the interviews, the platform economy emerges as a complex phenomenon. Because the study relied on qualitative interviews, the generalization of results is limited. Nonetheless, it offers new perspectives on the multifaceted dimensions of the platform economy in practice. According to the interviewees, key challenges include fairness concerns arising from varying consumer skills, unfair competition, and issues related to copyright and security.

Although many researchers have explored aspects of the platform economy, few have adopted a broad, multi-stakeholder approach aimed at identifying both the positive and negative effects of the platform economy on external factors—or the reciprocal influence of those factors on the platform economy. This study approached the phenomenon holistically, applying the STEEPLE framework to examine how external factors influence the platform economy and how, in turn, the platform economy affects them. The platform economy integrates multiple actors and entities, creating conditions for innovation in technologies and business models. However, questions remain concerning the ambiguous ownership of such innovations, as well as the governance and responsibilities associated with data ownership.

For researchers, this paper provides practitioner-based perspectives that raise new questions and dilemmas. From an economic standpoint, it unifies diverse viewpoints, illustrating the intersections and overlaps between technological, economic, environmental, and ethical issues that are often treated separately. Contradictory opinions persist regarding the environmental sustainability of the platform economy. For instance, resource-sharing models such as Airbnb can yield environmental benefits by optimizing asset use but may simultaneously encourage increased travel, thereby elevating carbon emissions due to lower accommodation costs.

Future theoretical work will focus on developing an overarching classification of the STEEPLE factors, their interconnections, and their bidirectional effects on the platform economy. This effort aims to build a holistic platform economy framework that will be continuously refined, expanded, and validated through practical application.

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The authors of this publication declare there are no competing interests.

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## APPENDIX

### *The Theme Interviews Base Questions (Based on STEEPLE Framework)*

#### Social

- What social impacts do you see in platform economy?
- Are users able to utilize the platform economy solutions?
- What type of skills are required?

#### Technological

- What technological impacts do you see in platform economy?
- Is the maturity level of the technology in a good state in your own industry to get benefit of platform economy?
- Are you or your organization aware of platform economy solutions?
- Most recent and upcoming innovations in platform economy?

#### Economic

- What economic impacts do you see in platform economy?
- Do you see new business in platform economy area?
- What type of persons or companies are likely to utilize platform economy solutions?

#### Environmental

- What environmental impacts do you see in platform economy?
- What type of new logistical solution could the platform economy provide to your industry?

#### Political

- What political impacts do you see in platform economy?
- Do you see any governmental possibilities in platform economy?
- Do you see any governmental challenges in platform economy?

#### Legal

- What legal impacts do you see in platform economy?
- Does the law require development in platform economy businesses?
- Are there any issues in copyright related things in platform economy (e.g. R&D activities)?

#### Ethical

- What ethical impacts do you see in platform economy?
- What type of impact (positive and negative) platform economy has to an organization's reputation?
- Who owns the innovation, for instance, in R&D activities where platform economy solutions are utilized?

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