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**Digital Transformation and Ecosystem
Orchestration in Global Travel Health Services:
The case of Health4Travel**

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ABSTRACT

The research aims to show how digital platform owners manage and guide a fragmented set of stakeholders within the world of cross-border healthcare. With digitalisation and the emergence of globally accessible services, there have been new ways to coordinate healthcare; these services produce a set of governance obligations. The coordination becomes difficult, especially when there are multiple independent players in the same ecosystem trying to coordinate together. The knowledge about platform governance comes from the most common world of e-commerce or tech innovations, leading to a gap in understanding how actors work in a red sea ecosystem like healthcare, where rules change the moment, a service is delivered across the border. The current research touches these issues directly by understanding the mechanics of governance and ecosystem orchestration when regulations are not just meant to be met, but rather they are the primary force that allows, restricts, and defines all interactions. By combining platform governance literature, ecosystem orchestration and institutional theory, the research identifies the difficulties in the coordination of networks of clinics, third-party administrators, patients, travellers, and even insurance companies. The research follows a qualitative case study design, focusing on a company that is GDPR compliant digital platform coordinating outpatient travel healthcare across borders. The data for research were collected through semi-structured interviews with employees handling day-to-day operations. The research uses an abductive approach where the analysis moves back and forth between these practical cases and established theory to find the gap. The findings of this study contribute into three ways: platform governance in regulated environments by focusing on how institutional constraints try to shape coordination between mechanisms. Next, it elaborates ecosystem orchestration research by showing how orchestrators operate under multiple shared governance rather than a centralised unit control. Finally, it provides insights that are empirical for cross-border healthcare platforms, which remains underdeveloped in terms of research. The findings from this research offer both theoretical and practical insights for operators managing a huge, complex, multi-actor ecosystem.

KEYWORDS: Ecosystem, Platforms, Healthcare Services, Digital Transformation, Information Governance, International Health Services, Cross-Border Healthcare

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3. LIST OF ABBREVIATIONS

API: Application Programming Interface

COO: Chief Operating Officer

CEO: Chief Executive Officer

CTO: Chief Technology Officer

DPA: Data Processing Agreement

EHR: Electronic Health Record

EU: European Union

GDPR: General Data Protection Regulation

GDS: Global Distribution System

GMD: Governance Mechanism Deployment

GOP: Guarantee of Payment

IATA: International Air Transport Association

IPN: Institutional Pressure Navigation

IT: Information Technology

NHS: National Health Service

OPM: Orchestration Process Management

PNR: Passenger Name Record

SAM: Shared Authority Management

TPA: Third Party Administrator

WHO: World Health Organisation

1. Introduction

1.1 Research Context

The digitization of healthcare models has completely changed the way services are structured and placed in the market. This transformation has led to platform-centric ecosystems that function as bridges among various organizations, sectors, and even boundaries. This is not just a digital upgrade; it is an actual digital transformation where technology is leveraged as a strategic tool to reshape organizational boundaries to value). For health and travel insurance providers, this transformation is a necessary response to the huge demand for medical solutions that are driven by data and solutions that work seamlessly across borders. In such ecosystems, actors like insurers, medical providers, travellers, patients, and Third-Party Administrators (TPAs) now rely on digital platforms to coordinate operational activities. Out of the available actors, TPAs serve as the major contributor in the ecosystem, exchanging information between customers, travellers or patients and insurance companies through clinics. These digital platforms allow these independent actors the technical foundation they need to gather resources and create value together. On the contrary, just providing a tech platform does not satisfy the global scaling demand, because cross-border healthcare needs huge orchestration. These obstacles create problems that are difficult for just a technical infrastructure to resolve on its own. To understand the role of the platform owner (Adner, 2017), it does not hold the authority or regulatory upper hand. For example, data protection laws vary, such as GDPR and other national regulations; these institutions decide how information can be shared. These regulations function as architectural co-authors of ecosystem governance structure (European Commission, 2024; World Health Organization, 2025). No doubt that current research on platforms and ecosystems explains how firms design their own system to manage these participants (Gawer, 2014; McIntyre & Srinivasan, 2017; Rietveld & Schilling, 2021), there is still a vacuum. As mentioned, most of the research is focused on E-commerce and big tech models or innovation heavy sectors. The studies have shown how independent actors cooperate to deliver a shared value (Adner, 2017; Jacobides et al., 2018). However, this level of control does not exist in cross-border healthcare. There has

been growing interest in digital health (Palumbo & Manna, 2018; Mwogosi & Mambile, 2025), but it lacks a clear picture of how coordination works in this legal environment.

1.2 Research Gap and Motivation

Existing research on ecosystem orchestration and platform coordination (e.g., Adner, 2017; Jacobides et al., 2018; Thomas & Autio, 2020; Shen et al., 2024) has confirmed how value is created by interdependent actors, but it assumes the environment to be stable and coherent. The main themes of this research include value maps, architectural complementarities, and coordination strategies, while giving us little insights about orchestrators dealing with institutional complexity because the members of the ecosystems function in different regulations. This is a problem when we talk about healthcare that goes across borders, where we have actors like insurance companies and healthcare providers who have to work in and are all part of systems in their own countries which in turn means they have rules and ways of doing things Scott (2013) and Greenwood et al. (2011). Hence, it is difficult to interpret how these orchestrators can make these actors of diverse groups work together. This is especially true when different rules and systems are in place.

The foundational pillars, concepts, or anchors guiding this research include ecosystem perspectives, platform governance frameworks, and digital health ecosystem research. These areas of study have been developed over the past twenty years, Adner, R. (2017), for eco-system perspectives, McIntyre, D. P., & Srinivasan, A. (2017), for platform governance frameworks, and Palumbo, R., & Manna, R. (2018), for digital health ecosystem research. However, each of these areas has mostly been worked on separately, with not much work being done to combine them. When we look at all of these areas together, we see a gap: none of them on their own or combined give us the theoretical tools we need to understand how the owner of a digital platform can govern and manage a healthcare service ecosystem that is fragmented, operates across borders and has to deal with regulations from multiple jurisdictions. Ecosystem platform owner has a pivotal role, but ecosystem perspectives, platform governance frameworks and digital health ecosystem research do not provide enough help to understand how they can do

this complex task. When people travel globally, the coordination of healthcare creates a lot of problems. It should be ensured that patients get care everywhere they go, and information should be shared between hospitals and other institutions that provide healthcare. Unlike systems that have been studied or examined before, these operations are governed by strict laws and mandates, (European Commission, 2025; OECD, 2024; Rana et al., 2021). Prior research on ecosystem coordination often assumes that the orchestrating actor has a significant role in designing and aligning ecosystem architecture. The platform owner also shares control with regulatory bodies, data protection laws, and health policies locally. When looked at, academic studies have been siloed under platform governance, ecosystem design, and practical situations of healthcare coordination. About platform research, the focus lies only on internal control systems, government legislation, and governance. This differs from research on ecosystems, which prioritizes value co-creation concepts and how partners depend on one another. However, when we focus on healthcare literature, concepts like service delivery and data exchange are treated as standalone technical issues rather than part of a huge ecosystem (Adler-Milstein et al., 2017, 2021; Adegoke et al., 2025). This research is to bridge the gaps and develop an integrated understanding of how these digital platform owners operate in a cross-border setup. This is done through a specific empirical study between platform governance, ecosystem orchestration, and institutional theory. There is existing literature that offers a useful basis for understanding coordination among interdependent actors, but this is still not enough to explain the governance of complex healthcare ecosystems where institutions are spread across borders and where actors are interdependent. Present studies are concentrated on commercial or technology areas, where the orchestrators have better structural control and more stable regulatory situations. This study contributes to this research stream by combining the concepts of ecosystem orchestration, platform governance, and institutional theory to understand how digital platform owners can coordinate the fragmented international healthcare stakeholders amidst multijurisdictional institutional constraints. The research adds to the body of knowledge on the nature of institutionally embedded coordination in global healthcare ecosystems

through an empirical case study. The research helps to clarify the nature of institutionally embedded coordination in global healthcare ecosystems through an empirical case study.

1.3 Research Question

Main Research Question: How do digital platform owners govern and coordinate fragmented international stakeholders within global healthcare service ecosystems?

Supporting Sub Questions:

4. Mechanisms: What mechanisms (governance and orchestration) are used by digital platform owners to coordinate interactions among healthcare providers, insurers, and third-party administrators across borders?
5. Institutional Layer: In what ways do regulatory and legal mandates enable coordination on how ecosystems are orchestrated in a cross-border context?
6. Outcome: What system-level or coordination outcomes emerge from platform-based coordination in global healthcare ecosystems in terms of efficiency, continuity of care, and integration of system data within the global healthcare ecosystem?

2. Literature Review

2.1 Ecosystem Orchestration

This section defines ecosystem orchestration as the primary theoretical lens of study, centring on how a focal firm aligns multiple independent actors to deliver a shared value proposition. If we move beyond traditional firm-centric models, value creation in digital environments depends on coordination from a network of independent participants. Ecosystem orchestration refers to the process through which a focal firm structures, aligns, and coordinates interdependent actors whose joint efforts creates a shared value proposition (Adner, 2017) rather than actions of a single firm. This shift in focus moves beyond the capability of an individual firm to a broader configuration of actors as well as synchronization of their roles. Orchestration is necessary because everyone in the ecosystem depends on another. However, no single actor has full control over the system, yet success depends on the coordinated actions of others. Thus, the role of orchestrator becomes central, and the orchestrating firm does not have complete hierarchical control over the participants in the ecosystem, instead it operates by influencing, aligning, and coordinating the actors. This is done through strategic positioning and the design of structures. This implies that orchestration is about shaping the conditions under which coordinated actions are successful rather than direct control. While ecosystem orchestration explains how alignment is achieved, it does not specify the mechanisms through which this coordination is implemented in a digital platform setting. While ecosystem orchestration refers to the broader process of aligning interdependent actors, platform governance provides the specific mechanisms through which this alignment is operationalized.

2.2 Platform Governance Mechanisms

Building on the concept of ecosystem orchestration, platform governance provides the specific mechanisms through which alignment among interdependent actors is operationalized in digital platform settings. In line with the governance theory, Gawer and

Cusumano (2014) argue that platform leaders determine ecosystems by establishing protocols, rules of interaction and orchestrating partner dynamics. Platform Governance unfolds through three concrete mechanisms: access and control (e.g., licensing protocols), standardization of interface (e.g., APIs, monitoring systems) and pricing rules (e.g., incentives and penalties) (Tiwana, 2014; Hein et al., 2020; Rietveld & Schilling, 2021). Hence, governance is not an abstract concept but is backed by specific means that facilitate coordination within the platform. The efficacy of these governance mechanisms is integrated into the architectural design of the platform. According to Baldwin and Woodard (2009) the design of the platform is characterized by its modularity, which allows owners of the platform to manage innovation without having full control over all components. Governance is directly embedded in the system by defining the interfaces, boundaries, and technical standards. Thus, architecture becomes a control mechanism that determines the scope of actions, the nature of connectivity amongst actors and parameters of value co-creation (Baldwin & Woodard, 2009; Tiwana, 2014). An ecosystem consists of both interdependent and autonomous actors who are self-reliant (Jacobides et al., 2018). Platform governance mechanisms shape the behaviour of participants; the owners do not have full hierarchical control. Instead, their own goals and capabilities shape interdependencies, influence incentives, and coordinate interactions between actors. Similarly, the governance capabilities of platform owners are subject to external pressures through institutions such as legal mandates, professional standards, and social expectations (DiMaggio & Powell, 1983; Greenwood et al., 2011; Scott, 2013). This external pressure limits the ability of the platforms to develop their own rules as well as implement them due to the constraints imposed by law and the industry. Platform governance theory provides substantive perspectives into how digital platforms coordinate interactions through governance mechanisms and architectural design. The existing state of literature has considered these interactions within stable and commercially driven environments. This consideration limits the study when looking at the complexity of a regulated environment, where exogenous institutional forces drive platform actions and governance outcomes.

2.3 Institutional Pressures

As explained above, ecosystem orchestration explains how a focal firm coordinates independent actors; the process does not occur in isolation. The possible methods of coordination have been formed and fixed by external institutional forces. In this study, institutional theory serves as the contextual layer, explaining how regulatory pressure, which is professional as well as societal, has influenced the orchestration process. Institutional theory suggests that organizational activity occurs in a framework of legally prescribed behaviours, norms, and expectations (DiMaggio & Powell, 1983; Scott, 2013; Greenwood et al., 2011). There are three basic types of pressure, i.e., Coercive pressure, which are formal, legitimate regulations and legal requirements that organisations must comply with. Next is normative pressure, which emerges from professional standards and practices that define what constitutes an appropriate behaviour in a field. Third is mimetic pressure, which arises in situations of uncertainty as organisations try to adopt practices from peers that they believe are legitimate or may be successful. These pressures directly affect the course of ecosystem orchestration. Finally, it decides where the actors should adhere to accepted standards and expectations just to be accepted as credible participants in the ecosystem. As a result, orchestration takes place in a constrained design framework. In conclusion, the above forces do not act as substitutes for the orchestrator role but affect the environment within which orchestration and governance are undertaken.

2.4 Platform Orchestration in Healthcare: Empirical Gap

Research related to healthcare platforms nowadays concentrates on the question of orchestration in the framework of individual authorities (Stephanie & Sharma, 2020; Mbanefo & Grobbelaar, 2024). It involves the analysis of the platforms used at a national level, which facilitate the interplay between providers, payers, and consumers in conditions of an identical regulatory setting and describes how orchestrators regulate activities of stakeholders in an analogous way using their governance strategies (Lepore et al., 2023). Identical rules concerning the protection of personal information, treatment

requirements, and payment mechanisms apply to all ecosystem participants equally. Examples of one country case are such organizations as Discovery Health, NHS Digital, and national e-health care systems like Estonia, where governance is adjusted to changes in national regulation, but all participants are expected to comply with the same regulations (Mbanefo & Grobbelaar, 2024; Mwogosi & Mambile, 2025). However, existing studies provide limited insight into this issue within cross-border healthcare ecosystems. This study fills this gap by exploring the process of orchestration within cross-border healthcare ecosystems, where coordination is driven by legal and institutional limits rather than through purely strategic means (Adner, 2017).

2.4.1 Table 1. Summary of Key Theoretical Perspectives on Ecosystem Orchestration and Platform Governance

Theoretical Perspective	Core Focus	Relevance to This Study	Limitation in Cross-Border Healthcare Context
Ecosystem Orchestration (Adner, 2017; Jacobides et al., 2018)	Coordination of interdependent ecosystem actors for value creation	Explains how multiple actors coordinate activities across fragmented service ecosystems	Existing research assumes stable institutional environments and clearer orchestrator authority
Platform Governance (Gawer & Cusumano, 2014; Tiwana, 2014; Hein et al., 2020)	Governance through rules, standards, participation controls, and technical architecture	Helps explain how digital platforms coordinate interactions between ecosystem participants	Research focuses primarily on commercial and technology ecosystems rather than highly regulated healthcare systems
Institutional Theory (DiMaggio & Powell, 1983; Greenwood et al., 2011; Scott, 2013)	Influence of legal, normative, and institutional pressures on organizational behaviour	Explains how regulations and institutional constraints shape ecosystem coordination	Limited attention to digital platform orchestration across multiple authorities
Digital Health Ecosystem Research (Stephanie & Sharma, 2020; Mbanefo & Grobbelaar, 2024)	Coordination and digital transformation within healthcare ecosystems	Provides understanding of healthcare coordination challenges and fragmented service delivery	Existing studies examine national healthcare systems instead of cross-border ecosystems

Platform Centrality and Bottlenecks (Thomas & Autio, 2020; Rietveld & Schilling, 2021)	Platform centrality, dependency, and ecosystem positioning	Explains how platforms may become indispensable coordination infrastructures	Existing literature assumes stronger structural control than may exist in fragmented institutional environments
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Table 1 provides an overview of the major theoretical perspectives employed in this research and highlights the shortcomings of existing studies in addressing governance and orchestration in the fragmented cross-border health care ecosystem.

2.5 Proposed Conceptual Framework

The current discussion involves the development of a conceptual model that brings together ecosystem orchestration theory as the guiding theory of the research and platform governance mechanism, along with institutional pressures as operational strategies. This model explains how the target orchestrating organization manages the interaction of dependent actors in an international health care ecosystem amid institutional complexity. The first level involves the institutional environment, which creates the constraints for the orchestration process. These may vary from being of different institutional pressures to pressure exerted on account of institutional power; they can also involve coercive, normative, or mimetic pressures. Together, they define the forms of coordination that are legal, professional and socially acceptable. At the core, the cross-border healthcare ecosystem involves interdependent players, such as healthcare providers, insurers, third-party administrators, patients and travellers whose collaborative efforts generate value. In such cases, not only the orchestration but also the involvement and interaction within the ecosystem are influenced by the orchestrator and regulatory bodies, resulting in institutional logics. As such, the definition of the boundary and coordination of the ecosystem is done jointly by organizational and institutional players (Adner, 2017; Jacobides et al., 2018). The central firm manages the orchestration process using platform governance mechanisms, such as access, participation, interface and data coordination, and standardization (Tiwana, 2014; Gawer and Cusumano, 2014). The first extension that is provided by this

framework is that of a regulatory bottleneck, wherein certain structural positions are derived from regulatory infrastructure itself rather than from strategic considerations. The second extension is that of regulatory complementarity, where the concept of complementarity is extended by suggesting that participation in the system depends not only on capability but also on regulatory compliance. Thirdly, the boundary-setting authority of a shared nature reveals that the participation of an ecosystem is mutually determined by both the owners of the platforms and regulatory institutions, which is a case of distributed governance. The collaboration of the three layers leads to a coordinated result within the system, with respect to the integration of services, provision of care irrespective of boundaries, and efficient coordination among the members of the ecosystem (Palumbo & Manna, 2018).

2.5.1 Figure 1: Conceptual framework of ecosystem orchestration through platform governance mechanisms under institutional constraints in cross-border healthcare ecosystems

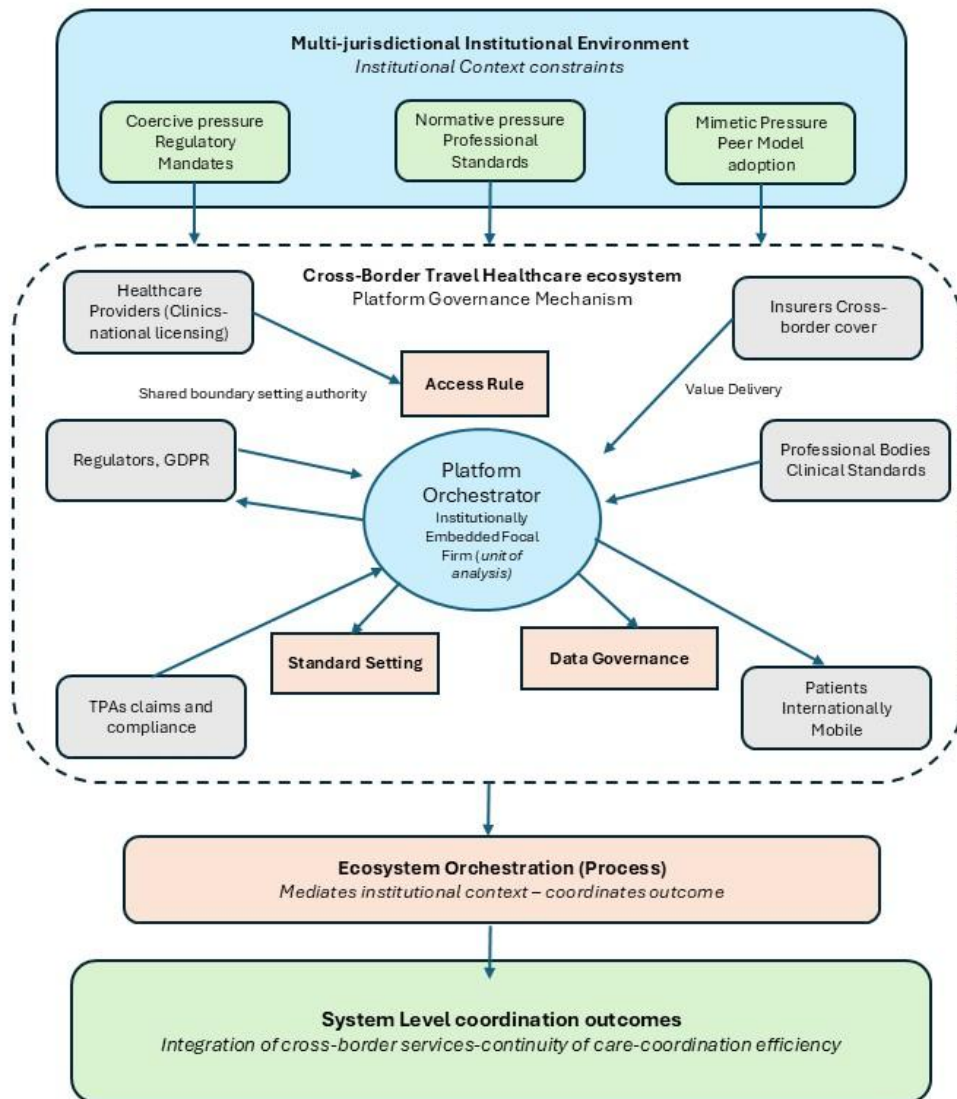


Figure 1: The proposed conceptual framework combines ecosystem orchestration, platform governance mechanisms, and institutional pressures to explain the coordination of cross-border healthcare ecosystems. Ecosystem orchestration is the primary theoretical lens; platform governance mechanisms operationalize coordination and institutional pressures define external constraints. The focal orchestrator firm is the unit of analysis in this study. The framework shows that coordination emerges through governance embedded in a multijurisdictional institutional environment rather than through full hierarchical control.

3. Research Methodology

The study is based on an interpretive paradigm of research that is suitable for studying such socially constructed and context-specific concepts such as governance and coordination. Governance in cross-border healthcare cannot be studied from the point of view of its objectivity, but rather from the perspective of rules and coordination. The legitimacy depends on the institutional and personal context in which the actors operate. Hence, this interpretative research helps understand the meaning given to orchestration, compliance, and interdependence by the actors (Flick, 2018; Patton, 2014). The study applies a qualitative case study approach due to the complexity and lack of prior research on the phenomenon. The application of this methodology facilitates the study of operations of one platform orchestrator within the context of multi-jurisdictional healthcare governance with regulatory, professional, and operational constraints. A qualitative case study approach is appropriate when the focus of research is on generating theoretical insights rather than achieving statistical generalization about the case in question (Yin, 2018; Eisenhardt, 1989). The unit of analysis in this study is a focal platform orchestrator firm. In accordance with abductive thinking, the researcher can engage in an ongoing process involving both theory and data collection. Rather than viewing theory and data as two distinct processes, abductive logic helps in the development of theories through comparisons with empirical evidence (Dubois & Gadde 2002; Gioia et al., 2013). This type of methodology is appropriate in the context in which theories regarding cross-border healthcare co-ordination have been inadequately developed and empirical findings may highlight some unknown governing principles. The combination of interpretivism, single-case research design and abductive reasoning form an appropriate methodology framework that can be employed in tackling the research problem, which intends to investigate the governance and orchestration structures that enable a platform orchestrator to coordinate the interaction among healthcare providers, insurance companies and third-party administrators.

3.1 Research Design

The chosen methodology for conducting the research is a qualitative sole case study design with an interpretive paradigm of research. The choice of the design is justified by the nature of the phenomenon being investigated. Platform orchestration and governance in cross-border healthcare is considered complex. This design helps the researcher examine how the process of governance and coordination occurs and is objectively measurable (Flick, 2018; Patton, 2014). The sole case study design is selected since the research deals with contextually relevant and theoretically important situations. The platform orchestrator is chosen as the unit of analysis. The focal company is accountable for the creation and execution of governance structures, in addition to the coordination of activities between members of the ecosystem. Although the whole ecosystem is the setting of analysis, the emphasis lies in the governance methods that are used by the focal firm in managing inter-dependencies. Abduction is a suitable approach in situations where there is sufficient theoretical knowledge that provides guidance but fails to account for the entire empirical phenomena under investigation. The analysis entails an iterative process, moving between empirical phenomena and the theoretical perspective discussed in section 2. This enables the researcher to evaluate whether the ideas of ecosystem orchestration, platform governance and institutional pressures adequately capture empirical phenomena or where necessary modifications need to be made (Eisenhardt, 1989; Dubois & Gadde, 2002; Gioia et al., 2013). Significantly, the research design is clearly directed towards understanding the governance mechanisms that support the operation of the platform orchestrator. Here, the governance mechanisms refer to specific operational mechanisms that include access control policies, interface standards (e.g., API standards), pricing, incentive schemes and data governance mechanisms used by the orchestrator to coordinate interactions between ecosystem players. As such, the research will concentrate on defining the governance mechanisms that facilitate coordination rather than focusing on understanding the process itself. The above consideration considers the research goal that focuses on explaining how a specific orchestrator firm facilitates governance and coordination of disparate stakeholders in a regulated cross-border healthcare ecosystem.

3.1.1 Figure 2: Abductive Analytical Framework for Platform Orchestration in Cross-Border Healthcare

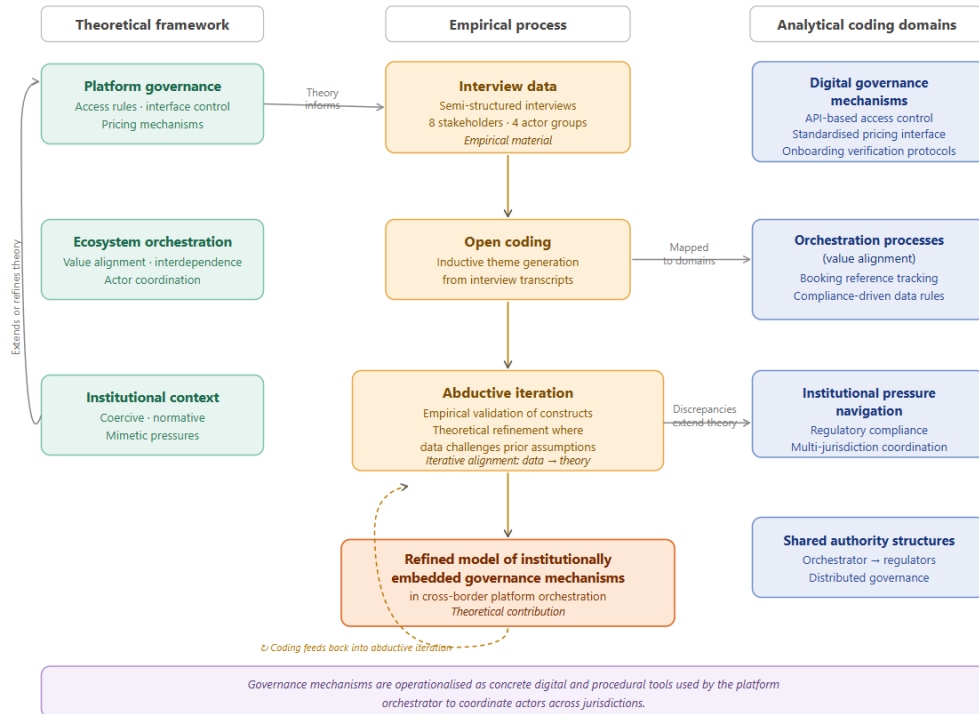


Figure 2 presents the abductive method that was employed in this research to analyze the problem. This was done by adopting the concept of ecosystem orchestration as well as the theories of platform governance and institutionalism to examine how the proprietors of digital platforms orchestrate fragmented international healthcare ecosystems. One can also observe that there was continuous interpretation of empirical findings and theory to understand the governance, orchestration, institutionalism, and dispersion of power in international healthcare ecosystems.

3.2 Case Selection

The research utilizes Health4Travel as a qualitative case. The said case is used in this study as it presents an ideal example of an information-rich case of a cross-border healthcare platform. The selection of the case in the present research is justified because the case provides an avenue to study how the orchestrator firm handles interdependence and coordination among various parties within a complicated regulatory

environment. The case was chosen theoretically, not statistically. One should note that previous research on healthcare platforms has focused on national contexts or contexts involving a single authority. Therefore, the phenomenon of cross-border healthcare orchestration remains underexplored. The significance of the case study in the context of the Health4Travel website arises from the possibility of evaluating a situation where interaction occurs between various laws. As a result, the analysis could be conducted on the orchestration process in the context where coordination is impossible within a homogeneous framework. This is the case of Health4Travel that fits this analysis well due to the nature of the business since the company does not act as a regular service provider but acts as an intermediary between various stakeholders. This is a fantastic opportunity to research platform governance mechanisms and other related aspects of the matter at hand. First, the case allows analyzing practical governance mechanisms through which coordination can take place, including access-related ones (e.g., onboarding providers), interface standardization (standard booking, information exchange procedures), pricing coordination (e.g., using standardized pricing schemes), and data governance (patient and transaction-related data). For these reasons, Health4Travel was selected as a revelatory case for studying institutionally embedded platform orchestration in cross-border healthcare.

3.2.1 Figure 3: Health4Travel's Role Within the Cross-Border Healthcare Ecosystem

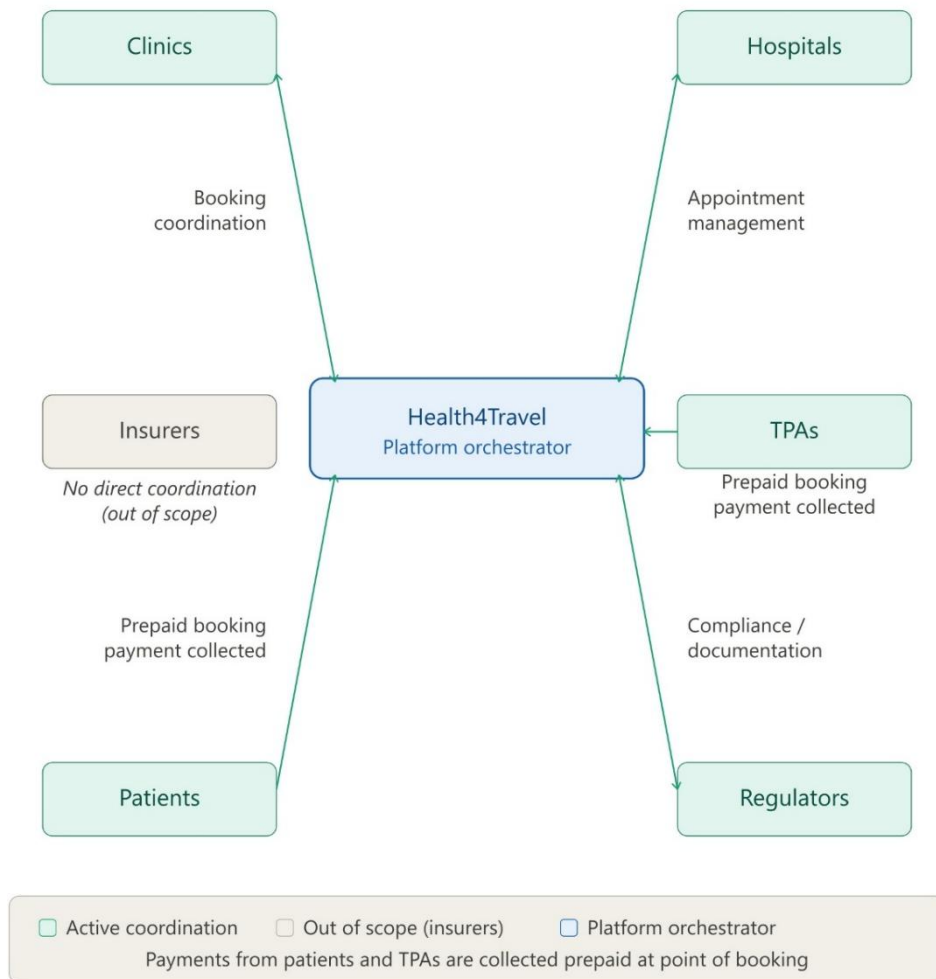


Figure 3 illustrates the role of Health4Travel as a coordination platform connecting fragmented healthcare ecosystem actors across authorities through booking, compliance, and operational coordination processes.

3.3 Data Collection

The main empirical data collected in relation to this research were obtained through semi-structured interviews. This approach was relevant since the research dealt with issues of governance and orchestration in the context of the complicated system of the cross-border health-care platform in terms of people engaged in it. It seemed appropriate for interpretive research because such research can find a golden mean between

structure and flexibility needed for comparison purposes and elaboration of subjective experiences. The selection of respondents has been conducted using purposive sampling because the current research deals with the participation of people in processes that happen on the platform, strategic, operational and relational activities. The participants included the senior leadership team members of the company, such as the CEO, CTO, co-founder, and partnerships manager, who oversaw the strategic development of the platform. Other participants involved in operational and technological aspects included the project managers, IT professionals, web developers, and accounts payable. In addition, the sample included commercial and relationship-oriented roles, such as sales directors and sales team members, who worked with insurance partners and third-party administrators. This combination of participants was appropriate since the governance and orchestration in the ecosystem of platforms are distributed among several areas and focusing solely on the leadership would not yield comprehensive results regarding how governance mechanisms work in platform companies. Interviews were conducted via Google Meet and recorded according to the participant's consent. Before conducting the interviews, the participants were made aware of the purpose of the research and their voluntary participation. Data obtained from the interviews and the process of its collection followed the GDPR guidelines. The structure of the questions was created based on the main elements that appeared during the literature review (mechanisms of governance, orchestration methods, pressure, and joint governance). It should be noted that special emphasis was made on gathering practical cases concerning the above-mentioned points, such as onboarding, data management, interaction standards, and pricing. The secondary data source consisted of internal documents of platforms/organizations, platform's documentation, partnership agreements, data flow schemes, privacy policies, and industry reports.

3.3.1 Table 2. Overview of Interview Participants – Organisational Roles and Profiles

Sr. No	Position / Role	Ecosystem Perspective	Interview Duration	Contribution to Study
Interviewee one	CEO & Founder	Platform leadership	58 Mins	Ecosystem orchestration and strategic positioning
Interviewee two	CTO & Co-Founder	Technical coordination	30 Mins	Platform architecture and governance mechanisms
Interviewee three	Partnerships Head & Co-Founder	Partner ecosystem development	52 Mins	Clinic partnerships and ecosystem expansion
Interviewee four	Sales Director (Consulting-Outsourced)	Ecosystem development	41 Mins	Cross-border stakeholder coordination
Interviewee five	Sales Manager (TPA & Insurance specialist)	Insurance and TPA integration	88 Mins	Coordination with insurers and TPAs
Interviewee six	Accounts Payable Manager	Financial operations	53 Mins	Payment orchestration and reconciliation processes
Interviewee seven	Project Manager IT	Technical operations	56 Mins	API integration and onboarding coordination
Interviewee eight	Web Backend Developer	Platform infrastructure	63 Mins	Backend integration and system interoperability
Interviewee nine	COO – TPA Partner	External ecosystem and assistance coordination	33 Mins	External validation of platform coordination, operational efficiency, and shared governance dynamics

Table 2 provides an overview of the interview participants included in the study and summarizes their roles, ecosystem perspectives, duration of interview and contribution to the research.

3.4 Data Analysis

Thematic analysis, which involves a six-step procedure as outlined by Braun and Clarke (2006), was employed to analyze the data. This technique was selected for analysis because it allowed for a systematic search for patterns in qualitative data without being

too rigid and allowed for an appreciation of the contextualized meaning conveyed by the respondents. The analysis was conducted through abductive reasoning, where there was constant interaction between the empirical observations and the theoretical development done in Chapter Two. The analysis involved interpreting data through theory. The analysis was conducted in two phases. The first phase involved the open coding of interviews inductively. For the coding process, there were no pre-defined codes, but they emerged directly from the descriptions of the participants on the governance processes, coordination difficulties, regulation, and interaction within the platform ecosystem. The inductive generation of concepts is consistent with the approach adopted by Saldaña (2016) in the face of scarce empirical literature on the subject matter. It is worth noting that, when empirical evidence is scarce, induction is the preferred method. During the second stage, the inductively coded data were further classified into higher-order conceptual categories using the Gioia approach (Gioia et al., 2013). This involved moving from informant language to researcher language and then to broader theory-building processes. In the process, the themes identified were examined through abductive reasoning in the context of the conceptual framework and tested their ability to illuminate, elaborate, or challenge the concepts of ecosystem orchestration, platform governance, and institutional pressures. The analysis was framed within four analytical domains taken from the conceptual framework. The first domain, governance mechanisms, included tangible platform-based mechanisms and rules, including onboarding mechanisms, API-based access control systems, data registry systems, standardization norms for pricing, verification and compliance systems. The next dimension of governance, namely, orchestration processes, was concerned with how governance mechanisms worked together to facilitate the alignment of interdependent actors, ensure the successful implementation of the value blueprint, and address issues of coordination in a cross-border environment. The third dimension, institutional pressures, referred to coercive, normative, and mimetic pressures affecting the coordination process and constraining governance design. The final dimension, shared authority, analyzed the allocation of responsibilities and boundaries between the platform orchestrator and other regulatory or professional parties. Patterns were detected in the data, codes were refined

and interviews were revisited with respect to the theoretical framework. Whenever the data exposed shortcomings or inconsistencies within the conceptualization, the theoretical framework was adapted accordingly. Thus, there was a continuous oscillation between the data and theory according to the rationale of Dubois and Gadde (2002). To improve transparency and credibility, the coding hierarchy adopted in the present research consisted of constructs of the first order, themes of the second order and aggregated dimensions, as illustrated in the appendix section. To improve on the data generated by the interviewees, additional data gathered from the documents released by the platform helped provide perspectives beyond those of the research participants. Such an approach helped identify governance tools that are relevant for platform orchestration in a cross-border healthcare environment regulated by legislation.

3.4.1 Figure 4: Data Analysis and Abductive Coding Process

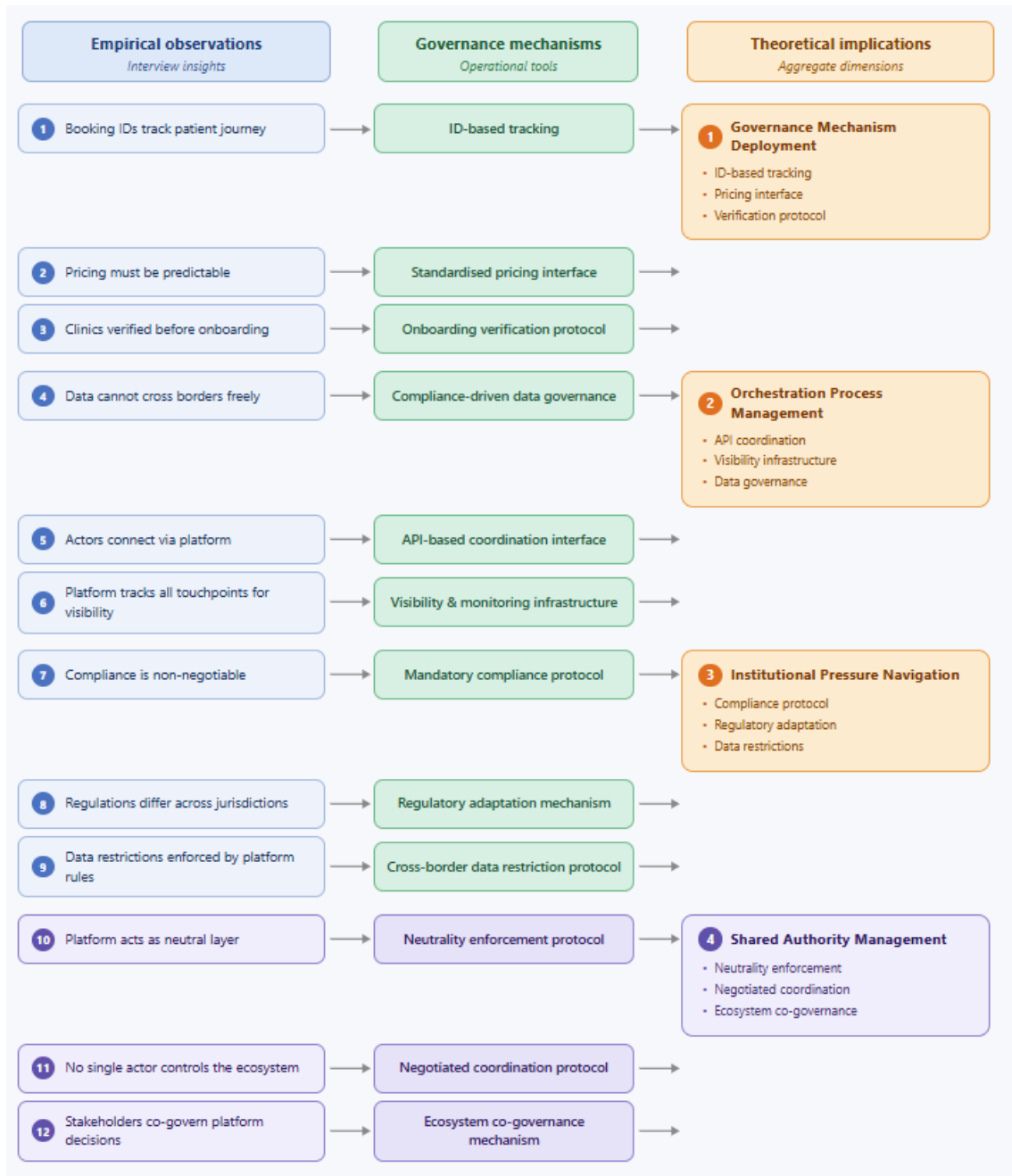


Figure 4 illustrates the empirical data structure developed through the abductive analysis process. First-order concepts derived from interview data were iteratively grouped into second-order themes and aggregate dimensions to identify governance mechanisms, orchestration processes, institutional pressures, and shared authority structures within the ecosystem.

4. Findings

To present the results, it is essential to clarify what a governance mechanism is, as it pertains to this research. In accordance with Jacobides et al (2018), governance mechanisms are the mechanisms used to shape the behaviour of ecosystem participants. They are not the same processes as platforms do. As the term orchestration is used by Wareham et al. (2014) to mean the greater process of coordinating. Governance mechanisms are the specific instruments (such as access controls) used to enact the governance framework rules, standards, and agreements by which this coordination is operationalised. Gawer and Cusumano (2014) define governance mechanisms as structural elements that establish the criteria for membership and the nature of the cooperation of stakeholders in the ecosystem. There is a distinction throughout the findings: mechanisms are the instruments by which orchestration is achieved. The results are discussed in this section based on nine semi-structured interviews and secondary sources of data. The findings are organised around four analytical domains derived from the conceptual framework: governance mechanism deployment (Section 4.1), orchestration process management (Section 4.2), institutional pressure navigation (Section 4.3), and shared authority management (Section 4.4). Section 4.5 synthesises the findings and introduces the concept of institutionally embedded and incomplete orchestration.

4.1 Governance Mechanism Deployment: Institutionally Conditioned Governance

These results show six practical means of governance that Health4Travel uses to organize participation, regulate interaction, and facilitate coordination within the fractured cross-border healthcare environment. Rather than being an autonomous strategic decision, each governance means is an institutionally determined tool driven by constraints of regulation, operations, and relationships.

4.1.1 Tiered Licence Verification Protocol (Access Control Mechanism)

The first form of governance is a multilevel license verification process that serves as an institutionalized form of gatekeeping in regulating platform access. Instead of enforcing a universal standard during onboarding, the platform adjusts its verification process based on institutional risks posed by the country. The Partnerships Head and Co-Founder described the baseline procedure: *"It is sufficient for us to simply check the name and license that the healthcare provider gives to us against a national database just to ensure that they are matching."* Further findings show that, in cases where there are higher risks, more verification procedures are put into place, as noted by the same participant, *"we have to do additional checks, including making video calls, sometimes physical visits to the clinic."* And in extreme cases, participation is restricted entirely, where *"we may not even work with local doctors."* This hierarchical structure operates as a governance mechanism because it is the exact mechanism that determines whether entry to the ecosystem will be granted or not. The onboarding process is one thing, while the verification mechanism is another. The verification method is not standardized and is determined by the level of institutional infrastructure available locally and becomes more complex in the case of poorly regulated national bodies. This conclusion agrees with Gawer & Cusumano's (2014) assertion that membership requirements are contingent upon the governance mechanism. The external validity of this mechanism was verified by the COO of a TPA partner: *"We looked into the DPA agreements, if everything is in place. I received that from. It was all fine. We just asked for that certificate, if everything is according to GDPR, which it is. And then we said, yeah, why not?"* This testimony gives some idea of how the compliance system on the platform makes it easier to verify the partners, thus enabling quick onboarding without violating the regulations. In addition, the above participant indicated that it was the ease of this process that influenced the decision to enter partnership.

4.1.2 Price Transparency Interface (Information Governance Mechanism)

The second one is the price transparency interface. It provides rules for organizing the pricing information and how it should be displayed and compared across different

parties. In a global world where information is fragmented and pricing lacks transparency, the price transparency interface can be used as a powerful way to tackle information asymmetry. The Partnerships Head explained the underlying principle: *"One of the principles that we do use is democratization of information, especially when it pertains to pricing information."* The interface operationalises this through filtering and comparison features: patients and intermediaries can *"filter by things like distance, price, etc.,"* while institutional actors are able to *"see at a single glance... what is available, where, for what price."* As far as the pricing display is concerned, it can be viewed as the outcome of this process. But the interface mechanism can be viewed as the instrument of governance through which guidelines about formatting and comparability of cost data are defined. With this mechanism in place, the asymmetry level is kept low, there is coordinated expectation, and there is influence of behaviour without hierarchical control. The significance of this approach is reinforced by TPA, who highlighted the importance of platform access to prices and appointments in the process workflow: *"It's always easier and faster. If you just click an appointment online, with, I think, three or four clicks, it is. It's much faster than on a daily work shift, when you just need to click for buttons instead of sending emails, calling, sending GOPs over and stuff like that."* This shows that the price transparency tool lowers transaction costs not only for patients but throughout the whole coordination process chain.

4.1.3 Consent-Based Data Minimisation Architecture (Regulatory Compliance Mechanism)

Thirdly, there is a data minimization framework based on consensual practices for restricting data acquisition, storage, and transmission across authorities. It is fundamentally different from conventional models, where the core idea is to focus on data acquisition. In the current case, the platform is not positioned as a medical data processor: *"Health4Travel is not a medical data processor,"* as the Partnerships Head stated. On the other hand, the platform controls the flow of information by distinguishing communication information from medical information and restricting its involvement to coordination. The Partnerships Lead went on to clarify: *"the exchange of communication*

information... is an integral part of facilitating the exchange of medical information," *stating that actual medical data sharing takes place through other means than the platform portal.*" Consent determines access: *"the patient has to give permission to various parties to release the information."* The architecture described above constitutes the governance system. It is the data consent trigger, data separation technique, and the restriction of the platform to communications data only that are the exact tools utilized to control the flow of data from one authority to another. As was elaborated by the CTO, the technical implementation of such a compliance strategy takes place as follows: the GDPR requirements are hardwired into the architectural design of the system, whereby any data that has been deleted will have pseudonymized identifiers applied to it so as to render it untraceable to anyone.

4.1.4 PNR-Inspired Booking Reference System (Coordination Mechanism)

The fourth governance tool employed is the booking reference system, which follows the principles of the Passenger Name Record from the airline industry. Every booking gets a unique alphanumeric code as defined by the web developer, *"a unique code... unique six-letter code, alphanumeric code, for each booking"* which links the patient, payer, clinic, service, payment, and follow-up communication within a single traceable transaction. The Project Manager expressed this structural analogy: *"It's exactly like PNR number, flight."* The rationale behind using the analogy was stated by the CEO-Founder: *"the world is missing something like the travel industry has the global distribution system,"* and argued that healthcare coordination *"could be resolved with this same concept that was proven in about 80 years of the travel industry."* The Booking Reference number is what comprises the governance mechanism. In other words, it is the instrument of governance. It is the tool that guarantees longitudinal trackability within the framework of fragmented transactions between multiple actors. Otherwise, each transaction involving the clinic, TPA, insurance company and patient would remain independent. The introduction of a governance mechanism combines all transactions into one governance unit. This arrangement is a straightforward solution to the institutional problem pointed

out earlier in the analysis. Nevertheless, the effect of the governance tool on the operation process, when evaluated from the perspective of the partner, was significant. As the COO noted, the procedure before the platform required a tedious process of making calls and sending emails, which took several hours: *"You receive the call, you check the requirements of the patient, then you need to look up, okay, in which country are we? What kind of network do we have there? ... In the end, the doctor was not available. So, you do not have a solution for the patient. Hours have gone already."* The booking reference system streamlined this process into just a few minutes: *"just type in address, click on find doctor, book the appointment. That is, it. Within, I would say, a maximum of 10 minutes, you had an appointment booked."* This is a tangible measure of reduced coordination cost brought about by the mechanism.

4.1.5 GDPR-Linked Participation Agreement (Rule Enforcement Mechanism)

GDPR compliance participation agreement is another model of governance where the un-negotiable conditions are put in place for participation in the system. It should be noted that this form of agreement does not represent the verification process where partners are verified as eligible or not to participate in the ecosystem, but rather, it represents the process of participation. According to the CEO-founder: *"If our partner refused to sign the GDPR contract... then simply not onboarded."* Those partners that fail to meet operational standards are simply dropped from the system: *"This clinic is not trustworthy; we need to kick it out."* In this case, the agreement takes the form of a governance architecture since it acts as the authority regulating the behavioural standards within the ecosystem. The agreement calls for a minimum standard of compliance needed to participate in the system. The Sales Director described GDPR compliance as a hygiene factor rather than a competitive differentiator: *"GDPR, data privacy, data processing... has become a hygiene factor in our industry... if you wouldn't have it, we'd just be out of business."* This indicates that the participation agreement does not offer any competitive edge but instead sets the minimum threshold of operation in the ecosystem.

4.1.6 Role Boundary Protocol (Ecosystem Role Delineation Mechanism)

The sixth governance tool is the role boundary agreement, i.e., explicit boundaries of activity of the platform in relation to other parties in the ecosystem. The platform guarantees formal separation by detaching itself from the process of adjudication of insurance claims, medical triage, and claims management, meaning that there is no possibility of conflicts of roles or threat to the complementarity of parties in the ecosystem. The Partnerships Head said: *"Health4Travel is not a tool that can or intends to take away the role of assistance company or TPA... they are the tool for assistance companies."* Internal discussions confirmed: the platform *"does not replace any insurers or clinics... [but] coordinates them digitally."* This was externally ratified at the topmost level by the COO of the TPA, who even raised doubts whether the insurance companies could circumvent the TPA and directly deal with Health4Travel. His assessment was unambiguous: *"a standalone, let's say, just as a platform, not being able to evaluate according to policy wordings, according to medical indications, etc., it's a clear no for me. Because that's what the insurers are paying for, to have that medical knowledge."* He further pointed to the fraud detection function of TPAs as irreplaceable: *"within one month, we had like 20 possible fraud cases, which we detected, luckily, with a volume... more than 100,000 euros of damage, if we hadn't have detected that."* This reinforces the notion that neutral positioning is an imperative and not simply a strategic choice on the part of the platform, acknowledged by the entire ecosystem. The governance function of the platform is coordination, while medical triage, policy interpretation, and fraud detection still fall within the ambit of TPAs. This mechanism demonstrates how governance within institutionally fragmented ecosystems may operate through explicit role-boundary management rather than hierarchical control.

4.2 Orchestration Process Management: Coordinating a Fragmented Ecosystem

As such, the results indicate that orchestration in the global travel healthcare ecosystem is necessary because it is inherently fragmented, diffuse, and diverse. The six governance tools described in Section 4.1 do not function in isolation but are complementary to each other within an orchestration framework to achieve a common coordination objective.

The following section explains how this process occurs. Actors always perceived the ecosystem as consisting of siloed entities. The CEO-Founder said that *"clinics, TPAs, and insurers all around the world... are using different systems... in different countries... under different rules."* The Sales Director characterised the industry as "very fragmented" with actors who *"operate more or less in silos."* The Sales Team Member with TPA and insurance expertise described it as *"a highly fragmented industry" where "there's no standard system" and "a severe lack of tools available."* The above fragmentation is both technological and institutional in nature since regulatory, paperwork, payment, and professional differences prevent any cooperation between these siloed entities. The main orchestration strategy employed to address this fragmentation problem within Health4Travel is Global Capacity Visibility. According to the CEO-Founder, Global Capacity Visibility implies *"globally visible the available sellable capacity of the doctor's time slots,"* thus transforming an in-accessible availability in clinics to search-and-use information. As pointed out by the COO of the TPA, this strategy has proven to be transformative about partners because finding a healthcare provider located outside the current location would involve countless phone calls and emails that might not necessarily lead to positive results in a predetermined time. The second orchestration strategy employed is the booking reference coordination principle, which has been borrowed from the logic of Global Distribution System used in the airline industry. According to the CEO-Founder: *"The world is missing something like the travel industry has the global distribution system."* The fact that such logic was deliberately employed became clear during the interview with the CTO, in whose words the organization *"had copy-pasted the logic from the airline industry."* The concept of booking reference connects the patient, payer, clinic, and payments into one identifiable block, which allows for longitudinal coordination among actors that do not have a common operational identifier. This mechanism is realized using the booking reference model that is inspired by PNR and was discussed in the previous section. Finally, transaction status-based rules are needed for managing how activities transition from one system to another. According to the description of the Accounts Payable participant: *"the only automatic thing is... if the status is completed in dark green," and that "Tipalti takes it immediately to the Tipalti system and creates a*

bill." However, if this standard process does not occur, then it must be manually selected: "If it does not occur in this standard process, then someone must manually select it. What should be mentioned in this regard is that although orchestration is not entirely automated and requires human intervention because there is no standardization within the institution.

It is worth considering the example given by the COO of how an important insurance company's patient's outpatients were managed using this platform. Considering there were about three hundred patients per month, the process was optimized to a streamlined one. According to the COO, customer feedback always pointed to time as being important, with 70-80 percent of the feedback being about appointment scheduling without any need to pay cash. At the level of outcomes, these findings indicate that orchestration through the platform results in tangible benefits in coordination for the actors concerned. It is critical to note that the findings indicated that the orchestration done by Health4Travel did not involve eliminating actors within the ecosystem, the CTO stated. "We do not want to fix the healthcare issues. We just want to fix access to healthcare." The Sales Director reinforced this: Health4Travel's strength is that it *tries "to understand and to but not to replace"* the existing ecosystem. The TPA COO echoed this from outside the organisation, describing the platform as "*an add-on, an additional add-on to help... having that existing network, if there is one, as an additional source.*" In this context, orchestration is seen as infrastructure-oriented, which helps reduce friction and foster alignment rather than exert control over the parties.

4.3 Institutional Pressure Navigation: Regulation as a Structuring Force

The above findings indicate that the health care institutional pressures across borders do not only represent exogenous pressures but rather structuring pressures that dictate coordination processes, membership, and positioning within the ecosystem. The participants never mentioned that regulation compliance was optional but rather an integral part of the platform's business model. Coercive pressure was mostly evident in the form of GDPR. The Sales Director described compliance as a baseline necessity rather than a competitive advantage: "*GDPR, data privacy, data processing... has become a hygiene*

factor in our industry... if you wouldn't have it, we'd just be out of business." The CEO-Founder articulated the platform's strategic response to this pressure as deliberate institutional positioning: *"I would never want to have even approval to process my cloud health data, because it means that I'm positioned as a healthcare provider, and I don't want [to become] any healthcare provider."* The absence of regulatory requirements for the processing of patient information can be achieved by limiting the scope of the function of data management to communication coordination and maintaining the GDPR registration. This way of positioning the boundary in response to coercive pressures from outside the organization received external confirmation: The COO of the TPA stated that the GDPR registration was sufficient diligence evidence. *"We just asked for that certificate, if everything is according to GDPR, which it is. And then we said, yeah, why not?"* The registration system that is inherent in the platform's compliance structure externalizes some compliance effort of the platform's partners without compromising regulatory standards. There are normative pressures that relate to behavioural expectations in relation to the healthcare system. In particular, the CEO-Founder explained how participation in the platform depends on more than just legality; it also includes trust and dependability *"Any partner that comes from Russia is excluded,"* and *"this clinic is not trustworthy, we need to kick it out."* In these examples, we observe the application of normative and mimetic forces working in conjunction with coercive forces owing to the need of the platform to sustain its legitimacy among insurers, TPAs and consumers through upholding professional norms that are superior to the statutory minimums. The next example of mimetic force is in relation to airline industry norms implemented by the platform. Considering the lack of an internationally coordinated body to deal with issues pertaining to healthcare, the platform uses airline industry standards of coordination that have already been developed by IATA. The CEO-Founder acknowledged both the opportunity and its limits: *"We do need rules... the definition of a doctor should be the same all over the world."* The COO offered a complementary perspective on whether Health4Travel might itself become such a standardising authority, arguing that this is not a choice a company makes but a position it earns: *"it's not about do you want or do you don't want it? Is it you able to do it and are you the company who can standardize that."*

This implies that the platform operates in an institutional environment where there is still no authoritative institution governing it, where, at the same time, the governance structures of the platform start to emerge as de facto coordination mechanisms. The dimension of pressure coming from financial and tax authorities is yet another one that has been overlooked in current discussions regarding platform governance. According to the Accounts Payable participant, the platform is unable to stay informed about its tax requirements in various states, because: *"We are not keeping up with tax issues of the whole world,"* with countries changing tax rates without notification. This raises the problem of operational risk; an incorrect invoice might lead to fines imposed by the authorities. This is an intricate problem that is not systematized by the platform.

4.4 Shared Authority Management: Distributed Governance and the Limits of Platform Control

The results show that the platform is always in a high-level structure in the ecosystem, despite limitations in its governance capabilities. The governance capabilities do not revolve around the platform but rather are spread out across the insurers, TPAs, clinics, regulatory authorities, and standardization agencies. In such cases, orchestration is a negotiating act. The Sales Director noted this point: *"The insurance company is the one collecting, at the end, paying us or holding the money. The TPA has direct, last mile, direct member contact."* He added: *"They all have power, but they all can break the system if they fail."* The above is an indication that none of the stakeholders alone controls the entire ecosystem. All the actors possess one kind of power, financial, operational, clinical, or regulatory, that the platform must take into consideration without bypassing. The COO of the TPA provides further insight into the above phenomenon of diffused power within the ecosystem. The selection of the Health4Travel company as a partner in the business was made through consensus between the COO, the CEO, and the quality management team, where the quality department was charged with the responsibility of assessing the compliance and data management practices.

The most apparent expression of the power relationships illuminated by this study would be that of whether insurance companies could avoid TPAs and do business directly with

Health4Travel. The answer given by the COO of the TPA holds analytical significance: *"a standalone, just as a platform, not being able to evaluate according to policy wordings, according to medical indications, it's a clear no for me. Because that's what the insurers are paying for, to have that medical knowledge."* The clinical triage role of examining medical need, reviewing policy language, and spotting potential fraud can never be outsourced to the coordination tool. This calls for human judgment based on knowledge of medicine and the law. This reinforces that the hierarchy within the ecosystem goes beyond institutions to functions, whereby various actors have unique roles in defining what the coordination tool can do. The CEO-Founder was explicit about the platform's deliberate restraint from expanding into adjacent roles: *"I would never want to have even approval to process health data... because it means that I'm positioned as a healthcare provider."* Not only is this a technique of regulation, but also one of governance that upholds the neutrality essential to enable the platform to govern competing stakeholders. As noted by the Sales Director, from an operational perspective, past attempts by technology companies to replace, rather than supplement, established players were doomed to failure: Health4Travel respects "the old system," and tries to learn rather than to replace it.

As observed by the COO, this approach to market segmentation makes shared authority even more complex. While large global assistance companies with their tens of thousands of hospital partners will be structurally independent of the platform, smaller assistance companies will lack the governance structures necessary, and thus need the platform to gain access to provider networks: *"if you don't have a foot on the ground, it's quite hard to get any connections to doctors... you simply cannot operate there."* This suggests that the platform's authority within the ecosystem is not uniform but varies by partner size, geographic coverage, and network maturity.

4.5 Synthesis: Institutionally Embedded and Incomplete Orchestration

In sum, the results show that existing governance framings that view platform governance as centralised, institutional stability, and an explicit orchestration authority are insufficient when dealing with cross-border healthcare. The Health4Travel case is a model

of institutionalized and structurally incomplete governance. The six governance mechanisms identified tiered licence verification, price transparency interface, consent-based data minimisation architecture, booking reference system based on the PNR, GDPR-related participation agreement, and role boundary protocol can be seen as the mechanisms by which the platform can reduce fragmentation and enable coordination. All these mechanisms were conceived in the absence of institutional constraints. They all represent a reaction to a legal obligation, social expectations, or fact, which are beyond the control of the platform. Governance in this ecosystem is more a tool built in and bounded by a rich institutional environment than a display of platform power. The result of these mechanisms is successful orchestration processes: global capacity visibility, booking reference coordination and transaction status management, which result in shorter time to coordinate and lower information asymmetry. The TPA partner proof: previously, hours-long appointment coordination was cut short to less than a decade; patient satisfaction always revolved around speed and cashless service delivery. Coordination outcomes are measurable, and they are related to the orchestration infrastructure of the platform.

But these results also show the limitations of this orchestration. Manual reconciliation remains when institutional heterogeneity cannot be addressed by automation. The complexity of tax and invoicing is not addressed at a jurisdictional level. The platform does not have the power to overrule the independent decision-making authority of the clinics, TPAs and insurers. There is no global healthcare standardisation authority it is the institutional void that the CEO-Founder likened to the missing IATA and the platform must take the brunt of the burden for compensating for a void that it will never close and that it did not create. The vision of the CEO-Founder for a global distribution network in the healthcare industry, supported by the COO of the TPA's view that the network will naturally adopt the role of setting standards owing to its high level of coordination practices, indicates the emergence of a future where governance processes in the platform become industry standards by default. However, this development is evolutionary in nature and not planned and relies on many factors such as network expansion and trust, among others. As the CEO-Founder summarised: *"The world is missing something like the travel*

industry has the global distribution system." Such a statement summarizes the core of this insight: Health4Travel is creating the tools for a coordination infrastructure that lacks any organizational analogue in the realm of world medicine. This kind of coordination is both tangible and meaningful, but incomplete – not due to any failures on its part, but simply because of a lack of organization.

4.5.1 Table 3. Governance Mechanisms Supporting Ecosystem Orchestration in Cross-Border Healthcare

Governance Mechanism	Type	Orchestration Process Supported	Empirical Evidence	Theoretical Interpretation
Tiered licence verification protocol	Access control	Selective ecosystem participation and trust formation	<i>"We have to do additional checks including making video calls, sometimes physical visits to the clinic"</i> (Partnerships Head) / <i>"we just asked for that certificate, if everything is according to GDPR"</i> (TPA COO)	Governance through risk-calibrated participation control complementary to local institutional strength (Gawer & Cusumano, 2014)
Price transparency interface	Information governance	Reduction of information asymmetry across actors	<i>"Democratization of information, especially when it pertains to pricing information"</i> (Partnerships Head) / <i>"three or four clicks... much faster than sending emails, calling, sending GOPs"</i> (TPA COO)	Interface standardisation as a governance instrument reducing transaction costs (Tiwana, 2014)
Consent-based data minimisation architecture	Regulatory compliance	GDPR-compliant coordination across fragmented healthcare actors	<i>"Health4Travel is not a medical data processor"</i> (Partnerships Head) / <i>"we just asked for that certificate, if everything is according to GDPR"</i> (TPA COO)	Technical coupling of regulatory requirements into platform architecture (Greenwood et al., 2011)

PNR-inspired booking reference system	Coordination	Cross-border patient and transaction tracking	"Unique six letter code, alphanumeric code, for each booking" (Web Developer) / "within 10 minutes, you had an appointment booked" (TPA COO)	Ecosystem orchestration through centralised coordination infrastructure (Jacobides et al., 2018)
GDPR-linked participation agreement	Rule enforcement	Behavioural standard-setting and compliance enforcement	"If our partner refused to sign the GDPR contract... then simply not onboarded" (CEO-Founder)	Governance through binding participation conditions and access management (Gawer & Cusumano, 2014)
Role Boundary Protocol	Role boundary	Prevention of role conflict and preservation of actor complementarity	"Health4Travel is not a tool that can... take away the role of assistance company or TPA" (Partnerships Head) / "a standalone platform... it's a clear no" (TPA COO)	Governance through role-boundary delineation preserving ecosystem actor complementarity within fragmented institutional environments

Table 3 collates the six governance mechanisms found in the empirical results and relates them to the orchestration process they underpin, where they come from and how they are understood. Both internal platform participant and external TPA partner accounts have been used in drawing the mechanisms, and they are not just mere intentions but recognised and lived as functional coordination tools by the ecosystem. The table shows that the governance in this cross-border healthcare system is exercised at an interlocking level, through a network of institutionally shaped instruments, rather than under platform control.

5. Discussions

This chapter provides an interpretation of the empirical results in the context of the research question: How do digital platform owners govern and coordinate fragmented international stakeholders within global healthcare service ecosystems? This chapter draws on the concepts of ecosystem orchestration, platform governance, and institutional theory to interpret the results. This chapter integrates empirical evidence and existing literature to provide a more profound insight into governance mechanisms, orchestration practices, and institutions within emerging healthcare platform ecosystems.

5.1 Ecosystem Orchestration Under Institutional Complexity

This section addresses the main research question and the institutional layer sub-question by discussing how ecosystem orchestration within cross-border healthcare is shaped by fragmented institutional and regulatory environments. The findings of this study demonstrate that ecosystem orchestration within cross-border healthcare is not merely a technological or operational coordination activity, but a process deeply shaped by institutional complexity. Whereas earlier work on ecosystem orchestration posits orchestrators as the agents who align interdependent players for the co-creation of value (Adner, 2017; Jacobides et al., 2018), the empirical findings from Health4Travel indicate that in global health care, orchestration takes place amid fragmented regulatory regimes, dispersed power dynamics and diverse operating environments in different countries. As such, orchestration becomes an ongoing negotiation process, rather than a process under central control, that involves various institutional agents at once. Coordination among insurers, clinics, TPAs, assistance companies, and health care providers remains highly fragmented because of disparate national regulations, payment arrangements, documentation procedures, and operations. As one participant described, the ecosystem operates as a “world of silos” (Sales Director), in which companies keep using fragmented administrative processes and disjointed systems. These results extend previous insights from the literature on orchestration in that interdependence alone is not enough to explain coordination difficulties in ecosystems. Rather, fragmentation of institutions

per se appears to become a critical factor in determining the nature of orchestration possible. Previous research into governance of platforms takes for granted the central position of the platform owners in structurally facilitating interaction in ecosystems (Gawer & Cusumano, 2014; Hein et al., 2020). However, according to our data, orchestration in cross-border healthcare ecosystems is constrained by regulations and laws related to healthcare, insurance, and other institutions relevant to countries involved in the process. The CEO-Founder explicitly acknowledged these limitations by stating: “We do need rules... the definition of a doctor should be the same all over the world.” This indicates that it is not possible for the platform itself to standardize the processes in the ecosystem alone. These results also indicate that the process of orchestration is influenced by positioning strategies aimed at minimizing institution-specific risks. Rather than becoming a healthcare provider, insurer, or claims processor, Health4Travel intentionally positioned itself as a coordination and communication layer connecting ecosystem actors. As the CEO-Founder explained, “I would never want to have approval to process health data... because it means that I am positioned as a healthcare provider. Such positioning reflects how ecosystem orchestrators respond to institutional pressures in contrast to simply being subjected to institutional pressures. Thus, the ability of the platform to be an ecosystem orchestrator not only depends on its technical ability but also on its legitimacy vis-à-vis different institutional players (Greenwood et al., 2011; North, 1990).

Furthermore, it has been empirically found that coordination in cross-border health care is deficient owing to a lack of standardized institutional norms internationally. Several respondents repeatedly compared healthcare fragmentation with the airline industry, where organizations such as the International Air Transport Association (IATA) provide globally standardized operational rules, procedures and coordination protocols across airlines, airports, and travel intermediaries. In contrast, respondents described healthcare as lacking a comparable centralized institutional authority offering standardized operating procedures. Though the CEO mentions that healthcare is missing a centralised authority, while simultaneously emphasizing that Health4Travel itself should not become the institutional rule-maker. Instead, the platform attempts to partially

compensate for institutional gaps through coordination mechanisms such as standardized booking processes, centralized booking confirmation numbers, GDPR-compliant onboarding, and digital communication structures. This finding significantly extends ecosystem orchestration theory. Research studies in the literature have defined orchestration as the process of intentionally orchestrating ecosystem players through focal firms (Adner, 2017; Jacobides et al., 2018). However, the findings revealed in this study show that in institutionally fragmented contexts like cross-border healthcare, orchestration does not only mean controlling interactions in ecosystems. Orchestration in such cases is seen as the continuous navigation of fragmentation in institutional contexts, along with ensuring stable coordination of interdependent players. Therefore, this study recommends that orchestration in cross-border healthcare ecosystems be seen as a process that is institutionally situated, whereby coordination is achieved through negotiations and compliance.

5.2 Governance Mechanism Enabling Cross-Border Coordination

This section addresses the mechanisms sub-question by examining the governance mechanisms through which Health4Travel coordinates cross-border interactions between clinics, insurers, TPAs, and healthcare providers. Whereas the topic of orchestration was described in Section 5.1 as the overarching process of coordinating fragmented ecosystem participants, the results suggest that orchestrations are accomplished using governance techniques that exist at the level of the platform's architecture. The use of these techniques leads to reducing fragmentation, improving the transparency of coordination, and stabilizing interactions. One of the key governance mechanisms identified through the findings is the selective data architecture of the platform. Instead of considering itself a provider of healthcare services or being responsible for handling medical data, Health4Travel deliberately restricts the types of data that are exchanged throughout the network. As the CEO-Founder explained, "We need only name, email, and mobile phone number." Thus, by storing less sensitive medical data and avoiding data-processing operations that would create regulatory vulnerabilities, Health4Travel manages to keep its hands clean in terms of coordination among all the involved parties in the

ecosystem. Hence, the findings suggest that governance in healthcare cross-border ecosystems could be determined not by maximizing data centralization but by the creation of selectively visible data architecture (Greenwood et al., 2011; North, 1990). The other key governing mechanism revolves around booking confirm-action, which revolves around the idea of Passenger Name Record (PNR) as applied in the aviation industry. Consistently noted by the interviewees, the booking confirmation ID that the digital platform generates works as an integral identification number for all interactions relating to the patient's travel trip. The CEO-Founder claims that the mechanism also enables the generation of longitudinal data with multiple interactions. Contrary to the decentralized healthcare coordination model characterized by the absence of continuous information flow between various stakeholders, this specific mechanism provides a unified operational benchmarking tool that connects clinics, insurance companies, TPAs, and even travellers into one coordination process. When combined with the governance mechanism related to the centralized visibility of doctor and appointment availability, this governance mechanism prevents coordination challenges associated with time lags and tracking. The other finding related to the use of participation controls as a governance mechanism that regulates participation in the ecosystem. Clinics and healthcare providers seeking to access the platform ecosystem are required to adhere to certain operational and GDPR guidelines prior to being onboarded into the ecosystem. According to the CEO-Founder, "if our partner refused to sign the GDPR contract... then simply not onboarded." Clinics or healthcare providers who continuously breach operational guidelines, for instance, incorrect availability information and appointment failures, can be booted from the ecosystem. Such participation controls serve as governance mechanisms in that they control participation, set standards of behaviour, and ensure trust (Hein et al., 2020). Combining these findings reveals how Health4Travel brings fragmented international stakeholders together through the interaction of various mechanisms of governance, rather than through hierarchy only. The selection of specific data structure, booking confirmation process, centralized transparency, onboarding processes, and manual reconciliations help to coordinate a set of fragmented regulatory environments and processes. As far as the research question is concerned, the findings

imply that when dealing with cross-border healthcare systems, governance is all about minimizing friction and maintaining stability rather than hierarchically controlling the platforms (Adner, 2017; Wareham et al., 2014).

5.3 Distributed Authority and the Limits of Platform Control

This chapter addresses the research question on cross-border healthcare ecosystems, focusing on the institutional layer sub-research question about the distribution of power between different parties involved in cross-border healthcare. Even though Health4Travel plays the role of a focal point for coordination, the finding is that governance power within the system is constrained due to the presence of regulators, insurers, TPAs, and healthcare providers. Consequently, orchestration in cross-border healthcare becomes a negotiated practice rather than a managed one. The results indicate that Health4Travel is in a prominent but not monopolistic position in the ecosystem. According to ecosystem literature, focal platforms can be considered architectural bottlenecks where interactions in the ecosystem take place (Jacobides et al., 2018). In contrast, the findings prove that clinics, insurers, and TPAs still have the capacity to coordinate interactions independently of the platform if required. Thus, it is not possible for the platform to control the process at the structural level. The platform stays relevant by enhancing coordination efficiency, visibility, and interoperability in fragmented healthcare processes. The finding resonates with the new perspective on platforms as focal entities of an ecosystem provided by Rietveld and Schilling (2021) and Thomas and Autio (2020). From the interview, it became evident that cross-border healthcare was marked by governance amid fragmented institutional contexts. The interviewees mentioned frequently the lack of global institutions that would organize and coordinate cross-border healthcare in an equivalent way to what International Air Transport Association does for airlines. According to the CEO-Founder, "We do need rules, especially those that would concern global uniformity." Cross-border healthcare governance was not facilitated by global institutions and remained fragmented, based on regulations, insurance, and healthcare legislation. These results support institutional theory claims about organizations' functioning within institutions (North, 1990; Greenwood et al., 2011). These

results indicate that Health4Travel deliberately limits its influence over the ecosystem. Several respondents clarified that although it might have been commercially advantageous for the platform to assume the role of an insurer, health care provider, or claims processor, these roles are consciously avoided. From the CEO-Founder's perspective, taking over such activities would be "a disruption to neutrality," whereas the Sales Director made it clear that the platform did not aspire to replace the actors already active. Rather than seeking to substitute the TPAs and insurance companies, the platform sees itself as "a coordination layer" operating between them. To summarize, the results show that Health4Travel controls its network using coordination capability and interoperability, without exercising control per se. Power in the case is distributed between various institutional and ecosystem actors who together determine how the orchestration process is performed within the context of cross-border healthcare provision. Consequently, the study advances ecosystem orchestration theory, illustrating that legitimacy negotiation becomes the decisive factor for the influence of a platform within institutionally fragmented environments (Adner, 2017; Wareham et al., 2014).

5.4 Toward Institutionally Embedded and Incomplete Orchestration

The following section discusses the results obtained from the study, which addresses the primary research question of the project, as well as the results addressing other related sub-questions. Based on the empirical findings, the study proposes the concept of institutionally embedded and incomplete orchestration as its primary theoretical contribution. According to the findings, orchestration within cross-border healthcare ecosystems cannot rely only on platform ownership, technical infrastructures, and centralized control. On the contrary, orchestration is still characterized by fragmentation within the institutional environment, diffused power, and coordination problems. Orchestration within the current body of literature has been conceptualized as a role fulfilled by an actor who brings ecosystem members together for value creation (Adner, 2017; Jacobides et al., 2018). Nonetheless, the results show that orchestration in cross-border health care does not allow itself to be centralized or governed by the platform owner. Rather, it is strongly influenced by the institutional environment characterized by

fragmentation involving healthcare law, data protection legislation, insurance companies, TPAs, clinics, and healthcare systems of nations acting at once at different borders. As such, governance and coordination become inherently negotiation-based processes. It can thus be concluded that platform governance in cross-border healthcare is institutionally embedded due to the constant influence of external institutional forces on the practice of governance and its limitations and shaping by such forces (Greenwood et al., 2011; North, 1990). On the other hand, the governance and ecosystem orchestration practices in question remain unfinished since platforms cannot completely replace standardization in institutions or have full control over the entire ecosystem. In doing so, this research contributes to the current body of knowledge on platform governance and ecosystem orchestration in international contexts by providing an institutionalized explanation for ecosystem orchestration (Wareham et al., 2014; Hein et al., 2020). Specifically, it suggests that instead of being understood as the central control of participants in an ecosystem, orchestration should be considered as a continuous process of negotiations and selective coordination of institutions.

5.4.1 Figure 5: Revised Conceptual Framework for Institutionally Embedded and Incomplete Ecosystem Orchestration

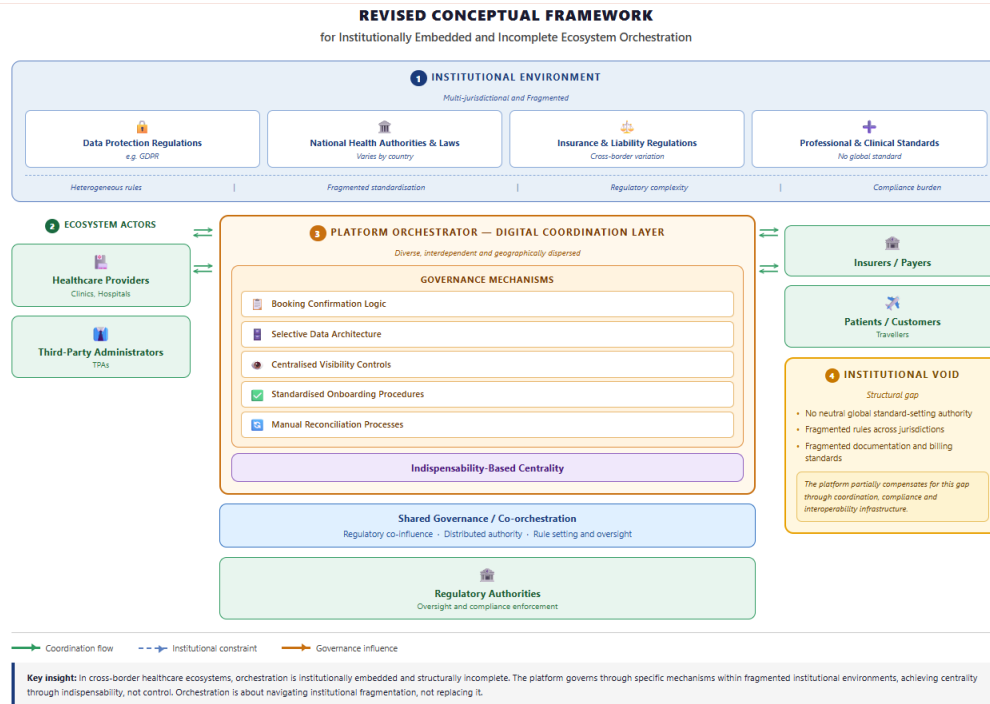


Figure 5: The new framework helps to identify how digital platforms manage fragmented actors within complex cross-border healthcare ecosystems that are marked by institutional complexities. This framework explains how the ecosystem orchestration process in the case of cross-border healthcare is still institutionally embedded and structurally incomplete since platforms do not have the ability to control ecosystem orchestration under various institutional frameworks. The coordination process involves governance that selectively stabilizes the interaction between the participants of the ecosystem under fragmented institutional environment. The framework advances the discussion on ecosystem orchestration because it highlights the fact that the process of coordination in cross-border healthcare ecosystems relies more on overcoming institutional complexities than on controlling activities in these ecosystems.

6. Conclusion

This study analyzed the mechanisms that led to the orchestration of fragmented international players in global healthcare service ecosystems by the owners of the digital platforms. This study employed the platform “Health4Travel” as the foundation for examining the orchestration process in the institutionalized and fragmented international landscape of healthcare services. These insights are emphasized in this chapter.

6.1 Key Findings

The study investigated the means and mechanisms that can be used by digital platform owners to manage and coordinate fragmented international actors within global ecosystems of health services. Through the analysis of the case of Health4Travel, it is evident that orchestration within the global ecosystem of healthcare services depends heavily on the fragmented institutions, regulations and governance. The research results suggest that orchestration does not take place exclusively via centralized control of the platform but rather through governance means that allow for coordination between many independent actors, such as healthcare institutions, insurance companies, TPAs, regulators and patients themselves. Such practices as selective data architecture, booking confirmation, coordination visibility, onboarding, and manual reconciliation were found to be crucial facilitators for coordinating cross-border activities. The research also reveals that even though the platform exercises a certain amount of power, it is institutionally contested, and it is not replacing institutional actors but, instead, works as a coordination infrastructure that facilitates fragmented interaction and depends upon regulatory legitimacy and the trustworthiness of the ecosystem.

6.2 Theoretical Contributions

The study adds to the literature on ecosystem orchestration by illustrating the institutional nature of orchestration as an aspect of cross-border healthcare ecosystems, not just strategic. Many existing studies in the field of ecosystem orchestration take a stable

institutional context and increased authority by the focal actor for granted (Adner, 2017; Jacobides et al., 2018). The results of this study demonstrate, however, that orchestration happens through ongoing negotiation between weak, but fractured, legal, regulatory, and professional systems in the context of cross-border healthcare. This study, therefore, extends the theory of the ecosystem orchestra, focusing on institutional fragmentation as a key factor influencing the coordination of the ecosystem. In addition to what is discussed above, this study contributes to platform governance literature by illustrating that platform governance mechanisms in ecosystems with high degrees of regulation are institutionally conditioned forms of coordination, rather than just being strategies designed into platforms for their effective operation. The use of mechanisms such as license verification tiers, GDPR compliant participation agreement, consent-based data minimization system and role boundaries can be explained by institutional complexity and fragmented regulation. Finally, this research project provides the idea of incomplete institutional orchestration to account for the way platform orchestrators orchestrate fragmented international healthcare ecosystems, even though they do not have sufficient governance powers over the ecosystem actors, institutions, and regulation systems. Thus, this research contributes to the current debate regarding platform and ecosystem research by challenging some assumptions about orchestration, which requires complete governance powers.

6.3 Managerial Implications

The implications of the findings of this research for managers operating in international ecosystems could be highlighted. First, the implication of the present study is that the management of such a regulated and fragmented ecosystem is not about quick growth but coordination of fragmented players amid different regulatory environments. Thus, the managers should pay attention to enhancing governance mechanisms focused on raising coordination, compliance, and interoperability, among others. Another key finding from this research is that strategic positioning becomes crucial in regulated ecosystems. In this regard, it is worth noting that Health4Travel does not position itself as an insurer, health-care provider, or even as health-related data provider. Instead, the

company is focused on remaining neutral. As a result, one of the main strategies here is boundary-setting. Third, this research stresses the significance of crafting a governance mechanism that facilitates trust and continuity of operations within the authority. The following mechanisms, like central booking visibility, standard controls for onboarding, selective architecture of data and coordination tracking, assume increased significance within a fragmented standards and distributed governance structure context. Finally, from the above findings, platform operators who operate in regulated environments should not attempt to substitute for the institutional players but act as coordinators that add to the institutional arrangements that already exist. This implies that, in the current case scenario under study, one needs to bear in mind that the legitimacy of an ecosystem is not only a matter of having technology but also complying with regulatory regimes.

6.4 Limitations and Future Research

Some limitations apply to this research. First, the research only uses one case, the Health4Travel Company. In this context, it is important to recognize that the case study played a key role in offering useful insights into the concept of ecosystem orchestration within institutionalized contexts. However, it is not possible to generalize the findings to all digital platforms within different healthcare sectors. The second limitation is that most data gathered was obtained internally from organizational members, platform stakeholders and from the core sales team which is a consulting company and not in-house. Although this method helped gather useful insights into coordination and governance processes, other stakeholders, including insurers, public health providers, and patients, ought to be considered as well. Third, the study captures ecosystem orchestration at a specific stage of industry development. Regulatory interventions related to cross-border data governance, interoperability and digital health infrastructure keep developing on an international scale (European Commission, 2024; WHO, 2025). As such, future changes in institutional arrangements can influence the governance mechanisms and coordination processes studied in this work. These issues leave scope for further academic inquiry. The final issue with the study is the absence of focus on the role of artificial intelligence in orchestrating and governing the digital healthcare ecosystem.

While participants of the interview mentioned the possibilities offered by AI in relation to the process of standardizing regulations, improving coordination, and processing data in large volumes, there was no systematic analysis of the impact that AI-based solutions can have on governance frameworks, coordination processes, and institutional decision-making in digital healthcare ecosystems. Future studies might consider the role that AI will play in orchestrating and governing digital healthcare ecosystems. Future research can use the case-based approach to investigate the role of institutional context in orchestrating cross-border healthcare platforms through comparative studies of multiple cases in different regulatory settings. Moreover, longitudinal studies would provide valuable insights into the evolution of governance arrangements within cross-border healthcare platforms amid increasing regulatory harmonization and ecosystem standardization on a global scale. Finally, future research can explore the connection between platform neutrality, regulatory position-taking, and ecosystem trust in highly regulated service ecosystems.

6.5 Final Reflection

This paper shows that the concept of orchestration in the field of transnational health care can hardly be defined with traditional notions of platform control, independence, or governance. On the contrary, orchestration is achieved by means of constant coordination in fragmented institutional contexts, distributed power hierarchies, and diverse regulatory regimes. In such cases, rather than simplifying the processes, digital platforms serve to establish instruments that make it possible to manage their inherent complexity. Consequently, the results emphasize the need for analyzing the governance of digital platforms from an institutional perspective.

7. References

Adner, R., & Kapoor, R. (2010). Value creation in innovation ecosystems: How the structure of technological interdependence affects firm performance in modern technology generations. <https://doi.org/10.1002/smj.821>

Strategic Management Journal, 31(3), 306–333. <https://doi.org/10.1002/smj.821>

Adler-Milstein et al. (2017) — "Electronic health record adoption in US hospitals: the emergence of a digital 'advanced use' divide." JAMIA DOI: 10.1093/jamia/ocx080

Adler-Milstein, Garg, Zhao & Patel (2021) — "A Survey of Health Information Exchange Organizations in Advance of a Nationwide Connectivity Framework." Health Affairs DOI: 10.1377/hlthaff.2020.01497

Acquisti, A., Taylor, C., & Wagman, L. (2016). The economics of privacy. Journal of Economic Literature, 54(2), 442–492.: <https://doi.org/10.1257/jel.54.2.442>

Adegoke, O., Osei-Bryson, K., & Dong, G. (2025). Emerging technologies and standards for digital health interoperability 2015–2025: A scoping review. Journal of Biomedical Informatics, 151, 104604. <https://doi.org/10.1016/j.jbi.2024.104604>

Adner, R. (2017). Ecosystem as structure: An actionable construct for strategy. Journal of Management, 43(1), 39–58. <https://doi.org/10.1177/0149206316680450>

Baldwin, C. Y., & Woodard, C. J. (2009). The architecture of platforms: A unified view. In A. Gawer (Ed.), Platforms, Markets, and Innovation (pp. 19–44). Edward Elgar Publishing. <https://doi.org/10.4337/9781849803311>

Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. MIS Quarterly, 37(2), 471–482. <https://doi.org/10.25300/MISQ/2013/37:2.3>

Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the state-of-the-art review. Tourism Management, 29(4), 609–623. <https://doi.org/10.1016/j.tourman.2008.01.005>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Chesbrough, H. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Harvard Business Press.

<https://www.hbs.edu/faculty/Pages/item.aspx?num=33594>

Chiu, I. H-Y. (2018). An institutional theory of corporate regulation. *Current Legal Problems*, 71(1), 279–334. <https://doi.org/10.1093/clp/cuy006>

Constantinou, I. D., & Kallinikos, J. (2015). New games, new rules: From pipelines to ecosystems. *Journal of Information Technology*, 30(3), 209–222. <https://doi.org/10.1057/jit.2015.15>

Centre for Healthcare Quality and Payment Reform. (n.d.). Four steps to successful value-based payment.

Cusumano, M. A., Gawer, A., & Yoffie, D. B. (2019). *The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power*. Harper Business. <https://www.harpercollins.com/products/the-business-of-platforms-michael-a-cusumanoannabelle-gawer-david-b-yoffie>

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. <https://doi.org/10.2307/2095101>

DexCare (2022). The rise of care orchestration: A new framework for health systems. <https://www.dexcare.com>

Eisenhardt, K. M. (1989b). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.2307/258557>

European Health and Digital Executive Agency (HaDEA). (2025). 2024 EU4Health Work Programme: New projects advancing digital healthcare across the EU. European Commission.

Eysenbach, G. (2001). What is e-health? *Journal of Medical Internet Research*, 3(2), e20.
<https://doi.org/10.2196/jmir.3.2.e20>

European Commission. (2025). Regulation (EU) 2025/327 on the European Health Data Space (EHDS). *Official Journal of the European Union*.

Gawer, A. (2014). Bridging differing perspectives on technological platforms: Toward an integrative framework. *Research Policy*, 43(7), 1239–1249. <https://doi.org/10.1016/j.respol.2014.03.006>

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31. <https://doi.org/10.1177/1094428112452151>

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *Academy of Management Annals*, 5(1), 317–371.

<https://doi.org/10.5465/19416520.2011.590299>

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82.

<https://doi.org/10.1177/1525822X05279903>

Gawer, A., & Cusumano, M. A. (2002). *Platform Leadership: How Intel, Microsoft, and Cisco Drive Industry Innovation*. Harvard Business School Press.

<https://hbsp.harvard.edu/product/2858-HBK-ENG>

Hagiu, A., & Wright, J. (2015). Multi-sided platforms. *International Journal of Industrial Organization*, 43, 162–174.

<https://doi.org/10.1016/j.ijindorg.2015.03.003>

Hein, A., Schreieck, M., Wiesche, M., Böhm, M., & Krcmar, H. (2020). Digital platform ecosystems. *Electronic Markets*, 30(1), 87–98.

<https://doi.org/10.1007/s12525-019-00377-4>

Henfridsson, O., & Lind, M. (2014). Information systems strategizing, organizational sub-communities, and the digital transformation of a manufacturing firm. *The Journal of Strategic Information Systems*, 23(1), 7–28.

Hess, T., Matt, C., Benlian, A., & Wiesböck, F. (2016). Options for formulating a digital transformation strategy. *MIS Quarterly Executive*, 15(2), 123–139.

Health4Travel. (n.d.). Reimagining access to outpatient care: A strategic white paper for TPAs in the digital health era. <https://www.health4travel.com>

<https://www.health4travel.com>

Hesse, B. W., Grousset, S., & Moser, R. P. (2010). The health information national trends survey: Research from the golden age of communication. *Journal of Health Communication*, 15(sup3), 1–7.

<https://doi.org/10.1080/10810730.2010.499991>

Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). Digital transformation: What is new and what is old? *Digital Business*, 1(1), 100001.

Iansiti, M., & Levien, R. (2004). *The Keystone Advantage: What the New Dynamics of Business Ecosystems Mean for Strategy, Innovation, and Sustainability*. Harvard Business Press.

<https://hbsp.harvard.edu/product/8180-HBK-ENG>

International Medical Travel Journal. (2025). Medical tourism trends: The shift towards digital integration.

<https://www.imtj.com>

Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8), 2255–2276.

<https://doi.org/10.1002/smj.2904>

Jacobides, M. G., Brusoni, S., & Cennamo, C. (2024). *Ecosystems, platforms, and the new rules of strategy*. Oxford University Press.

<https://global.oup.com/academic/product/ecosystems-platforms-and-the-new-rules-of-strategy-9780198884514>

Kallinikos, J., Aaltonen, A., & Marton, A. (2013). The ambivalent ontology of digital artifacts. *MIS Quarterly*, 37(2), 357–370.

<https://doi.org/10.25300/MISQ/2013/37.2.02>

Lepore, D., Frontoni, E., Micozzi, A., Moccia, S., Romeo, L., & Spigarelli, F. (2023). Uncovering the potential of innovation ecosystems in the healthcare sector after the COVID-19 crisis. *Health Policy*, 127, 80–86. <https://doi.org/10.1016/j.healthpol.2022.12.001>

<https://doi.org/10.1016/j.healthpol.2022.12.001>

Liu, X., Singh, A., & Han, S. (2023). Digital transformation in the insurance sector: Drivers, challenges, and performance outcomes. *Journal of Business Research*, 161, 113809.

<https://doi.org/10.1016/j.ibusres.2023.113809>

Lunt, N., Smith, R., Exworthy, M., Green, S. T., Horsfall, D., & Mannion, R. (2011). Medical tourism: Treatments, markets, and health system implications: A scoping review. OECD.

<https://www.oecd.org/els/health-systems/48723982.pdf>

Lusch, R. F., & Nambisan, S. (2015). Service innovation: A service-dominant logic perspective. *MIS Quarterly*, 39(1), 155–175.

<https://doi.org/10.25300/MISQ/2015/39.1.07>

Matt, C., Hess, T., & Benlian, A. (2015). Digital transformation strategies. *Business & Information Systems Engineering*, 57(5), 339–343.

<https://doi.org/10.1007/s12599-015-0401-5>

McIntyre, D. P., & Srinivasan, A. (2017). Networks, platforms, and strategy: Emerging views and next steps. *Strategic Management Journal*, 38(1), 141–160.

<https://doi.org/10.1002/smj.2596>

McKinsey & Company. (2024). The next frontier of healthcare: Platforms and ecosystems. McKinsey Health Institute.

<https://www.mckinsey.com/industries/healthcare/our-insights>

McNulty, Y., & Brewster, C. (2017). Theorizing the meaning(s) of 'expatriate' and 'global mobility' in institutional and international settings. *International Journal of Human Resource Management*, 28(1), 27–61.

<https://doi.org/10.1080/09585192.2016.1244104>

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded source-book* (2nd ed.). SAGE Publications.

Mwogosi, A., & Mambile, C. (2025). *Digital ecosystems for healthcare communication and collaboration: A scoping review*. *DIGITAL HEALTH*, 11, 20552076251377933.

<https://doi.org/10.1177/20552076251377933>

Mbanefo, C., & Grobbelaar, S. (2024). *Unveiling the core elements of platform ecosystem development: A systemic lens for value co-creation in small and medium enterprises and orchestrators*. *Management Review Quarterly*. Advance online publication.

<https://doi.org/10.1007/s11301-024-00416-1>

Mbanefo, C., & Grobbelaar, S. (2025). *Evolutionary dynamics of digital platform ecosystems in healthcare: A case study of the discovery ecosystem in South Africa*. *Electronic Markets*, 35, 79.

<https://doi.org/10.1007/s12525-025-00820-9>

Ibeh, A. I., Oso, O. B., Alli, O. I., & Babarinde, A. O. (2025). *Scaling healthcare startups in emerging markets: A platform strategy for growth and impact*. *International Journal of Advanced Multidisciplinary Research and Studies*, 5(1), 838–854.

<https://doi.org/10.62225/2583049X.2025.5.1.3729>

Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital innovation management: Reinventing innovation management research in a digital world. *MIS Quarterly*, 41(1), 223–238. <https://doi.org/10.25300/MISQ/2017/41:1.03>

North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511808678>

- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145–179. <https://doi.org/10.2307/258610>
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511807763>
- OECD. (2024). *Health briefly 2024: Digital health readiness*. OECD iLibrary.
- Palumbo, R., & Manna, R. (2018). Innovation at the crossroads: An investigation of the link between inter-organizational relationships and innovation. *International Journal of Organizational Analysis*, 26(3), 432–449. <https://doi.org/10.1108/IJOA-09-2017-1247>
- Palumbo, R., & Manna, R. (2018). What if things go wrong in co-producing health services? Exploring the implementation problems of health care co-production. *Policy and Society*, 37(3), 368–385. <https://doi.org/10.1080/14494035.2018.1411871>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods* (4th ed.). SAGE Publications. <https://us.sagepub.com/en-us/nam/qualitative-research-evaluation-methods/book232962>
- Pereno, A., & Eriksson, D. (2020). A multi-stakeholder perspective on sustainable healthcare: From 2030 onwards. *Futures*, 122, 102605. <https://doi.org/10.1016/j.futures.2020.102605>
- Porter, M. E., & Heppelmann, J. E. (2014). How smart, connected products are transforming competition. *Harvard Business Review*, 92(11), 64–88. <https://hbr.org/2014/11/how-smart-connected-products-are-transforming-competition>
- Rana, N. P., Luthra, S., & Rao, H. R. (2021). One hundred issues in consumer health informatics. *International Journal of Information Management*, 58, 102298.
- Rietveld, J., & Schilling, M. A. (2021). Platform competition: A systematic and interdisciplinary review of the literature. *Journal of Management*, 47(6), 1528–1563. <https://doi.org/10.1177/0149206320969791>

Sansone, A. (2024). Regulatory orchestration as a driver of innovation and competition: A framework for regulators and firms in open finance ecosystems. *Journal of Financial Transformation*, 59, 42–55.

Scaringella, L., & Radziwon, A. (2018). Innovation, entrepreneurial, knowledge, and business ecosystems: Old wine in new bottles? *Technological Forecasting and Social Change*, 136, 59–87. <https://doi.org/10.1016/j.techfore.2017.09.023>

Scott, W. R. (2014). *Institutions and organizations: Ideas, interests, and identities* (4th ed.). SAGE Publications.

Shen, L., Shi, Q., Parida, V., & Jovanovic, M. (2024). Ecosystem orchestration practices for industrial firms: A qualitative meta-analysis, framework development, and research agenda. *Journal of Business Research*, 173, 114463. <https://doi.org/10.1016/j.ibusres.2023.114463>

Stake, R. E. (1995). The art of case study research. SAGE Publications. <https://us.sagepub.com/en-us/nam/the-art-of-case-study-research/book4954>

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). SAGE Publications.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610.

Swiss Re Institute. (2023). The future of health insurance: From payer to partner. *Sigma Reports*. <https://www.swissre.com/institute/research/sigma-research.html>

TEHDAS2. (2025). Technical roadmap for the operational implementation of the EHDS: Facilitating cross-border secondary use of health data. Joint Action on the European Health Data Space. <https://tehdas.eu/results/>

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49. <https://doi.org/10.1016/j.lrp.2017.06.007>

Tiwana, A. (2014). Platform ecosystems: Aligning architecture, governance, and strategy. Elsevier.

Thomas, L. D., & Autio, E. (2020). Innovation ecosystems in management: An organizing framework. Oxford Research Encyclopaedia of Business and Management. <https://doi.org/10.1093/acrefore/9780190224851.013.203>

Topol, E. J. (2019). The Topol review: Preparing the healthcare workforce to deliver the digital future. NHS Health Education England. <https://topol.hee.nhs.uk/>

UNCTAD. (2024). Digital economy report 2024: Value and governance. United Nations. <https://unctad.org/publication/digital-economy-report-2024>

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. Journal of Marketing, 68(1), 1–17. <https://doi.org/10.1509/jmkg.68.1.1.24036>

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. Journal of the Academy of Marketing Science, 36(1), 1–10. <https://doi.org/10.1007/s11747-007-0069-6>

Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: An extension and update of service-dominant logic. Journal of the Academy of Marketing Science, 44(1), 5–23. <https://doi.org/10.1007/s11747-015-0456-3>

Yin, R. K. (1981). The case study crisis: Some answers. Administrative Science Quarterly, 26(1), 58–65. <https://doi.org/10.2307/2392599>

Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). SAGE Publications. <https://us.sagepub.com/en-us/nam/case-study-research-and-applications/book250150>

Zhang, M., & Singh, J. (2023). Digital care pathways and cost outcomes in distributed healthcare systems. Health Care Management Review, 48(2), 112–124. <https://doi.org/10.1097/HMR.0000000000000360>

Zuboff, S. (2015). Big other: Surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology*, 30(1), 75–89.
<https://doi.org/10.1057/jit.2015.5>

8. Appendices

Appendix A: Privacy Notice

Privacy Notice

Privacy Notice for Master's Thesis Research

Title of the Study: Digital Transformation and Ecosystem Orchestration in Global Travel Health Services: The case of Health4Travel

1. Data Controller

University of Vaasa

Wolffintie 34, 65200 Vaasa, Finland

2. Researcher

Binita Balakrishnan (2404755)

Master's Student, Strategic Business Development

University of Vaasa

x9966599@student.uvasa.fi

3. Purpose of the Study

The purpose of this study is to understand how digital platform owners govern and coordinate fragmented stakeholders in cross-border healthcare ecosystems under complex regulatory environments.

4. Personal Data Collected

The following personal data may be collected:

Name

Job title

Organization

Contact information (email, phone, LinkedIn)

Interview responses (audio recordings and transcripts)

5. Purpose and Legal Basis for Processing

Personal data is collected and processed solely for the purpose of conducting this academic research. Participation is voluntary, and the legal basis for processing is the participant's consent.

6. Data Recipients

The collected data will be accessible to:

The researcher (student)

Thesis supervisor(s) at the University of Vaasa

University administrative staff involved in thesis evaluation.

7. Data Storage and Protection

All the data collected will be stored and managed confidentially. Data in digital format, which includes recordings of audios and their transcriptions, will be stored in secure storage places approved by the university.

8. Data Retention

Personal data will be retained only for the duration necessary to complete the thesis and evaluation process. After completion, data will be deleted or anonymized in accordance with university guidelines.

9. Participant Rights

Participants have the right to:

- Access their personal data
- Request correction of inaccurate data
- Withdraw consent at any time
- Request deletion of their data

The legality of processing that was done before consent was withdrawn is unaffected.

Appendix B: Consent Form

Study Title: Digital Transformation and Ecosystem Orchestration of Global Travel
Health Services: The case of Health4Travel

I confirm that I have been informed about the objectives and nature of this research study. I understand that participation is entirely voluntary and that I may withdraw at any time without consequence.

By signing this form, I confirm that:

- ✓ I have read and understood the Privacy Notice for this study
- ✓ I voluntarily agree to participate in this research
- ✓ I consent to the processing of my personal data for the purposes described in the Privacy Notice
- ✓ I understand that the interview will be audio-recorded
- ✓ I understand that my responses will be used solely for academic research purposes
- ✓ I am aware that my data may be accessed by the University of Vaasa for thesis supervision and evaluation purposes

Participant Information

Name: _____

Position / Organization:

Signature: _____

Date: _____

Researcher: Binita Balakrishnan | master's Student | University of Vaasa

Appendix C: Semi-structured Interview Guide

The interview guides were designed using a semi-structured format to ensure consistency across interviews while allowing participants flexibility to elaborate on governance mechanisms, orchestration processes, institutional pressures, and ecosystem coordination practices relevant to the study.

Section 1: Executive and Strategic Leadership Interviews

- 1) How would you describe the role of Health4Travel within the cross-border healthcare ecosystem?
- 2) What governance mechanisms are used to coordinate clinics, insurers, TPAs, and patients?
- 3) How do regulations shape the platform's operational decisions?
- 4) Why has the company intentionally avoided entering insurance or direct healthcare provision?
- 5) How does the platform maintain neutrality across ecosystem actors?
- 6) What coordination challenges emerge across different jurisdictions?
- 7) How are onboarding, participation, and compliance managed across actors?

Section 2: Technical and Platform Architecture Interviews

- 1) How does the platform technically coordinate interactions between ecosystem actors?
- 2) How is GDPR compliance embedded into the platform architecture?
- 3) How are medical and communication data separated within the system?
- 4) How does the booking reference system function operationally? How are clinics and partners integrated into the platform?

- 5) What technical challenges arise from cross-border coordination?
- 6) How are payment and settlement processes managed across jurisdictions?
- 7) How are onboarding and verification procedures technically enforced?
- 8) What operational processes still require manual coordination?

Section 3: Operational and Financial Coordination

- 1) How are payments coordinated across multiple countries and currencies?
- 2) What operational challenges emerge during claims reconciliation?
- 3) Which parts of the coordination process remain manual?
- 4) How are tax and VAT differences handled across jurisdictions?
- 5) What coordination problems occur between clinics, insurers, and TPAs?
- 6) How does the platform reduce operational inefficiencies?
- 7) What happens when institutional or regulatory requirements differ across countries?

Section 4: Commercial and Ecosystem Relationship

- 1) How do insurers and TPAs perceive the platform?
- 2) What forms of resistance emerge from ecosystem actor?
- 3) How does the platform create value for insurers and clinics?
- 4) What coordination inefficiencies exist in current cross-border healthcare systems?
- 5) How does the platform reduce transaction costs and operational friction?
- 6) What onboarding or partnership challenges are most common?
- 7) How do ecosystem actors react to automation and digital coordination?

Section 5: Institutional and Regulatory Coordination Themes

- 1) How do country-specific regulations influence ecosystem coordination?
- 2) What role does GDPR play in shaping platform governance?
- 3) Are there regulatory barriers that limit ecosystem expansion?
- 4) How are compliance requirements enforced operationally?
- 5) To what extent can digital platforms standardize healthcare coordination globally?

- 6) What institutional gaps remain unresolved in cross-border healthcare ecosystems?

Appendix D: Interviewee Consent and Profiles

All participants were informed about the purpose of the study, the voluntary nature of participation, the data collection procedures, confidentiality measures, and their right to withdraw from the study before the interviews. Verbal consent for participation and audio recording was obtained during the recorded online interviews conducted via Google Meet. All collected data were handled confidentially and managed in accordance with GDPR principles. Participants are referred to through anonymized organizational roles to maintain confidentiality.

Role	Consent	Date	Notes
CEO-Founder	Verbal consent provided during recorded online interview	27 April 2026	Primary strategic informant
CTO-Co-founder	Verbal consent provided during recorded online interview	30 April 2026	Technical architecture and governance informant
Partnerships Manager / Co-founder	Verbal consent provided during recorded online interview and written consent	27 April 2026	Ecosystem coordination and regulatory informant
Project Manager – IT	Verbal consent provided during recorded online interview	17 February 2026	Platform implementation and operational coordination informant
Web Developer	Verbal consent provided during recorded online interview	10 March 2026	Technical governance and platform infrastructure informant
Accounts Payable	Written consent	12 February 2026	Financial coordination and reconciliation informant
Sales Director	Verbal consent provided during recorded online interview	24 April 2026	Ecosystem development and partner coordination informant
Insurance & TPA Sales Team Member	Verbal consent provided during recorded online interview	22 April 2026	Insurance and third-party administrator coordination informant
COO TPA Partner	Verbal consent provided during recorded online interview	08 May 2026	External ecosystem perspective on coordination and platform integration

Appendix E: Interview Coding Structure (First-Order Codes, Second-Order Themes, and Aggregate Dimensions)

Interview conducted via Google Meet. The participants were pseudonymised. All team member names were replaced with roles and designations in the company. Analytical frameworks used are: Gawer & Cusumano (2014); Adner (2017); Jacobides et al. (2018); DiMaggio & Powell (1983); Wareham et al. (2014).

Interview Coding Table Colour Codes
OPM: Orchestration Process Management
GMD: Governance Mechanism Deployment
IPN: Institutional Pressure Navigation
SAM: Shared Authority Management

Part.	Paraphrased Extract (Pseudonymised)	Open Code	Do-main	Theoretical Link
CEO & Founder	<i>The CEO explicitly states his goal is to create a "Healthcare Global Distribution System" (GDS), borrowing the logic of Amadeus/Sabre from the aviation industry.</i>	Infrastructural Orchestration: Applying aviation-industry logic to healthcare coordination.	GMD	Governance Mechanism Deployment: Setting the "Value Blueprint" as a standardized infrastructure for all actors.
CEO & Founder	<i>CEO & Founder emphasizes a "Neutral Positioning" strategy: he explicitly refuses to become a medical data processor or a healthcare provider to avoid being held back by "slow public healthcare" and complex regulations.</i>	Strategic Boundary-Setting: Deliberately narrowing the platform's role to remain agile and unregulated.	IPN	Institutional Pressure Navigation: Using "Decoupling" to separate the platform from heavily regulated institutional environments.

CEO & Founder	<i>The CEO identifies a specific type of "Local TPA Cannibalization." He argues that local intermediaries who only provide "doctor lists" are redundant, whereas "Outbound TPAs" are partners.</i>	Ecosystem Pruning: Deliberately displacing low-value intermediaries while supporting high-value partners.	SAM	Shared Authority Management: Managing the "Adoption Chain" by selecting which legacy actors to support vs. replace.
CEO & Founder	<i>CEO & Founder argues that the platform is "Demand-Driven," not forced. By making global clinic capacity visible, he believes the demand will naturally flow to the platform.</i>	Incentive-Led Coordination: Relying on market transparency rather than mandates to drive actor participation.	OPM	Orchestration Process Management: Reducing information asymmetry to lower transaction costs for insurers.
CEO & Founder	<i>He views GDPR as a "Label of Trust" rather than just a legal hurdle. He believes that without these rules, the platform would lose its status as a "neutral confidential party".</i>	Regulation as a Trust Asset: Leveraging compliance as a competitive advantage to build legitimacy.	IPN	Institutional Pressure Navigation: Turning institutional constraints into "Signalling Mechanisms" for ecosystem trust.
Part.	<i>Paraphrased Extract (Pseudonymised)</i>	Open Code	Do-main	Theoretical Link

Part.	Paraphrased Extract (Pseudonymised)	Open Code	Do-main	Theoretical Link
CTO & Co-Founder	<i>CTO & Co-Founder notes that an "IATA for Health" is harder than aviation because money flows from more sources (Insurance, Gov, Employer, Pocket) and health data is not "openly shared".</i>	Multi-Actor Payment Complexity: Recognizing the fragmented financial governance of global healthcare.	GMD	Governance Mechanism Deployment: Identifies "Institutional Voids" where the orchestrator must fill the gap left by missing global bodies.
CTO & Co-Founder	<i>CTO & Co-Founder explains that GDPR is "embedded"; when data is deleted, it is "overwritten with pseudonyms" (e.g.,</i>	Hardcoded Anonymization: Using architectural design to automate legal compliance and protect the platform.	IPN	Institutional Pressure Navigation: Direct evidence of "Technical Coupling" where regulations are built into the code.

	<i>ABC123) so it cannot be traced back to the person.</i>			
CTO & Co-Founder	<i>CTO & Co- Founder argues that the "Network + Technology" combo makes them hard to replicate; hotels.com is easy to build, but hard to scale to thousands of hotels.</i>	Network-Asset Entrenchment: Competitive advantage derived from the difficulty of ecosystem coordination, not just code.	SAM	Shared Authority Management: Building "Barriers to Entry" through ecosystem density rather than just product features.
CTO & Co-Founder	<i>CTO & Co- Founder explicitly advises against integrating claims into the platform to avoid "managing medical data," suggesting a "separate tech entity" instead.</i>	Strategic Architectural Siloing: Keeping "high-risk" functions (claims/medical data) outside the platform core.	IPN	Institutional Pressure Navigation: Using "Structural Decoupling" to maintain a lower regulatory profile.

Part.	Paraphrased Extract (Pseudonymised)	Open Code	Do-main	Theoretical Link
Co-founder & Partnerships head	<i>Co-founder & Partnerships head describes the core value proposition as the "democratization of information," allowing for price comparisons in an ecosystem where this was previously "practically impossible".</i>	Information Asymmetry Resolution: Strategic transparency as a tool for ecosystem disruption.	OPM	Orchestration Process Management: The orchestrator creates a "Value Blueprint" by standardizing previously opaque data.
Co-founder & Partnerships head	<i>Co-founder & Partnerships head clarifies that the platform is not a medical data processor and explicitly excludes medical data from its workflows to avoid regulatory burdens.</i>	Intentional Scope Limitation: Designing the platform boundary to bypass medical data regulations.	IPN	Institutional Pressure Navigation: Illustrates the strategic avoidance of "Coercive Pressures" by narrowing the platform's role.

Co-founder & Partnerships head	<i>Co-founder & Partnerships head adopts a tiered risk-assessment model for clinic vetting, relying on national databases in "Tier A" countries but requiring video calls and embassy lists for high-risk regions.</i>	Adaptive Governance: Vetting mechanisms that scale in complexity based on regional institutional risk.	GMD	Governance Mechanism Deployment: Governance standards are not universal but are "Complementary" to the strength of local institutions.
Co-founder & Partnerships head	<i>Co-founder & Partnerships head refutes the idea that the platform "cannibalizes" TPAs, arguing it is a tool to digitize their processes and offload "loss-leader" cases like minor outpatient visits.</i>	Partner Complementarity: Positioning the platform as an efficiency tool for legacy actors rather than a competitor.	SAM	Shared Authority Management: A strategy to manage "Adoption Chain Risk" by aligning incentives with powerful incumbents.
Co-founder & Partnerships head	<i>Co-founder & Partnerships head identifies a "Regulatory Operational Locker" in markets like Germany, where statutory pricing codes do not easily map to the platform's open pricing system.</i>	Infrastructural Mismatch: National regulatory codes acting as a bottleneck for digital standardization.	IPN	Institutional Pressure Navigation: Direct evidence of how national regulations create "Regulatory Bottlenecks" for global platforms.

Part.	Paraphrased Extract (Pseudonymised)	Open Code	Domain	Theoretical Link
Sales Director	<i>Sales Director explains that unlike previous tech startups that failed by trying to "replace" the ecosystem, the case company shows "respect" for the legacy system and seeks to understand rather than replace.</i>	Collaborative Integration: Strategic focus on complementing rather than disrupting legacy infrastructure.	GMD	Governance Mechanism Deployment: A strategy to manage "Adoption Chain Risk" by lowering resistance from incumbent actors.
Sales Director	<i>Sales Director refines the concept of "cost," defining it as the "total cost of ownership" including labour, processing, language friction, and customer acquisition costs.</i>	Total Cost of Ownership (TCO): Moving beyond medical costs to capture systemic operational inefficiencies.	OPM	Orchestration Process Management: The orchestrator creates value by reducing high transaction costs across the value chain.

Sales Director	<i>Sales Director reframes TPA resistance: it is not about losing "fees," but about protecting "margins." The platform allows TPAs to reduce their price tags while increasing their actual profit margins.</i>	Margin Protection vs. Fee Loss: Aligning orchestrator value with partner profitability.	SAM	Shared Authority Management: A governance tactic to resolve "Conflict of Interest" among ecosystem partners.
Sales Director	<i>Sales Director notes that the platform intentionally avoids providing insurance or medical services to remain outside the direct oversight of clinical and insurance regulators.</i>	Regulatory Perimeter Management: Strategic avoidance of regulated roles to minimize institutional pressure.	IPN	Institutional Pressure Navigation: Illustrates how orchestrators navigate "Institutional Pressures" by defining their boundaries outside regulated sectors.

Part.	Paraphrased Extract (Pseudonymised)	Open Code	Domain	Theoretical Link
Project Manager - IT and Web Developer	<i>Project Manager - IT and Web Developer explain that the platform allows "Guest Checkout" to ensure a "sleek and smooth" user flow, prioritizing immediate medical access over data collection.</i>	Frictionless User Onboarding: Strategic choice to bypass mandatory profile creation for "critical conditions."	GMD	Governance Mechanism Deployment: A mechanism to reduce "Adoption Chain Risk". By removing barriers to entry, the orchestrator ensures the value proposition (medical aid) is delivered immediately.
Project Manager - IT and Web Developer	<i>Project Manager - IT and Web Developer describes a unique 6-digit alphanumeric booking code, inspired by the Airline industry (GDS), which links multiple appointments and family members.</i>	Standardized Ecosystem Identifiers: Use of a universal "PNR-style" code to track complex actor interactions.	OPM	Orchestration Process Management: Implements a "Shared Standard" across the ecosystem. This code acts as the "Golden Thread" that identifies the customer across disparate international clinics.
Project Manager - IT and Web Developer	<i>Project Manager - IT and Web Developer confirms that while the platform maintains a "Partner ID" for billing, it also tracks "Additional Charges" (VAT/Service tax) manually across different jurisdictions.</i>	Multi-Jurisdictional Tax Logic: Manual maintenance of tax and VAT statuses within the database infrastructure.	IPN	Institutional Pressure Navigation: Validates Project Manager - IT and Web Developer "Regulatory Bottleneck". The system architecture is "institutionally aware" but requires manual upkeep to navigate local tax laws.
Project Manager - IT and Web Developer	<i>Project Manager - IT and Web Developer clarifies the "Backend Brain" uses Stripe for receiving</i>	Bifurcated Financial Architecture: Separation of customer-facing	GMD	Governance Mechanism Deployment: Illustrates the complexity of the "Shared Authority". The

Web Developer	<i>payments but uses Tipalti specifically for "dispatching payments to partners."</i>	payment (Stripe) and partner-facing settlement (Tipalti).		orchestrator must manage two distinct technical layers to fulfil the payment promise to clinics.
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Part.	Paraphrased Extract (Pseudonymised)	Open Code	Domain	Theoretical Link
COO Partner TPA	– <i>"We just asked for that certificate, if everything is according to GDPR, which it is. And then we said, yeah, why not?"</i>	Compliance-Based Participation Validation	GMD	Governance Mechanism Deployment: Using GDPR-linked onboarding protocols as ecosystem trust and participation mechanisms.
COO Partner TPA	– <i>"Within, I would say, maximum 10 minutes, you had an appointment booked and send out the details to the patient."</i>	Time-Based Coordination Optimization	OPM	Orchestration Process Management: Reducing coordination friction and accelerating outpatient coordination across fragmented actors.
COO Partner TPA	– <i>"The cheapest way is the best way."</i>	Cost-Driven Ecosystem Coordination	IPN	Institutional Pressure Navigation: Economic pressures shaping coordination logic within insurance-led healthcare ecosystems.
COO Partner TPA	– <i>"You always need to have like... a human being checking the medical indication for the treatment."</i>	Human Verification Authority	SAM	Shared Authority Management: Preserving distributed medical authority despite platform-enabled coordination.