



# **Temporary Organising and the Implementation of Large-Scale Projects: A Multiple Case Study.**

**Harriet Finnegan, BA, MSc**

**Maynooth Student Number: 16407542**

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**Head of School: Professor Joseph Coughlan**

**Primary Supervisor: Dr Nicola Mountford**

**Secondary Supervisor: Professor Brian Donnellan**

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## DECLARATION

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# Table of Contents

Acknowledgements.....	3
Table of Contents .....	4
List of Figures .....	7
List of Tables.....	8
Abstract .....	9
Glossary of Terms .....	10
Chapter 1. Introduction .....	12
Institutional Logics .....	13
Temporary Organising .....	14
Implementation .....	15
Process .....	15
Research Aim and Questions .....	16
Method .....	16
Chapter 2. Literature Review .....	18
What is Temporary Organising? .....	18
What are Institutional Logics? .....	30
The Relationship between Temporary Organising and Institutional Logics.....	44
How do Temporary Organising and Institutional Logics guide Implementation Processes? .....	47
Chapter 3. The Implementation Process Context .....	51
Rural Electrification Context .....	51
Electronic Health Record System Context .....	54
Conclusion .....	57
Chapter 4. Method .....	59
Research Outline .....	59
Research Aim and Questions .....	59
Research Design.....	60
A Case Study Approach .....	65
Stake’s Multiple Case Study Design.....	66
Case Selection.....	69
Data Collection .....	73
Within Case Sampling .....	74

Data Collection Instruments .....	75
Document Analysis .....	78
Analysing the Data.....	81
Limitations of the Methodology .....	84
Conclusion .....	85
Chapter 5. Case Study 1: The Irish Rural Electrification Scheme.....	87
Introduction.....	87
Findings.....	90
Chapter 6. Case Study 2: Ireland’s National Electronic Health Record Programme.....	109
Introduction.....	109
Findings.....	117
Chapter 7. Cross Case Analysis .....	135
Temporary Organising .....	142
The Institutional Logics in the Cases.....	144
Assertions.....	148
Research Aim and Questions .....	148
Categorising the Findings .....	148
Categorised Assertions.....	150
Time .....	150
Task.....	152
Team.....	157
Transition .....	161
Recommendations for Practice .....	163
The Institutional Logic Relationships in the Cases.....	169
Chapter 8. Discussion .....	173
Introduction.....	173
Embedded .....	177
Constellated.....	180
Decoupled .....	182
Chapter 9. Contribution .....	186
Findings Within the Logic Relationships.....	187
Chapter 10. Conclusion.....	190
Future Work .....	191

Limitations .....	191
References .....	193
Appendices.....	226
Appendix 1: Interview Topic Guides .....	226
Appendix 2: Anonymised Interviewee Descriptor Table .....	232
Appendix 3: List of REO News Files .....	234
Appendix 4: Ethical Approval .....	240
Appendix 5: NVivo Coding Screenshots .....	241
Appendix 6: Interview Consent Form.....	244
Appendix 7: Characteristic Table of selected Empirical EHR studies.....	256
Appendix 8: Reference List of selected Empirical EHR Studies .....	302

## List of Figures

Figure 1. Interrelatedness of the basic concepts in the theory of temporary organisations (Lundin & Söderholm, 1995 p. 451).....	19
Figure 2. Sequencing concepts in the theory of temporary organisations (Lundin & Söderholm, 1995 p. 451).....	21
Figure 3. The four basic phases of a project’s life cycle (PMI, 1987; Lundin & Söderholm, 1995 p. 445) .....	24
Figure 4. Types of Logic Multiplicity Within Organisations (Besharov & Smith, 2014 p. 371) .....	43
Figure 5. Timeline of Data Collection .....	80
Figure 6. Conceptual Framework linking temporary organising characteristics with implementation process categories, illustrating the resulting institutional logic relationship types. ....	189

## List of Tables

Table 1. A typology of temporary organising as form (Bakker et al., 2016 p.1706) .....	26
Table 2. Revised Interinstitutional System Ideal Types (Thornton et al. 2012 p. 73).....	36
Table 3. Overview of key details of both cases. ....	71
Table 4. Key documents analysed in both cases. ....	79
Table 5. HSE Classification of Electronic Records .....	115
Table 6. Health Record types. ....	116
Table 7. Comparison of EHR and Shared Care Record.....	117
Table 8. Coding Structure of the 4Cs.....	136
Table 9. Case 1 represented in terms of Lundin and Söderholm's (1995) four T's. ....	142
Table 10. Case 2 represented in terms of Lundin and Söderholm's (1995) four T's. ....	143
Table 11. Institutional Logics present in Case 1. ....	145
Table 12. Institutional Logics present in Case 2. ....	146
Table 13. Outline of four main Institutional Logics based on Thornton et. al. (2012). ....	149
Table 14. Categorised Assertions in terms of Lundin and Soderholm's (1995) Time. ....	150
Table 15. Categorised Assertions in terms of Lundin and Soderholm's (1995) Task. ....	152
Table 16. Categorised Assertions in terms of Lundin and Soderholm's (1995) Team.....	157
Table 17. Categorised Assertions in terms of Lundin and Soderholm's (1995) Transition. ..	161
Table 18. Assertions categorised by Institutional Logics Relationships.....	169
Table 19. Identified Institutional Logic Relationship Types.....	174
Table 20. Proposed Institutional Logics Relationship types categorised by 4C's and 4T's ...	187

# Abstract

This thesis examines the relationship between temporary organising and institutional logics in large-scale project implementation, focusing on two cases: The Irish Rural Electrification Scheme, and Ireland's National Electronic Health Record Programme. It analyses implementation processes in each case to understand how temporary organising interacts with prevailing institutional logics. Using a multiple case study design and a qualitative methodology, the research explores the complexities and dynamics of temporary organising. Based on insights from the two cases, it develops a novel categorisation of the temporary organising/institutional logic relationship as: Embedded, Constellated, or Decoupled, and identifies four key categories of implementation processes as: Compliance, Competence Building, Collaboration, and Cost (the 4Cs). The findings offer both theoretical contributions, advancing understanding of how temporary organising shapes and is shaped by institutional logics, and practical guidance for managing complex, time-bound projects across instances of temporary organising.

## Glossary of Terms

<b>Term / Acronym</b>	<b>Definition</b>
<b>Backsliders</b>	People who had initially agreed to get electricity but then changed their minds.
<b>eHealth Ireland</b>	The division of the HSE responsible for digital health innovation and the National EHR Programme.
<b>eHealth Strategy</b>	Ireland's 2013 strategic plan for the digital transformation of healthcare.
<b>EHR (Electronic Health Record)</b>	The systematised collection of electronically stored patient and population health information in a digital format. These records can be shared across different health care settings.
<b>EMR (Electronic Medical Record)</b>	A digital version of a patient's chart within a single practice.
<b>ESB (Electricity Supply Board)</b>	The semi-state company responsible for electricity generation, transmission, and distribution in Ireland.
<b>Go-live</b>	The date when a new EHR system, or another new technology, is implemented and becomes the primary, live system for patient care.
<b>HIQA (Health Information and Quality Authority)</b>	Regulates and oversees health information standards, data quality, and safety.
<b>HSE (Health Service Executive)</b>	The national body responsible for delivering public health and social care services in Ireland.
<b>iPMS (Integrated Patient Management System)</b>	A patient administration system used to manage patient demographic and transactional information.
<b>MN-CMS (Maternal &amp; Newborn Clinical Management System)</b>	An Electronic Health Record (EHR) for all women and babies being cared for in maternity, newborn and gynaecology services in Ireland.
<b>NCIS (National Cancer Information System)</b>	An electronic patient information system used in Irish public hospitals to record and manage cancer cases, diagnosis, and treatment.
<b>NIMIS (National Integrated Medical Imaging System)</b>	A national IT project integrating radiology images and reports across Irish hospitals.

<b>NIMS (National Incident Management System)</b>	An electronic system in Ireland for reporting and managing patient safety incidents in public and some private healthcare settings.
<b>PHR (Personal Health Record)</b>	The collection of an individual's medical documentation maintained by the individual or a caregiver in cases where patients are unable to do so themselves.
<b>Rural Electrification</b>	The process of bringing electrical power to rural and remote areas.
<b>Switching-in ceremony</b>	Event where the first electric power was officially turned on in a rural community

# Chapter 1. Introduction

Whether we realise it or not, most of us have taken part in temporary organising at some point. Instances of temporary organising largely involve the management of projects. Many of these projects fail (Al-Ahmad et al., 2009; Brown & Jones, 1998; Herz & Krezdorn, 2021; Moretti & Zirpoli, 2016; Oluseye, 2024; Pak et al., 2025; Zuofa & Ochieng, 2014), a phenomenon widely recognised in organisational and management literature. This thesis doesn't just dissect the institutional context of another failed project born from a temporary organisation. Instead, it examines the complex dynamics between institutional logics and temporary organising, aiming not only to understand the challenges of this relationship but also to develop a robust conceptual framework for categorising these, as advocated by Granqvist & Gustafsson (2016). By drawing on literature in organisation studies, temporary organising, and institutional logics, this thesis synthesises and examines key concepts to propose a framework that captures how institutional logics operate within temporary organisations.

This thesis is situated within the field of organisational theory, with its primary theoretical contribution located in the literature on temporary organising. It draws on institutional theory, and specifically the institutional logics perspective, as an analytical lens through which to examine how temporary organisational forms are structured, governed, and enacted in practice. Institutional logics provide a well-established framework for understanding how organisational action is shaped by broader belief systems, norms, and rules (Thornton et al., 2012), yet their role in temporary, project-based forms of organising remains underexplored.

This thesis makes an original contribution to organisation studies by advancing understanding of the relationship between temporary organising and institutional logics in large-scale project implementation processes. It demonstrates that temporary organisations are not passive recipients of institutional pressures. Rather, they actively mediate, adapt, and sometimes reshape the logics that govern them. Rather than applying existing institutional logics frameworks to a new empirical setting, this research seeks to unpack how temporary organising itself influences the enactment, prioritisation, and negotiation of institutional logics. In doing so, it addresses a theoretical gap in the temporary organising literature, which has tended to focus on coordination, time pressure, and project performance, with less attention to institutional embeddedness and logic relationships.

By identifying three distinct relationship types (Embedded, Constellated, and Decoupled) and identifying 4Cs (Compliance, Competence Building, Collaboration, and Cost) as key categories of implementation processes, this thesis provides a novel conceptual lens for analysing how organisational practices influence outcomes in temporary settings. Empirically, through detailed case studies of the Irish Rural Electrification Scheme and Ireland's National Electronic Health Record Programme, the thesis generates actionable insights for practitioners, showing how these categories guide decision-making, resource allocation, and stakeholder engagement. Theoretically, this thesis advances understanding of temporary organising by demonstrating how different configurations of institutional logics shape, and are shaped by, time-bound organisational forms. In doing so, it also contributes to institutional logics scholarship by showing how the enactment of logics is contingent on the temporal and structural conditions of organising, extending existing theory beyond relatively stable organisational contexts. Practically, the thesis offers a predictive and structured framework for managing complex, time-bound initiatives in instances of temporary organising.

## Institutional Logics

Institutional logics are socially constructed, historical patterns of cultural symbols and material practices including assumptions, values, and beliefs through which individuals and organisations make sense of daily activities, organise time and space, and reproduce their experiences (Thornton et al., 2012). Originally conceptualised by Friedland & Alford (1991) within interinstitutional systems these logics were later refined by Thornton et al. (2012) to include: family, community, religion, state, market, profession, and corporation.

Institutional logics offer structure and order across multiple levels: societal (Friedland & Alford, 1991), field (DiMaggio & Powell, 1983), industry (Thornton & Ocasio, 1999), and organisational (Bettis & Prahalad, 1995). Within organisations, multiple logics can coexist and interact, influencing decision making and shaping action (Thornton & Ocasio, 2008). Examining their relationship with temporary organising illustrates how institutional logics constrain, enable, and are adapted by temporary organisational processes (Ocasio, 2023).

Beyond providing structure, institutional logics help researchers understand how actors are influenced by their positions within overlapping social locations in interinstitutional systems. They serve as frames of reference that guide sensemaking, shape the language actors use to motivate action, and inform their identity and self-concept (Thornton et al., 2012, p.2). By

highlighting these frames, the concept of institutional logics allows scholars to interpret how meaning, motivation, and identity influence organisational behaviour across contexts, insights central to understanding temporary organising in practice.

## Temporary Organising

Temporary organising is inherently time-bound. Given their reliance on historical continuity, studying institutional logics within the inherently time-bound setting of temporary organising reveals how such logics operate and evolve under temporal pressure. This thesis draws primarily on Lundin & Söderholm's (1995) theory of the temporary organisation. Institutional logics influence the translation processes and interorganisational relationships inherent in temporary organising (Dille et al., 2018), while temporality, the negotiated structuring of time, shapes how these logics are enacted (Granqvist & Gustafsson, 2016). Understanding this recursive relationship is crucial for navigating the complexities of temporary organising.

Interest in temporary organising has grown as it has become increasingly common across industries, encompassing short-term projects, temporary organisations, transient networks, and contract-based work (Bakker, 2010; Kenis et al., 2009; Sydow et al., 2004). Its emergent and flexible nature shifts the analytical focus from formal structures to dynamic processes and activities (Bakker et al., 2016). Temporary organising involves clear start and end points, urgency, and operational flexibility (Atkinson, 1990; Jones & Lichtenstein, 2009; Kenis et al., 2009), yet questions remain about the long-term impact of temporary initiatives on organisations and institutional environments.

Globally, there has been an increased need to organise in flexible, ad hoc ways, requiring frequent adaptation to opportunities and changes. Research has documented a rise in temporary organising principles within and across firms (Bakker, 2010; Bakker et al., 2016). The literature emphasises the need to typify patterns and outcomes of temporary organising through more fine-grained conceptualisations of its processes (Sydow et al., 2004). Adopting a strong process view, considering temporary organising as a dynamic process and temporary organisations as a form, promotes "process pluralism" and strengthens theoretical foundations (Bakker et al., 2016; Langley et al., 2013; Tsoukas & Chia, 2002; Bechky, 2006; Burke & Morley, 2016).

Temporary organising is particularly relevant for projects that bring about institutional change, which require actors capable of managing complex processes and aligning activities with

multiple stakeholder interests (Holm, 1995; Nguyen Huy, 2001; Dutton & Duncan, 1987; Hardy & Phillips, 1998; Zietsma & Lawrence, 2010). Institutional studies highlight the importance of agency, collaboration, and motivation, demonstrating how knowledgeable actors translate ideas into normatively acceptable forms (Holm, 1995; Lawrence et al., 2002; Greenwood et al., 2002). Within temporary organising, these dynamics manifest as multiple institutional logics influencing decision making and project implementation. Institutional logics bridge societal-level institutions with organisational and individual practices (Seidel & Berente, 2013), making them particularly well suited for examining projects such as Rural Electrification and the National Electronic Health Record system in Ireland. Over time, shifts in logics reflect changing project focus, as diverse actors contribute distinct perspectives that guide action throughout implementation.

## Implementation

This research focuses on implementation as a practical, often complex process, rather than the broader issue of adoption, which primarily concerns acceptance and use. Adoption is defined as “the phase of investigation, research, consideration and decision making in order to introduce a new innovation into the organisation” (Andriessen, 2003; Bouwman et al., 2005). Implementation, in contrast, refers to “the phase of internal strategy formation, project definition and activities in which an adopted application is introduced within the organisation, with the aim of removing reservations and stimulating the optimum use of the application” (Bouwman et al., 2005).

While adoption can occur both before and after implementation, the two represent distinct stages. This thesis explicitly examines implementation processes as defined by Bouwman et al. (2005), focusing on how innovations are operationalised within organisations, the challenges encountered, and the strategies used to ensure effective uptake. By concentrating on implementation, the research highlights the practical, process-oriented aspects of temporary organising and institutional logics in action.

## Process

A process-oriented perspective highlights the temporal dimension of implementation, emphasising how time shapes activities, decisions, and outcomes. EHR implementation, in

particular, is a complex and time-consuming endeavour (Boonstra & Van Offenbeek, 2017) that often unfolds gradually and incrementally (Hernández-Ávila et al., 2013). The primary benefits of EHR systems are typically realised over the long term, making it essential to view implementation as a sustained change management process (Takian, 2012).

Short-term pressures, however, can jeopardise these benefits. These pressures may emerge when there is insufficient time to adapt the system to local conditions (Hariyati et al., 2020) or when the pace of implementation is constrained by simultaneous projects (Jung et al., 2020). External actors also influence timelines: political considerations can shape procurement arrangements (Sheikh et al., 2011), while vendors may impose tight schedules to meet contractual obligations (Hertzum & Ellingsen, 2019). Understanding implementation as a time-bound, adaptive process is therefore critical for capturing the challenges and dynamics inherent in temporary organising and institutional logics.

## Research Aim and Questions

This thesis examines the relationship between temporary organising and large scale project implementation. To address this, the following research questions were addressed:

1. What are the processes by which large scale projects are implemented?
2. What are the guiding beliefs and assumptions that underpin these processes?
3. How do different combinations of beliefs and assumptions affect implementation processes?
4. How does this contribute to improved theory and practice?

These questions provide a clear structure for investigating the dynamics between institutional logics and temporary organising, while simultaneously generating insights relevant to both theory and practical management of large-scale projects.

## Method

This research adopts a qualitative, multiple case study design, focusing on two cases: the Irish Rural Electrification Scheme and Ireland's National Electronic Health Record (EHR) Programme. This approach enabled an in-depth exploration of temporary organising across distinct contexts, analysing how it manifests and interacts with institutional logics in each case.

Each case was treated as a bounded system, shaped by its historical, political, and institutional environment, allowing for identification of both shared patterns and context-specific influences on organisational practices.

Data was collected through semi-structured interviews, archival sources, and a review of relevant empirical literature and strategy documents. An abductive approach guided the analysis, combining inductive and deductive reasoning. Themes and insights emerged from participants' experiences and were interpreted through the lens of institutional logics. Archival materials provided historical and structural context for the rural electrification case, while the EHR case incorporated prior empirical studies to situate findings within the broader literature and support interpretation of interview data. This combination of methods provided a robust basis for understanding temporary organising and its interaction with institutional logics in large-scale project implementation. It ensured the research addressed the questions posed while generating novel theoretical and practical insights into the implementation process.

## Chapter 2. Literature Review

Before examining the specifics of the case contexts, it is important to situate this research within the relevant literature. This chapter synthesises the literature on temporary organising and institutional logics, which provide the theoretical foundation for the study. It also reviews the literature on implementation processes as they relate to the two specific cases explored in this thesis: Rural Electrification and Electronic Health Record (EHR) system implementation. By focusing on these areas, I set out to establish the conceptual and empirical context necessary for understanding the dynamics of implementation in settings characterised by temporary organising and institutional logics.

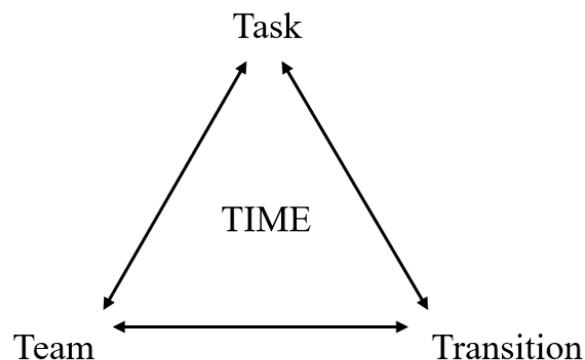
### What is Temporary Organising?

This section explores the concept of temporary organising, focusing first on Lundin and Söderholm's (1995) influential theory of the temporary organisation before examining how later scholars have developed and expanded upon it. It outlines the defining features of temporary organisations, including their focus on Time, Task, Team, and Transition, and considers how these elements interact to distinguish them from permanent organisational forms. The section concludes by situating Lundin and Söderholm's work within the broader literature, highlighting its continued relevance to contemporary understandings of temporary organising.

### A Theory of the Temporary Organisation

Lundin and Söderholm's (1995) theory of the temporary organisation represents a foundational framework for understanding how temporary structures function and why they differ fundamentally from permanent organisations. Their theory develops from the perspective of inside the temporary organisation, placing action at the centre of their analysis. They argue that temporary organisations are formed to address specific needs by "making things happen" within or between organisations, examples of this including task forces, project organisations, committees, and action groups (Lundin & Söderholm, 1995). These temporary organisations play an important role across industries and everyday life. At the time, mainstream organisational theory largely assumed permanence of organisations, with limited attention to

temporary settings such as projects. Lundin and Söderholm (1995) challenged this by offering a theory based on four interrelated concepts; Time, Task, Team, and Transition, which together help distinguish the temporary organisation from permanent ones. Whereas permanent organisations are defined by; goals, survival, stable working structures, and ongoing production processes, temporary organisations are distinguished by their bounded duration (time), their focus on a specific purpose (task), the temporary configuration of people (team), and the emphasis on change or transformation (transition) as seen below in Figure 1 (Lundin and Söderholm, 1995).



*Figure 1. Interrelatedness of the basic concepts in the theory of temporary organisations (Lundin & Söderholm, 1995 p. 451)*

Rather than decision making being central, Lundin and Söderholm suggest that action provides the primary explanatory lens (Lundin & Söderholm, 1995). Empirically, this is justified by the fact that temporary organisations are almost always created to perform specific actions in order to achieve immediate goals (Goodman & Goodman, 1976; Miles, 1964; Palisi, 1970). Previous literature on projects and project management similarly emphasises action as fundamental to success (Borum & Christiansen, 1993). The time-bounded nature of temporary organisations intensifies this focus on action. Time is always finite from the outset, limited by contracts or conditions, and usually ‘well known’ from the beginning (Lundin & Söderholm, 1995). As such, temporary organisations are structured around the consecutive phases of initiation, action, evaluation, and termination. Termination here may involve either disbandment of the organisation or reattachment to a more permanent system (Lundin & Söderholm, 1995). Tasks

are central motivators for creating temporary organisations. They are typically more important to participants in temporary organisations than to those in permanent ones (Katz, 1982; Weick & Roberts, 1993). Tasks may be unique, requiring creativity, flexibility, and visionary action, or repetitive, in which case actors already know what is required and can draw on previous routines (Lundin & Söderholm, 1995). Regardless of type, tasks represent the organising principle around which teams assemble and resources are mobilised.

A defining feature of temporary organising is its orientation toward change, achieving transformation within the limits of a finite timeframe. Temporary organisations depend heavily on the will, commitment, and ability of individuals for their creation, development, and termination (Lundin & Söderholm, 1995). Team formation occurs around the task at hand and the available time, making the people who are part of that team both resources and bearers of conceptions, attitudes, and expertise. Commitment building often requires fragmentation, delimiting the scope, simplifying tasks, and providing time horizons. This secures engagement from members, particularly in unique tasks where roles are not pre-defined (Lundin & Söderholm, 1995). Temporary organisations are designed to bring about some form of change, creating a qualitative difference between the “before” and “after” states of the organisation (Lundin & Söderholm, 1995). Aspirations and accomplishments associated with transition are therefore central. However, the temporary organisation is not simply a vehicle for task completion but a means of achieving broader transformation. As their existence is sequential by nature, temporary organisations can be understood in phases. Initial stages involve clarifying tasks, resources, and conditions. Subsequent phases emphasise action, with later stages focusing on evaluation and termination (Lundin & Söderholm, 1995). The sequencing of action against time is, as a result, a defining feature of temporary organising shown here in Figure 2.

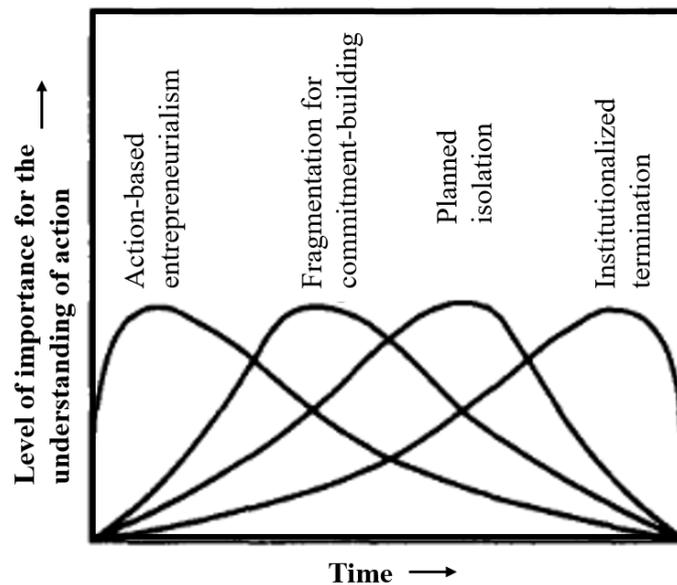


Figure 2. Sequencing concepts in the theory of temporary organisations (Lundin & Söderholm, 1995 p. 451)

While Lundin and Söderholm's (1995) framework remains foundational, later scholarship has expanded and reinterpreted their ideas to reflect the evolving nature of temporary organising in contemporary organisational life. Lundin & Söderholm (1995) provide the above illustration of the sequencing concepts in the theory of temporary organisations. This sequencing is important because it captures how temporary organisations evolve dynamically through distinct but interrelated phases, emphasising progression and transformation rather than stability. More recent scholarship, such as Bakker et al. (2016), builds on Lundin and Söderholm's framework and offers updated perspectives. Bakker et al. (2016) highlight the increasing relevance of temporary organising in contemporary contexts, where projects, teams, and task forces are central to organisational life. While their account differs in some respects, it remains grounded in the conceptual foundation established by Lundin and Söderholm. Recent scholarship continues to revisit and extend these foundational ideas, emphasising the processual, practice-based, and relational nature of temporary organising. For example, Brunet et al. (2025) argue for renewed theorisation of temporary organising that bridges organisation theory and project studies, highlighting the importance of practices, processes, and tensions in contemporary temporary forms. Relatedly, Sydow et al. (2025) revisit the 4T framework (Time, Task, Team, and Transition), demonstrating how increased complexity and organisational

fluidity require a more dynamic understanding of temporariness. Other recent studies foreground the lived experience of temporary organising, examining issues such as identity, legitimacy, and organisational climate within time-bounded organisational forms (Söderlund et al., 2025; Gilardi et al., 2025). Collectively, this body of work reinforces the continuing relevance of Lundin and Söderholm's framework while also demonstrating how it can be productively extended to capture contemporary forms of temporary organising.

This more recent scholarship provides valuable extensions and contemporary perspectives on temporary organising (Brunet et al., 2025; Gilardi et al., 2025), however Lundin & Söderholm's (1995) framework remains the most suitable foundation for this thesis. It captures the fundamental dynamics of temporary organisations and aligns closely with the analytical focus of this study. The framework's clarity and generalisability make it a robust basis for combining with institutional logics theory, allowing the thesis to integrate newer insights without losing conceptual coherence. Therefore, returning to the original framework, as others have done, provides the clearest basis for combining it with institutional logics and integrating newer conceptual insights. This thesis will, accordingly, use Lundin and Söderholm's (1995) framework for discussion and understanding throughout.

## Background and Types of Temporary Organising

This section provides an overview of the main conceptualisations and types of temporary organising found in the literature. I begin by outlining the defining characteristics of temporary organising and the major perspectives identified by Bakker et al. (2016). I then explore how time, uncertainty, and coordination shape these forms of organising, paying particular attention to projects as the most prominent example. I conclude by discussing the variety of temporary organisational forms and their configurations, situating the present research within this broader theoretical landscape.

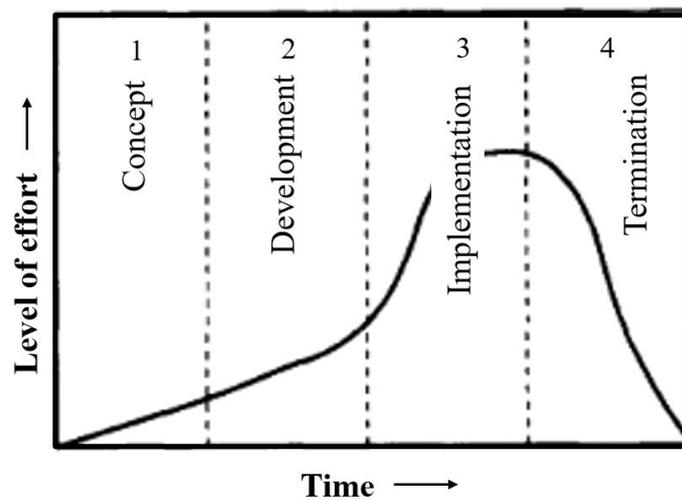
Temporary organising is most commonly defined by its finite duration and the expectation of eventual dissolution, but scholars have approached it from multiple conceptual perspectives. Temporary organising refers to the activities and practices associated with collectives of interdependent individual or corporate actors who pursue previously agreed-upon task objectives within a predetermined time frame (Burke & Morley, 2016; Goodman & Goodman, 1976; Lundin & Söderholm, 1995). A defining feature of such organising is its "institutionalised termination" (Lundin & Söderholm, 1995, p. 445), meaning collaboration is

expected to end. In practice, however, the actual duration of temporary organisational forms may deviate substantially from initial agreements (Bakker et al., 2016). The literature debates what temporary organising is or what it should be. Bakker et al. (2016) propose three perspectives: temporary organising as process, as form, and as a perspective.

The process view focuses on the unfolding dynamics of organising, highlighting how actions and relationships evolve over time. The form approach views temporary organising as a structural arrangement with defined boundaries and lifespans, while the perspective view treats temporariness as a lens through which to understand organisational life more broadly. This thesis focuses on the process approach, as it best captures the dynamic, time-bound, and change-oriented features of temporary organising central to the empirical cases examined. Temporary organising is inherently dynamic, with stability constantly challenged (Farjoun, 2010). Such organisations are often described as enabling superior energy output (Miles, 1964), higher levels of creativity and innovation (Kenis et al., 2009), and even a “hyper-efficient organisational form freed from any organisational slack” (Grabher, 2004, p. 1491). For some, this has led to claims of a new “logic of organising” (Burke & Morley, 2016; Powell et al., 1996).

Time and uncertainty lie at the heart of temporary organising, with temporal mechanisms such as deadlines and milestones serving as essential coordination tools. Time-based controls, such as shared schedules, deadlines, and milestones, help coordinate different teams and ways of working. They align people’s varying approaches to time and local knowledge, preventing temporary organisations from becoming too focused on their own local priorities (Lindkvist et al., 1998). Such mechanisms help maintain diversity by providing a shared framework that enables different professional groups or local units to contribute distinct perspectives without fragmenting the overall effort. In this way, temporal coordination allows diversity to be preserved while reducing overly localised orientations that could hinder collaboration. These mechanisms also help manage tensions between professional and organisational cultures, avoiding “collaborative paralysis” (Burke & Morley, 2016; Grabher, 2002; Söderlund, 2003). Uncertainty and ambiguity are fundamental characteristics of temporary organisations (Ibert, 2004; Kreiner, 1995; Lundin & Söderholm, 1995). Engwall (2002) argues that goal ambiguity can even be a necessary precondition for coalition building at the initiation stage, as it allows different interests to coexist (Burke & Morley, 2016). Despite extensive attention to these features, the specific organisational processes underpinning the formation of temporary organisations and their influence on outcomes remain underexplored.

Projects are among the most widely recognised and studied forms of temporary organising, typically conceptualised as progressing through a defined life cycle: concept, development, implementation, and termination, illustrated in Figure 3 (Lundin & Söderholm, 1995; Project Management Institute, 2004). Projects as temporary organisations play a fundamental role in industrial and societal development, contributing to the transformation of institutions and permanent organisations (Dille & Söderlund, 2013). They are a particularly prominent feature of contemporary organisational practice, reflecting the growing tendency to structure work and innovation through discrete, time-bound initiatives.



*Figure 3. The four basic phases of a project's life cycle (PMI, 1987; Lundin & Söderholm, 1995 p. 445)*

Early studies of temporary organising provided the conceptual foundation for understanding projects as distinctive organisational forms. Many early studies explicitly used the project concept while, in practice, examining temporary organisations in a broader sense (Hellgren & Stjernberg, 1987; Sahlin-Andersson, 1992; Sapolsky, 1972; Stinchcombe, 1985). Building on this early work, Lundin and Söderholm (1995) proposed a linear model of development comprising four distinct phases. While influential, this model is not the only accepted conception of temporary organising. In parallel, Packendorff (1995) defined a temporary organisation as an organised collective course of action aimed at evoking a non-routine process and/or producing a non-routine outcome. Such organisations have a predetermined end point

or condition when the organisation and/or its mission is expected to cease, are subject to performance evaluation criteria, and are sufficiently complex in roles and structures to require conscious organising efforts. Packendorff (1995) also illustrated key research focus in project management, showing how projects can be viewed both as tools and as temporary organisations.

Alternative models, such as Gersick's (1989) punctuated equilibrium model, offer different insights into how time and adaptation shape temporary organising. Gersick's (1989) model suggested that groups make deliberate attentional shifts at their temporal midpoint, guided by awareness of deadlines.. Once primarily practitioner-driven and normative, project management became the focus of growing scholarly interest, particularly regarding the role of these temporary structures in organisations (Engwall, 2003). Several scholars highlight the increasing prevalence of project-based and time-limited organisational structures, leading towards a "projectified society" (Lundin & Söderholm, 1998). Relatedly, broader trends toward nonstandard work arrangements such as part-time, temporary, and contract work highlight the importance of temporariness in contemporary employment relations (Kalleberg, 2000).

Some scholarship integrates multiple views of temporary organising, recognising its coexistence as both a process and a form (see Bakker et al., 2016). Alternative perspectives highlight non-linear or dynamic processes. Burke and Morley (2016) note that more dynamic temporary organising processes are prone to unanticipated developments and outcomes. Nevertheless, temporary organising generally aims at 'reflexive structuration', using rules, routines, and resources to coordinate, enable, and restrain the actions of actors within and beyond the focal entity (Bakker et al., 2016). There are many different forms of temporary organising, with time playing varying and important roles in all forms. Temporary organising, when viewed primarily as form (Lundin & Söderholm, 1995), focuses on the temporary organisations produced through temporary organising, formal organisations or social systems designed to dissolve within a predetermined time frame (Bakker et al., 2016). Researchers adopting this perspective often broaden the definition to include structures awaiting enactment, reproduction, or transformation by participating agents (Bakker et al., 2016; Kenis et al., 2009; Lundin et al., 2015). Bakker et al. (2016) provide a typology of temporary organising as form, reproduced here in Table 1, noting that organisational forms differ not only in temporariness but also in whether temporariness is orchestrated primarily by agents or structures.

Table 1. A typology of temporary organising as form (Bakker et al., 2016 p.1706)

Structure\Actor	Temporary	Permanent
Temporary	(1) Temporary, ephemeral or disposable organization	(2) Semi-temporary organization (PSO, PBO, PNW)
Permanent	(3) Semi-permanent organization with temporary employment	(4) Permanent organization

Some of the literature also frames temporary organising as a distinct “logic of organising” (Powell et al., 1996, p.197), emphasising the centrality of time and temporality. Time plays a critical role in both theoretical and empirical analyses of temporary organising. Temporary systems evolve as projects progress through phases of development, conceptualised as a collaborative path (Manning & Sydow, 2011) or reconfiguration (Bakker, 2016). The distinction between what is “permanent” and “temporary” is often blurred, with temporary organising understood relative to the permanent structures, institutions, and networks in which it is embedded (Bakker, 2010; Burke & Morley, 2016; Grabher, 2004; Manning & Sydow, 2011; Schwab & Miner, 2008). It is not the aim of this thesis to establish the differences between permanent and temporary organising, however, references to permanent organising have been included where they provide context for understanding temporary organising.

Temporary organisations are often embedded within, and interdependent with, more permanent structures, blurring the boundaries between the temporary and the enduring. Many temporary organisations have a parent or permanent organisation to which they are attached or by which they have been produced. Temporary organising is embedded within more permanent contexts, and project networks frequently represent recurring collaborations that extend beyond individual projects, differing from conventional joint ventures or alliances (Bakker et al., 2016; Jones & Lichtenstein, 2009; Sydow & Windeler, 2020). Teams, whether permanent or temporary, are pervasive organisational units, and growing research has focused on the characteristics and performance of temporary teams (Kenis et al., 2009; Mathieu et al., 2008; Stewart, 2006). Söderlund (2000) provides a typology of permanent/temporary organising using participation and structure which helps distinguish between different combinations of permanence and temporariness in organisational life, clarifying how temporary organising differs from both traditional employment and project-based structures.

Contemporary studies highlight the diversity of temporary organisational configurations and the multiple factors shaping their effectiveness. Burke and Morley (2016) categorise temporary organisations based on intra- or interorganisational nature and the extent of ‘projectification’, noting five broad factors influencing temporary organisation configuration: individual/team attributes; temporary organisation task attributes; tensions with permanent organisations; networks and fields; and performance outcomes. Temporary organisations can range from intraorganisational projects within permanent structures (Shenhar, 2001) to interorganisational project ventures (Bakker et al., 2011; Whitley, 2006). Interorganisational temporary organisations span multiple organisations and are defined by temporality, whereas project-based organisations may constitute the organisation itself (Bresnen et al., 2004). Temporary organising tends to prioritise task completion and performance evaluation. Deadlines serve as key criteria for temporary organisation evaluation (Grabher, 2002), while task progression and attainment of predefined states are central to defining project success (Lundin & Söderholm, 1995). Saunders & Ahuja (2006) highlight that temporary distributed teams prioritise effectiveness over long-term efficiency. Frameworks for evaluating project success include multidimensional strategic criteria (Shenhar, 2001) and performance, market outcomes, and learning effects (Blindenbach-Driessen & Van den Ende, 2006). Time and temporal structures are essential to understanding temporary organising. Gersick (1989) and Lindkvist et al. (1998) examine the consequences of time pressure, while Rämö (2002) distinguishes chronological and non-chronological time.

This thesis situates its focus on temporary organising at the level of the project, where processes of coordination, learning, and change are most visible. To contextualise this level of analysis, it is useful to note that temporary organising can occur at multiple levels, from teams and projects to programmes, networks, and interorganisational collaborations. Focusing on the project level introduces elements of project management, including stakeholder conflicts, agent roles, and monitoring systems to prevent opportunism (Turner & Müller, 2003). Turner and Müller further define projects as temporary organisations that integrate resources for novel, transient endeavours while managing uncertainty to achieve beneficial change. Grabher (2002) and Sydow et al. (2004) highlight that projects rely on networks, institutions, and norms, situating temporary organising within broader societal infrastructures. Process-oriented perspectives emphasise the relationship between past, present, and future in analysing projects, highlighting “theories in use” (Blomquist et al., 2010). Temporary project-based systems offer flexible, task-specific resource allocation, promising hyper-efficient organisational forms

(Grabher, 2004; Lundin & Söderholm, 1995; Sydow et al., 2004). Organisation members' temporal experiences and coordination practices create temporal norms, influencing flexibility, pacing, and scheduling (Ballard & Seibold, 2003; Orlikowski & Yates, 2002). Temporary organising represents an emergent, enduring, and theoretically significant process, organisational form, and perspective that warrants research attention (Bakker et al., 2016; Burke & Morley, 2016).

## Projects

In this section I define what constitutes a project and explore how projects operate within and beyond organisational contexts. I introduce the concept of project-based organisations, highlight the distinctive management challenges they face, and consider large-scale projects, often termed megaprojects, to illustrate how projects reflect broader social, cultural, and institutional dynamics. I then conclude by linking these discussions to the thesis' focus on how projects, as temporary organisations, shape and are shaped by their surrounding contexts.

Projects are not isolated entities. They are intricately connected to their surrounding organisational and institutional contexts (Engwall, 2003; Grabher & Thiel, 2015). Modern definitions emphasise that projects are defined by their temporal limitation rather than simply by duration. Temporal limitation refers to the inherent expectation that a project will end once its objectives are achieved, whereas duration describes only the passage of time. Temporal limitation defines the purpose-driven temporariness of projects, while duration is a descriptive measure. Project legitimisation is based on a specific task, which may be either complex and non-routine or standardised (Grabher, 2002).

Management practices in project-based organisations present distinctive challenges for knowledge diffusion and organisational learning. In project-based organisations, embedding new management knowledge is particularly difficult due to the weak links between organisation-wide change initiatives and project management practice (Bresnen et al., 2004). Features such as decentralisation, a short-term emphasis on project performance, and distributed work practices critically shape the adoption and embedding of new management practices (Bresnen et al., 2004). Projects, rather than being vehicles for creativity, can sometimes create barriers to innovation when they privilege short-term task performance over long-term knowledge accumulation (Bresnen et al., 2004). The decentralised and time-constrained nature of projects, combined with loose coupling between them, creates highly

distributed working practices that pose particular challenges for diffusing and embedding new knowledge within the firm (Bresnen et al., 2004; Sydow et al., 2004).

Project-based organisations differ from traditional organisational forms in both structure and purpose, with some but not all projects qualifying as temporary organisations. Projects in sectors such as engineering, construction, aerospace, and parts of the media (Hobday, 2000) do not simply occur alongside established routine activities. Some projects are not temporary organisations in the full sense. They may represent recurring operational tasks or internal initiatives that lack a defined endpoint. In contrast, projects that are discretely and consciously designed with a fixed time horizon are considered temporary organisations (Kreiner, 1995). Despite their temporariness, projects may be executed by participants who share a history of collaboration and/or expect to collaborate again in the future beyond the current project (Granovetter, 1985; Jones & Lichtenstein, 2009; Ligthart et al., 2016). A project is undertaken to deliver beneficial change and is typically characterised by three essential features: it is unique, no project before or after will be exactly the same; it uses novel processes, new or adapted methods; and it is transient, defined by a clear beginning and end.

Large infrastructure projects exemplify the scale, ambition, and complexity of project-based organising. These large infrastructure projects, like the ones discussed in this thesis, are sometimes referred to as megaprojects (Müller-Mahn et al., 2021). The projects in this thesis may be classed as megaprojects, following Flyvbjerg's (2014) categorisation as typically costing a billion dollars or more, taking many years to develop and build, involving multiple public and private stakeholders, and being transformational, impacting millions of people. Megaprojects can be viewed as vast development schemes that are "particularly ambitious, expensive, and difficult to manage," with a tendency to fall short of their initial objectives (Schindler et al., 2019). These ventures, characterised by their complexity, extensive development timeline, and far-reaching impacts on numerous stakeholders, have garnered significant attention in academic research (Flyvbjerg, 2014). They are a popular policy measure used to stimulate economic growth (Aschauer, 1990). Müller-Mahn et al. (2021) propose that megaprojects be understood as large-scale constructions that explicitly affect the future, functioning as tools of future making.

Conceptualisations of power stemming from culture, understood here as the shared meanings, values, and symbolic systems that shape perception and behaviour, suggest that the influence of megaprojects derives not only from their material form but also from their power over how

people imagine and interpret change (Müller-Mahn et al., 2021). Though they do not always fail, the impractical nature of many megaprojects, which often proceed with little consultation or participatory engagement, may contribute to their failure. Consequently, local input is not only desirable but also practically necessary (Mkutu et al., 2019; Stetson, 2012), a point that will be evident in both case studies.

The governance and outcomes of megaprojects reflect complex power dynamics and differing institutional logics. Seidel & Berente (2013) discuss how different logics gain and lose legitimacy over time, taking different forms at various stages of a project, an idea that helps explain the shifting priorities and contestations typical of megaprojects. The governance of these projects is often described as “partly fuzzy” (Mosley & Watson, 2016) because of the involvement of governmental and non-governmental actors, private sector participants, and international funding agencies. Scott (1998) argues that state-led, top-down projects frequently fail because they do not fit local conditions. The disappointing performance of megaprojects may not be entirely accidental as “exaggerated promises, weak governance structures, lack of control, and insufficient accountability” can create opportunities for extraordinary profit (Mosley & Watson, 2016).

Megaprojects contribute to future making, regardless of whether they achieve their stated goals (Müller-Mahn et al., 2021). Decision-makers often engage in what can be described as wishful thinking, by presenting desired futures as if they were already real to persuade investors, donors, and local communities. Megaprojects rarely result in clear success or failure but typically fall somewhere in between, with their legacies extending beyond completion through their social, political, and symbolic effects.

## What are Institutional Logics?

This section introduces the institutional logics perspective, explaining its conceptual foundations and analytical applications. It defines institutional logics, describes ideal types, and discusses embeddedness, decoupling, and multiple levels of institutional logics. The section also addresses the relationships between logics, highlighting their recursive influence on practices, organisational identities, and social action.

Institutional logics provide a framework for understanding how societal-level patterns shape organisational and individual behaviour. This research uses Thornton et al.’s (2012)

conceptualisation of institutional logics as the guiding framework throughout. Many detailed overviews of the literature exist (Ocasio et al., 2017; Thornton et al., 2012; Thornton & Ocasio, 2008). Although intuitively attractive, the concept is difficult to define and apply analytically. Thornton and Ocasio (2008) define an institutional logic as the socially constructed, historical patterns of cultural symbols and material practices including assumptions, values, and beliefs through which individuals and organisations make sense of daily activities, organise time and space, and reproduce their experiences. Thornton et al. (2012) identify seven ideal-type institutional logics: family, community, religion, state, market, profession, and corporation. Recent scholarship has continued to develop the field, emphasising the dynamic, practice-based, and contextually contingent nature of logics (Schildt & Kodeih, 2025; Lounsbury & Wang 2024; Sloot et al., 2024). These studies highlight that logics are enacted, negotiated, and sometimes contested in organisational settings. Thornton et al.'s (2012) framework is the most widely used and agreed-upon in the field, providing a robust conceptual foundation for analysing the interplay between logics and temporary organising.

The institutional logics perspective has grown into a rich and diverse field since its formal inception. Although there were mentions of the concept prior to 1990, the literature on institutional logics began with Friedland & Alford's 1991 publication. Since then, it has expanded into a large and diverse area of organisational research (Haveman & Gualtieri, 2017). Importantly, the institutional logics perspective is not merely an extension of new institutional theory; it is a metatheoretical framework for analysing the interrelationships among institutions, individuals, and organisations in social systems (Thornton & Ocasio, 2008).

Thornton and Ocasio (2008) outline five core metatheoretical principles of institutional logics:

1. Embedded agency: the duality of agency and structure, recognising that actors both shape and are shaped by institutions.
2. Society as an interinstitutional system: institutional orders are interconnected, and actors are nested within multiple levels (individual, organisational, field, societal).
3. Material and cultural foundations of institutions: each institutional order possesses both material (structures and practices) and symbolic (ideas and meanings) elements, which are intertwined and mutually constitutive.
4. Historical contingency of institutions: institutions are shaped by historical contexts, consistent with institutional theory.

5. Institutions at multiple levels of analysis: institutional logics operate across levels, from social-psychological to organisational field and social sector (Thornton et al., 2012).

The institutional logics perspective provides a theory of cultural heterogeneity, specifying the cultural content of institutions according to one or more of the seven orders. It offers a framework for understanding how logics guide practices, identities, and decision-making, while allowing for change and transformation over time (Thornton et al., 2012).

A central feature of institutional logics is their recursive relationship with organisational practices. Practices are guided by existing institutional logics, yet when practices are altered or new ones established, they can reproduce or transform logics (Thornton et al., 2012). Institutional logics also underpin the identities of organisations, groups, and individuals (Thornton, 2004). The perspective addresses power dynamics and resistance, highlighting conditions under which actors resist institutional control or engage in political struggle (Lawrence, 2008; Oliver, 1991). Symbolic representations within logics can take three forms: theories, frames, and narratives. Theories enhance coherence and support adoption of practices; frames facilitate identification, mobilisation, and agency; and narratives connect theories and frames to specific practices. However, symbolic representations alone do not constitute a logic; they must be embodied in practice (Thornton et al., 2012). Institutional logics evolve through both developmental and transformational change. Developmental changes involve assimilation, elaboration, expansion, or contraction of prevailing practices and symbols, largely retaining core elements. Transformational changes are more radical, reshaping practices and symbols through processes such as replacement, blending, or segregation (Thornton et al., 2012).

Institutional logics build upon but are distinct from earlier institutional theories. While Thornton provides the primary framework, the groundwork laid by other authors is important. Institutional logics theory emerged from new institutional theory but remains distinct in its focus on the interplay between societal-level institutions and organisational action (Haveman & Gualtieri, 2017). The earliest precursor to institutional logics is Weber's concept of the Protestant ethic. This is the moral view that individuals should strive to achieve success through hard work and thrift, with success as an indicator of divine grace, which Weber argued drove the rise of capitalist enterprise in Western society (Haveman & Gualtieri, 2017; Weber, 1958). Friedland & Alford (1991) observed that organisational and economic studies often yield

period-specific findings, highlighting the dynamic and historically contingent nature of institutions.

Neo-institutional theory underpins the development of institutional logics. Neo-institutional theory, developed by DiMaggio and Powell (1983, 1991), emphasised organisational fields in shaping structure and practice. Hirsch & Lounsbury (1997) note that “old” institutionalism connects more closely to action, while “new” institutionalism emphasises structure. DiMaggio (1991) introduced ideal types into institutional analysis, bridging historical and organisational research. Scott’s (1995) three pillars (regulative, normative, and cultural-cognitive) offer a complementary understanding of institutions. The regulative pillar concerns rules and sanctions, the normative pillar specifies values and roles, and the cultural-cognitive pillar addresses shared understandings of reality and identity. Scott’s (1995) typology remains an influential alternative to the institutional logics perspective, serving as a useful classification rather than a framework for theoretical integration (Scott, 1995)

Friedland and Alford (1991) extended institutional theory by emphasising societal-level dynamics. They proposed a societal-level theory, the interinstitutional system, highlighting that institutionalisation stems from societal structures rather than solely from organisational fields. Their non-functionalist approach views society as a potentially contradictory interinstitutional system. Jackall (1988) similarly defined institutional logic as “the complicated, experientially constructed, and thereby contingent set of rules, premiums, and sanctions that men and women in particular contexts create and recreate in such a way that their behaviour and accompanying perspective are to some extent regularised and predictable.” These insights informed Thornton and Ocasio’s (1999) conceptualisation of institutional logics as socially constructed, historically contingent patterns integrating structural, normative, and symbolic dimensions.

Friedland & Alford (1991) also distinguish two perspectives on individuals’ relationship to logics: one emphasises opportunity, where contradictory logics create space for agency and change (Greenwood & Suddaby, 2006; Holm, 1995; Seo & Creed, 2002); the other emphasises constraint, where dominant logics shape preferences, interests, and actions, guiding behaviour through core organising principles rather than prescriptive scripts (Powell & DiMaggio, 1991; Zucker, 1977). This reflects the embedded agency perspective, where social action is culturally embedded within institutional logics.

The strategy literature highlights how logics influence managerial attention and innovation. Bettis & Prahalad (1995) introduced the concept of “dominant logic” to describe how

organisational context filters managerial attention. Greenwood et al. (2002) found that individuals with high interorganisational mobility are better able to recognise heterogeneous institutional arrangements, facilitating reflective capacity for innovation and institutional change. Much of the literature emphasises competing logics, arising from distinct organisational forms (Lounsbury, 2007) or different practices within the same form (Reay & Hinings, 2009). The process of changing logics is variable and context-dependent, encompassing multiple forms of institutional change (Murray, 2010). The first detailed analysis was by Friedland & Alford (1991), drawing on social constructionism (Berger & Luckman, 1967) and the new cultural focus in social sciences (Friedland & Mohr, 2004). New institutionalists in the 1970s and 80s challenged realist and rationalist accounts, emphasising that rationality is socially constructed and institutionally embedded (DiMaggio & Powell, 1983; J. W. Meyer & Rowan, 1977; Zucker, 1977). By linking institutions to action, the institutional logics perspective bridges macro-structural analyses with micro-level, process-oriented approaches.

## Ideal Types

In this section I discuss the concept of ideal types within the institutional logics perspective. The definition of ideal types adopted in this thesis draws on the formulation developed by Thornton et al. (2012), whose work is widely regarded as a seminal and foundational contribution to the institutional logics literature. I explain how ideal types and institutional orders are used to analyse society as an interinstitutional system, highlighting their dynamic, multilevel, and historically contingent nature. I also examine mechanisms of institutional change and the risks of reifying logics, situating ideal types as analytical tools for understanding complex organisational phenomena. While subsequent research has continued to engage with and apply this framework, Thornton et al.'s conceptualisation remains particularly influential and appropriate for the analytical focus of this thesis.

Ideal types and institutional orders are closely connected. Thornton et al. (2012) propose conceptualising society as an interinstitutional system, employing a typological method to understand the origin and transposition of cultural symbols and material practices that underlie institutional change (Thornton et al., 2012, p.124). Representing societal-level culture as an X,Y matrix of institutional orders, shown below in Table 2, allows researchers to theorise and measure the differentiated, fragmented, and sometimes contradictory influence of culture on

cognition and behaviour in institutional fields (Thornton et al., 2012, p.123). Conceptualising society as a nearly decomposable interinstitutional system provides tools to analyse how individuals and organisations are situated in multiple institutional orders, explaining varying effects on their cognition and behaviour (Thornton et al., 2012, p.127).

Thornton et al. (2012) present the interinstitutional system as an ideal type, enabling researchers to translate social science observations into mechanisms, what Hernes (1998) refers to as a “virtual reality.” This allows aggregation and disaggregation of mechanisms to be theorised as analytically distinct (Thornton et al., 2012, p.14). Ideal types are formal analytical models rather than descriptions of particular organisational fields, research contexts, or levels of analysis. They serve as abstract models for gauging the relative distance of observations from the pure or ideal form and are best developed in pairs or multiple characterisations to allow for generalisation and comparison (Thornton et al., 2012, p.53). The goal is to provide a rich yet generalisable understanding of the processes shaping institutional outcomes.

Table 2. Revised Interinstitutional System Ideal Types (Thornton et al. 2012 p. 73)

<b>Y-Axis:</b>	<b>X-Axis: Institutional Orders</b>						
<b>Categories</b>	<b>Family 1</b>	<b>Community 2</b>	<b>Religion 3</b>	<b>State 4</b>	<b>Market 5</b>	<b>Profession 6</b>	<b>Corporation 7</b>
<b>Root Metaphor 1</b>	Family as firm	Common boundary	Temple as bank	State as redistribution mechanism	Transaction	Profession as relational network	Corporation as hierarchy
<b>Sources of Legitimacy 2</b>	Unconditional loyalty	Unity of will Belief in trust & reciprocity	Importance of faith & sacredness in economy & society	Democratic participation	Share price	Personal expertise	Market position of firm
<b>Sources of Authority 3</b>	Patriarchal domination	Commitment to community values & ideology	Priesthood charisma	Bureaucratic domination	Shareholder activism	Professional association	Board of directors Top management
<b>Sources of Identity 4</b>	Family reputation	Emotional connection Ego-satisfaction & reputation	Association with deities	Social & economic class	Faceless	Association with quality of craft Personal reputation	Bureaucratic roles
<b>Basis of Norms 5</b>	Membership in household	Group membership	Membership in congregation	Citizenship in nation	Self-interest	Membership in guild & association	Employment in firm
<b>Basis of Attention 6</b>	Status in household	Personal investment in group	Relation to supernatural	Status of interest group	Status in market	Status in profession	Status in hierarchy
<b>Basis of Strategy 7</b>	Increase family honor	Increase status & honor of members & practices	Increase religious symbolism of natural events	Increase community good	Increase efficiency profit	Increase personal reputation	Increase size & diversification of firm
<b>Informal Control Mechanisms 8</b>	Family politics	Visibility of actions	Worship of calling	Backroom politics	Industry analysts	Celebrity professionals	Organization culture
<b>Economic System 9</b>	Family capitalism	Cooperative capitalism	Occidental capitalism	Welfare capitalism	Market capitalism	Personal capitalism	Managerial capitalism

The X,Y cell contents of the interinstitutional system matrix vary depending on the instantiation of institutional logics in the research context. These contents are analytical interpretations, not direct descriptions of empirical instances, highlighting key concepts and foreshadowing testable hypotheses (Thornton et al., 2012, p.59). Ideal types discipline researchers to identify abstract categories that simplify and distil the properties of practices and their expected outcomes. They also provide a means of clustering individuals and organisations into categorical types to measure and explain deviation from the pure form of an institutional logic. The pure form represents an analytical abstraction capturing the core assumptions, values, and practices of a logic, even if these rarely exist in isolation in empirical settings (Thornton et al., 2012). By comparing observed practices to the pure form, researchers can identify hybridisation, variation, and institutional change.

Institutional orders are dynamic, evolving through historical interdependence and mutual influence. Change and stability within the interinstitutional system depend on the interdependence among orders. Overdominance or autonomy of a single order can induce instability, whereas symbiotic interdependence can restore balance through feedback mechanisms. Institutional orders moderate one another. For example, the state, professions, and religion may check extreme market practices, while the market can constrain an overly dominant state (Thornton et al., 2012, p.120). Thornton et al. (2012) propose that the pace of change of institutional orders (X axis) is generally slower than that of their elemental categories (Y axis) noting that the parts often change faster than the whole. Mechanisms of institutional change include invasion and succession, in which symbols and practices of one order transform another, sometimes leading to partial self-destruction, and structural overlap, where previously separate roles and functions are forced into association by external change (Thornton et al., 2012, p.122).

The movement of categorical elements between institutional orders depends on complementarity and conflict. Orders that complement each other exhibit greater transposition capacity than those in conflict. The availability of logics depends on individuals' and organisations' vertical specialisation within an order and horizontal generalisation across orders. Contradictory versus complementary elemental categories influence the blending, segregation, and recombination of logics (Thornton et al., 2012, p.126). While ideal types are valuable analytical tools, researchers should avoid reifying logics by treating them as stable, fixed entities because they are heuristic constructs rather than rigid realities (Furnari, 2020; Ocasio et al., 2016; Ocasio & Gai, 2020). This multilevel perspective allows researchers to

analyse institutions historically, account for embedded yet autonomous agency, and measure institutional influences both internal and external to individuals and organisations (Thornton et al., 2012, p.127).

## Embeddedness

This section examines the concept of embeddedness in the institutional logics perspective. It then explains how actors are both constrained by and partially autonomous from prevailing logics, explores multiple forms and levels of embeddedness, and discusses the implications for individual and organisational behaviour. The section concludes by highlighting mechanisms through which actors can navigate and transform institutional constraints.

Embedded agency captures the tension between constraint and autonomy within institutional logics. A central premise of the institutional logics perspective is that the interests, identities, values, and assumptions of individuals and organisations are embedded within prevailing institutional logics (Thornton & Ocasio, 2008; Seo & Creed, 2002; Battilana, 2006; Greenwood & Suddaby, 2006). Thornton and colleagues (Thornton & Ocasio, 1999, p. 804; Thornton, Ocasio, & Lounsbury, 2012, p. 2) emphasise agency more strongly than Friedland and Alford (1991). They introduce the concept of “embedded agency” to reflect the dual nature of institutional logics: while logics constrain the choices available to individuals, groups, and organisations, they also provide opportunities for actors to socially construct and reconstruct logics in ways that reflect their interests. This means actors are embedded within institutional logics yet retain partial autonomy from them (Haveman & Gualtieri, 2017).

Embedded logics operate across multiple levels, creating both constraints and opportunities for institutional change. These logics function at the level of individuals, organisations, and society, with nested structures that allow some degree of decoupling and autonomy within and across institutional orders (Friedland & Alford, 1991; Thornton, 2004). Recognising both embeddedness and partial autonomy is crucial for understanding how actors can socially construct and transform institutions (Berger & Luckmann, 1967). The paradox of embedded agency arises from the tension between constraint and change: if actors’ actions and rationality are conditioned by the same institutions they aim to influence, how can they shape or transform these institutions? Despite this tension, embedded agency is not merely a source of inertia. It also provides pathways for significant institutional change (Holm, 1995; Seo & Creed, 2002).

Sociological perspectives enrich the understanding of embeddedness in organisational contexts. Granovetter (1985) critiques rational choice theory by showing that individual choices, while instrumental, are situationally constrained by social networks, a concept influential in studies of interorganisational relations (Uzzi, 1997). Zukin & DiMaggio (1990) distinguish between several forms of embeddedness. Cognitive embeddedness refers to structured regularities of mental processes that limit economic reasoning, though this is less central to Thornton et al.'s (2012) conception. Cultural embeddedness reflects shared collective understandings that shape strategies and goals; actors deeply embedded in a particular institutional logic are more likely to invoke knowledge consistent with that logic (Hong et al., 2000; Morris & Gelfand, 2004; Thornton et al., 2012). Political embeddedness describes how power struggles involving market and non-market actors, including the state, shape economic institutions and decisions.

Embeddedness shapes behaviour by influencing identities, goals, and schemas. Actors embedded in different institutional logics may activate different goals or behaviours in response to the same situation, depending on which identity, goal, or schema is most salient (Thornton et al., 2012). Institutional logics guide behaviour through culturally grounded goals and social identities (Thornton & Ocasio, 2008). The perspective emphasises the 'nestedness' of analysis levels and the need to view behaviour as embedded within societal contexts (Friedland & Alford, 1991). Relational embeddedness refers to shared understandings and relationships, while structural embeddedness captures interaction patterns across organisations (Burke & Morley, 2016; Jones & Lichtenstein, 2009).

Although new logics in the institutional environment can create opportunities, choices remain embedded in existing logics, which continue to shape cognition and behaviour (Durand et al., 2013). Concepts such as the cultural entrepreneur illustrate how individuals and organisations can act outside immediate constraints, providing potential mechanisms to overcome the limitations of embedded agency (Thornton et al., 2012). As James (1968, p. 42) notes, an individual possesses multiple social selves, each corresponding to the distinct groups whose opinions they value.

## Decoupling

In this section I explore the concept of decoupling within the institutional logics perspective. I explain how multiple logics can coexist within organisations, how decoupling and loose

coupling allow organisations to manage conflicting institutional demands, and how Thornton's conceptualisation extends and diverges from earlier theories.

Decoupling enables organisations to manage tensions between external legitimacy and internal technical objectives. An important reformulation by Thornton et al. (2012) was to decouple institutional logics from institutional orders. This reformulation allows multiple logics to coexist within an organisation, industry, or field, and recognises that a single logic may be associated with or derived from multiple institutional orders (Haveman & Gualtieri, 2017). The concept of decoupling has its roots in Meyer and Rowan's (1977) theory, which focuses on three central concepts: institutional rules, legitimacy, and isomorphism. Meyer and Rowan argue that the survival and success of formal organisational structures stem from their reflective rationalisation of society's cultural system of taken-for-granted rules. However, this rationalisation can lead organisations to develop goals and actions that do not directly serve their core technical mission. Consequently, organisations face the tension of simultaneously satisfying external institutional requirements while accomplishing their internal technical objectives. Organisations manage these tensions by decoupling their external structures from the internal activities of their technical core (Meyer & Rowan, 1977).

Loose coupling illustrates how organisations can symbolically adopt practices without fully embedding them in operational activities. It is a related concept that explains why organisations may adopt practices ceremonially, for example, implementing policies in administrative offices without applying them in the technical core (Meyer & Rowan, 1977; Weick, 1976). Loose coupling serves both defensive and strategic purposes. Defensively, it maintains internal efficiency under heterogeneous pressures; strategically, it enables impression management to gain advantages (Hannan & Freeman, 1998). Contemporary cognitive and social psychological research extends this understanding to individuals, showing that people can manage multiple roles and identities without cognitive conflict, for instance, by compartmentalising norms from different institutional orders (Klyver & Thornton, 2010). Organisations may exhibit analogous behaviour, using decoupling and loose coupling to segregate conflicting demands while preserving operational coherence (Hannan & Freeman, 1998; J. W. Meyer & Rowan, 1977; Weick, 1976).

Thornton's conceptualisation of decoupling emphasises the coexistence of multiple logics rather than separating theory from practice. Thornton's work diverges from Meyer and Rowan by focusing on the coexistence of multiple institutional logics within the same organisation,

rather than on decoupling between theory and practice or technical mechanisms and broader institutional beliefs. While Meyer and Rowan emphasise organisational survival through decoupling, Thornton highlights the embeddedness of technical mechanisms, such as performance and efficiency, within institutional logics. In this perspective, decoupling is less about separating organisational theory from action and more about understanding how distinct logics coexist and interact within organisations (Haveman & Gualtieri, 2017; Thornton, 2004).

## Field and Societal Levels

In this section I discuss how institutional logics operate at both societal and field levels. I explain the relationship between these levels, how field-level logics emerge and vary, and how organisations navigate multiple logics across fields.

Field and societal level institutional logics are related but operate distinctly, with some areas of crossover. Institutional logics are often discussed at both societal and field levels, yet there is no agreed-upon typology of field-level logics. Field-level and societal-level logics are different but can overlap. Thornton et al. (2012, p.93) propose that each institutional field consists of one or more available logics, alongside a range of collective organisational identities and practices from which individual organisations assemble their own identities and practices. Each field may contain a unique constellation of X-axis institutional orders and Y-axis elements. Organisations affiliated with multiple fields may develop more varied identities, reflecting the need to manage diverse institutional pressures (Greenwood et al., 2011). Typically, one or more institutional logics develop at the field level, which are shaped by, but distinct from, the logics of the interinstitutional system (Thornton et al., 2012, p.148).

Field-level logics may represent variants of societal-level logics (e.g., an editorial logic as a field-level variant of the societal-level professional logic), while societal-level logics can also be present at the field level (Thornton et al., 2012, p.149). The emergence and variation of practices are central to changes in institutional logics, linking practices and symbols through language. Analysis of field-level logics provides a framework for understanding how practices and symbolic constructions are connected via emergent field-level vocabularies. Variations in these vocabularies constitute more extreme departures from ideal types than simple instantiations of a logic (Thornton et al., 2012, p.149). Societal-level logics, as well as external logics developed in other fields, serve as available building blocks for forming field-level logics. External logics may be instantiations, variants, or hybrids of societal logics (e.g.,

shareholder value logic as a field-level variant of the societal-level market logic) (Thornton et al., 2012, p.150). Societal-level logics influence fields both directly and indirectly via other fields, but they are not simply transposed in their entirety. At the cognitive level, societal logics provide categories and schemas for sensemaking; at the social level, they are translated into theories, frames, and narratives at various levels of abstraction (Thornton et al., 2012, p.152).

Critical events can accelerate the importance and institutionalisation of field-level logics. Event attention can trigger sensemaking not only of the events themselves but also of the broader organisational field, shaping new forms of theorisation and field-level practices that may develop into dominant logics (Nigam & Ocasio, 2010). Field-level logics, as organising principles, define relationships among actors and provide overarching models for governance within the field (Nigam & Ocasio, 2010). While grounded in societal-level logics, field-level logics remain distinct (Zilber, 2006). Emerging fields may, under conditions of urgency and goal similarity, converge rapidly on a single organising logic, enabling quick institutionalisation (Maguire et al., 2004; Purdy & Gray, 2009). Organisations respond to multiple institutional logics as refracted at the field level. Field fragmentation exacerbates institutional complexity, whereas centralisation mitigates its effects on organisations. Institutional logics are not created by organisational fields. They are instantiated and enacted within them. Logics originate from the interinstitutional system rather than the field itself, although they may be reshaped and customised in local contexts (Friedland & Alford, 1991; Scott, 1995).

## Relationships

This section explores how institutional logics interact within organisations, highlighting the types of relationships they can form, the effects of multiple logics on organisational functioning, and how actors mediate these dynamics. It discusses frameworks of logic multiplicity, institutional complexity, and strategic enactment.

Institutional logics within organisations can relate to one another in ways that are not solely competitive. While competitive relations imply that strengthening one logic necessarily weakens another, cooperative relationships suggest that alternative logics can jointly influence practice, with strengthening one logic potentially reinforcing another (Goodrick & Reay, 2011; Waldorff et al., 2013). Greenwood et al. (2010) similarly show that certain logics can co-occur and amplify each other's effects. There has been growing recognition that multiple logics can

coexist within a field, shaping both organisational change and stability (Thornton et al., 2012; Waldorff et al., 2013).

The coexistence of institutional logics allows organisations to experience both tension and synergy in practice. The effects of multiple logics on organisational functioning depend on the type and configuration of these logics. In some cases, one logic may dominate, rendering others immaterial, whereas in other cases, similar logics may blend into a single set of practices, with minimal impact on organisational outcomes (Besharov & Smith, 2014). Besharov and Smith (2014) propose a framework categorising organisations based on logic multiplicity and its effects, represented here in Figure 4. The X-axis of the framework represents compatibility, indicating the extent to which logics reinforce or conflict with one another, while the Y-axis represents centrality, reflecting the degree to which a logic is integral to organisational functioning (Besharov & Smith, 2014, p. 371). For instance, Estranged organisations exhibit low compatibility and low centrality, resulting in divergent goals where one logic primarily drives organisational functioning. Aligned organisations, by contrast, demonstrate high compatibility and high centrality, allowing multiple logics to strongly influence practices while maintaining organisational coherence. Understanding the nature of logic multiplicity is therefore critical for organisational research (Besharov & Smith, 2014).

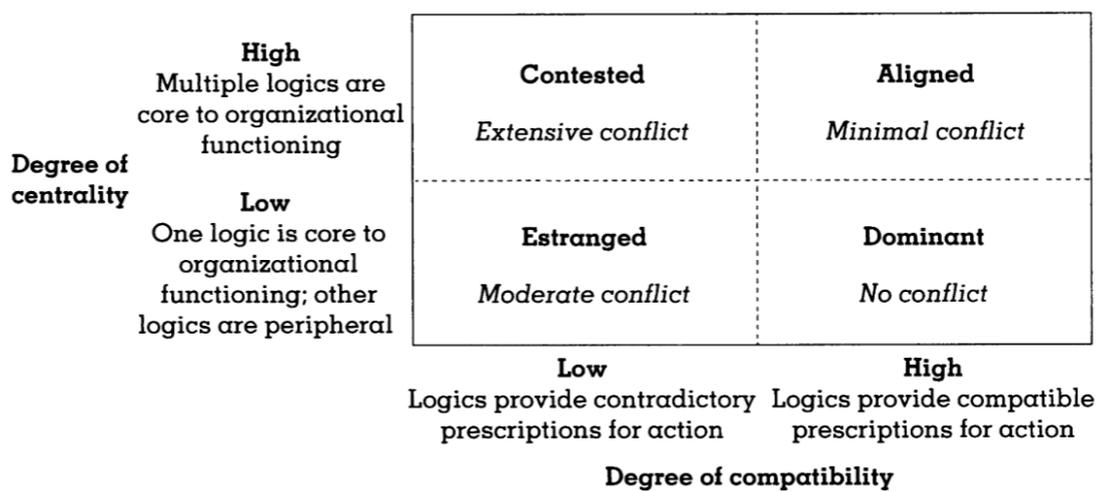


Figure 4. Types of Logic Multiplicity Within Organisations (Besharov & Smith, 2014 p. 371)

Organisational characteristics shape the experience of institutional complexity. Organisations experience institutional complexity differently depending on their characteristics and positions

within fields. Highly embedded or “central” organisations may face greater tensions from multiple logics than peripheral organisations. Factors such as organisational structure, ownership, governance, and identity shape how logics are filtered and how organisations perceive and respond to institutional pressures (Greenwood et al., 2011). A more nuanced understanding of these relationships can inform policymakers in diverse contexts, including hospitals, schools, and corporations, by clarifying the forces shaping organisational behaviour (Greenwood et al., 2011). Institutional logics are also enacted through actors and their practices. Studies show that actors can mobilise logics strategically, hybridise multiple logics, or selectively adopt elements of a new logic to reinforce existing practices (Lawrence et al., 2009; Lok, 2010; Seo & Creed, 2002). Reay and Hinings (2005, 2009) illustrate how rivalry between logics is actively managed through collaborative relationships, while collaboration more broadly shapes fields via networks, structures of domination, and the production of institutional rules (Phillips et al., 2000; Waldorff et al., 2013).

Institutional logics are dynamic resources strategically mobilised by actors. Institutional logics are composed of resources and tools that actors can strategically employ in organisational life (Lounsbury & Glynn, 2019; McPherson & Sauder, 2013). As such, even “ideal type” logics (e.g., market logic) are not monolithic but manifest in diverse instantiations across time and space (Lounsbury et al., 2021). Studying how logics cohere, endure, emerge, and transform provides valuable insights into institutional processes and the dynamics of organisational change (Lounsbury et al., 2021). Field-level studies have largely focused on horizontal complexity, identifying logics underpinning institutions and tracing their historical contingency rather than the vertical nestedness of logics within organisations (Dunn & Jones, 2010; Lounsbury, 2002; Reay & Hinings, 2005). Much of this work depicts fields as ordered by a dominant logic and examines the processes by which fields transition from one dominant logic to another (Greenwood et al., 2011).

## The Relationship between Temporary Organising and Institutional Logics

In this section I examine how temporary organising, such as projects or task-based teams, interacts with institutional logics. I explore how temporary forms of organising both draw upon and influence the structures, practices, and norms of permanent organisations and wider institutional fields. I then highlight the temporal and embedded nature of these interactions and

the ways in which temporary organising can generate, reproduce, or transform institutional logics.

Temporary organising and institutional logics relate to each other in multiple ways. Temporary organising conceptualises organisational phenomena as inherently dynamic processes, in contrast to traditional research approaches that focus on stable configurations of resources and routines (Van De Ven & Poole, 2005). Process-oriented research methodologies are therefore better suited to capture how sequences of events and activities unfold over time, producing specific outcomes, including the formation and evolution of temporary organisations (Bakker et al., 2016).

Temporary organisations can be embedded in both permanent organisations and wider institutional fields. Projects operate not only within their parent organisations but also within broader institutional environments, which they may reinforce or challenge (Cattani et al., 2011; Sahlin-Andersson, 2002). Institutions provide resources, knowledge, and practices while imposing regulatory constraints and conventions (Stjerne & Svejenova, 2016; Sydow & Staber, 2002). Consequently, projects function within multiple systemic contexts including organisations, inter-organisational networks, and fields, that simultaneously enable and constrain organising (Manning, 2008). Project constitution (through tasks, timeframes, and team composition) and institutional embedding are inseparable systemic processes (Manning, 2008). At the micro level, individuals bring beliefs, attitudes, and expectations into temporary organisations, shaping teamwork (Lundin & Söderholm, 1995). Participation is time-limited, and individuals often maintain other organisational “homes” before, during, and after their temporary assignment. These other homes may be governed by different institutional logics, influencing how individuals interpret and enact their roles. Team composition also shifts as members enter and exit, introducing new expectations and experiences (Miles, 1964). The project thus becomes a site where institutional logics intersect and are negotiated.

Temporary organisations are shaped by interactions with external contexts and stakeholders. Teams may form around specific tasks, via organisational mandate, or through other mechanisms, but their legitimacy is determined by interactions with external organisations and stakeholders. Parent organisations may support the temporary entity, while competing structures or environmental indifference can challenge its legitimacy. This need for legitimisation shapes internal interactions, sometimes leading teams to establish their own norms and internal structures (Katz, 1982). Upon termination, temporary organisations often

undergo external evaluation, further highlighting the importance of legitimacy in the relationship between the team and its environment (Lundin & Söderholm, 1995).

Temporary organisations both draw upon and reproduce institutional structures. Actors reflexively enact and modify the rules and resources of organisations, networks, and fields through their activities, reproducing the interplay between temporary and permanent contexts (Sydow & Windeler, 2020). While inter-organisational projects are often designed as stand-alone initiatives, they remain deeply embedded within parent organisations and wider industries (Bakker, 2010; Bechky, 2006; Engwall, 2003; Grabher, 2004; Swärd, 2016; Sydow et al., 2004; Sydow & Staber, 2002). Projects not only respond to institutional contexts but can actively shape them, producing institutional change (Tukiainen & Granqvist, 2016). Institutional theory frames this recursive process by defining institutions as widely shared rules, beliefs, and practices enacted and reproduced through activity (Bjerregaard & Jonasson, 2014; Lawrence et al., 2009; Lindberg, 2014; Lounsbury, 2008; Lounsbury & Boxenbaum, 2013; Scott, 1998). Actors navigating institutional pressures employ strategies including adaptation, compromise, avoidance, dismissal, and influence (Aaltonen & Sivonen, 2009).

Projects act as sites of temporal institutional work, mediating change across contexts. Projects often take the form of “inter-institutional projects,” bringing together actors from distinct institutional environments. These contexts can generate coordination challenges and conflicts, but also opportunities for institutional change (Dille & Söderlund, 2011, 2013; Phillips et al., 2000). Institutional projects, as Holm (1995) argued, are temporary organisations explicitly aiming to alter rules, regulations, and beliefs within bounded institutional settings. Such projects may drive change through sequences of consecutive temporary organisations or single initiatives (Lawrence et al., 2001; Manning & von Hagen, 2010; Perkmann & Spicer, 2007; Tukiainen & Granqvist, 2016).

Time is a central dimension linking temporary organising and institutional logics. Institutional analysis often requires a longer temporal frame than studies of individual action (Battilana, 2006). At the same time, actors experience time through shared temporal structures such as schedules, deadlines, and rhythms that coordinate ongoing practices (Orlikowski & Yates, 2002). Granqvist and Gustafsson (2016) identify three forms of temporal institutional work: entraining, constructing urgency, and enacting momentum, which create shared beliefs about temporality and can shape institutional change.

Temporary organisations mediate multiple institutional logics, generating ambiguity and adaptation. Established organisational fields often host multiple logics (Boch Waldorff & Greenwood, 2011; Goodrick & Reay, 2011; Lounsbury, 2007; Reay & Hinings, 2009). Temporary projects highlight these pluralities by bringing together actors with different orientations, requiring negotiation, hybridisation, or bricolage of logics (Binder, 2007; Durand et al., 2013). Ambiguity arises from divergent practices, emerging collective identities, and differences in implementing institutional logics (Wry et al., 2011; Ansari et al., 2010; Orlikowski & Yates, 2002; Thornton et al., 2012). Shifts in logics often involve changes to collective identities and practices, relying on symbolic and material resources to achieve legitimacy (Wry et al., 2011). Temporary organising thus amplifies the dynamics of institutional complexity, even in mature fields where priorities between logics may appear stabilised (Dunn & Jones, 2010; Greenwood et al., 2011; Hoffman, 1999; Reay & Hinings, 2009).

Temporary organising provides a lens for understanding engagement with institutional logics. Research must examine the conditions under which organisations engage differently with multiple logics and how these engagements shape practice variation and project outcomes (Thornton et al., 2012, p. 144). Analysing the emergence and transformation of logics, collective identities, and practices over time requires recognising their interrelated but loosely coupled nature (Thornton et al. 2012). Temporary organising, with its flexibility and transient structure, makes tensions between logics more visible and actions to reconcile them more deliberate and traceable.

## How do Temporary Organising and Institutional Logics guide Implementation Processes?

This section examines how temporary organising, such as projects or task-based initiatives, interacts with institutional logics to guide implementation processes. It looks at how logics shape attention, behaviour, and decision making, while temporary structures mediate, adapt, and enact these logics in practice. It also highlights the role of cognition, power, temporality, and leadership in orchestrating action and navigating tensions between temporary and permanent organisational contexts.

Institutional logics offer social actors organising principles and cognitive schemas that influence attention, decision making, and behaviour in organisations (Besharov & Smith, 2014; Friedland & Alford, 1991; Meyer & Hammerschmid, 2006; Thornton, 2004). These logics are not static structures; they simultaneously enable and constrain action, motivating actors to elaborate, combine, or transform extant logics (Binder, 2007; Meyer & Hammerschmid, 2006; Thornton, 2004).

Actors selectively draw on multiple logics to navigate identity and practice. Individual actors can engage with multiple logics simultaneously, producing hybrid forms that differ from any single logic while ongoing struggles over identity and practice continue (Greenwood & Hinings, 1996; Meyer & Hammerschmid, 2006). Actors do not enact logics in their entirety but selectively engage with elements relevant to their belief systems and contexts (Meyer & Hammerschmid, 2006; Haveman & Gualtieri, 2017). In practice, logics shape behaviours, and behaviours derive meaning only in relation to the symbolic systems of those logics (Haveman & Gualtieri, 2017). Institutional logics provide schemas which are patterns of reasoning that guide decision making, attention, and interpretation of events (Norman & Shallice, 1986; Thornton, 2004). These define what is permitted, causal, or obligatory, with subsets applied in practice due to cognitive limitations (Thornton, 2004).

Attention and interaction are guided by dominant logics and situational cues. Dominant logics focus actors on particular organisational features, problems, and solutions, while environmental stimuli can trigger attention shifts, prompting departures from embedded logics (Norman & Shallice, 1986). Situational contexts activate cognitive cues that make specific logics accessible, with accessibility contingent on prior knowledge and experience (Thornton, 2004). Actors less committed to existing logics are more likely to experiment with alternatives (Norman & Shallice, 1986; Lok, 2010). Through social interaction, actors reproduce and transform organisational practices and identities (Thornton & Ocasio, 1999; Greenwood et al., 2010). Different interactions may be guided by different logics depending on actors involved, generating institutional complexity within organisations and fields (Greenwood et al., 2010). Actors can blend ideas and practices across previously segregated groups, creating novel combinations valued in new contexts (Thornton et al., 2012; Waldorff et al., 2013).

Institutional logics shape organisational identities and constrain practices. Logics and organisational identities are fundamentally interrelated (Mohr, 1994; Thornton, 2004). While logics enable and constrain action, identities provide internal constraints on the range of

appropriate practices, as actors strive for consistency with core beliefs (Gioia & Thomas, 1996; Lounsbury, 2002). Variation in practices may result from external changes in logics, collective identities, or fields, or from internal organisational politics, and can trigger sensemaking efforts to reconcile ambiguities (Cerulo, 2002; Ranson et al., 1980; Zucker, 1977). Organisational change occurs when shifts in logics or institutional instability prompt modifications in practices and identities. These localised changes can alter institutional configurations more broadly (Thornton, 2004; Greenwood et al., 2010). Decision making, sensemaking, and collective mobilisation are key mechanisms through which actors enact and negotiate these changes (Thornton, 2004). Institutions are not purely top-down; social actors actively shape, maintain, and transform institutional arrangements (Binder, 2007; Kruse et al., 2015).

Power and politics are embedded within institutional logics. Executive power derives its sources, meaning, and consequences from higher-order logics that define the “rules of the game” for gaining, maintaining, and losing authority (Jackall, 1988; Thornton & Ocasio, 1999; Friedland & Alford, 1991; Powell, 1991; Meyer et al., 1997). While logics shape political processes, powerful actors can reinterpret or elaborate logics to serve strategic ends (Scott et al., 2015; Lok, 2010). Changes in resource environments, societal pressures, or internal contradictions can trigger evolution in logics (Sine & David, 2003; Waldorff et al., 2013). Institutional logics are domain-specific yet overlapping; state, professional, corporate, and market logics coexist, with market logics increasingly salient in recent decades (Lounsbury, 2002; Scott et al., 2000). Analysing sources of legitimacy across orders helps understand the dominant or transformative potential of a logic and its implications for power enactment (Thornton & Ocasio, 1999; Besharov & Smith, 2014).

Temporariness shapes behaviour and engagement with institutional logics. Temporary systems, embedded in more permanent organisations, networks, or fields, create tensions at the interface between temporary and permanent structures, which remain poorly understood (Bakker et al., 2016). A practice-based understanding emphasises “temporal structuring,” where agents enact, reproduce, or transform temporal structures such as meeting schedules, deadlines, or reporting periods (Orlikowski & Yates, 2002). Enacting these structures allows agents to “perform” time, implicitly or explicitly regulating, coordinating, and accounting for activities within legitimised temporal frameworks at multiple levels (Ballard & Seibold, 2003; Bakker et al., 2016).

Leadership and managerial orchestration guide temporary organising and implementation. Leaders in temporary organisations tend to be task-oriented, though relationship-oriented

leadership is more effective overall (Bryman et al., 1988). Temporary systems alternate between idea generation and decision-making phases, requiring managers to orchestrate these phases effectively (Morley & Silver, 1977). Project leaders face unique challenges in coordinating transient teams moving between initiatives (Rickards & Moger, 2000; Shenhar, 2001). Team composition, longevity, and staffing decisions influence knowledge sharing, innovation, and performance (Katz, 1982; Perretti & Negro, 2007). The temporariness of projects directs attention toward immediate tasks and creates a shortened time horizon (Bakker et al., 2013). Goal management and environmental drift further influence project outcomes, with urgency increasing adaptive behaviour but time pressure potentially reducing flexibility (Kreiner, 1995; Engwall, 2002; Burke & Morley, 2016; Kenis et al., 2009; Ligthart et al., 2016; DeFillippi & Arthur, 1998)

Temporary projects depend on mobilisation of prior and external resources. Due to their limited duration, temporary organisations often cannot generate specialised knowledge or project-specific capabilities independently. Instead, they rely on resources from previous events or external sources, such as prior large-scale projects (Brady & Davies, 2004; Grabher & Thiel, 2015).

## Chapter 3. The Implementation Process Context

This thesis examines the implementation process within examples of temporary organising. Building on the detailed review of the literature on temporary organising and institutional logics, I now turn to the specific case study contexts that provide the empirical basis for investigating the phenomenon. In this section, I define implementation and process, but rather than presenting a broad overview of these extensive literatures, I focus specifically on studies addressing the implementation process in two contexts: Rural Electrification and Electronic Health Record (EHR) systems. These discussions are not intended as comprehensive overviews of the cases themselves, which will be presented in Chapters 5 and 6. Instead, they provide a targeted analysis of the literature on implementation processes in these particular domains.

This narrower focus enables a more precise engagement with the research question and the phenomenon under study. It foregrounds the implementation challenges, organisational dynamics, and institutional considerations relevant to temporary organising in the contexts under analysis. The literature discussed in this section situates the forthcoming case analyses, providing the conceptual and empirical context necessary to assess the relationship between temporary organising and institutional logics in real-world implementation processes.

### Rural Electrification Context

This section explores the key factors influencing the implementation of rural electrification programmes. It emphasises the processes and organisational structures that shape successful outcomes. I discuss the temporal dimension, frameworks, planning and policy, community involvement, organisational arrangements, and financial strategies, highlighting how these elements interact to support effective implementation.

### Understanding Rural Electrification

Rural electrification involves bringing electrical power to remote and rural areas, transforming social and economic conditions (Muthu & Sankaravelu, 2014). Despite global progress, 666 million people remain without electricity, primarily in remote, conflict-affected, or low-income regions complicating grid expansion (International Energy Agency et al., 2025). Access to electricity enables productive activities after dark, reduces household drudgery, mitigates

indoor air pollution, and facilitates profitable agricultural practices such as irrigation and post-harvest processing (Barnes, 2005). Achieving these benefits depends on how effectively programmes are implemented, highlighting the importance of coordinated processes. This section draws substantially on Foley (1992), an early and influential contribution that foregrounds the institutional dimension of rural electrification, a perspective that remains particularly relevant given the relatively limited number of more recent studies with this specific focus in the literature.

### Temporal Dimensions of Implementation

Rural electrification is a dynamic, long-term problem-solving endeavour. Large-scale projects involve dispersed populations, complex logistics, and substantial capital investments (Shiel, 2005). Governments must ensure sustained funding and long-term commitment, whether through subsidies, loans, or hybrid models, to cover system installation, ongoing maintenance, and eventual upgrades (Barnes, 2005; Niez, 2010). Generating local income through productive electricity use can support maintenance costs beyond formal contracts (Niez, 2010). Historical experience, such as post-World War II electrification in Europe and the US, demonstrates the inevitable lag between urban and rural deployment, emphasising the need for careful long-term planning (Duffy, 2011).

### Structures for Implementation

Successful rural electrification depends on robust implementing organisations. Dedicated, autonomous agencies or divisions manage resources, coordinate activities, and maintain operational focus (Barnes & Foley, 2004). These organisations must remain insulated from political interference to ensure continuity, transparency, and accountability (Barnes & Foley, 2004; Niez, 2010). Strong leadership motivates staff and aligns objectives with national development goals (Barnes & Foley, 2004).

Tensions arise when commercial utilities, guided by market logics, are responsible for rural electrification, which often requires broader social and developmental priorities (Foley, 1992). Separating rural electrification responsibilities from utilities creates focused organisations, minimises internal conflicts, and builds a clear institutional identity (Foley, 1992). Foley emphasises that balancing autonomy with accountability, controlling budgets, staffing, and

operational resources while maintaining external performance oversight, is critical for implementation success (Foley, 1992).

## Community Participation in Implementation

Community engagement is essential for effective rural electrification. Involving rural communities in planning, decision-making, and management enhances local ownership, accurately assesses demand, and facilitates consumer education and participation (Niez, 2010; Barnes, 2005). Delegating operational responsibilities to local communities can reduce costs and broaden access, but sustained support from central coordination is necessary to maintain systems over the long term (Foley, 1992). Requiring communities to contribute to installation and management costs improves accountability and sustainability (Foley, 1992).

## Planning and Policy Frameworks

Planning and policy provide the structure for implementation. Governments establish policy frameworks while utilities or dedicated state bodies manage detailed planning and operational execution (Davis, 1995). Effective decision-making requires consideration of need, environmental acceptability, economic feasibility, and technological viability, with environmental factors encompassing social and ecological impacts (Zomers, 2003). Organisational arrangements must be decentralised and operationally autonomous to ensure adaptability to local contexts (Zomers, 2003).

Policy support is vital for successful implementation. Reliable data, long-term government commitment, independent institutions, market infrastructure, supportive regulations, and community involvement underpin effective rural electrification (Niez, 2010). Political interference and resource diversion can compromise implementation, while low population density, limited income, and rights-of-way challenges add operational complexity (Barnes & Foley, 2004). Clear planning processes, meaningful participation, and government involvement ensure comprehensive and sustained program outcomes (McGookin et al., 2022; Niez, 2010; Shiel, 2005).

## Organisations for Implementation

The establishment of a dedicated rural electrification division within a utility simplifies legal and administrative requirements but requires sufficient autonomy, resources, and authority to operate effectively (Foley, 1992). Strong leadership, institutional knowledge, and prior implementation experience are essential for overcoming resource diversion, low staff morale, and other operational challenges (Foley, 1992). Long-term stability is critical for maintenance, equipment replacement, and reliable support for communities over decades (Foley, 1992). Organisations must have authority to manage all aspects of electrification promptly and effectively, as institutional decisions often shape implementation outcomes more than technical considerations (Foley, 1992; Maurice, Manning & McDowell, 1984).

## Financial Strategies for Implementation

Sustained funding is fundamental to implementation and maintenance. Projects require long-term, ring-fenced financing for installation and ongoing operation, ideally secured for five to ten years post-installation (Niez, 2010). Cost recovery is a critical success factor: projects emphasising self-sufficiency achieve sustainable operations, while reliance on subsidies exposes programs to instability and reduced service quality (Barnes & Foley, 2004). Tailoring system design to rural consumption patterns can reduce construction and operational costs, enhancing feasibility and effectiveness (Barnes & Foley, 2004). International approaches vary: Ireland used direct grants to consumers covering 50% of costs (Quinn, 2025), while India and Korea employed low-interest loans or guarantees on concessionary financing (Davis, 1995).

## Electronic Health Record System Context

This section examines the implementation of Electronic Health Record (EHR) systems, focusing on the processes and organisational structures that shape successful deployment. Key areas discussed include policy and procurement, control mechanisms, relationships and collaboration, training, and financial considerations. Together, these elements highlight the complexity of EHR implementation across healthcare settings and the factors that influence long-term sustainability and effectiveness.

## Understanding Electronic Health Records

An EHR is a digital version of a patient's medical record, designed to be shared across healthcare organisations such as hospitals, clinics, and pharmacies, improving care coordination and communication among providers (Health Service Executive, 2024). Since their introduction in the late 20th century, EHRs have evolved significantly due to technological innovation and supportive policy reforms (Doyle-Lindrud, 2015). For instance, the HITECH Act of 2009 in the US accelerated adoption, establishing EHRs as key tools for enhancing patient safety, operational efficiency, and secure access to critical patient information (Menachemi & Collum, 2011).

While definitions vary slightly across organisations, the underlying concept is consistent. The WHO defines EHRs as “a longitudinal record of patient health information generated by one or more encounters in any care delivery setting” (World Health Organisation, 2006), whereas CMS emphasises maintaining accurate, up-to-date patient data accessible to authorised users (Centers for Medicare & Medicaid Services, 2024). Electronic Medical Records (EMRs) are typically limited to individual encounters within single practices, and Personal Health Records (PHRs) are patient-controlled systems for self-management (Archer et al., 2011; Bates et al., 2003; Roehrs et al., 2017). This thesis focuses on EHRs as their broader scope, interoperability requirements, regulatory complexities, and higher implementation demands, make them ideal for examining institutional processes and temporary organising in implementation.

## Policy and Procurement in EHR Implementation

Implementation of EHR systems requires balancing top-down and bottom-up approaches. Top-down policies provide strategic direction, while local involvement ensures contextually appropriate adoption and practice-level engagement (Cresswell, 2016; Klecun et al., 2019). Leveraging ideas from private sector institutions and integrating best practices can enhance nationwide implementation (Jung et al., 2020). However, bottom-up approaches are time-intensive and may complicate future collaborations, whereas purely top-down strategies risk inadequate stakeholder engagement (Banas et al., 2011; Sheikh et al., 2011).

Government leadership is critical for maintaining momentum and institutionalising EHR initiatives. Strong national and local policies, integration into healthcare planning, and aligned reimbursement mechanisms facilitate adoption and system sustainability (Ghani et al., 2008; deRiel et al., 2018; Jung et al., 2020; Evio & Bonito, 2024). Conversely, political shifts can

disrupt processes, alter power dynamics between vendors, and create uncertainty regarding program continuity (Cacciatore et al., 2024; Robertson et al., 2010; Sheikh et al., 2011). Developing close relationships with policymakers mitigates these risks and strengthens long-term implementation outcomes (Cresswell, 2016; Hernández Ávila et al., 2013).

## Control Mechanisms in Implementation

### *Compliance*

EHR implementation is supported by multiple organisational actors beyond government. Vendor organisations with centralised administrative and clinical structures enforce compliance with national standards, facilitating consistent adoption across healthcare organisations (Strong et al., 2014; Jung et al., 2020; Cacciatore et al., 2024; Deokar & Sarnikar, 2016). Compliance processes driven by vendors and adherence to regulatory frameworks enable coordinated implementation and support interoperability (Carayon et al., 2009).

### *System Selection*

Selecting appropriate EHR systems is a critical step in the implementation process. Hospitals cannot assume seamless interoperability by purchasing from the same vendor used for financial systems; vendor limitations, practice-level autonomy, and restrictive licensing can hinder implementation and usability assessment (Craven et al., 2014; Collins et al., 2015; Crowley et al., 2019). Decisions about system choice, customisation, and integration directly shape the trajectory of the implementation process and influence long-term effectiveness.

### *Training and Technical Support*

Training is a cornerstone of successful EHR implementation. Vendors often provide both initial and ongoing training, combining peer and technical support to optimise system use and adapt to practice-specific needs (Carayon et al., 2009; Felt Lisk et al., 2009; Noblin et al., 2013; Mbwambo & Mandari, 2023; Tobler et al., 2017). Adequate training across all stages of implementation builds practitioner competence and confidence, positively affecting system adoption, user wellbeing, and perceived ease of use (Boswell, 2011; Hariyati et al., 2020; Heponiemi et al., 2021; Mbwambo & Mandari, 2023). Insufficient training resources, time constraints, and lack of specialised support pose substantial risks to implementation success (Collins et al., 2015; Czerw et al., 2016; Rau et al., 2024; Ser et al., 2014; deRiel et al., 2018; Ghani et al., 2008). Recommendations emphasise ongoing pre- and post-implementation

training cycles and the use of clinical informaticists to sustain implementation (Martin et al., 2022; Marca et al., 2014).

## Relationships and Collaboration

Collaborative relationships are essential for effective EHR implementation. Clear communication, well-articulated expectations, and trust among team members foster alignment and coordination (Deokar & Sarnikar, 2016; Faiella et al., 2019; Gross et al., 2016; Hertzum et al., 2021). Strong relationships with vendors and external stakeholders provide technical and organisational support, while impersonal or inconsistent communication can undermine implementation (Boonstra & Van Offenbeek, 2017; Takian et al., 2014; Kiepek & Sengstack, 2019; Evio & Bonito, 2024). Open, transparent, and early engagement with external partners facilitates shared problem-solving and adaptation of systems to local contexts (Kiepek & Sengstack, 2019).

## Financial Considerations in Implementation

Cost is a central determinant of EHR implementation success. Sustainable funding aligned with national eHealth strategies ensures that systems are developed, deployed, and maintained effectively (Fragidis & Chatzoglou, 2018; Evio & Bonito, 2024). Accurate budgeting and early cost assessment support project management, while monetary incentives can facilitate adoption (Palvia et al., 2015; Cucciniello et al., 2015). High upfront costs, ongoing maintenance, customisation, and limited financial support challenge both small practices and large hospitals (Ghani et al., 2008; Takian et al., 2014; Czerw et al., 2016; Deokar & Sarnikar, 2016; Felt Lisk et al., 2009; Gabriel et al., 2014; Gans et al., 2005; Marca et al., 2014; Sheikh et al., 2011; Vadillo et al., 2016; Zandieh et al., 2008). Addressing these financial challenges is therefore essential for the sustainability and effectiveness of implementation processes.

## Conclusion

In summary, the literature highlights that implementation processes are shaped by a complex gathering of organisational structures, institutional logics, stakeholder relationships, and resource considerations. Across diverse contexts, from Rural Electrification to EHR systems,

‘successful’ implementation depends not only on technical solutions but also on adaptive, temporary organising arrangements that respond to dynamic challenges and evolving institutional pressures. Understanding these processes requires attention to both the formal structures and the emergent, context-specific practices that facilitate or constrain implementation. The insights gathered provide a conceptual foundation for the subsequent case studies, offering the lenses through which the relationship between temporary organising and institutional logics can be critically examined and empirically explored.

## Chapter 4. Method

### Research Outline

This thesis examines the relationship between temporary organising and the implementation of large scale projects. Sound empirical research begins with strong grounding in related literature, identifies a research gap, and proposes research questions that address the gap (Eisenhardt & Graebner, 2007). Although early identification of the research question and possible constructs is helpful, it is equally important to recognise that both are tentative in this type of research. My research question therefore evolved and changed with access to data and as my own familiarity with the topic developed. Research questions are structured by context and they need to evolve (Eisenhardt, 1989). Stake (2006) suggests that “multiple case research starts with the (phenomenon or) ‘quintain’ under investigation. To understand it better we study some of its single cases, its sites or manifestations, but it is the quintain we seek to understand. We study what is similar and different about the cases in order to understand the quintain better.” (Stake 2006, p.6)

### Research Aim and Questions

This thesis examines the relationship between temporary organising and large scale project implementation. To address this, the following research questions were addressed:

1. What are the processes by which large scale projects are implemented?
2. What are the guiding beliefs and assumptions that underpin these processes?
3. How do different combinations of beliefs and assumptions affect implementation processes?
4. How does this contribute to improved theory and practice?

The aim of multiple case research as presented by Stake (2006), is to come to understand the phenomenon better. Even when the study is ‘well done’, the research questions will not be fully answered. The research questions are selected to guide this search for understanding, and the discussion in the interpretation sections will also be guided by research questions. However,

getting the research questions and other content of the study right is as important as getting the methods right, and as Stake (2006 p. 17) suggests “probably requires greater effort”.

## Research Design

### My Ontological and Epistemological Assumptions

“What is the nature of this world that we wish to study?” (Corbin & Strauss, 2012 p.21). As researchers the methodology we use is highly influenced by our own worldview. Therefore, in approaching this research I also needed to understand how I approach the world. The research here is grounded in moderate constructionism, which assumes that there are multiple viewpoints and truths. Truth is not fixed, it instead exists through dialogue, critique, and consensus within communities. From this perspective, the aim of research is to create new usable knowledge through these multiple constructions, knowledge grounded in empirical observation and shaped by context dependent subjective experiences (Järvensivu & Törnroos, 2010). It is a difficult task to identify and assign a name to the way one thinks. Corbin & Strauss’ (2012, p.25) own approach to this issue is appropriate here in that “I have no simple term to classify the person I’ve become methodologically, or a simple term to describe the method presented here.”

Ontologically, moderate constructionism allows that a reality may exist but recognises that any knowledge of it is contingent, local, and socially constructed. Epistemologically it supports the possibility of understanding local truths through community based knowledge creation and empirical observations bounded by subjectivity (Järvensivu & Törnroos, 2010).

An alternative philosophical position commonly adopted in qualitative organisational research is critical realism, which assumes the existence of a reality independent of human perception while recognising that access to this reality is always mediated through social, cultural, and historical contexts (Bhaskar, 1978; Easton, 2010). Critical realism is particularly well suited to research seeking to identify underlying causal mechanisms or generative structures that produce observable events. While this study shares with critical realism the assumption that a reality exists beyond individual interpretations, it does not seek to explain organisational phenomena primarily through the identification of such causal mechanisms. Instead, the focus of this research is on how institutional logics are constructed, negotiated, and enacted through

interaction within temporary organising contexts. For this purpose, a moderate constructionist stance was considered more appropriate, as it foregrounds meaning-making processes, relational dynamics, and context-specific interpretations rather than causal explanation, while still acknowledging that these processes are shaped by broader structural conditions.

Moderate constructionism is a variant of constructivism. However as constructivism tends to focus on the internal cognitive processes of individuals, constructionism focuses on the activities that transpire between people, lending itself more appropriately to my research focus on organisational dynamics and institutional logics, which are socially constructed.

Moderate constructionist researchers often adopt a research logic based on abduction, an approach which also lies in a middle ground, this time between induction and deduction (Peirce, 1955). Abduction aligns comfortably with moderate constructionism as, unlike induction, abduction accepts the presence of existing theory to strengthen theoretical insights while avoiding the rigid hypothesis testing of deduction (Järvensivu & Törnroos, 2010). Abduction is also well suited to case study research, especially in complex fields such as large infrastructure projects (Dubois & Gadde, 2002). The constructionist paradigm rejects the idea that any method or theory can make universal claims to truth or knowledge. Instead, it recognises the contingent and community-bounded nature of understanding (Järvensivu & Törnroos, 2010; Richardson, 2000).

At the start of this research I considered using a mixed method approach, planning to use interviews, questionnaires and focus groups to collect my data. This was before I understood the issues associated with conducting mixed method research. This was also before I realised that I am instinctively a qualitative researcher at heart. The use of quantitative questionnaires would have potentially been useful to broaden and deepen the research if I had been concerned with the individual participant as my focus of analysis. However, it soon became clear that the focus of the research was not the patients and staff themselves, in the EHR case study, or the customers and staff, in the Rural Electrification study, but rather the projects being carried out by the organisations which these individuals belonged to. Prior to this realisation, I had fully intended at the beginning of this research to use methods that encouraged participation from those unable to partake in interviews, in the form of Photovoice research. However, given my interest in the organisation and the project, rather than a patient-specific focus, I quickly realised that this method would not be appropriate or useful.

In line with my abductive, constructionist philosophy, I trialled a number of data collection concepts to identify those that most effectively accessed the collective, organisation-focused insights that I sought. When first accessing the archival data for the Rural Electrification case, I had plans to thematically code and catalogue all of the archival data available relating to the rural electrification scheme. This amounted to 300 large cardboard boxes worth of files. I undertook the categorising of a number of these boxes, logging each individual document within each file, defining it by type and whether it was relevant to the research. Though this had initially seemed promising, it soon became evident that it would be far too time consuming and not particularly useful for addressing the questions I was researching. A large amount of the documents were maps, letter correspondence, memos and other non-official documents. It would have led to an enormous volume of data which was of low relevance, pulling my own attention away from a more focused inquiry of the available data. I also procured the digital copy of 75 advertisements from the time of rural electrification from the ESB archives with a similar plan to categorise and code these resources, and a similar outcome where these documents proved interesting in general, but not appropriate for the research I had set out to conduct. Around this time I also pursued Geomapping training with the intention of mapping the movement of staff across the country using the rural electrification archival data. This idea was grounded in the hope that any identified patterns could also be applied to the EHR case data later on. While I still find this idea conceptually interesting, in practice it was difficult to justify the usefulness of this approach when aiming to align it with the core focus of my research questions.

Ultimately this process of testing ideas for data collection led me to settle on a fully qualitative multiple case study design using archival data, interviews and document analysis. These were the most relevant and manageable sources of data for understanding how large scale infrastructure projects are implemented. They allowed me to stay close to the actual processes and engage deeply with the organisations implementing these projects in a way that my previous plans for data collection would not have allowed me to do.

## Process Approach

My study adopts a process approach, which emphasises understanding how and why phenomena evolve over time. A strong process perspective (Langley et al., 2013) views temporary organising as an ongoing process and a structural form. This approach complements

more moderate process studies and adds to the field through what Bakker et al. (2016) call “process pluralism”. There remains a need for stronger theoretical foundations of temporary organising (Burke & Morley, 2016), and recent work has increasingly drawn upon practice and institutional perspectives that advocate for processual understandings (Lundin et al., 2015; Bakker et al., 2016).

Case study research remains a dominant methodology for investigating temporary organising because it enables flexible and rich data collection that can capture dynamic change processes (Langley et al., 2013). Process methodologies are designed to examine sequences of events and activities as they unfold over time (Bakker et al., 2016). These methodologies make it possible to investigate phenomena dynamically by explicitly tracing movement, change, and temporal evolution. In this respect, narrative, interpretive, and qualitative case studies offer particularly powerful approaches for advancing a strong process perspective (Langley et al., 2013). Multiple case designs are particularly valuable because they reduce the risk of idiosyncratic findings and increase the robustness and generalisability of generated theories (Bakker et al., 2016). Process research methodologies, either moderate or strong, aim to capture sequences of events and activities over time and explain how these produce specific outcomes, including the form of the temporary organisation (Bakker et al., 2016). Case studies employing narrative, interpretive, and qualitative data are especially powerful within a strong process perspective (Langley et al., 2013). At the same time, these challenges represent opportunities for improving future research. Bakker et al. (2016) emphasise the need for conceptual models that articulate the impact of time across different types of temporary organising forms, tasks, and levels of analysis, suggesting it as an essential step for increasing the field’s broader impact.

Within the institutional logics literature, researchers have called for closer attention to fine grained mechanisms and processes that shape organisational and collective identities and practices across institutional fields (Reay & Jones, 2016). While many studies focus on a single institutional field at one point in time, advancing understanding of institutional change processes requires comparative analyses across fields and extended historical timeframes (Reay & Jones, 2016). A bottom up process approach allows patterns associated with institutional logics to emerge inductively from the data. Process data often takes the form of stories of what happened and why, requiring conceptual tools that can detect patterns across unfolding events (Langley, 1999). The most common analytical pattern in the literature is the linear sequence of phases that generate particular outcomes (Burgelman, 1983). Importantly, a process view treats time as a central analytic element.

## Institutional Logics Perspective

A key methodological benefit of the institutional logics perspective is its encouragement of multi-level analysis. Any accurate understanding of social mechanisms requires observation not only across historical time but also across multiple levels of analysis to capture cross level effects (Thornton et al., 2012, p.13). Researchers who combine multiple levels are more likely to observe the workings of mechanisms and the contradictory nature of institutional logics (Thornton et al., 2012, p.14). Institutional logics are historically contingent, varying over time and space depending on the distribution of power among social actors, available cultural or material technologies, and the objectives of those actors (Haveman & Gualtieri, 2017).

Institutional logics also provide conceptual tools to interpret cultural meaning. Ideal types, for instance, help researchers translate complex empirical realities into logically pure components, preventing them from becoming lost in confusing details (Thornton et al., 2012, p.52). Similarly, typologies of the interinstitutional system aid understanding of institutional stability and change. Its decomposable and transposable characteristics align with the assumption that logics are not adopted or discarded wholesale. Orr & Scott (2008) suggest this approach integrates cognitive, normative, and regulative aspects of institutions, allowing comparisons across contexts and levels to clarify how meaning and motivation shape the enactment of power (Scott, 2008). Institutional logics can also inform models of organisational decision making by examining how attentional focus is given to specific identities, roles, and schemas (Thornton, 2004, p. 95). The institutional logics lens further emphasises the need to conceptualise and study external drivers of change that problematise existing organisational practices or identities (Thornton et al., 2012, p.147).

Qualitative methods are particularly well suited to studying institutional logics because they focus on meaning making, capturing logics as revealed through language, practices, symbols, and material artifacts (Reay & Jones, 2016). Finally, while there is substantial research on the effects of institutional logics across institutional fields, less attention has been given to their role within organisations (Thornton et al., 2012, p.147). Applying the institutional logics perspective in organisational research can illustrate how logics shape identity, decision making, and practice, offering richer insights into mechanisms of institutional stability and change.

## A Case Study Approach

The multiple case study approach (Stake, 2006) was chosen for this research because it offers a powerful means of exploring complex, context dependent phenomena such as the implementation of large scale infrastructure projects. Case studies are particularly well suited for understanding business networks and relationships as they can capture the dynamic nature of the phenomenon under study and provide a multidimensional view of the situation within its specific setting (Eisenhardt, 1989; Järvensivu & Törnroos, 2010). A key strength of case study research is its capacity to generate theory from empirical observations, especially in settings where boundaries between phenomenon and its context are blurred (Yin, 2003). This is highly applicable to my research which examines the implementation of rural electrification and electronic health records, domains where socio technical, political, and organisational boundaries often overlap.

Though case studies can be criticised for their perceived lack of generalisability (Yin, 2003), Järvensivu & Törnroos (2010) note that this critique tends to arise from a positivist epistemological standpoint. From a moderate constructionist perspective, the goal is not to produce universally generalisable truths, but rather to develop situated, theoretically-informed insights which may be transferable to other contexts. An important reason for adopting the multiple case study is to examine how the program or phenomenon performs in different environments. Stake illustrates that “when cases are selected carefully, the design of a study can incorporate a diversity of contexts” (Stake, 2006 p.23). Theory building from multiple case studies is a recognised and respected strategy within management and organisational research (Eisenhardt & Graebner, 2007). Multiple case study designs enhance theoretical generalisability by allowing for replication logic, where findings can be corroborated across different settings or units of analysis (Yin, 2003).

This research is particularly aligned with Eisenhardt’s (1989) theory building logic, which uses case based empirical data to construct midrange theory. Research of this type is often considered to be among the most impactful and interesting in organisational literature (Eisenhardt & Graebner, 2007). Theory developed in this manner is emergent as it arises inductively from patterns in the data but is also shaped by existing concepts and frameworks in an abductive logic (Dubois & Gadde, 2002). The rich empirical nature of case studies also allows for the inclusion of multiple data sources, such as interviews, archival records and observation (Eisenhardt & Graebner, 2007). This diversity of sources is important in complex

areas like large-scale projects, where the perspectives of actors across functional, hierarchical and organisational boundaries matter.

I considered the strengths and weaknesses of the case study method before selecting it. A key advantage of the case study is its ability to explore a “contemporary phenomenon within its real life context” particularly when context and phenomenon are not clearly separable (Yin, 2003, p. 13). This makes case study research particularly well suited to addressing “how” questions such as ‘how large scale projects are implemented’ (Anaf et al., 2007; Stake, 2006; Yin, 2003). The approach also allows for multiple perspectives and rich contextual data, which are essential for understanding these complex implementation processes.

Case studies have at the same time been criticised for lacking a clearly defined data analysis process (Yin, 2003) and for ongoing ambiguity around whether they represent a method or merely a research strategy (Lauckner et al., 2012). However this flexibility of the case study is also a strength as it allows researchers to draw on a variety of qualitative analysis techniques as needed (Merriam, 1998). Additionally, I have sought to mitigate this criticism of a lack of a ‘clearly defined data analysis process’ by using Stake’s (2006) multiple case study design, which I describe in detail below.

## Stake’s Multiple Case Study Design

The purpose of the cross case analysis is to move beyond the boundaries of the individual cases in order to develop a deeper understanding of the broader phenomenon that connects them. As Stake (2006) observes, multiple case research depends on selecting cases that share some degree of similarity so that, collectively, they can illuminate the phenomenon under investigation (Stake, 2006 p. 1). To make sense of the findings, it is important to describe what each case does, the effects of its activities, and the specific circumstances in which these occur, since the situation significantly shapes the nature of the activity (Stake, 2006 p. 4). At the centre of multiple case research is what Stake calls the quintain, the overarching phenomenon, concept, or process that links the cases. The purpose of studying individual cases is not just to understand them in isolation, but to use them as a means to explore and interpret the quintain in more depth. This involves examining both the commonalities and the differences between the cases and reflecting on which of these aspects contributes more meaningfully to our understanding (Stake, 2006 p. 7).

Stake (2006) highlights a fundamental tension in multiple case research: scientific traditions tend to value generalisable findings, while professional practice often values the particular (Stake, 2006 p. 11). In conducting this study, I was conscious of this dilemma and sought to navigate it by paying careful attention to both the shared dimensions of the phenomenon and the unique characteristics of each case. Each case represents a complex entity situated within its own historical, cultural, and physical contexts (Stake, 2006 p. 12). One of the aims of a multiple case study is therefore to reveal how the phenomenon operates within and across these varied and often challenging settings. Rather than seeking simple cause and effect explanations, the analysis aims to describe how events unfold, how they coincide, and how they are shaped by their contexts. Even the most carefully designed multiple case study cannot fully answer the research questions it poses. As Stake (2006) argues, the aim is not to provide definitive answers, but to advance understanding of the quintain. The research questions in this study have been used as guides throughout this process, shaping how I approached interpretation and discussion in the cross case analysis.

A key responsibility of the multiple case researcher is to show how the phenomenon or programme appears in different contexts (Stake, 2006 p. 27). Context must be explored and described even when its influence is not immediately obvious, because the activities of each case are inevitably shaped by their environment (Stake, 2006). Stake also reminds us that knowledge is always constructed by the observer, and that no two researchers will interpret a case in exactly the same way (Stake, 2006 p. 37). I accept that another researcher might have drawn different conclusions from the same material. However, I have taken care to ensure that the findings presented in this thesis are well grounded in both the data and the existing literature.

Given the unifying concept that links the cases, I have an obligation to interpret the findings across cases. However, Stake warns that cross case analysis can sometimes overshadow the individual case studies and obscure the unique vitality and contextual richness of each (Stake, 2006 p. 39). I was aware of this risk throughout the writing process and made a deliberate effort to preserve the individuality of each case, even while drawing together broader patterns and themes. Many readers approach a cross case analysis seeking what is common rather than what is distinctive, creating what Stake refers to as the “quintain dilemma” (Stake, 2006 p. 39). Navigating this tension, between commonality and uniqueness, has been a central concern in my own analysis. Stake (2006) suggests that the cross case analysis section of a multiple case report is typically shorter than the combined case studies but must synthesise and communicate

their most significant findings as a set of assertions. Some of these findings will inevitably remain context bound, and some degree of simplification is perhaps unavoidable in the synthesis process. If the situational particularities of the cases are of little importance to a researcher, Stake (2006) notes that multiple case research may not be the most appropriate design. Stake's approach is grounded in the scrutiny of site specific experiences and the contextual realities within which a phenomenon unfolds (Stake, 2006 p. 41).

Before undertaking the cross case analysis, I first sought to develop a deep understanding of each individual case. The primary task of cross case analysis then became to read and re read the case reports and interpret their findings in relation to the overarching research questions about the quintain (Stake, 2006 p. 47). Stake's guide does not set out a prescribed structure that aligns neatly with the conventions of a doctoral thesis, and my approach departs slightly from his in one respect, I conclude by offering a modest theoretical contribution to the study of institutional logics and temporary organising.

I have followed Stake's Track 2 approach, which focuses on generating cross case assertions based on evidence from the case reports (Stake, 2006 p. 58). While the uniqueness of each case is central to Track 1, Track 2 places greater emphasis on synthesising findings across cases. The process of writing the cross case analysis was therefore both interpretive and evidence based, with the resulting assertions forming the conceptual framework of the final report (Stake, 2006).

It is important to emphasise that cross case analysis is not the same as comparison. While comparison, examining similarities and differences, plays a role in all research, Stake (2006) remarks that its role in multiple case inquiry is relatively minor. Comparative studies often focus narrowly on a small number of predefined variables, which can oversimplify the complexity of contextual dynamics (Stake, 2006 p. 83). In contrast, multiple case research seeks to deepen understanding of the quintain through the study of selected instances, portraying both the common and the unusual as they emerge within diverse and situated contexts (Stake, 2006). The findings of multiple case research should not be understood as definitive conclusions that override opinion. Rather, they combine interpretation and evidence in ways that aim to be "persuasive to critical friends" (Schwandt, 2000; Stake, 2006, p. 41). Ultimately, the responsibility for making generalisations rests more with the reader than with the researcher (Stake, 2006 p. 90). Therefore my role is to enrich the reader's experiential understanding by presenting the action and context of the cases as fully as possible.

## Case Selection

The selection of cases for this study was guided by the principles of theoretical sampling, which prioritises cases that are particularly well suited to illuminate, challenge, or extend emerging theoretical constructs (Eisenhardt & Graebner, 2007). Rather than seeking statistical representativeness, theoretical sampling involves choosing cases that provide maximum insight into the phenomenon or ‘quintain’ under investigation. The phenomenon in this case being the implementation of large scale infrastructure projects by temporary organisations. When selecting the two cases for my multiple case study I followed Stake’s (2006) three main criteria for selecting cases:

- Is the case relevant to the quintain?
- Do the cases provide diversity across contexts?
- Do the cases provide good opportunities to learn about complexity and contexts? (Stake 2006, p.23)

Two cases were selected for this research:

1. The Irish Rural Electrification Scheme (Case 1)
2. Ireland’s National Electronic Health Record Programme (Case 2)

These cases were selected as they offered contrasting yet complementary perspectives on the phenomenon that this research set out to examine. One of the cases is retrospective and one is ongoing, strengthening the theoretical insight and empirical richness of the research, as outlined below.

Case 1, the Irish Rural Electrification Scheme, is a retrospective case. It represents a momentous national infrastructure project with long lasting impacts on rural life. The Rural Electrification Scheme (1946–1976) was a large scale infrastructure project led by Ireland’s Electricity Supply Board (ESB) through its Rural Electrification Office. Its goal was to bring electricity to almost all rural homes, modernise agriculture, and improve quality of life, transforming dispersed rural communities across Ireland. The project cost around IR£140 (€193 million), was funded by state grants and urban to rural cross subsidies, and involved building a nationwide low voltage distribution network. Nearly 60% of Ireland’s population lived in rural areas at the time, making the project socially significant, while technical and

administrative challenges required dedicated organisation and community engagement. By 1975, 99% of rural homes were electrified, marking it as one of Ireland's longest running and most transformative state led infrastructure initiatives. This case enables a retrospective exploration of how the Electricity Supply Board approached large scale infrastructural transformation. Studying historical projects is considered useful by Gaddis (2000) for actually conducting some form of 'process tracing' or pattern recognition (Söderlund & Lenfle, 2013).

Case 2, Ireland's National Electronic Health Record Programme, is an ongoing case. It focuses on the rollout of a similarly ambitious project, this time within the digital health environment. The National EHR Project in Ireland is a large-scale, state-led initiative steered by the Health Service Executive (HSE) through its Technology and Transformation unit (formerly eHealth Ireland). The project aims to implement a comprehensive Electronic Health Record (EHR) system nationwide, enabling seamless, safe, and connected digital health services for all patients and healthcare providers. Planned in phases through 2030, it covers regional rollouts across six Health Regions and involves developing standards, procurement frameworks, and governance structures. While some systems exist, full implementation is complex due to multiple legacy systems and slow progress. The initiative emphasises digital infrastructure as a long term investment, stakeholder engagement, and innovation. With a total health budget of €24.5 billion in 2024, the scale of investment underscores that healthcare represents one of the state's largest areas of expenditure. The Digital Health Framework positions digitisation as a cornerstone of broader health system reform, ensuring this major public service evolves to deliver better care and value. This case provides a real-time, complex environment, making it ideal for examining how infrastructure projects are implemented in instances of temporary organising. It also directly connects to current debates around digital transformation, interoperability, and organisational change in healthcare. An overview of the key details of both cases is provided here in Table 3.

Table 3. Overview of key details of both cases.

<b>Category</b>	<b>Case 1: The Irish Rural Electrification Scheme</b>	<b>Case 2: Ireland’s National Electronic Health Record Programme</b>
Context	Example of state led, large scale infrastructure transforming rural society; modernisation and social equity	Example of state led complex digital infrastructure; modernisation of healthcare systems and digital transformation
Scale	60% of population lived in rural areas (1.7 million people in 1946) eventually 99% of rural homes electrified	National healthcare system, all patients and healthcare providers across Ireland (5 million population)
Organisation	Led by ESB via Rural Electrification Office under W. F. Roe; state utility with centralised planning	Led by HSE via Technology and Transformation (formerly eHealth Ireland) under a CIO; centralised governance with regional rollouts
Duration	30 years (1946–1976), long term infrastructure buildout	Multi phase, started 2013, ongoing implementation through 2030 (17+ years), staged digital rollout
Infrastructure focus	Physical infrastructure: nationwide electricity distribution network to rural areas	Digital infrastructure: comprehensive EHR systems, standards, interoperability, and governance
Cost	IR£80 million / €140 million, funded by state grants and urban to rural cross subsidies. Equivalent of up to €1.5 billion when adjusted for the project’s share of national income in today’s terms.	The 2016 Business case for national EHR published suggested €609m-€824m for a 9 year rollout.
Social / Economic impact	Modernised agriculture, improved quality of life, reduced rural	Improved healthcare delivery, patient empowerment, safer decision making,

	depopulation, enabled labour saving devices	integration of health services, support for digital innovation and startups
Common features	State led, long term infrastructure projects with social modernisation goals, required dedicated organisational structures, phased implementation, transformative impact	State led, long term infrastructure projects with modernisation goals, dedicated central authority, phased implementation, transformative impact
Key differences	Physical energy infrastructure, rural focused, labour and daily life transformation. Ireland seen as an innovator, the scheme used as a model for others worldwide.	Digital health infrastructure, national healthcare system, technical, governance, and interoperability challenges, tech driven societal transformation. Ireland seen as a laggard, the lowest-ranked EU country in terms of citizen access to their eHealth records

Stake (2006) notes “Each case to be studied is a complex entity located in its own situation. It has its special contexts or backgrounds. Historical context is almost always of interest but so are cultural and physical contexts. The phenomenon operates in many different situations. A purpose of the multiple case study is to illuminate some of these many contexts, especially the problematic ones.” (Stake, 2006 p.12). Use of a multiple case study approach allows for greater analytical power through comparison and replication (Eisenhardt, 1991; Yin, 2003). By examining how infrastructure is constructed and contested in two distinct but related settings, this research avoids the limitations of single cases and provides a stronger basis for theoretical development (Eisenhardt & Graebner, 2007). The cases were not selected to represent the full diversity of large-scale projects or to offer generalisable theory specific to either market, but rather, to highlight patterns of institutionalisation and coordination that apply across domains or periods of time. They each function as an opportunity to observe the same phenomenon: large-scale project implementation by instances of temporary organising, under different conditions (Stake, 2006). Stake (2006) argues that in qualitative multiple case study research, selection should be purposeful and conceptually driven, aiming to capture variation across contexts. I argue that the selection of these two cases do just that. Ultimately, the goal of this

sampling strategy was not to generalise statistically, but to develop robust, midrange theoretical insights (Eisenhardt, 1989) into how large-scale projects are implemented in instances of temporary organising.

## Data Collection

The unit of analysis in this study is the project as an instance of temporary organising.

Data collection occurred between February 2022 and October 2024, employing a combination of semi-structured interviews, archival data analysis, and documentary analysis. For single case and multiple case studies, Stake (2006) asserts the most common methods of case study are observation, interview, coding, data management, and interpretation (Denzin & Lincoln, 2005; Gall et al., 2003; Gomm, 2004).

These multiple methods allowed for triangulation of data, strengthening the credibility of the findings (Eisenhardt, 1989; Pratt, 2000). “Triangulation is mostly a process of repetitious data gathering and critical review of what is being said” (Stake, 2006 p.34). As suggested by Eisenhardt (1989), overlapping data collection and analysis allowed flexibility in both method and direction, improving the responsiveness of my research process to emerging findings. I followed a theoretical sampling approach (Eisenhardt & Graebner, 2007), selecting participants and materials not at random, but because of their relevance to emerging constructs and their potential to clarify relationships among them. This iterative approach gave me a deeper understanding of the cases as new data informed subsequent interviews and document analysis.

Throughout the study, I made sure to pay attention to the ethical responsibilities of the researcher. Participants were informed of the study's purpose, and care was taken to ensure they did not feel pressured to contribute. The interview environment was designed to be respectful, open, and non-hierarchical, supporting the comfort and agency of participants (Faryadi, 2019). Interviewees were provided with an information sheet and consent form prior to meeting (Appendix 6). As Faryadi (2019) notes, effective data collection is contingent upon the researcher's preparation, interpersonal skills, and sensitivity to the background and context of the participants. By maintaining a participant-informed and issue-sensitive approach, I sought to uphold both methodological rigour and ethical integrity in my research. Ethical approval for this research was secured from Maynooth University Social Research Ethics Committee (Appendix 4).

## Within Case Sampling

Sampling was guided by theoretical relevance, feasibility of access, and an iterative approach to data collection and analysis, consistent with abductive research principles.

### Case 1: The Irish Rural Electrification Scheme

Access to the Rural Electrification case was initially facilitated through the archival collection held at the ESB archives in Finglas, Dublin. This archive contains a rich set of materials produced during the Irish Rural Electrification Scheme, including the Rural Electrification Office (REO) News staff magazine, government reports, and technical manuals.

- Archival data was accessed beginning in February 2022 and continued over the following year. In total the entire REO News archive (168 issues), of comprehensive, project-focused staff magazines, spanning a lengthy time span from December 1947 to September 1961, were systematically collected and imported into NVivo for coding.
- Preliminary analysis of this archival material informed the development of the interview topic guide for the rural case and the EHR case.
- Interviews with former ESB employees, and community members involved in or affected by the electrification scheme were conducted between September 2023 and October 2024. In total, 9 semi-structured interviews were conducted.

The combination of archival and interview data enabled the triangulation of key events and dynamics, helping to mitigate concerns around retrospective bias by checking alignment across data types.

### Case 2: Ireland's National Electronic Health Record Programme

- Analysis of the released strategy documents for EHR implementation was conducted before and after the period of interviews. Early insights from these documents and the academic literature on the topic of EHR implementation shaped emerging themes and informed refinements to the interview guide.
- Interviews were conducted with healthcare professionals, policymakers, and technical staff involved in the design and implementation of EHR systems in Ireland.
- In total, 18 semi structured interviews were completed between September 2023 and October 2024. Interviews were audio recorded, transcribed, and coded abductively in NVivo.

- Further data collection for the EHR Implementation case continued with an extensive documentary analysis of empirical literature related to Electronic Health Record system implementation. This process included gathering and reviewing 90 empirical papers (Appendix8), selected based on their relevance to EHR implementation in both national and international contexts.

For both cases, data collection was not linear but iterative, allowing for emerging themes in one source to guide the focus of subsequent collection efforts. For instance, coding of archival data in the Rural Electrification case helped refine the questions asked during interviews, and initial EHR interviews helped pinpoint areas where deeper documentary evidence was needed.

This phased and flexible approach is consistent with theory-building case research, where data collection and analysis evolve together (Eisenhardt, 1989).

## Data Collection Instruments

I drew on multiple sources of qualitative data across the two cases. The instruments used included semi-structured interviews, documentary material, and archival records. The following outlines the data collection process, rationale, and ethical considerations.

I conducted 27 semi structured interviews in total:

- 9 interviews for the Rural Electrification case
- 18 interviews for the EHR Implementation case

These were carried out between September 2023 and October 2024.

Participants were contacted primarily through cold emailing outreach, with additional contacts identified via snowball sampling. For the EHR case I attended numerous public events where Irish eHealth was being discussed and either spoke to potential interviewees at the event, or emailed the relevant speakers after the event asking them if they would participate in my study. Some participants were also identified through searching Irish ehealth projects online and contacting notable members of these projects via email. Rural Electrification interviewees were found in a similar manner where I attended numerous public events concerning rural electrification and either spoke with potential participants there or emailed them after the event. I also contacted numerous Irish Countrywomen's Association Charters around the country and was very kindly invited to attend some of their meetings. Upon attending their meetings I explained my research and arranged with some of the members there to set up interviews at a

later date. Some individuals, across both cases, declined to participate, usually stating they did not feel sufficiently knowledgeable about the topic to contribute meaningfully. Each participant received a participant information sheet and consent form in advance (Appendix 6). All interviews were conducted in accordance with the ethical protocols approved by Maynooth University Social Research Ethics Committee. No ethical issues arose during the study.

The timing of collection of data is represented below in Figure 5. I conducted 9 interviews for the Rural Electrification case and 18 interviews for the EHR case. These sample sizes reflect the principle of data saturation, the point at which additional interviews yield little new conceptual insight. As can be seen from the counts, this point was reached a lot quicker with my rural electrification interviewees than it was with my EHR interviewees. This was likely a result of the wealth of archival data which had already been analysed for this case. The interviews were semi-structured, which allowed for depth and flexibility while remaining oriented around core themes set out on the topic guides (Appendix 1) I had developed. After coding all the REO News files and reviewing the case literature for both cases, I began developing a topic guide for the interviews. I drew on the key themes, patterns, gaps, and institutional logics I had identified during coding to ensure the guide would capture the most relevant issues, while allowing participants to share their own perspectives. The topic guide became a structured framework for exploring my research questions in depth, connecting insights from the documentary data with the lived experiences of interviewees. After conducting my pilot interviews, I found that when interviewees were asked broad, open ended questions such as, “Can you talk about your experience with rural electrification/EHR systems?”, it often led to richer, more narrative responses which were of more use to me than asking them pointed questions about their experience. They tended to cover most of the information I wanted to know about in a much more natural way if asked a few broad questions about an area. As a result of this, by the end of my data collection of interviews, I had developed an understanding of the topic area questions to ask my interviewees and did not need to adhere closely to the very specific questions on my topic guide. The topic guide remained useful as just that, a guide, but it was rare that I would need to ask even half of the questions on it to participants as it was highly detailed. At the beginning of each interview I acknowledged to participants that it was my aim to learn from their expertise and that I was not an expert in the subject matter they were discussing. This was something I felt was necessary as often I found interviewees qualifying their answers with statements such as “You probably already know this” or “I don’t know how much use my experience will be to you”. I found that starting each

interview by telling them I was interested in anything they felt was important greatly improved the perceived comfort of the participant and the ease with which they spoke on their topic. Interview locations were left largely up to the interviewees with 11 interviews occurring in person, 15 via Microsoft Teams, and 1 interview occurring via phone call. Each interview was audio recorded, transcribed verbatim, and imported into NVivo 15 for analysis. Archival and documentary data were also imported and coded in NVivo. Interview durations ranged from under 30 minutes to over one hour, with an average interview time of 43 minutes and 50 seconds.

I made notes during each interview to track which areas had or had not been addressed and followed up as needed throughout the interview. Throughout the interviews I was conscious that Stake (2006) suggests that “An interview should be less about the interviewee than about the case. Of course, the way the interviewee sees the case operating is essential knowledge and the researcher needs to find out a little about the interviewee to understand his or her interpretations” (Stake, 2006 p.31). All interviews were audio recorded on two dictaphones and then transcribed using Otter AI, a paid transcription software. Each transcript was checked manually against the recording and corrected for accuracy. This was a time consuming process, but a necessary one as it ensured a high level of reliability in the data. Participants’ identifying details (e.g. name, contact information) were stored separately from their interview data. Where interviewees referred to other individuals, or specific locations, those names were generally removed to further protect anonymity. Additionally a few interviewees did not consent to being quoted in any research output emerging from the interview, even if anonymous. I have not used direct quotes from those interviewees anywhere in this thesis. Only myself and my primary supervisor have access to the raw interview data. Any published material will fully anonymise participants. A large number of participants stated that they did not mind being identified as an interviewee, however ultimately I decided to anonymise all interviewees. A full list of anonymised interview participants is included in Appendix 2. Wherever “...” is seen in any quotes presented in this thesis this means that the original quote has been shortened. The material replaced with this symbol was usually where interviewees repeated words numerous times or used filler words such as “um” or “eh”. In such instances I have taken care to ensure that the original meaning of the interviewees’ quote remains intact, seeking only to improve the flow of the quotes so as not to distract from the importance of what is being said.

## Document Analysis

Document analysis across both cases broadly consisted of:

- 90 empirical papers, originally collected as part of a scoping literature review.
- Policy reports, strategic documents.
- REO News: All 168 issues were reviewed, comprising approximately 3300 pages.

REO News archival data (Appendix 3) was a key historical resource for the Rural Electrification case. It provided material relating to the scheme and its operation. These materials were sourced from the ESB archives. This archival material helped frame the broader context of the scheme and informed my early thinking about relevant themes and interview topics. The key documents analysed in both cases are presented below in Table 4.

Table 4. Key documents analysed in both cases.

<b>Case 1: The Irish Rural Electrification Scheme</b>	<b>Author</b>	<b>Year</b>	<b>Type</b>	<b>Pages</b>
The Electricity Supply Board	Browne, R F	1952	Report	20
The Irish National Electrification Scheme	McCarthy, Albert J. P.	1958	Journal Article	15
Electricity Supply in Ireland: The History of the ESB	Manning, Maurice; McDowell, Moore	1984	Book	281
The Quiet Revolution: The Electrification of Rural Ireland	Shiel, Michael J.	2005	Book	304
Wiring the Countryside: Rural Electrification in Ireland	Duffy, Patrick J.	2011	Book Section	14
<b>Case 2: Ireland's National Electronic Health Record Programme</b>	<b>Author</b>	<b>Year</b>	<b>Type</b>	<b>Pages</b>
eHealth Strategy for Ireland	Department of Health	2013	Report	76
ISF Programme ICT Asset Base Workstream 2.4 Standards Catalogue 'Delivering eHealth Ireland'	HSE Design Authority	2016	Report	124
Factors for Success in Electronic Health Record Implementation: Literature Review and Key Considerations	Fennelly, Orna	2019	Report	66
The need to reform Ireland's national health information system to support the delivery of health and social care services	Health Information and Quality Authority	2021	Report	76
Digital for Care: A Digital Health Framework for Ireland 2024 2030	Department of Health	2024	Report	65
Digital Health Strategic Implementation Roadmap	Health Service Executive	2024	Report	91
<b>Total Pages</b>				<b>1,132</b>

For the rural electrification case, the use of archival data was essential in providing historical grounding. Concerns regarding retrospective bias were mitigated through triangulation. The themes and events described in archival material were consistently validated by interview data, suggesting a reliable representation of historical processes. As Stake (2006) notes, researchers often must rely on others' experiences to gain insight into events they did not directly observe, with interviews and documents serving as complementary lenses. Following Stake's (2006) multiple case research design, I treated data collection as an evolving and issue driven process. Early findings informed later stages, including the development of interview topic guides based on emerging patterns from archival coding. Case specific issues functioned as illustrations of context, rather than fixed research questions, allowing deeper contextual engagement (Lauckner et al., 2012). As Eisenhardt (1989) highlights, theory-building case research benefits from such methodological flexibility, including the addition or adjustment of data collection methods and protocols mid study. This responsiveness ensured that data collection remained closely aligned with the research goals and evolving conceptual framework.

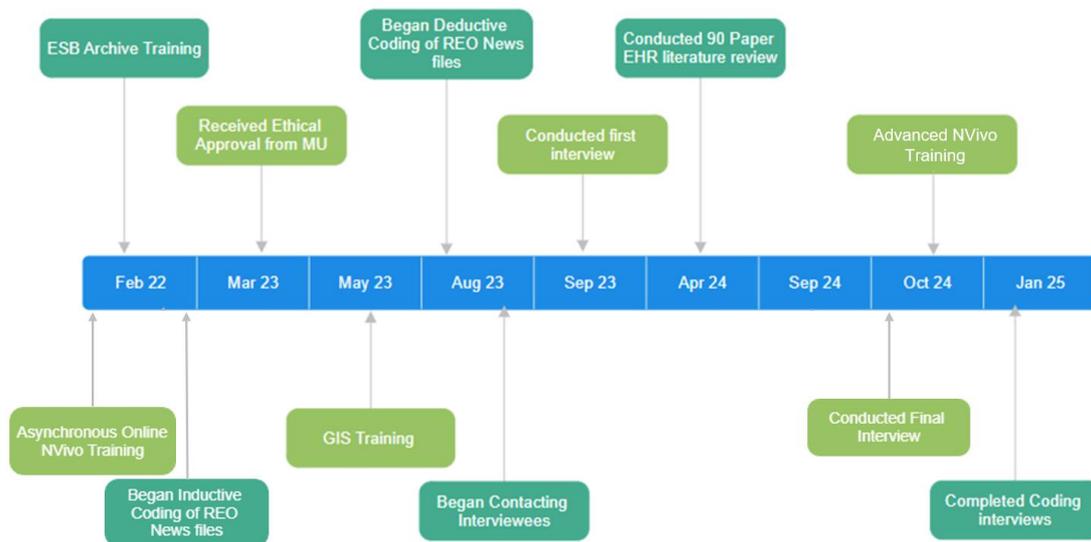


Figure 5. Timeline of Data Collection

## Analysing the Data

The overarching logic of inquiry I used in this research was abduction, which lies between inductive and deductive reasoning. Abduction involves a recursive and iterative process of connecting empirical observations with theoretical constructs, allowing both to mutually inform and refine one another (Hsieh & Vergne, 2022; Timmermans & Tavory, 2012). This process of ‘double fitting’ (Timmermans & Tavory, 2012) supports the generation of novel theoretical insights while remaining anchored in the empirical world.

Abduction was not an analytic choice on my part, but rather a natural consequence of the research process. Though some aspects of my data collection initially followed inductive or deductive logics, the broader analytic trajectory was fundamentally abductive. Early on, for example, while developing my interview topic guides, I was already informed by institutional theory, showing a deductive pull. At the same time, much of my initial coding especially of the archival materials was open and inductive (Braun & Clarke, 2006). These movements between data and theory reflect what Järvensivu and Törnroos (2010) describe as the abductive rhythm of research: an initial leaning toward either induction or deduction, followed by recursive, theory data interplay in later phases. Abduction is often the mechanism that enables creative theoretical insight, especially when existing models fail to fully explain surprising or puzzling findings (Bamberger, 2018; Lipscomb, 2012; Peirce, 1955). My study followed what Bamberger (2018) calls exploratory abduction, beginning with a series of empirical puzzles (such as conflicting narratives across cases). The analysis progressed by generating plausible explanations and testing their fit across multiple data sources. The creative but fallible nature of abductive inference (Lipscomb, 2012) was acknowledged by triangulating claims across multiple sources and by returning to theory repeatedly to reframe or revalidate findings. The analysis occurred in two major stages, though in practice these overlapped and evolved iteratively.

In line with this abductive approach, the data was coded using an iterative approach that combined both deductive and inductive strategies. Deductive codes drew on institutional logics and relevant theoretical constructs, providing a framework to guide attention to key concepts, while inductive coding remained open to patterns emerging directly from the data. This iterative interplay between theory and data allowed empirical observations and theoretical constructs to inform one another, challenging, refining, and extending understanding of the data. This abductive coding approach proved particularly valuable because it captured insights

that might have been missed under a purely deductive or inductive strategy. Deductive-only coding could have constrained the analysis to pre-existing categories, risking the omission of unexpected or novel patterns, whereas inductive-only coding might have produced rich descriptive themes without connecting them to theoretical insights. Abductive coding, by combining both, enabled a more nuanced interpretation of how institutional logics are enacted in practice, validating anticipated patterns while also revealing unanticipated dynamics.

While this approach required careful reflexivity to ensure that theoretical frameworks did not overshadow emergent data, it was ultimately the most appropriate for this study. It provided a richer, more comprehensive analysis than a single coding strategy would have allowed.

### Stage 1: Initial Coding and Theme Development

The earliest data that I analysed were the 168 archival staff magazines (REO News) accessed through the ESB archives. These were initially coded inductively, using NVivo, during the second year of my PhD. Although the inductive process surfaced rich insights, it proved overly broad. After reviewing my findings, I recoded these materials using a deductive framework based on Thornton et al.'s (2012) institutional logics ideal types, having observed clear patterns aligning with ideal type logics. This recoding helped surface the institutional tensions and transitions evident in the archival data and directly informed the development of the semi structured interview topic guides used across both the rural electrification and EHR implementation cases. Though the context of each case varied, the thematic core of the interviews remained the same, for example all interviewees spoke about cost, staffing, transformation, relationships, and many other common topics.

While still collecting interview data, I identified the need for a comparative dataset to strengthen my analysis of the EHR case. This led to a scoping literature review of 90 empirical studies (Appendix 7 & 8) on EHR implementation between 1999 and 2024. I searched five databases using carefully selected keywords to capture variations in terminology and refine results to studies focused on implementation processes rather than outcomes. I screened 4,454 citations through a rigorous process using Covidence, resolving any disagreements collaboratively with my primary supervisor to ensure consistency. Data from the 90 eligible studies were extracted and thematically coded in NVivo, with intercoder checks to ensure reliability, allowing me to draw evidence based insights grounded in observed experiences rather than theoretical gaps. These papers were used to publish a standalone literature review

(Finnegan & Mountford, 2025). At the time, this process was primarily exploratory and grounded in thematic concerns rather than theory testing.

## Stage 2: Recoding Data to Institutional Logics Ideal Types

While writing up my methodology chapter, I recognised that although I had been iterating between theory and data throughout, I had not applied the institutional logics framework consistently across all data sources. To strengthen the theoretical coherence of the study I returned to the interview transcripts, coding them again deductively for evidence of institutional logics. In this research, all logics were coded and analysed as societal level logics, with justification provided for each selection based on the X and Y axes of the interinstitutional system ideal types outlined by Thornton. While readers may interpret these logics at the field level, this research does not focus on developing new field level logics, as doing so would dilute the analysis and reduce its generalisability. Adhering to societal level ideal types strengthens the conceptual connections being examined.

Additionally, I revisited the archival data once more, this time focusing not on logic types but on discussions of implementation processes, aligning my coding strategy with the structure used for the EHR empirical paper scoping review. This step was essential to developing a meaningful cross case analysis and to ensuring that both institutional logics and process elements were captured in my analysis.

Throughout the research, NVivo was used to manage and code all data sources (Appendix 5) including interviews, archival materials, and empirical articles, enabling the cycling between theory and data that is characteristic of abductive research (Eisenhardt et al., 2016; Klag & Langley, 2013). I undertook NVivo training at Maynooth University prior to coding interviews, building on prior experience using the software for earlier stages of documentary and archival analysis. The analytic process was deeply iterative, involving numerous returns to earlier data, codes, and theory. To enhance analytic rigor, major claims were supported by multiple data sources, and preliminary interpretations were refined through supervisor feedback, and engagement with scholarly audiences at workshops and conferences. This reflexive engagement with data and theory helped guard against both under and over interpretation.

Abduction's strength lies in its ability to generate plausible yet tentative explanations, and I have aimed in this study to embrace the "messy, non linear, and creative path" often required

in abductive analysis (Eisenhardt et al., 2016; Klag & Langley, 2013). As Bamberger (2018) notes, abductive research in management has often been masked under the banner of induction, yet its potential lies in refining core theoretical constructs such as institutional logics by bringing them into tension with unexpected empirical realities. This is especially relevant when logics manifest in ways not anticipated by the theory or when implementation processes diverge from their theorised trajectories.

## Limitations of the Methodology

I have adopted a multiple case study design to examine temporary organising and institutional logics and their role in shaping the implementation of large scale project implementation. There are, however, several methodological limitations that must be acknowledged. These limitations are particularly relevant given the structural and temporal differences between the two cases used, rural electrification in mid 20<sup>th</sup> century Ireland, and EHR implementation in 21<sup>st</sup> century Irish healthcare.

The two cases involve fundamentally different types of organisations and sectors, a national utility in the energy sector, versus a multi-layered public health system. These organisations operate under distinct regulatory frameworks, funding models, professional logics, and technological infrastructures. The market, institutional, and societal environments in which they are embedded are also markedly different. These differences limit the potential for symmetrical comparison. This thesis does not assume that findings from one context can be directly transferred to the other. Rather, the analytical strategy focuses on drawing theoretical parallels across cases. This logic follows an abductive reasoning strategy (Peirce, 1903; Bamberger, 2018), whereby surprising empirical patterns in one case help refine new theoretical insights applicable across settings.

A second major limitation is the temporal distance between the two cases. The rural electrification programme occurred in the mid-20th century, within a post war, developmentalist state context using physical infrastructure. In contrast, the EHR implementation is taking place in a contemporary, digitally-networked healthcare system, shaped by EU level governance, and data protection legislation. These technological and historical differences pose challenges for theoretical generalisability. For example, concepts such as “infrastructure” or “professional resistance” may carry different meanings and operate

under different constraints across periods. While the study aims to use these differences to illuminate variation in the instances of temporary organising implementing these projects, it must be acknowledged that some conceptual translations across time may be strained.

The two initiatives also differ in their states of completion and the types of temporariness they embody. The rural electrification programme is a completed historical project whose outcomes can be retrospectively assessed. In contrast, EHR implementation remains ongoing, with its future shape and success still uncertain. This introduces potential bias as retrospective analysis of a completed project allows for clearer assessment of outcomes and narratives of success or failure. Meanwhile, studying an ongoing process limits the analysis. As a result, some insights from the electrification case may appear more conclusive than those from the EHR case, which is still developing. However, the multiple case study design allows these individual shortcomings to be addressed in the research.

Finally, there is a risk of bias in how insights from one context are applied to the other. Abductive reasoning, while creative and generative, is also fallible (Lipscomb, 2012; Peirce, 1998). There is a danger that themes or insights derived from one case might overly shape the reading of the second, especially when working with ideal type constructs like institutional logics. To mitigate this, I have employed a rigorous process of triangulation, critical peer feedback, and repeated returns to both theory and data. Still, the possibility of subtle theoretical retrofitting must be acknowledged as a limitation of the abductive process itself.

## Conclusion

My study adopted a multiple case qualitative research design, focusing on two cases connected by a shared quintain. Data collection drew on semi structured interviews, document analysis, and archival sources, which ensured a comprehensive and contextually grounded account of each case. The reader should bear in mind that multiple case study is not a design for comparing cases. The cases studied are “a selected group of instances chosen for better understanding the quintain.” (Stake, 2006 p.83). The emphasis is on observing cases as they operate in real settings (Stake, 2006) and selecting them carefully to ensure meaningful engagement with the critical phenomena under study (Creswell, 1998; Patton, 1990; Stake, 2006; Yin, 2003).

Multiple case research does not seek to reduce cases to variables or comparative descriptions, which risk oversimplification. Rather, it aims to interpret the life of the quintain across multiple

situations (Stake, 2006). The role of this study, therefore, is not to generate generalisable findings in the manner of traditional social science, but to provide situated insights that deepen understanding of the phenomena of interest (Stake, 2006).

# Chapter 5. Case Study 1: The Irish Rural Electrification Scheme

## Introduction

The Irish Rural Electrification Scheme (1946–1976), led by the Electricity Supply Board through its Rural Electrification Office (REO), aimed to bring electricity to rural homes, modernise agriculture, and improve quality of life. It required major technical, administrative, and community efforts to build a nationwide distribution network. By 1975, 99% of rural homes were electrified, making it one of Ireland’s most transformative and long lasting infrastructure projects. Below is a timeline of the project’s progress.

## Timeline of Rural Electrification in Ireland

- 1946: Rural Electrification Scheme passed. First pole of phase one erected on November 5th at Kilsallaghan, Co. Dublin.
- 1947: First electricity switched on at Oldtown, Co. Dublin in January.
- 1946-1965: (First phase of electrification)
- 1955: Electricity Supply Amendment Act passed, supporting further rural expansion.
- 1965: End of first phase; over 300,000 homes connected.
- 1965-1978: (Post-development/extension phase): By 1975 99% of Irish homes were connected to the national electricity grid. Rural electrification continued in remaining areas. Black Valley, Co. Kerry connected in 1978.

## Overview

The idea of a nationwide electricity supply for Ireland was first envisioned in the 1920s by an electrical engineer, T. A. McLaughlin (McCarthy, 1958). Dr. McLaughlin visualised electric power as the basis for a new social and economic program for the state.

The Electricity Supply Board (ESB) was founded in Ireland in 1927 following the enactment of the Electricity (Supply) Act 1927. The founding mandate of the ESB was to generate sufficient revenue to cover the costs associated with electricity generation and transmission

(Quinn, 2025). Following the completion of the Shannon Scheme, a large project involving construction of Ireland's first major hydroelectric power station on the River Shannon at Ardnacrusha, the ESB's next major initiative was rural electrification. A White Paper authored by Thomas McLaughlin, the ESB's inaugural Chairman, was published in early 1944. After receiving government approval, planning began in 1945 and the first pole was installed in November 1946 (Manning and McDowell 1984, p.131). The rural electrification program spanned approximately thirty years, costing around IR£80 million at the time. This was equal to €140 million in contemporary value (Shiel, 2003, p. 7), though modern estimates that adjust for the project's share of national income suggest an equivalent of up to €1.5 billion (McGinley, 2021) in today's terms. The scheme laid the foundation for Ireland's subsequent economic and infrastructural development (Quinn, 2025).

### The Rural Electrification Office

In 1939 the Irish government asked the Electricity Board (ESB) to propose a comprehensive plan to reach poor and under-equipped rural areas. After some delays, due to World War II, a rural electrification programme was established, with the objective of electrifying about 280,000 rural homes. The state agency ESB was in charge of building and operating the rural grids and a separate temporary organisation, the Rural Electrification Office (REO), was established within the ESB to deal with employment, supplies, and logistics, and to decentralise the day-to-day running of the scheme to local areas as much as possible (Duffy, 2011). An interviewee discusses that event and the importance of establishing a separate organisation,

“I think going separate was terribly important. The ESB had a staff for maintenance, and repairs, and individual home bills. So they were building or connecting ... a one off house there, maintenance on the network, new line builds. ... Because we have a base staff to do what we need to do. There was no way anyone else could take that on, any area could take it on without bringing in a whole new organisation. Now it's contractors. Then they built it from inside. You know they probably took a reasonable number of experts from the day job or the standard ESB staff...So yeah, I think they did the right thing and sure they're doing the same thing today so it must be working.” (REI109)

Electrification was nearly completed by 1976, reaching over 500,000 customers which significantly exceeded initial expectations. Although the process was gradual, it was ultimately 'successful', as universal access to electricity was achieved (Matly, 2005).

The rural electrification scheme is alternatively referred to by different names throughout the literature, e.g. rural electrification programme. For the sake of consistency I will refer to the introduction of electricity by the ESB to rural Ireland as the rural electrification scheme throughout this thesis.

## The ESB

Prior to 1927, electricity generation and distribution were managed largely by local authorities and private enterprises, particularly around Dublin. The industry suffered from fragmentation, with over 160 separate undertakings by 1925, each operating with different standards and voltages (Gaffney et al., 2017; Shiel, 2005). The fragmented nature of these operations hampered the potential for national electrification, especially in rural areas. While electricity was present in Dublin and some other major towns by the 1920s, the networks were largely isolated and incompatible. According to the ESB's 1927-28 annual report, there were 15 electricity suppliers in County Dublin alone, and over 150 nationally (Quinn, 2025). These disparate and locally controlled systems were not capable of providing the foundation necessary for widespread rural electrification. A cohesive, national infrastructure based on alternating current and centralised planning was essential (Quinn, 2025). The ESB therefore acquired nearly all existing electricity undertakings operated by local authorities, private companies, and small entrepreneurs (Gaffney et al., 2017). An interviewee summarised the early consolidation efforts of the ESB:

“I think they bought up three hundred and thirty something existing companies, because you ... couldn't guarantee what frequency they were going to generate at. So you couldn't connect them into the ESB system. So the government agreed then that there would be only one supplier of electricity in Ireland. And hence, if you go back eight, nine years to America, one branch of a tree brought out whole of New York, because there was different suppliers feeding into the grid. Here you have one national grid. So...they were kind of way before their time in the sense that they planned this thing out. And this is the way it was going to be, you were going to have a national grid and ESB would be responsible for it.” (REI109).

At its inception, the ESB made a pivotal decision to forgo selling electricity in bulk to other distributors, an option allowed by the Act, instead opting to deliver electricity directly to consumers on a non-profit-making basis (Shiel, 2005). Although opposed by local authorities, this decision was driven by the thinking that municipal boundaries and local politics should not

interfere with the creation of a unified national electricity network (Shiel, 2005). This unified approach aimed to overcome past slow developments and create a nationwide electricity grid (Gaffney et al., 2017).

## Rural Electrification Scheme

The Rural Electrification Scheme was one of Ireland's longest running infrastructure projects, spanning from 1946 to 1976. The scheme focused on creating the necessary distribution network to bring electricity to rural areas (Quinn, 2025). To manage the scheme, the ESB established the Rural Electrification Office (REO). The REO operated as a separate organisational unit within the ESB, reporting performance independently while financial oversight remained integrated with the main ESB accounts (Quinn, 2025). The scheme was organised along parish lines, each representing a small local administrative unit. It is described in the literature as Ireland's greatest social revolution since the land reforms of the late 19th century (Quinn & Warren, 2017). Rural electrification had a substantial social impact, with labour saving electrical devices becoming widely used on farms, enhancing productivity and lessening the physical demands of rural labour. It transformed daily life especially easing the workload of rural homemakers and helped stem rural depopulation by making countryside living more attractive (Browne, 1952; Shiel, 2005).

## Findings

Analysis of the interview and archival data produced several notable themes: consumer perception of the scheme, cultural context, collective effort, management, planning, policy, cost, and training. To provide a clear view of each case, I begin by outlining public reactions to the scheme alongside the cultural context of the time. The same approach is applied to Case 2, showing how these themes emerged in different settings

## Consumer Perception of the Scheme

Rural consumers' perceptions of the scheme reveal a complex combination of acceptance, anticipation, resistance, social influence, and prior exposure. These attitudes were shaped not only by the novelty of electrification but also by social dynamics, communication patterns, and

prior experience, creating a unique picture of engagement with the project. In the following section I synthesise these influences, highlighting the patterns that underpinned both enthusiasm and hesitation towards the scheme.

Although completed many years ago it is important to develop an understanding of the consumer attitudes towards this project. For some, the introduction of electricity was eagerly welcomed: “My parents, mammy and daddy were in their thirties possibly at the time, and they were delighted to have electricity at last.” (REI102)

However, acceptance was not universal, and some potential consumers were more hesitant: “No, electrification...some people took it aboard...more than others you know.” (REI103). Anticipation also shaped responses and is illustrated here by an interviewee who was a child at the time of introduction of supply to their area, “Well, I just remember the excitement of it and the man coming to wire the house and...the ‘switch-on’ day you know, being at school and rushing home...you know, the excitement of it.” (REI103).

While excitement and anticipation were common, consumer reactions were uneven, reflecting a spectrum from enthusiasm to hesitation. Resistance was also common: “I know that some people... no matter where they put the pole they wouldn't be satisfied about it anyway. Like, I mean, even today, people would have to, you know, complain about it, ‘It should be over somewhere else’.” (REI104). Social dynamics played a large role in acceptance of supply during the scheme, as neighbours’ decisions could influence others and affect the practical rollout of supply: “If the person in the next house didn’t take it on there was a big kerfuffle because the ESB had to like revise their plans and revise the route that they’d take and it was through bogs and through fields and like, Leitrim and Mayo have the same terrain so you can imagine what it was like. And the neighbours would be trying to influence them to get it, and sometimes they succeeded but a lot of the times they didn’t.” (REI101). Consumers liked to see supply in action before committing to acceptance, “But anyway... some of the neighbours that didn't get it, were keen to... see what it was like in other people's houses.” (REI104). Peer pressure played a strong role in acceptance, “Like everything else, pressure and locality. If one has it, the other one will get it. And you know, women were mostly grateful for...moving forward and doing stuff like that...so I suppose that was the way it worked.” (REI105).

Acceptance was therefore not merely a matter of individual preference but was strongly socially mediated, shaped by observation, peer pressure, and the decisions of neighbours. Resistance to supply or the scheme in general was often rooted in fear or suspicion. One vivid

illustration of this states, “My grandfather used to have a stick, and he started poking the stick at this poor guy that was demonstrating the washing machine... ‘You’re trying to kill us all! Get out of the house!’” (REI102). Others reflected, “You know, people, old people like that ...they always had an issue about something new.” (REI103) and “I think that there was a fair amount of paranoia about it.” (REI108). Fear and unfamiliarity were critical factors in shaping resistance, highlighting the emotional and psychological element of consumer responses.

Communication within communities and between staff and consumers helped mitigate these fears. Discussions about the scheme facilitated information sharing and collective understanding: “The other things I remember about it is, there was lots of discussions with the neighbours.” (REI101) and “Every two months they would discuss what the ESB bill was. Everyone and the neighbours would. You’d know exactly what everyone’s ESB bill was.” (REI101). Effective communication served as a bridge between technological change and social acceptance.

Prior exposure to electricity, either locally or abroad, influenced expectations and comfort with supply. Those without prior experience often approached the scheme with uncertainty: “Unless you had kids who were living in the town you wouldn't really have really been exposed to any of that sort of stuff. If you were 1920s or... 1890s as my grandparents were born in this sort of area. You just wouldn't have had a clue.” (REI108). Consumers who had minimal previous experience of supply were unsure of what to expect, “My granny was in awe of it. She couldn't understand how it was happening.” (REI101).

Rural consumers' reactions to the scheme were influenced by a mix of excitement, social pressure, fear, and past experience. Their acceptance or resistance was rarely clear-cut, but shaped through interactions with neighbours, communication, and familiarity with technology. Overall, consumer perception was a complex, socially influenced process, not just a response to what was offered.

## Cultural Context

The cultural context of 1900s Ireland provides essential insight into the implementation and reception of rural electrification. Rural communities' responses were shaped by religion, government influence, gender roles, and post-war social conditions. The evidence from interviews and REO News files reveals how these factors framed both expectations and

experiences of electricity supply, highlighting the relationship between social norms, technological change, and everyday life. This section synthesises these elements to demonstrate how rural electrification was not only a technical initiative but a transformative social phenomenon.

Religion and local leadership played a central role in framing the scheme as a socially and morally significant development. A speech by a local clergyman at a 'switching-in' ceremony illustrates the perceived impact of electrification: "No material instrument can do so much to uplift the rural people and give them a status in accordance with the important position they hold in the nation. Rural people who supply the fundamental necessities for the whole nation should have at least an equal right to the amenities of the nation" and again, "It is more than an amenity, it is a revolution which will sweep away inferiority complexes." REV. [NAME REDACTED], P.P., BANSHA, speaking at Bansha. 24th May 1948." (REO1948.07). Religious and community leaders framed rural electrification as a transformative force, positioning it as a moral and social equaliser that elevated rural status and identity.

Life before electricity was characterised by labour-intensive routines and reliance on traditional lighting methods. One interviewee describes household life prior to supply: "In 1952 electricity came to our area. Before that we lived with oil lamps, open hearth fires and we were a very busy and hardworking household. We had an oil lamp which hung on the wall... just inside the front door which had a small porch beside it, hung a mirror. Every evening before it got dark, we got the lamp ready by making sure it was filled with paraffin oil and that the wick was clean and ready to light. After lighting the wick we put the globe back on very carefully. That was our main light. We had candles for the bedrooms and we always made sure to blow them out carefully before we settled and fell asleep." (REI105).

The historical timing of the scheme, shortly after the Second World War, influenced both perceptions and adoption. Interviewees noted lingering mistrust of new technologies: "Now, you see in the 50s, if you think about it, we're not that long after war years... So there was always a mistrust of something new." (REI104). The rapid changes introduced by electrification also created generational differences in experience: "You know I always said that... I had a sister 10 years older than me...and I had a brother 10 years younger than me. We experienced things that he never experienced. And he'd say, 'I don't know what you're talking about'. And he would never have seen machinery or seen work going on the way we did at home." (REI106). Post-war uncertainty and generational disparities shaped how rural

communities perceived and adapted to the technological and social transformations brought by electricity.

Rural electrification had a profound impact on women, particularly homemakers, transforming domestic work and daily life. Interviewees highlighted both personal and broader societal changes: “I only remember my mother's delight, because she had worked in England for nine years, and she had had running water and electricity for nine years, and then she comes back to rural Ireland where they had none of this, but that’s what she was used to in her own home place.” (REI101). “I always say that rural electrification and running water was the two biggest boons for women in the country. Poor women especially, because they didn't have to carry water anymore and they had the electric at the switch of the of the finger.” (REI103). “I wonder what the biggest changes were for them. Because if you think about it, it's really in one 50 year period it went from the medieval people would have been quite familiar with what they were doing, to something that would be unrecognisable. I mean I don't suppose my grandmother would recognise my kitchen at all.” (REI108). As a result of the prominent role and effect that rural electrification had on women, a lot of advertising was designed to appeal to women. An interviewee addresses this women-centred position: “So I think we are a nation of contradictions and very often something like rural electrification will trip us up beautifully. Because you've got ‘Sure it's only for the women, isn't it?’ What? Wouldn't it make your life easier if you had lights out in the milking? Oh, you know, people don't think and they have a reactionary response to things and it takes time for change to embed.” (REI108). Electrification reshaped domestic life and women’s labour, with both practical and cultural implications.

Staff roles and responsibilities were also shaped by the cultural mindset of rural communities. REO News highlighted the importance of tailoring staff engagement to local attitudes: “Our rural dwellers have a sturdy individualism; they do not like to be considered merely as the agricultural hinterland to a small town, nor are they keen on the prospect of having to dress up to attend a Demonstration in the town, when they could conveniently drop in to a local Demonstration with complete absence of any formality.” (REO1950.01). The financial and national importance of the scheme was also emphasised: “The rural scheme must be subsidised in one form or another. We do not think that the expense will be grudged: for even the least enlightened citizen recognises that, if the country's agriculture, the basis of everybody's prosperity, is to make serious progress, rural electrification is essential.” (REO1950.08). Staff guidance and policy communications reflected an awareness of rural cultural norms, economic

considerations, and the need to balance respect for local independence with the promotion of this national project.

## Collective Effort

The implementation of the rural electrification scheme relied heavily on collective effort between staff, local communities, and informal networks. The evidence demonstrates that achieving widespread supply required coordinated involvement, both formally through committees and staff directives, and informally through community participation and peer support. This section illustrates the ways collective effort operated, highlighting the interactions, responsibilities, and social dynamics that enabled the scheme to succeed.

Community involvement was formally acknowledged and encouraged throughout the REO News files. Local committees were credited with facilitating the work, while staff were advised to engage communities to increase uptake of supply: “A pleasing feature of the report is the note that the local committee were very helpful throughout the construction period.” (REO1951.07), and where staff are being advised to involve the community in implementation in order to increase uptake of supply, “Assuming that the whole idea is to reduce the number of backsliders to a minimum I would be in favour of retaining the Committee's assistance both during and after the A.O's (Area Organiser's) canvass.” (REO1949.05).

Formal structures and local committees were instrumental in harnessing community support and ensuring smooth implementation of the scheme. Communities also contributed directly as temporary members of the workforce. One interviewee recalled: “When they came, they employed the men that lived in the house and in the community to work on digging the holes for poles, cutting the trees that made the poles...While they were in the area of the owner, the owner's land, he was employed. When they moved to a different area, the next people were employed and they were paid by the ESB, as manual workers.” (REI102). Staff often remained in the community while carrying out their duties: “When they were doing the poles, and they were doing the work like that they would often have stayed in boarding houses or guest houses or locally.” (REI103). The integration of community labour and the physical presence of staff within local areas reinforced the cooperative dynamic and facilitated practical implementation.

Maintaining positive relationships within the community reduced workload and increased efficiency. REO News illustrates this practice: “Sometimes this helps a lot when an A.O. (Area

Organiser) knows a handy man in town who may wire their houses if consumers get the fittings. He may do the job for nothing in his spare time...” (REO1949.03). An interviewee reflected on informal assistance from family members, describing how their father, who lived in England at the time would travel over to Ireland in the summertime and wire up houses free of charge for family members and people in the community. “So we... drove over that year and he spent that summer, two week holiday, wiring [PLACE REDACTED], that is the homeplace. It didn't get connected for another four years. But then the following year, he came ... and ... wired my aunt's house. Just down the way. And then other years, he would come and help other people.” (REI108). Informal contributions from community members and family exemplify how collective effort extended beyond formal responsibilities to practical support and skill-sharing. A sense of community was similarly important among REO staff. Staff regularly shared ideas and advice through REO News, fostering internal collaboration:

- “We have had three interesting ideas from R.A.s recently and pass them on.” (REO1948.04).
- “[NAME REDACTED], while in Killeshandra, heard of a consumer whose pump was protected by a felt covered and insulated box. He thought the idea might be worth passing on, as this method, if efficient, would cut down the expense of building a concrete pumphouse.” (REO1959.10).

These instances of staff sharing advice among their own community were frequent and varied in terms of content throughout. Knowledge-sharing among staff created a supportive professional community, enabling efficient problem-solving and the spread of best practices.

Communities sometimes acted collectively to achieve shared goals, particularly when some individuals resisted electricity supply: “Oh yes, if everybody in the street didn't sanction, or agree to the electricity going through their land or their house, they had to cross the road, get planning permission to go the other side of the road and get that house to bring the electricity to the next house. People wouldn't talk to one another, going ‘Why wouldn't you get electricity’ you know, so it was a delay. ... There was some awkward people, and again they were old people who were frightened. And ... they'd be scare mongering too, and there'd be fellas... saying ‘Ah did you hear what happened with such a one, he climbed up the pole and he never came down again, or he came down fried or something.’ There'd be all these horrible stories you know.” (REI102). Failure by community members to act in the group interest would have repercussions for other members of the community, with another interviewee noting, “And then

because people, or people nearer the road than them didn't take it... they were further up the lanes so therefore they wouldn't give it...to the other people". (REI103). This resort to community action to meet group needs recurred throughout the interviews. "So... apparently Wicklow said Red Cross (the area) didn't come into their area and Arklow said it didn't come into their area. So eventually, after a lot of discussion... they said that if they had 12 people willing to accept electricity, they'd give it to us.... So my father and (the neighbour) [NAME REDACTED] had to go around...all the families in the area. Now in those days, they were all mainly farmers... so, anyway, they went around to every house to see were they interested in getting it? And of course, some people didn't want it. Some people wanted one light in the house." (REI104). Many more accounts like these illustrate that scheme implementation required the involvement of many people other than the staff concerned. Collective action among community members was essential to overcoming local resistance and ensuring electricity reached all households.

Involvement extended beyond formal duties, illustrating the broader engagement of community members: "It is interesting to note that Mr. [NAME REDACTED] found that the absence of a local committee was no handicap whatever, as the individual residents take a lively interest in their own affairs and kept the Area staff fully occupied." (REO1952.08). An interviewee here gives an insight into the community mindset of those involved, detailing the arrangements for switching on the town street lights. "To switch on the street lights in Bansha ...Time switches ... hadn't been brought in yet. So it was manual switching. So the switch was in our front hall. It was an open house... And basically, my mother or father before they'd close up the shop would switch on the lights, and whoever was going home from the pub later would turn them off." (REI109). Engagement in collective effort extended beyond official responsibilities, highlighting a widespread sense of community ownership of the scheme.

REO News was used strategically to maintain relationships and foster community spirit, either directly: "Greetings to our friends: It would be unthinkable if we issued this Christmas /Birthday Number without sending Seasonable Greetings to all our old friends and to those new friends we have made during the past year." (REO1949.12); or indirectly by encouraging its community to maintain relationships outside of their own community, "The co-operation of all is asked to maintain the good relations that have existed between the Post Office and ourselves in the past." (REO1952.05). The REO leveraged communications to reinforce social cohesion, maintain connections, and encourage sustained community involvement.

Career progression and recognition of staff contributions reinforced motivation and a sense of community. Promotions, achievements, personal milestones, resignations, and sympathy notices were regularly reported:

- “We learn that [NAME REDACTED] has received a well deserved promotion” (REO1950.05)
- “We congratulate [NAME REDACTED] on the success of his application for the position as an Assistant Engineer” (REO1951.07)
- “Congratulations to [NAME REDACTED], Area Clerk, on his recent marriage” (REO1949.12)
- “Resignation: Miss [NAME REDACTED], Typist, Rural Head Office, on the occasion of her forthcoming marriage.” (REO1949.04)

Recognition of achievements and attention to staff life events fostered morale, loyalty, and a supportive workplace culture.

Staff and public communities, however, remained distinct. REO News emphasised the importance of maintaining confidentiality and professional boundaries: “We would like to draw the attention of our readers to a small point which is sometimes overlooked. The material contained in this journal of ours is essentially confidential and more particularly so when dealing with matters of policy which affect the public.” (REO1953.07). Despite the collaborative environment, professional and public spheres were carefully separated to preserve operational integrity and confidentiality.

## Management

Effective management was central to the implementation of the rural electrification scheme. Insights from the REO News files reveal how management structured staff responsibilities, monitored progress, acknowledged achievements, and maintained standards, providing a window into how the scheme was actually executed. This section examines the multiple dimensions of management, including staff training, reporting, recognition, discipline, and attention to public perception, highlighting the practices that enabled successful implementation.

The ESB emphasised the importance of ensuring that REO staff were capable of educating consumers about electrical installations and safe wiring practices. Educational materials were

developed and distributed to guide staff in promoting safe and informed electricity usage: “A pamphlet is at present in course of preparation for issue to consumers giving some advice on the wiring of premises and negotiations with wiring contractors.” (REO1948.01), “Incidentally, our leaflet on Farmyard Wiring has now been completed and a preliminary issue of 500 copies has been made to each District.” (REO1950.02). Management prioritised the training and guidance of staff to ensure rural consumers were well-informed and electricity was used safely.

Detailed area reports formed a central component of monitoring implementation. These reports assessed economic viability (e.g. “Baltimore Rural Area: The report on Baltimore Rural Area discloses that of the original 210 economic acceptances, 30 were ‘backsliders’.” (REO1950.09) and local conditions to guide ongoing efforts (e.g. “Oughterard Area: agriculturally speaking, the area is very poor and it is unlikely that the use of electricity for agricultural purposes will be very high.” (REO1951.01). Systematic reporting enabled management to evaluate local circumstances and adjust strategies for effective scheme rollout.

Management also incorporated observations from outside experts into REO News to contextualise challenges and reinforce awareness among staff: “Lack of industry and backward state of agriculture in Ireland led to large scale emigration which reduced the population of the country by half” ELECTRICAL REVIEW 6/8/1948.” (REO1948.09) These observations would sometimes take the form of a curated collection of extracts from a report, “Extracts from a report by Mr. [NAME REDACTED] (Agricultural Adviser to the British Electricity Authority) following his visit to some of our rural areas.” (REO1949.03). External assessments provided critical perspectives on broader social and economic conditions, helping staff understand the context of their work.

Management also maintained rigorous standards, emphasising discipline, safety, and adherence to regulations: “The attention of all staff is again directed to the importance of adhering to the instructions on wayleaves. No laxity should be permitted.” (REO1951.09). The importance of discipline and responsibility was also highlighted: “The Board has expressed its very grave concern at the number of transport accidents, greater care should be exercised.” (REO1948.10). Setbacks, such as failed demonstrations or poor competition entries, were openly acknowledged indicating a willingness to confront and learn from difficulties:

“We are disturbed to see the lack of success which has attended Demonstrations held in country towns” (REO1950.01).

“The adjudicators were very disappointed at the low standard of entries in the saving material competition.” (REO1949.02).

Public commendations and calls for feedback further encouraged high standards and staff engagement: “The standard of line building has shown continued improvement: R.A.Es (Rural Area Engineers) are to be congratulated.” (REO1949.04), “Star performance of the month was the excellent job done in Killucan Rural Area” (REO1950.03). At the same time, calls for feedback and experience sharing through the involvement of staff demonstrated that management of REO staff included commitment to communication and continuous improvement. “Is this procedure too elaborate? Is it well worthwhile? Let us know what you think.” (REO1948.06) “We would be very glad if other R.A.Es (Rural Area Engineers) would give their experience. R.E.O. News is your paper. You will contribute to make it Interesting.” (REO1948.09), “Have you yet considered what the staff in one area is always anxious to know how another area works?” (REO1948.02). Management cultivated a culture of feedback, and communication, integrating recognition of success with opportunities for staff to learn from setbacks.

Throughout the implementation, the REO was mindful of the public perception of staff actions: “Due respect ought to be paid to the aesthetic appeal of trees, removal could cause malediction and critical letters in the press.” (REO1949.08). Staff were encouraged to maintain goodwill in rural communities by respecting local communities, “Every R.A.E., as the senior officer, represents the Board should aim at maintaining good relations and thus create good will.” (REO1950.07) and promoting the benefits of electricity, “Very Rev. [NAME REDACTED] stated that it would be advisable for the E.S.B. to make a 16 mm. film illustrating uses of electricity on an average Irish farm.” (REO1948.08).

Competence, training, and continuous self-assessment were central to sustaining high standards: “The need for specially trained salesmen to convince potential rural consumers has always been apparent.” (REO1953.09). Staff were encouraged to self-assess their skill level, seek training, and build confidence in their technical knowledge, “Those who feel they have insufficient information should seek help from superior officers.” (REO1958.11). This underlines management’s focus on continuous learning and professionalism, and association with quality of craft in managing the implementation of the scheme, “Every once in a while it pays every man to do a check up on himself to decide what can he do to make himself more successful.” (REO1960.07).

## Planning

Planning played a critical role in the successful implementation of rural electrification, shaping the pace, safety, and design of the scheme. Evidence from REO News and interviews highlights how careful preparation, oversight, and staff engagement contributed to efficient and effective rollout. Planning encompassed procedural guidance, input from experienced staff, safety protocols, and attention to financial and logistical constraints, demonstrating how management coordinated a technically and socially complex project.

Clear procedures and guidance were communicated to staff to ensure structured implementation of the scheme. REO News highlighted updates on area selection and published guidance to inform planning practices: “NEW METHOD OF SELECTING AREAS : Since we have passed the milestone of 'one area in each of the 26 counties' we have altered the basis on which future areas will be selected.” (REO1948.05). Specific articles were published to aid planning, “HOW LONG SHOULD AREA SURVEY AND DESIGN TAKE” (By Surveyor) (REO1948.09), and general advice on implementation was given, “Points to be watched; During construction, constant supervision is essential and each gang should be visited” (REO1949.10). Implementation planning involved keeping staff firmly abreast of the intentions for future action, “During the present year it is hoped to step up work to the rate of 40 areas per annum. The watchword is still 'Full Speed Ahead'” (REO1948.05). Clarity on spending was also evident as part of the planning process. “THE PAST AND THE FUTURE We are at present embarking on another speed up of the Rural Scheme. What is the present position and the outlook for the development of our plans? At the end of the last financial year the capital spent on completed areas amounted to £9.6 million.” (REO1954.09). Open acknowledgment of shortcomings regarding planning were published, “We did not quite reach the target we set ourselves for it was hoped to have one area selected for development in each of the 26 counties before the end of the year.” (REO1948.01). Staff were consistently provided with detailed procedural guidance and updates to ensure clear expectations, progress tracking, and transparency in the planning process.

Planning also relied on the expertise of staff on the ground, incorporating their practical knowledge into implementation strategies: “The opinions of R.A.Es on this practice will be welcomed.” (REO1950.01), “How To Run A Rural Area (by An Area Clerk).” (REO1950.03). Interviewees also reported that staff were knowledgeable about the planning required within the houses, “But he came out and dad said to him ‘Now put up a new meter for me there now

because we have no electricity,' and yer man said to him 'You don't need a new meter. This house has to be totally rewired.'" (REI101). Input from experienced staff ensured that practical challenges were anticipated and addressed, enhancing the effectiveness of planning at the local level.

Safety was a recurring focus in planning, with procedures designed to minimise accidents and ensure staff and consumer protection: "CONDUCTOR STRINGING NEAR LIVE LINES Additional caution is essential when stringing new lines under or near existing 'live' lines. Recently we had an accident when running out an L.T. conductor under a 'live' 10kV line. Fortunately, the accident did not prove fatal but one man received a severe shock and another a light shock." (REO1949.08). Safety was also discussed as a cost, with accidents having effects on the planning and management of the scheme, "SAFETY ACCIDENTS MEAN LESS UNITS AND HIGHER UNIT COST." (REO1957.03). Ultimately staff were encouraged to be conscious of risks and adhere to any guidelines for safety produced by the REO. "Safety: All R.A.Es. should have by now received a copy of the Safety Committee Annual Bulletin, 1956. 'Start right away by being SAFETY conscious at all times'" (REO1957.04). Safety planning was integral to the scheme, with formal guidance and vigilance embedded in operational procedures to reduce risk and associated costs.

Interviewees also reflected on the perception of risk at the time and their own experiences of danger: "You know, no one knew what it was ... and it was...dangerous too."(REI106). Some interviewees illustrated the thinking of the consumers at the time in that "People were afraid that houses would go on fire."(REI105). A previous ESB staff member says, however, that safety was as advanced as it could be at that point in time, "The safety was the best it could be of the day. Not now, we're way way way more advanced than that... You know, this safety attitude wasn't there even in the ESB...as far as PPE and protective clothing and all that... You know so, when you change safety or improve it, the biggest problem is to bring the old stock with you. ESB made huge strides as they follow the systems...At their time they were as safe as they could be." (REI109). Both staff and consumers were acutely aware of safety concerns, as measures reflected best practices of the period and evolved over time to improve protection standards.

## Policy

Policy and government oversight were critical in shaping the implementation of rural electrification. Evidence from REO News and interviews shows how historical mistrust, political engagement, and state intervention influenced both staff and community perceptions. This section examines the interaction between public attitudes toward government, the rationale for state involvement, and the practical implications of policy for equitable and efficient rollout.

Historical experience shaped rural attitudes toward government, creating a baseline of mistrust that influenced responses to electrification: “But to get back then to what you were saying about the government, back then our grandparents and our father, they were ruled by the British, you know up until 1922, 23 when they experienced civil war. Here we are now, 25 years later, and they still have, and you know sometimes up to the 70s, I saw it in my father, that the guy who’s governing you and taking your money, you want to give him as little as you possibly can, even if you’re going to be a bit dishonest. So the relationship with the government was nearly like the relationship that they had with the British. It’s still ‘What we can get away with’, and it was that all over, it wasn’t just my family, you know ‘This governments out to screw ya, let’s see what we can get’.” (REI101). Rural communities’ historical experiences with authority created enduring scepticism toward government, which shaped consumer interactions with the electrification scheme.

The legacy of famine and colonial rule further reinforced generational attitudes of mistrust: “And you see, the grandparents, they were the first generation, but you see... our grandparents, their parents were the first generation after the famine. They were born in the 1860s and 1870s and it was only 20 years before that there was famine. So they were the survivors, of the people who survived the famine. So you can imagine how they hated English. And they still had to work for them because there was nobody else.” ( REI102).

“The mentality was still there when we got our own government you know? And our own government, what did they know about running the country? You know? They really didn’t have a clue.” (REI101). The collective memory of hardship and colonial oppression shaped perceptions of authority, creating a cautious and sometimes adversarial relationship with state projects.

Despite these attitudes, state involvement in rural electrification sought to promote equality and national unity. Interviewees noted that government oversight ensured equitable access and

prevented fragmented supply: “The government's idea was that if someone was going to get electricity everybody was going to be entitled to it. And it was highly debated in the Dail whether it was good or bad or whatever... I think that it needed to come from somewhere. And as I said, there was a lot of three hundred and something suppliers. They were all individuals, suppliers, and you were really at the mercy of them. But now you had a company that was overseen by the government. So therefore these could not run riot...the government were going to have a say in what was done. And I think that's why rural electrification was rolled out. The government basically said, ‘No, you're not going to just connect Johnny down the road and leave Willy over the road with no light.’ So you provide a facility that they can be all connected if they want. And that was rural electrification.” (REI109). Government intervention ensured a uniform and equitable rollout, addressing past inconsistencies in supply and centralising authority to regulate this access.

When examining the discussions of policy and government in REO News, the picture is more nuanced. REO News cites local political engagement as being important to the implementation process, noting to staff that, “The help of any local T.Ds should also be sought.” (REO1948.02), and highlighting the involvement of political figures in the implementation. This involvement seems to have helped build community and political support. For example, “Supply was ceremoniously switched on at Kilfinnane by Mr. [NAME REDACTED], Parliamentary Secretary to An Taoiseach” (REO1949.09).

The state justified rural electrification as an infrastructure project with lasting social benefits, measuring success through connectivity and aligning implementation with government policy: “A further justification for the course adopted is that, while the capital for rural electrification will be provided over a relatively short term of years, the benefits of the scheme will be of lasting character.” (REO1950.06). Success was measured notably by the number of consumers connected, “We have always emphasised the number of consumers connected as one of the most important indications of our success.” (REO1952.01). The state viewed rural electrification as a mechanism for redistribution and development. The Board’s efforts were framed as implementing government policy to advance rural and farm electrification: “In regard to the policy of the Board and the Government and its implementing by the Board, I hope that a few facts and figures will show that the Board have, in fact, done everything in their power to implement the Government's policy to press ahead with rural and farm electrification.” (REO1950.11). And as with most projects of this size, the government was involved and interested in the financial side of implementation “... As you are probably tired

of hearing, the finances of the rural scheme are slender in the extreme and it is, therefore, common prudence to ensure that the areas likely to give the best financial return are given priority in development. This, in fact, is a direction from the Government and in addition to giving the securest financial basis, serves the additional purpose of providing the basis for priority in selection.” (REO1951.10). Government policy provided both the strategic direction and financial framework for the scheme, prioritising equitable access while balancing economic considerations to ensure sustainability and efficiency.

## Cost

Financial considerations were central to the implementation of rural electrification, affecting both consumers and the REO. Evidence from REO News and interviews shows that cost concerns encompassed not only monetary expenditure but also time, labour, and the pace of progress. The large-scale rollout required balancing affordability for consumers with the financial sustainability of the scheme, and delays or slow uptake were frequently tied to perceptions of expense.

The pace of electrification rollout is experienced as slow by many rural residents. One interviewee recalled, “But things moved slowly at first. We heard nothing.” (REI105). Describing the moment electricity finally arrived, the same interviewee says “Nothing happened for ages. And one day a man came with a big hat...to our house and he said he was...an electric contractor and that he was connecting the houses on our road and in our area. And then that would bring electricity into our house.” (REI105). Others noted delays in actual progress of implementation, and the scale of the scheme noting, “Things came like years apart,” (REI102). This large time span had effects on access to supply for consumers, “So it was a full decade nearly before everybody had it.” (REI107). Despite the slow speed in some areas, the volume of work was significant. As noted in a REO News announcement, “Last month we announced the decision to expand the Rural Electrification. The plans for increasing construction work are progressing satisfactorily and we are optimistic about reaching our targets.” (REO1953.09). Interviewees observed that, “So actually in the house, it was minimal compared to the work that was going on outside.” (REI102).

Efficiency and strategic planning were essential to manage costs and optimise sales, which in turn influenced overall scheme progress. REO News and interviews emphasised the need to monitor work rates and encourage appliance uptake to offset operational costs: “Where

consumers express the view that meter readings and collections should be effected by a Board official they should be made aware that such expenses would make rural electrification wholly impossible.” (REO1948.09). REO News encouraged sales of appliances to consumers, which was met with varying receptions depending on the promotion that had occurred in the area, “He expresses a doubt as to whether the demonstration served any useful purpose as the sales in the area were so very poor.” (REO1951.10). The perceived wealth of the area was an influencing factor to supply uptake and volume of appliance transactions, “Sales, it was noted, were not as good as usual, principally due to the fact that there were a large number of Council cottages in the area.” (REO1951.01). Managing efficiency, encouraging appliance sales, and promoting affordability were critical to sustaining the financial viability of the rural electrification scheme.

Cost was a concern for the people living in the newly electrified houses: “And up to then, the only bill that ever came to the house, would be the bill for rates, and that would come, once or twice a year, and that was bad enough, but at least they knew what it was going to be. It was a set amount. And there was huge worry about when the ESB bill came, or the bill for the electricity. How were they going to pay for it? And for people who were just used to buying turf and sticks for their fire for heat and paraffin for lighting, it would have hugely been a source of worry.” (REI101). Money is cited repeatedly as a deciding factor for consumers consenting to electrify their homes. “The family that was living there didn’t get electricity. And they didn’t get electricity because the people who lived near them, and the people who lived another half mile further down that road couldn’t afford to get electricity. And so they couldn’t afford to get it on their own because there was a charge for each electricity pole.” (REI101). These concerns regarding cost had a direct effect on the speed of work across the scheme, “They wanted to ...get everyone to sign but people were slow to sign because it was expensive then.” (REI104). The high perceived cost of electrification directly influenced consumer decisions and slowed the pace of connection across rural areas.

Consumers relied on flexible payment methods to access appliances, reflecting both economic constraints and innovative financing by the ESB. A previous ESB employee sums up the financial situation of a lot of the consumers at the time, in the context of purchasing appliances, “It's kind of hard to put... what you're talking about wages... what the wages were back then...Probably for the average man, you wouldn't be buying them off a wage,...That's why the big thing was the ESB ... famous line 'Put it on the bill'. So you could walk into the ESB and say, ‘I'd like that fridge, cooker, washing machine’ ...They were brown goods at that time, they

were referred to as brown or white. The white appliances were all kitchen area or the brown goods, televisions, radios. Because there was two different vat rates. You paid more vat on brown appliances because they were luxury items. The white appliances were not. So at that time, yeah, it was standard everybody...put it on the bill. As the woman used to say, 'Pay weekly and very weakly.' But yeah, every two months, then you paid x amount off an appliance." (REI109). These innovative payment systems allowed consumers with limited income to access appliances, demonstrating the ESB's responsiveness to economic realities while supporting uptake.

Poverty and economic constraint were recurrent themes, highlighting the social context of electrification costs. Interviewees repeatedly emphasised that "... it's hard actually for people to realise quite how poor people were here." (REI108), but also that, "Ahhhh...it was expensive enough but it wasn't.. you were fit that you.. made it anyway. You had to make a commitment of it anyway. Sure you wouldn't disconnect it. You wouldn't go and take it out." (REI104). This is echoed in the REO News discussion of the low level of importance placed on the money being generated by the scheme, "The revenue to be derived from supplying electricity to rural community is never high and, even with the strictest economy in capital investment, the revenue gives a low return on the capital invested." (REO1952.12). Rural electrification faced a dual challenge: providing affordable electricity to consumers who struggled financially, while keeping the program economically sustainable.

## Training

Training and formal qualifications were largely absent during the implementation of rural electrification. Interviewees emphasised that most of the work was carried out by individuals with minimal formal experience, relying on practical knowledge or family guidance. In many cases, wiring and electrical work was performed by family members or local workers with some general experience in construction rather than certified training: "But there was no such thing as qualified electricians in them times." (REI106). Often, family members with a little experience in the area actually wired their homes for them, "Oh yeah my youngest it was my brother wired it....And he wouldn't have.. he was one of those who would've done a bit of everything you know? He did construction work on buildings. He done the wiring and he wired a lot of local houses,... and some of [them] would have done it themselves,... and funny wiring I think some of it was now you know, but the ESB done some...funny wiring too. There was

people who would have... got these qualifications in it and I don't think they were too qualified either.” (REI106).

Formal qualifications and structured training were virtually non-existent during this period, and practical skill was valued over certification: “He wasn't, he wouldn't have been Corgi registered or whatever you call it, but he had his certs in putting on plugs and things like that. And I don't think people expected anybody to be qualified in the way that we do today. It's just if you can do it.” (REI108). This view on qualifications or training was reinforced by a previous ESB staff member: “At the time of rural electrification there was no qualification. They would have friends, family, anybody even down to lads that were working in the ESB were wiring houses at the weekend or on Sunday... I was an electrician, I think certs, they really only brought in certs nearly after rural electrification. Well... I could wire a house and certify you could get these sheets and certs and certify. Even though I was ESB I wasn't a registered RECI. So RECI didn't come in till... I'd say RECI didn't come in till the 2000s I'd say...It was the register of electrical contractors. Before if you could wire it you could wire it. Sure you never thought it was dangerous you know. Basically it was two wires and an earth, what the quality or standard of it was hit and miss.” (REI108).

Supervision of staff during implementation was limited, reflecting the trust placed in individuals' practical skills and the flexibility required on the ground: “Well there wasn't much supervision in them times, now I'd say they'd tell ya it wasn't that hectic...here would be an engineer maybe in [PLACE REDACTED] and they'd never see him...he might appear one time alright but they seemed to get some sort of... go ahead anyway with erections” (REI107). Some early concerns regarding staff proved unfounded: “Shortage of experienced staff,” Mr. [NAME REDACTED] wrote, “worried us in the beginning, unduly as events proved.” (REO1961.11). This is perhaps explained by the availability of temporary staff in the community and the ability to train staff on the job in response to changing needs. “Well now that would be the ones who added on to the electricity afterwards... I do reckon the first ones they, had the blueprint and they had been trained in how they were doing it. But of course every house was different. So they had to decide, how to get the wires into the house, with the least possible damage to the house and expense to themselves.” (REI102). On-the-job learning and temporary staff deployment helped address early concerns about workforce experience, allowing the scheme to adapt to the unique conditions of each household while ensuring progress continued efficiently.

# Chapter 6. Case Study 2: Ireland's National Electronic Health Record Programme

## Introduction

Case 2 examines the ongoing rollout of Ireland's National Electronic Health Record Programme, a large scale, state led initiative by the Health Service Executive. The project aims to deliver a nationwide, integrated EHR system by 2030, enhancing connectivity, safety, and efficiency across healthcare services. Despite its strategic importance and significant investment, implementation faces challenges such as legacy systems, governance complexity, and slow progress. This case highlights digital transformation in real time, offering insights into infrastructure development, stakeholder engagement, and organisational change in healthcare.

## Overview

In 2013 the HSE outlined their plan to implement a national EHR in Ireland. More than a decade on and this plan has not been realised. I detail below the implementation timeline and show where current strategic thinking is in Ireland, using information from various government documents, such as The Strategic Implementation Plan and the voices of experts directly involved with EHRs and digital health projects in Ireland. As of 2025 Ireland still has no national implemented EHR. Therefore this case focuses on the current state of EHR implementation in Ireland.

## The National Electronic Health Record Project Timeline

- 2011: New government takes office with healthcare reform agenda.
- 2012: 'Future Health' published; proposes CIO role and ehealth strategy.
- Dec 2013: eHealth Strategy for Ireland launched (7 year plan, statutory agency proposed).
- 2014: CIO appointed; eHealth Ireland unit created inside HSE.
- 2015: eHealth Ireland committee formed. Knowledge & Innovation Strategy published.

- 2016: Business case for national EHR published (€609m-€824m, 9 year rollout).
- 2018: EHR business case rejected by DPER (Department of Public Expenditure and Reform). European Investment Bank announces €225m loan.
- 2019: Last meeting of eHealth Ireland committee in September.
- 2020: Digital health “living labs” network launched.
- 2021: €225m EIB loan drawn down in October.
- 2022: HSE board told EHR “effectively paused” in May.
- 2022: HSE estimates EHR cost at over €1.4bn in September. Total ehealth funding need up to €2.1bn. Rollout projected up to 20 years.
- 2022: Sláintecare deadline to publish updated strategy missed.
- 2023: HSE Digital Transformation Director resigns in January. Oireachtas reveals business case rejection.
- 2024: eHealth Ireland rebranded to Technology and Transformation.
- 2024: Digital Health Framework for Ireland (2024-2030) and Digital Health Strategic Implementation Roadmap released.

The above timeline of major developments is based on description of events from Feely (2023).

## The National Irish Electronic Health Record Project

“A Digital Health framework for Ireland (2024-2030)” (Department of Health, 2024) provides the most up to date information on the current state of thinking behind EHR implementation in Ireland. The Health Service Executive (HSE) has also developed a corresponding implementation roadmap the “Digital Health Strategic Implementation Roadmap” in parallel with this strategic framework (HSE, 2024).

These documents outline that the implementation of EHRs in Ireland will be “a complex process due to the presence of multiple systems that already exist across the health and social care system including EHRs, laboratory systems, The National Integrated Medical Imaging System (NIMIS), and already deployed and future systems.” (HSE, 2024). The procurement and delivery of EHRs are considered fundamental to “the seamless provision of healthcare services across Ireland.” (HSE, 2024). The proposed initiative sets out to develop a business case, standards, a national procurement framework, and eventually coordinate implementation across the six newly established Health Regions. The implementation roadmap document details numerous systems which are already in place or are planned so far but reveals that as of

2024 EHR systems “have not yet been fully defined or agreed for the full planning period (through 2030)” (HSE, 2024). These documents suggest the initial focus is on “empowering patients and services users, establishing the foundations to enable the transformation, and leveraging the potential of EHRs” (HSE, 2024). Children’s Health Ireland is mentioned as currently implementing an EHR in the new Children’s Hospital, proposing that this will “support better management of health information, safer, better care, effective decision making and performance management, delivering substantial benefits to health services” (HSE, 2024).

The process for developing the Digital Health Strategic Roadmap built on and aligned with the Digital for care Framework, the Sláintecare action plan, and the Department of the Taoiseach’s Digital Ireland Framework. The Framework and Roadmap outline Ireland’s plans for digital health across 7 years (HSE, 2024). Interestingly, the Digital Health Strategic Roadmap does not make direct reference to the eHealth Strategy for Ireland (2013). The Roadmap outlines the need for significant and sustained investment to achieve transformational goals including implementation of EHRs and a Shared Care Record, allowing a single point of access to health information for patients and staff (HSE, 2024). The Digital Health Strategic Implementation Roadmap proposes to develop a business case for the procurement and deployment model for EHRs. The HSE Roadmap describes the programmes and projects that need to be developed throughout the implementation. The pace at which the programmes are delivered will be dictated by the level of resources that are committed through successive budgets (Department of Health, 2024).

The “Digital Health Framework for Ireland (2024 2030)”, prepared by the Department of Health, sets out the future policy direction for EHR rollout across the country and describes the vision as having a “single, comprehensive EHR for every individual, which should be accessible to healthcare professionals and the patient.” At the same time this framework acknowledges the need to “replace legacy systems with enterprise level EHR systems delivered on a regional basis” while maintaining a national standard (Department of Health, 2024). Development of this framework is cited as being achieved through consultation with patients, healthcare professionals and staff, innovator groups, and industry (Department of Health, 2024). The framework mentions that they plan to nurture the opportunities offered by indigenous startup companies in Ireland, and continue to engage with the digital health ecosystem in Ireland, finding meaningful ways for them to be included in the implementation of this strategic framework (Department of Health, 2024).

To set the scene for what is expected of this national project, the framework outlines the vision and mission as “Better health outcomes enabled by seamless, safe, secure, and connected digital health services which support health and wellbeing for both our patients and providers.” And “To harness the power of new technologies, digital and data to transform how health and social care services are delivered for our population” (Department of Health, 2024).

The following sections highlight the need for establishing a temporary or separate organisation to deliver this vision, outline plans for implementation (including EHRs and the shared care record) and describe the processes that will be followed.

## eHealth Ireland

According to the “eHealth Strategy for Ireland” international experience has shown that eHealth deployments are “complex undertakings and need specific focus” (Department of Health, 2013). In 2013 as a result the Department proposed a new entity called “eHealth Ireland”, initially to be established on an administrative basis within the System Reform Group of the HSE and over time as an independent entity within a new institutional framework for shared services for the health sector as a whole (Department of Health, 2013). The strategy then goes on to note that eHealth Ireland will achieve the successful execution of an eHealth strategy through “the development of outcome focused implementation plans based on two phases within a seven year timescale” (Department of Health, 2013). The strategy also states that “based on the options considered and the ranking matrix applied above it is proposed that the optimum model for delivery of Ireland’s eHealth strategy is a dedicated and focused entity with specific oversight and responsibility for Ireland’s eHealth implementation” (Department of Health, 2013).

eHealth Ireland was not established as was originally intended as a separate entity with responsibility for overall governance around eHealth implementation “including funding, legal enabling, public awareness and stakeholder engagement through building the eHealth ecosystem in Ireland” (Health Information and Quality Authority, 2021). HIQA (2021) called for a strategic entity (eHealth Ireland) to be established outside the HSE “with a legislative remit to provide strategic leadership and governance to support the collection, use and sharing of health information in Ireland”. In addition they proposed that an “operational function developing and supporting the systems required for the delivery of care should continue to exist in the HSE”, and that the remit of this entity should be broader than eHealth “and include the

centralised coordination and governance of national data collections and the secondary uses of health information at a national level” (Health Information and Quality Authority, 2021).

The eHealth strategy proposed that eHealth Ireland be headed up by a new CIO who would work closely with all of the key business organisations within the health service in order to drive forward the eHealth strategy and ensure that key IT systems are implemented on time and to budget. It was also proposed that eHealth Ireland would have responsibility for overall governance around eHealth implementation including “funding, legal enabling, public awareness, stakeholder engagement, and building the eHealth Ecosystem” (Department of Health, 2013). eHealth Ireland was rebranded and renamed “Technology and Transformation” in May 2024. Numerous critical key points are noted by the “eHealth Strategy for Ireland” to realise the full eHealth potential for Ireland. These include viewing eHealth as an infrastructural investment in Ireland’s future; ensuring eHealth is not reduced to a series of piecemeal pilots and trials; and establishing a dedicated, fully focused, and centrally managed entity to oversee the eHealth implementation journey (Department of Health, 2013). Though Technology and Transformation is a permanent division of the HSE, the Digital for Care Framework and specifically the National EHR implementation are time limited projects. They are examples of temporary organising within the HSE, designed to deliver a defined set of digital transformation outcomes before transitioning into maintenance of these projects.

## Planning for Implementation

The Office of the Nursing and Midwifery Services director, HSE commissioned a report to support services who are or will be embarking on implementing an EHR in Ireland (Fennelly, 2019). The report proposes that the EHR project management team need to plan for either a ‘big bang’ or ‘phased implementation’ and that the most appropriate implementation approach for an individual organisation should be made based on the individuals “requirements, resources, and change readiness of the stakeholders and organisation” (Fennelly, 2019).

In 2015 the HSE identified a number of key national strategic eHealth programmes detailed in the Knowledge and Implementation Plan (2015) and made the decision to align with what other countries have prioritised, including an individual health identifier, a unique number assigned to every person who interacts with the healthcare system in Ireland (Health Information and Quality Authority, 2021). HIQA’s 2021 report shows, however, that while work is ongoing in each of the mentioned strategic programmes and they are at varying stages of maturity, uptake

and implementation has been slow, and “Ireland continues to lag behind other countries in this regard” (Health Information and Quality Authority, 2021). The national electronic health record program was specifically cited in 2021 as having slow progress (Health Information and Quality Authority, 2021). Delivery of a national electronic health record (EHR) was noted as “the foundation for the reform of the healthcare system” (Health Information and Quality Authority, 2021). However a new ‘strategic direction’ appears in the Strategy Implementation and Action Plan (2021 2023) to “deliver on the summary and shared care records instead of a national EHR” (Health Information and Quality Authority, 2021).

Many changes to the strategy regarding implementation of a national EHR have occurred since 2013, with HIQA illustrating that since the publication of the eHealth Strategy in 2013, the Strategic Policy Framework has evolved, with the Department of Health then publishing the Sláintecare Report in 2017 which detailed a 10 year plan for health reform (Health Information and Quality Authority, 2021). Between these two events, in 2015, the National Electronic Health Records Strategic Business Case outlined “the need for the investment of up to €875 million over a 10 year period to deliver a National Electronic Health Record across the Irish health system. This investment equated to approximately 0.65% of the total health system budget over that time” (Health Information and Quality Authority, 2021). The business case provided illustration of the resources required for two different implementation scenarios for a national EHR, a five year implementation scenario and a nine year implementation scenario (Health Information and Quality Authority, 2021). However, the business case for the EHR programme was not approved and as previously mentioned, a new strategic direction was taken with the Slaintecare Strategy Implementation and Action Plan (2021 2023) which then aimed to deliver on the summary and shared care records instead of a National EHR (Health Information and Quality Authority, 2021). The updated plan is to allow regions to run competitions to draw down from the shortlist of successful vendors to confirm their preferred EHR vendor. “There will be a number of specific conditions of sanction that regions and hospitals will need to sign up to, in order to access the framework, and associated resources required for implementation” (Health Service Executive, 2024).

## Ireland’s Current EHRs

The Health Service Executive (HSE) classifies electronic records hierarchically.

*Table 5. HSE Classification of Electronic Records*

<b>Level</b>	<b>Type</b>	<b>Description</b>
Top Level	Electronic Health Record (EHR)	Enterprise-wide record system within a hospital or hospital network; hosted by the institution.
Mid Level	Electronic Medical Record (EMR)	Smaller, non-enterprise deployments such as standalone hospitals or GP clinics.
Patient Level	Personal Health Record (PHR)	Individual-controlled health record, e.g., Microsoft HealthVault (Health Service Executive, 2024).

The GP community in Ireland are well developed digitally in comparison to the hospital and community sectors (Health Service Executive, 2024). In terms of a National EHR, which is the focus of this research, HIQA offer this definition: “A national electronic health record (EHR) is a complete digital record of a patient’s journey, throughout their life, across all health and social care settings, for every citizen. An EHR contains the information documented by healthcare professionals when they interact with that patient for example, the patient’s symptom history, past history of illnesses and operations, clinical observations made by the professional such as a blood pressure reading, blood and other test results, X rays and scan results, prescriptions and other treatments, care advice, the course of the illness, preventive and public health activities such as immunisations, and activities undertaken by patients to stay healthy” (Health Information and Quality Authority, 2021). This was the initial plan for Ireland and this is where this research lies. To aid clarity and understanding Table 6 illustrates the different health record types.

Table 6. Health Record types.

<b>System</b>	<b>Description</b>
Electronic Health Record (EHR)	Comprehensive digital record hosted by a hospital or healthcare network. Enterprise-level, longitudinal patient data.
Electronic Medical Record (EMR)	Smaller scale, clinic or hospital-based records. Often siloed and focused on a single care setting.
Personal Health Record (PHR)	Managed by the patient, containing personal health information, wellness data, and records from multiple providers.
Shared Care Record (SCR)	Aggregated digital record from multiple sources providing a holistic, point-in-time view of patient health. Allows visibility but not creation of data (Health Service Executive, 2024).

The approach to EHRs in Ireland has changed in the strategy from a national EHR to a shared care record and summary care record. This happened during this period of study and as such the questions asked of the interviewees are based around the idea of a national EHR rather than a shared care record. Regardless, some interviewees did speak about the shared care record. As this term is important to the context, I provide a brief definition of it. A shared care record is defined in the Digital Health Strategic Implementation Roadmap as “a digital record aggregated from various electronic data sources that provides a holistic view of a patient's health status across healthcare settings. It can contain information about a patient's diagnoses, test results, procedures, care plans, and more” (Health Service Executive, 2024). So a shared care record can be thought of as close to an EHR but not quite possessing the same capabilities. “It enables visibility of patient health information, but not an ability to create (Health Service Executive, 2024). A shared care record enables healthcare providers in different settings to view selected point in time information for the patient collated from the systems of record. With evolving integrated EHRs, the shared care record will have a narrower role but remain valuable for transitions of care with private providers” (Health Service Executive, 2024).

Table 7. Comparison of EHR and Shared Care Record

Feature	EHR	Shared Care Record
Creation of records	Yes	No
Enterprise integration	Yes	Partial
Point-in-time view	Yes	Yes
Longitudinal record	Yes	Limited

## Findings

Stake's (2006) multiple case study design emphasises the importance of understanding the context of each case. This context has been partially established through discussion of the strategy and framework documents, however, examining the perceptions of interviewees provides further insight into the status and potential trajectory of the national project. Given that, at present, a national EHR system in Ireland exists as a plan rather than a fully implemented system, interviewees were consulted about their experiences with implementing or working with EHRs, or more broadly within the eHealth domain. The sections below cover the professional's perception of the project, time, the implementation process, policy and procurement, control, relationships, training, and cost.

### Professionals' Perception of the Project

The professionals interviewed offered a range of perspectives on the current state of Ireland's National Electronic Health Record (EHR) project. While some expressed cautious optimism, many voiced scepticism about its delivery and feasibility. This section explores these perceptions, highlighting both the challenges identified and the implications for smaller EHR initiatives operating in parallel. Overall, the data revealed a mix of frustration, doubt, and cautious advocacy, reflecting a complex professional understanding of the national EHR landscape.

Many interviewees questioned whether a national EHR would ever materialise. As one remarked, "I think the donkeys and the horses have a better digital record than the humans" (EHI112), capturing the feeling that progress on health records is lagging behind expectations.

Scepticism about a national EHR was echoed repeatedly, with one professional stating, “I don't think there's going to be such a thing as a national EHR. It won't exist as a standalone entity” (EHI107). At a time when I was still largely under the impression that the strategy was indeed to implement a national EHR, some interviewees made comments like “The overall national EHR, it's a pity that we're not getting one” (EHI108). It was clear that I was not alone in my understanding, however with other interviewees making statements like: “Yeah well, they can do one... I'm pretty sure they have one that's ready to go, but it keeps getting held up. The plan is that it will be rolled out, not sure when, but I think it's hopefully soon enough. I think when it does roll out, it'll be a game changer, because it'll just make things so much easier” (EHI114). Some expressed scepticism even when discussing new initiatives such as the shared care record: “Who's saying they're... implementing a shared care record?... Is there any evidence? So they say things, but unless you see verifiable evidence of that and someone using it, it's just waffle” (EHI112).

Despite doubts about feasibility, many participants advocated for the establishment of a single national EHR, emphasising both the effort required and the potential benefits. One interviewee explained, “I mean, is it feasible? Yes, probably. It probably is. Would it be difficult? Absolutely, and it would take a long time, but...I still do think that we should probably strive for the one system. And certainly, if you kind of listen to experts talking about it, that's what they would... advocate for... rather than disparate systems, even if they did talk to each other” (EHI115). Frustration with slow progress was a recurring theme: “I'd love them to do it, by the way. We're all patients. I would love for all of this to be working and stuff. So I don't want to be like, I hate sounding like a negative person. But it's just so frustrating” (EHI116). Professionals also suggested strategies to move the project forward, with one noting the importance of infrastructure and clear planning: “I think you need the infrastructure... I think there needs to be a good understanding on what you actually want. You know, we've learned from that thinking we want this. But we've actually found... actually.. this is what we need. So we have to go down a different route. I think it's a mammoth task” (EHI109).

While Ireland lacks a national EHR, smaller, local EHR systems are widespread. Professionals raised concerns about these smaller projects, particularly regarding future integration. One described one of the issues as it being “difficult, because in the absence of having this national system, I think a lot of people have gone off and done little workarounds, and that's going to cause problems in in the future, because people might, I think, be happy with the local workaround, ...or those local workarounds won't talk to the national system, and we'll have to

kind of start all over again” (EHI115). Some described these efforts as inefficient, suggesting that resources were being spent on systems that may later need to be replaced or integrated into a future national EHR. One interviewee explained that the EHR is what people would like implemented but money is being wasted implementing smaller systems which will be difficult to integrate with any future EHR (EHI104).

Several interviewees captured the long-standing uncertainty surrounding the national EHR project. One reflected on the communications and decisions over the years, summarising a shared perception of many of those interviewed: “First of all, for years, right from probably 2013, 15, 18, all through that period, they kept on inferring there was going to be a big decision about... an electronic health record. In fact, nothing ever happened, and nothing continues to happen...So instead of that, what they're focusing on right now is considering things like EHRs, which I'm just not sure that they realise the inordinate challenge that is going to be...And I think it's a worry that they're a bit naive about it” (EHI113).

## Time

Time emerged as a critical factor affecting both the implementation of eHealth systems and the overall progress of Ireland’s Digital Health Strategy. Discussions highlighted two main dimensions: the relationship between time and resources, and the implications of delays for patient outcomes and system effectiveness. Professionals repeatedly emphasised the urgency of accelerating projects while acknowledging the structural challenges that slow progress.

Delays in implementation have tangible consequences, including risks to patient care. Wasted time in project management can directly impact health outcomes, as one interviewee noted: “Oh my God, you know, I mean, the old thing about, you know, doctors differ and patients die. I mean, you could say the same thing for project management. If, in fact, somebody takes two and a half years to do what can be done in nine months for a critical implementation... No doubt, patients have suffered and died as a result, but nobody seems to internalise that” (EHI113). Similar concerns were raised regarding large-scale projects such as the Children’s Hospital EHR, where resources devoted to one implementation may delay access elsewhere: “There's the opportunity cost... there are a lot of other patients in the health system, who will now have delayed access to an EHR as a consequence of procurement decisions” (EHI108).

The pace of implementation is widely regarded as insufficient for Ireland's future healthcare needs. Stakeholders emphasise the importance of accelerating projects to remain innovative: "If you want to be pioneering and advanced, you can't work at a slow pace" (EHI112). Slow rollouts are perceived to be common within the HSE, with one professional reflecting, "You're working with the HSE on a lot of these things. There's projects we've been working at for nearly 20 years, still not up and running" (EHI107), and another adding, "You know, I mean... there's a real problem in the HSE of seeing things through and being accountable for delivering. That's a huge, huge problem. One of the biggest problems" (EHI113).

Despite delays, there is strong belief in the value of these systems. Incremental progress is acknowledged and appreciated, though it was accompanied by frustration due to lack of integration: "I'm sure you're getting the general gist of this if you're talking to people in eHealth in Ireland, but everything takes forever and you say no, 'Oh God, well, you know, when will we get this done' But you know, things happen slowly but surely and... they're great when they do, you know" (EHI106). Projects continue to be implemented across Ireland, though interoperability challenges remain: "There are so many e health projects going on at the moment... but ... a lot of them don't talk to each other... So I think that's the frustrating thing" (EHI114). Delays also contribute to technological obsolescence. Systems implemented, in development, or planned for future deployment risk being outdated before full rollout: "We are, we were and we probably still are, about 20 years behind the curve in lots of ways, especially around mental health" (EHI110). Decisions made today will have long-term implications: "The decisions we make now are going to have really important implications on future functionality" (EHI108).

The uneven pace of eHealth adoption across the health system exacerbates these issues. General practice has advanced significantly, but outdated practices elsewhere create bottlenecks: "It's just... we're working in... an environment where general practice are a big player in this certainly, but unfortunately, we're 20 years ahead of the other players, from an IT infrastructure point of view. And the ones that are 20 years behind are talking about stuff that we tried to do 20 years ago, and it doesn't work, and we're sort of saying 'Well you can't do that', and it trips up here, there and everywhere..." (EHI107). Staff continue to expend effort converting paper records to electronic formats, and legacy communication methods hinder efficiency. In hospitals, outdated systems present significant challenges. One hospital is currently replacing systems that have been deferred for decades: "If you go to big hospitals like [HOSPITAL NAME REDACTED], for instance, where their IT system is hanging on by a

thread. It's at the point of absolute collapse... they've got systems there, for instance, where there's nobody left, that knows how they were written... it's that bad. Because they're 40 years old, 30 years old. People have retired, people have died. You know, this is the reality” (EHI113).

Integrating other elements of the digital health strategy into existing infrastructure remains difficult, particularly in community services such as disability and older persons care: “We have so many systems, particularly across the community, that are end of life or seriously antiquated systems... A lot of those systems are end of life. And...when we go and try and talk to them about... IHI integration, they're saying ‘We're literally holding this together with Sellotape and Blu tack’ ... there is no development capability to get the IHI integrated. So you're dependent on... big investment and big infrastructural changes... to allow for that IHI integration” (EHI118).

Professionals with international experience highlight that Ireland’s current systems are outdated compared to modern digital health infrastructure elsewhere: “I think the next generation, let's be honest with the health records... having worked in various places around the world, and I see the ones they're putting in here. They're like, they're the old versions... so we're... taking on problems of 20 years ago from other countries by putting in systems because our people don't realise... that they're... the old systems. If you've trained and worked and lived in Ireland, all your life, you don't know what modern digital infrastructure is or technology... The majority of people in Ireland don't see that” (EHI112). Despite these challenges, rapid implementation is possible when urgency is present. The COVID-19 pandemic demonstrated the capacity for accelerated change: “I suppose the pandemic was the place where we saw... a project that should have taken, realistically, five or six years to kind of evolve, done right, getting done within three, four weeks, especially the... electronic prescription transfer. That... was something that was done over like 27 zoom meetings over a weekend... hit the Oireachtas to change legislation, and bam, two weeks later, it's up and running” (EHI107). Overall, these delays in implementation not only hinder progress but also lead to technological obsolescence, inefficiencies, and negative effects on patients. Although some areas show that rapid advancement is possible, maintaining momentum throughout the system remains a major challenge.

## The Implementation Process

The implementation of eHealth systems in Ireland involves multiple, interconnected layers of planning, governance, and ongoing support. While there is now a new seven-year Digital Health Strategic Implementation Plan in place, the experiences described by interviewees largely reflect their work with existing EHR projects. Their insights reveal both structural challenges and practical strategies, highlighting that implementation is not a single event but an extended, evolving process requiring coordination across multiple stakeholders and contexts.

The implementation process is guided by overarching strategic plans, yet the operational realities often differ. At the time of data collection, the new Digital Health strategy was being finalised, allowing interviewees to discuss their direct experiences of implementation. One described the transition between strategy and practice, noting the relationship between departmental goals and HSE execution: “There's two bits, there's the strategy, which is the department's kind of wish list and then there's the implementation, which is the HSE, sort of offering to do it... At present, there's a new one, you probably know, which is due to come out...very shortly from both the department and the HSE, which will be kind of parallel related documents. And a lot of that will also be driven by the Health Information Bill... which is coming through this year, which will also change to some extent how health data is managed in Ireland” (EHI106). A lack of central ownership or control over implementation was seen as a major obstacle. Decision-makers were perceived as hesitant to commit due to fear of negative consequences: “The people that are in the positions to make these decisions are very shy of making any decision. Because if we make a decision, it could be wrong, and then it might impact your... role or your position, or your pension or whatever else. So people make no decisions, you know, and that's... a real problem” (EHI113).

Opportunities for learning from other countries were identified as a potential facilitator of implementation. One interviewee suggested that examining processes in countries like the US could help avoid past mistakes and inform local implementation: “Okay, what can we learn, or what can we apply that we did learn through that process?... there's opportunities there at least... of learning from past mistakes or challenges” (EHI102). Strong governance was seen as essential to manage local variations across services: “You just need really robust governance. You need decision makers. You need to be able to manage those people that come in and say... I like it this way, and I want it that way... These are all...the really big, huge issues that also can

be blockers, and that's why I think Ireland's... it's going to be really tough for them to bring an EHR in, because... this is all of the stuff that they're going to have to do in every single service, and it's just going to be painful, because not one service operates. They don't think they operate the same, the processes” (EHI116).

Experience implementing EHRs revealed the complexity of the process. Vendors typically prescribed structured approaches, forming core teams of managers, staff who were comfortable with technology, and frontline users to translate paper records into electronic systems: “...when I was doing the implementation, prior to me going to the site to visit, internally, the hospital would compile what they would call a core team...people that actually get into the system and kind of navigate and build... the software itself is very much customisable...Say they're coming off of paper... all those different paper, charts, sheets...What I would do is teach them how to put that into an electronic form more or less...likely the project manager would have said, ‘Okay, here's the ideal mix of people that you're looking for.’ And then the hospital are trying to build that team and make sure that they have the time dedicated to it” (EHI102). Implementations outside of large vendors followed similar timelines but required significant coordination and preparation: “The implementation... you do have... a long... enough build up to it... So ... once the hospital makes an agreement to bring [EHR NAME REDACTED] in... it takes about nine months... from the agreement being signed to actually going live...ordering your equipment, getting systems to talk to each other... interface testing... train the trainer... it takes about... nine months. I think ... we did it in seven months, so we were actually quite quick in doing it” (EHI114).

Support and maintenance were critical aspects of implementation, extending well beyond the initial go-live period: “We would have a lot of support around the go live...around the two weeks of go live, but... support needs to persist...beyond the two weeks... users need constant training and constant reinforcement of the workflows to... actually use the system properly” (EHI111). Ongoing maintenance ensures systems remain functional and responsive to changing requirements: “A really important question...it's really, really important that there is a team on a site that will help maintain it” (EHI111). Implementation is therefore an evolving process rather than a finite task, with continual updates and testing required as new needs emerge (EHI104). Planning prior to implementation leverages Ireland’s relative position behind other countries in digital health, allowing lessons to be learned from international experience. One interviewee noted that early consideration of interoperability and information exchange can guide better system design: “ I think, one of the benefits of Ireland, I don't want to say being

behind but in fairness, being a little bit behind in the development is they can look at that type of stuff and say, 'Okay...the US is on electronic systems. But... are there things that we can do to improve from the beginning of the planning phase...versus just saying, 'Okay, we have the electronic system. Now what?'" (EHI102).

The scale and complexity of the preparatory work necessary for successful implementation was also emphasised. Planning involves upskilling staff and establishing robust project management capabilities, which were seen as lacking in Ireland: "There is a massive preparation phase...upskilling the human resource that's available to support the implementation of this ...It's just not a core skill they have... They don't have project managers that are any good... at least, we've never seen one. And they have no...concept of the challenges that are going to face them, I don't think. So... that's a real worry in Ireland" (EHI113). Learning from smaller, earlier projects was recommended to avoid repeating mistakes: "The productivity paradox is important, needs to be considered for future implementations...as a total system, we can learn from the implementations of the early pathfinder projects like MN-CMS. We shouldn't be learning those lessons over and over again" (EHI108). Successful implementation requires more than introducing a system. It needs extensive planning, coordination, and ongoing support. While structured processes, learning from international experience, and robust governance can facilitate implementation, the complexity and scale of these projects make them long-term, evolving efforts rather than discrete tasks.

## Policy and Procurement

Policy and procurement play a central role in shaping the implementation and sustainability of eHealth systems in Ireland. Interviewees highlighted how national legislation, procurement rules, and governance structures both enable and constrain system development. Their insights reveal that these processes influence standardisation, interoperability, inclusion of local suppliers, and ultimately the effectiveness and cost-efficiency of EHR projects.

Decisions about building versus purchasing EHR software are closely tied to the broader policy environment. Systems built internally must adapt to national policy changes, which can introduce unexpected requirements and additional work: "You have to go through your accreditation again of how you then integrate the results. That's not...something that you had in mind on your plan. Now you have to do it" (EHI117). Strong national legislation, however, can support standardisation and reduce duplication. One interviewee described how a single

national build facilitated the creation of a consistent system across multiple hospitals: “It was one standard national build that went into the Maternal and newborn clinic management system, which was built once and built well, as opposed to four or five or six hospitals, each reinventing the wheel and each coming up with their own flavour of how they implement what should be one national system” (EHI108). The stages of policy development, from design and approval, to education and implementation, were described as a substantial component of system work beyond the technical build: “You develop your policy, you get it signed off, everybody's agreed on that it. That's grand...That's 1/3 of it. The next third is to educate people make them aware of it. That's the second third. And then final third is actually the implementation, the oversight, the surveillance, the monitoring, the audits” (EHI110). An interviewee described the complication position of policy in this case: “This should not be, in any way, a controversial topic, if you are looking at it objectively. It is a controversial topic because it's a something that requires political will. So it becomes a political decision. It is very hard to describe that on the counter side, on the other side of the equation is somebody politically who's going to have to assign their career to ‘We are doing a massive scaled transformation project, infrastructurally huge, with an enormous cost attached, which will take years to achieve, and I can't exactly articulate to you why it's a good idea’. So you're asking somebody to commit political suicide without having tangible evidence as to why it's a good idea. All you can say is "everybody agrees it's a good idea". (EHI117).

Procurement processes can create challenges that lead to fragmented implementation and higher long-term costs. Strict legislation and rules sometimes prevent the development of interoperable national systems: “So you know it's way, way, way above my paygrade, the people who are making these decisions, but I am concerned that procurement legislation, and the interpretation of procurement legislation has led to a fragmented, piecemeal implementation that is gonna lead to more procurement costs in the long run. Because you're gonna be getting interoperability engines, you're going to be employing way more staff. And they're not actually going to be able to do as good a job as... one team could do, one national system” (EHI108). Multiple systems in the health service increase interoperability problems and put pressure on the teams maintaining them: “Decisions that are made through the various procurement processes...being managed by a variety of people are having a knock on impact on; One: the sustainability of the teams who keep these systems live and develop them. And two: the long term interoperability of these systems...The more systems that come into the mix, the more interoperability problems we'll have into the future” (EHI108).

Procurement rules can also exclude smaller, local technology companies. Requirements for historical financial turnover often make SMEs in Ireland ineligible to bid, forcing hospitals to contract with large vendors and absorb additional costs: “... typically, in a...public procurement, when they issue... the tender, they say, ‘Oh, yeah, you need historical turnover levels of 5 million or 20 million or something’, which means no SME in Ireland can even bid.... So if they do that, when this comes out, I have to go to a big company, license them instantly...all that does is disadvantage the SME, because now I have to... give a big chunk of margin to that middleman...That's the reality we're dealing with” (EHI113).

A lack of transparency and clarity in the procurement process was another challenge. Some stakeholders were unsure how particular vendors were selected or how nationwide standardisation would be achieved. One interviewee summarised this uncertainty, noting that it would be preferable if top-level decisions clarified the national system and its integration with GPs and other services (EHI105). Others emphasised that, despite these challenges, procurement is governed by public rules and tenders are publicly available on the eTenders website, providing some transparency in the process (EHI103). Policy and procurement processes strongly shape the standardisation, efficiency, and sustainability of eHealth systems. While legislation and formal rules ensure consistency and transparency, they can also cause fragmentation, restrict smaller suppliers, and raise long-term costs.

## Control

Control over EHR systems, including decisions about design, functionality, and integration, emerged as a critical issue shaping implementation. Interviewees highlighted tensions between healthcare staff, policy makers, and vendors, showing that the focus of control affects flexibility, ownership, and the capacity to adapt systems to local needs.

Control is particularly complicated when vendor dependence is high. Projects can become constrained if critical functionality relies solely on a single vendor: “Even little projects that we could be working on now... if a lot of the functionality is reliant solely on a particular vendor, they're not going to put their foot in there, because if that vendor got grumpy and started, there's no way of pulling them back if the project's reliant on them” (EHI107). Using one large vendor for national-scale implementation raises concerns about the loss of ownership and leverage. One interviewee described this as giving “the keys of the kingdom” to the vendor (EHI113). In neighbouring countries where similar approaches were taken, governments often lose

flexibility, having to modify their processes to match vendor workflows: “Not only is that unbelievably eye wateringly expensive, but they have just lost all leverage forever...There'll be a degree of configurability, but frankly, you'll have to compromise every which way, because you've put in the [VENDOR NAME REDACTED] system, you now have to use the [VENDOR NAME REDACTED] system” (EHI113). Alternative approaches, such as best-of-breed architectures, allow more retained control and greater responsiveness to local requirements. This is where the top-performing software solutions for specific functions are each chosen because they excel in their particular area, rather than relying on a single, all-in-one platform that offers broader capabilities but may not perform each function as effectively : “In [NEIGHBOURING COUNTRY], they have not given the keys of the kingdom to a single American company. They have retained an awful lot of control to optimise and to gain an adequate response from companies by going with a best of breed architecture” (EHI113).

Vendor control also affects the integration of existing systems. Attempts to consolidate multiple functional areas into a single national EHR can create friction with hospitals that have long-standing, well-functioning local systems: “They want, this is our one source of truth...We're going to be completely paperless once we go to the new Children's Hospital. They don't want cardiology, they don't want diabetes, using their own little systems that have worked very, very well for many, many years, in our little silo, in our little hub. But now this is going to be the ‘all encompassing EHR' that we all have to use. And ‘Please stop using that.’...But [AN ADULT] Hospital ... are not happy about that. They said ‘No, this is a national registry...everything has to go into this system’. So I am currently in negotiation with [A CHILDREN’S HOSPITAL] to see... how much information we can get interfaced across...they have agreed to some, but not all. So it might be that we ended up using two systems when we go to the new children's hospital anyway. So that's a difficult, it's a difficult one” (EHI105). How control is shared among vendors, healthcare staff, and policymakers strongly influences EHR implementation and integration.

## Relationships

Relationships emerged as a critical factor in the successful implementation and operation of EHR systems. Interviewees highlighted that cultivating strong connections with colleagues, vendors, and other stakeholders not only supports smooth project delivery but also facilitates

knowledge sharing, trust-building, and problem-solving throughout the implementation process.

Strong interpersonal relationships within project teams were seen as essential for success. Staff with well-established social ties and professional reputations can leverage these connections to navigate obstacles and gain cooperation: “You need your informatics pharmacists who have those soft ties, and have the social capital to call in favours and meet with people and do the face to face communication and the convincing and the bringing people along with you slowly. That is essential to make these projects as successful... They're very much trading on the reputations, or the social capital of the people in the project” (EHI108). Beyond leveraging influence, relationships also support knowledge transfer: “Grab as much knowledge as you can from any senior people” (EHI102).

Challenges arise when relationships are weak or disrupted. Projects managed externally, rather than by staff with established connections, can experience breakdowns in communication and cooperation. Speaking on an ehealth project that was taken over by the HSE, an interviewee explains: “They wanted to do it themselves... the people who owned the project, obviously reckoned that (an) outside resource wouldn't be able to get the right response from hospitals... but they never gave us a chance. And we were used to working with hospitals... because we work so closely with the people at the front line that they develop a huge level of trust in us. There's great cooperation. We get things done. Instead of that, we had to put up with a project team that was parachuted in within the HSE, and all the little political power plays started happening, and people wouldn't talk to each other, and people wouldn't do this, and nobody would upset that person” (EHI113). Similar patterns were noted in national projects that attempted a top-down approach: “This happens a lot Harriet in national, a very much ‘We'll do it our way’. And then when it gets down to operations...the relationship and the communication just breaks down” (EHI116).

Relationships with vendors are also vital for operational flexibility. Positive engagement can facilitate problem-solving and support smaller institutions: “We've been very lucky with the company we have, because they are a big company. We've developed really good relationships....So I can pick up the phone now and, ‘Any chance you'd do me a favour’” (EHI109). Conversely, some interviewees critiqued large vendors for poor interoperability and high costs: “The big vendors are [VENDOR NAME REDACTED] and [VENDOR NAME REDACTED] internationally, but they're really grumpy monopolies. They're just useless...

Their interoperability is minimal to none, if possible. And that's some of our big projects totally stalled on that...They're... old fashioned, designed and built on... business models, how you bill patients, how you get your money back” (EHI107). The potential incentives for vendors to participate in Irish eHealth projects were also discussed, though some saw large vendors as not universally beneficial: “I suppose the... carrot for the vendors would be development of the new projects and getting on the HSE roadmap... And you know, there's obviously a smoky room where wheelbarrows of money move from one end to the other... some players are still thinking of... ‘Oh but sure [VENDOR NAME REDACTED] would be good. But [VENDOR NAME REDACTED] won't do anything, because they're a big slug’” (EHI107). Some vendors, however, have in the past introduced flexible solutions to accommodate smaller hospitals: “Basically a subscription service...some of the smaller hospitals that wouldn't have the funding for a full EMR...would be more of an out of the box solution...because they might be kind of modifying some of their workflows to... accept what their ... standard package is” (EHI102).

Relationships are also critical across healthcare sectors. The Irish Prison Service, for example, relies on connections with the HSE and community clinics to ensure continuity of care. Their own EHR systems need to be able to “link back in when people have GPs in the community. Because when somebody's been in prison, we need to link back into make sure that GP is up to date with, ‘Okay, he's leaving prison now, after five months, five years. Here's his latest health update. Here's what's happened. This is what we've done. There you go.’” (EHI110). These cross-sector partnerships demonstrate the operational benefits of trusted, well-maintained relationships. Strong relationships are important for successful EHR implementation. They help build trust, share knowledge, and solve problems. Weak or broken relationships can cause communication issues and operational problems.

## Training

Training and staff support emerged as critical factors in successful EHR implementation. Across the interviews, participants highlighted differences in staff capabilities, organisational needs, and training approaches, emphasising that hands-on, context-specific learning is far more effective than generic classroom instruction. The interviewees also revealed tensions between providing comprehensive training and minimising disruption to frontline staff, showing that training is both a practical and strategic concern.

Interviewees emphasised that differences in staff experience significantly shape EHR implementation. In voluntary hospitals, teams were described as largely competent and capable, with plans to enhance their informatics skills (EHI113). By contrast, non-voluntary hospitals were discussed as often lacking IT staff with equivalent expertise, making training and support essential. One interviewee explained that expecting staff to adopt a new EHR without preparation is unrealistic, given the existing workload, low morale, and limited support: “you cannot come along to these people and say ‘Oh, by the way, we're putting an EHR into your hospital.’ Impossible, impossible. I mean, the person wouldn't even be able to take on a training role because they wouldn't have enough depth... of knowledge, of insight. So this is a huge, and I think, an unchallenged issue that they haven't stood back and said, ‘Okay, if we are going to implement EHRs in Ireland, we have to be ready for a massive enterprise wide change which will touch everybody, including our incredibly busy frontline, under resourced workers... who are task saturated already, who are interrupt driven, and ... whose morale is really low because of the last 10 years’. And now we're going to say, ‘Oh, by the way, change everything you do and learn all this new stuff. And by the way, with nobody to support you when the system goes wrong,’ “ (EHI113).

The type of training required depends on organisational needs. Many interviewees stressed the value of hands-on support during implementation. For example, having technicians available on-site to demonstrate the system was described as far more effective than manuals or videos: “I think that was the best way to be trained, because there's no point in reading a manual. Your brain doesn't absorb what you need to do until you're trying to do it. Now all the vendors do provide videos and tutorials. They're available out there for tasks, but we're all human beings...you don't think about these things until you're trying to do something, and when you're trying to do it, you want the answer now” (EHI107). Staff with previous experience in large EHR vendors described structured programs with mentorship, shadowing, and step-by-step guidance as effective (EHI102). Small group, simulation-based exercises were also recommended for nurses and doctors to practice using the system in a realistic setting (EHI113).

Education and training were repeatedly cited as crucial to successful implementation. Participants noted that hospitals often do not place enough emphasis on this area, despite its impact on system adoption and effectiveness: “people understanding and knowing how to use the software, in addition to the millions you already spend on getting the software is massively important. And I think that's actually one that a lot of hospitals fall short on, is kind of the education and the training side” (EHI102). Interviewees highlighted the need to balance

thorough training with minimising disruption to patient care. An interviewee who had experienced a lengthy training on a system offered that “It was long. It was too long, if I'm being honest... I think it was like seven hours one day, and then you had to go off and do case studies and come back...and it didn't need to be that long. But definitely, if they were doing an EHR, there'd have to be ... a national training with regional trainers. And the absolute best case scenario would be that each area would have a super user, and that person would come in, from a technical point of view, and help you out and all that kind of stuff.... That'd be kind of gold standard, I would imagine” (EHI115). Peer-to-peer and guided support were also emphasised, with comprehensive resources such as user guides, FAQs, and videos supplementing hands-on learning (EHI109).

Beyond immediate system use, participants stressed that effective training underpins the long-term success of EHR implementation. Awareness-raising and foundational education were seen as critical to keeping pace with rapidly evolving eHealth technologies: “And we're racing against the clock Harriet, powering ahead, and we're trying to... catch up very, very quickly in this space as well.... So there's an awful lot can be done, but huge education pieces and awareness raising here. And it's not just about the bringing in the EHR system... it's about getting some of these fundamentals right” (EHI118). Effective EHR training is context-specific, hands-on, and ongoing.

## Cost

Financial considerations play a central role in the implementation and sustainability of EHR systems. Funding affects not only whether projects can proceed but also decisions about system scope, scale, and integration. Cost pressures influence design choices, the ability to maintain systems, and the equity of access across different care settings.

Money is a persistent factor shaping decisions and progress: “So many things are money. So you probably can't extract that too much from the equation because it drives so many things...probably that is a big part of it” (EHI101). Adequate resourcing is critical for large-scale projects, with money mentioned among one of the deciding factors of the National EHR project's fate: “I do think it's possible, but I think it needs resourcing, it needs funding, and it needs a committed team to get that in” (EHI111). Discussion of money brought up some issues regarding inequality of access to choice among different care facilities, especially hospitals. On the back of this some interviewees discussed the for profit making nature of notable big

vendors in the healthcare sector, and how these systems are designed less with a patient focus and more with a management focus, “If you're a hospital looking for an EHR, you're probably going to go for a [EHR VENDOR NAME REDACTED] or [EHR VENDOR NAME REDACTED]. Why? Because it's all bent towards how to save you money, as opposed to anything to do with the patient journey or the clinician's journey, or how it looks, how it feels. That's irrelevant. The people who pay the money for the EHR have nothing to do with patients and clinicians, they're ... management up top. So these things are all.. those. The big sellers are all built on management packages originally, and then they've evolved to bring in the EHR stuff on the back of a very robust management model. And you go around the world... that's what hospitals, health boards are investing in, these big, silly things that just don't work for function” (EHI107).

Funding availability also determines the strategic direction of national projects. Limited current funding may necessitate prioritising shared care records over a fully integrated national EHR. So new funding would be required to implement a large EHR (EHI103). Allocations are annual and centralised through the Department of Health, which introduces challenges in sustaining project momentum: “So I suppose our resource concerns would be... .. a lot of funding is going to go into EHRs and shared care records, but again, it's constantly lobbying that... we're not the outward facing part of it, but we're fundamental to the success of the...engines or the outward facing pieces, and that we need to be resourced and remembered accordingly, which is incredibly challenging given the current climate and just coming out of a recruitment embargo” (EHI118).

Implementation costs extend beyond initial procurement. Transitioning to a new record system involves additional expenses for equipment, interfaces, and staff training: “A lot of extra cost for the overall process” (EHI117). Interviewees highlighted the need to plan for both implementation and long-term maintenance in initial budgeting: “Before, we were very fluid, and we just went with it...But now we have to pare back because we are going to incur costs...We've gone through all the implementation and all that. So now we have to watch our budget” (EHI109). The debate over best-of-breed versus fully integrated systems also reflects cost considerations, as integration can be expensive if multiple vendors are involved (EHI104).

General practice faces unique financial pressures. Upgrading outdated systems requires significant investment in hardware, software licenses, and infrastructure: “..it's very expensive... maybe eight years ago, we moved from one IT system to another, and because the

other system was newer than the one we had, our hardware infrastructure wasn't able to take the new one. So we had to buy new servers, new workstations. The whole thing, nothing to a hospital's budget, but to a GP small business environment, it was prohibitive really” (EHI107). Running costs are substantial, and state support is limited: ““The running costs are staggering. It's maybe 12,000 a year you pay for just your software license and that's... there's 10 users in my practice so ... you have a massive installation cost to take software in the first place. Sometimes you have a massive hardware cost to get your... network up to speed, and then you've got massive running costs. State doesn't give us anything for that” (EHI107). Funding shortages remain a persistent barrier: “There isn't enough, we always need more” (EHI108).

International experience offers potential models to accelerate implementation. The US EHR expansion under ‘Obamacare’ illustrates how government incentives can rapidly drive uptake: “If the government were to say...’We'll do some kind of reimbursement. Get onto a system, get electronic and...we'll kind of help with the cost of it’. I think that would push things along. But again, I also think it's important to fund the public side, especially, to look at that interoperability and make sure that data is shared throughout the HSE” (EHI102). Rapid adoption, however, can also create risks if systems are unvetted: “Everybody jumped on the bandwagon, including crooks, people who didn't bother validating their software and resulted in God knows how many deaths” (EHI113).

Funding for maintenance and new initiatives presents an ongoing challenge. Legacy systems are often prioritised due to pre-existing budgets, leaving limited resources for innovation: “if you're talking about in Ireland... the ICT capital is held by eHealth. Most of that is to pay for the legacy systems and iPMS and all of that. So there isn't that much funding outside of that. If anybody wants to look for a system... from community, they have to apply through the CDOG, which is the Community Development Oversight Group. Most of the time they say no, which frustrates people, because a lot of the stuff is in conflict with other work that they're doing... At the moment, most of the funding is just going into old, like legacy stuff, and to people.” (EHI116). Projects that receive special-purpose funding may face a sudden end to support once implementation is complete: “So that's when we got the money to implement the EHR. But now...as I say, we've done it now, but there's no money for support... So now we're trying to see. Obviously, they need somebody to keep the system going and support, but there's no money for that. So we're going back to the HSE to see can we pull money on an ongoing basis... So the money was finite. ‘There you go. Go do something cool’. So we've done that, but we need... there's no, there's no funding for maintenance” (EHI105). Financial constraints affect

nearly every part of EHR implementation, from choosing and designing the system to maintaining it over time.

## Chapter 7. Cross Case Analysis

This chapter presents the cross case analysis that forms the culmination of this multiple case study. In this chapter, I present each case through the lens of Lundin and Söderholm's (1995) four T's of temporary organising (Time, Task, Team, and Transition). I then interpret the cases in relation to their ideal type institutional logics, drawing on Thornton et al. (2012) to identify the most prominent logic configurations seen within each context. The findings are organised into four emergent categories, Compliance, Competence Building, Collaboration, and Cost (the 4Cs), which structure the analysis and address the research questions introduced earlier in the thesis. These categories were developed directly from the inductive coding process, with initial codes grouped based on conceptual similarity to form the 4Cs. Compliance emerged from codes relating to government, policy, regulations, vendors, and planning. Collaboration emerged from communication, relationships, collective effort, and management. Competence Building emerged from training, support, and control. Cost emerged from cost and time/opportunity considerations. Each category captures a distinct aspect of implementation. Compliance reflects adherence to prescribed practices, Competence Building highlights skill and capacity development, Collaboration emphasizes inter-organisational and interdisciplinary working, and Cost considers resource implications. Table 8 below illustrates how the original codes map onto the 4Cs. While existing implementation frameworks such as CFIR (Damschroder, 2022) address broad determinants of implementation, the 4Cs provide a focused lens integrating regulatory, relational, capability, and resource perspectives, highlighting both alignments and novel contributions. Within this framework, I identify the logic relationship types that underpin each assertion, highlighting how they shape actions and outcomes in the cases. Finally, I build on these findings to develop practical recommendations for enhancing implementation processes in instances of temporary organising.

“These systems unmask all kinds of issues in the health system. Some before go-live, through your preparation process, and your data collection workbooks and your workflows. But some things just become apparent after you start using the system. So it's like the electrification, you turn on the lights, and people start looking at all the cobwebs. So there's, I can think of few equivalents on the EHR side of things.” (EHI108)

Table 8. Coding Structure of the 4Cs.

Category	Code	Definition	Keywords	Illustrative Quote: Case 1	Illustrative Quote: Case 2
Compliance	Government	References to National or Regional Government.	Government, Political	“So the relationship with the government was nearly like the relationship that they had with the British. Its still what we can get away with, and it was that all over, it wasn’t just my family, you know ‘This governments out to screw ya, lets see what we can get’. (REI101)	“No, we don't interact too much with like, the government isn't really integrated on this. I mean, sure, you only have to look at the HSE sure. They don't have digital records. And it's 2024.” (EHI112)
	Policy	Any reference to policy, government policy, organizational policy.	Policy, Political	“Well it was just always politics in it in everything and anything you know” (REI106)	“We're very much working to try and develop a dual diagnosis service in line with HSE national policy. “ (EHI110)
	Regulations	Mentions of regulations,	Regulations, Standards	“The ESB tended to be led by German standards, as in British Standards.” (REI108)	“So things like even the termination of pregnancy legislation arrived with very

		often associated with policy			strict regulatory framework around prescribing in that setting.” (EHI108)
	Vendors	Direct reference to vendors. Mostly in line with early stages of implementation and system selection.	Vendors, System Selection, Suppliers	“I think they bought up three hundred and thirty something existing companies, because you ... couldn't guarantee what frequency they were going to generate at. So you couldn't connect them into the ESB system. So the government agreed then that there would be only one supplier of electricity in Ireland.” (REI109)	“The big vendors are [VENDOR NAME REDACTED] and [VENDOR NAME REDACTED] internationally, but they're really grumpy monopolies. They're just useless. (EHI107)  “
	Planning	The approach to undertaking the work.	Approach, Plan, Developing, Phase, Preparation	“As wiring gets off to a very slow start in most areas, we have adopted the plan in this district of circularising every economic acceptance in an area shortly before the	“And I guess that cut over then from a completely paper based chart, paper based everything, you know, from 8am, in the morning, we suddenly decided, Okay, now

				construction crew is ready to move in.” (REO1950.04)	we're going to go to the electronic system. So there was some planning, a lot of planning.” (EHI111)
<b>Collaboration</b>	Communication	Communicating between team members and communicating EHR capabilities to users.	Communication, Dialogue, Awareness, Information campaigns	“You know but there would have been no holes barred about anything. Everything was discussed. You know it would be “what was your electricity bill this week, or this month” You know, that kind of thing.” (REI101)	“You need your informatics pharmacists who have those soft ties, and have the social capital to call in favours and meet with people and do the face to face communication and the convincing and the bringing people along with you slowly, that is essential to make these projects as successful.” (EHI108)
	Relationships	All mentions of relationships, also any mention of collaboration. The visibility of	Relationships, Collaboration, Involvement	“It is good to get the local people interested as an organised body and let them feel they have some share in getting the benefits of electricity for their	“Myself and [NAME REDACTED] would have developed very good relationships with them. So I can pick up the phone now and, Any chance you'd do me

		the actions of the project.		parish.”(REO1948.01)	a favour or you know so.” (EHI109)
	Collective Effort	Working with others towards a common goal. Involving the user in implementation.	Community,	“I am in full agreement with your idea that an energetic and enthusiastic local committee is always a considerable asset to an area - and to the Area Organiser.” (REO 1948.02)	“So we did pick other patients. So they sat around, we were able to say to them, This is what we're proposing, and what do you want? And then they just, you know, and then when it came to test it, they were involved with all of that as well. So we kept them involved in all stages.” (EHI109)
	Management	Those in charge of making decisions. Management of implementation or staff.	Management, Project, In-charge, Board	“Should the original objector be dissatisfied with the alterations offered , he should be told that the R.A.E. has no alternative but to submit the case t o the Board.” (REO1949.04)	“I mean, you could say the same thing for project management, if, in fact, somebody takes two and a half years to do what can be done in nine months for a critical implementation, critical system. No doubt,

					patients have suffered and died as a result..." (EHI113)
<b>Competence</b>	Training	Any mention of training, largely staff training re system use	Training, Preparation	"And now wouldn't have had, you know, degrees or any of these kinds of things that people would have now, you know what to make them engineers or whatever?" (REI104)	"And so my job as a trainer was to run those classes, the certification classes, to maintain the curriculum..." (EHI101)
	Support	User support, project support, any mention of support.	Support	"Let us know if you get R.E.O. Head Office is also considering the problem to see if it can lend any help." (REO1949.09)	"It's a huge organizational change, and that support needs to persist, I guess, beyond the two weeks after the go live, you know, that there is a team there to support via the local back office..." (EHI111)
	Control	Ownership of the systems. Responsibility	Control, Ownership	"We, the E.S.B, are a non-profit-making authority charged by the people of this country, through the Dail,	"They have retained an awful lot of control to optimize and to gain an adequate response from companies by going

		towards implementation.		with the task of providing and distributing electric power to these same people.” (REO1948.06)	with a best of breed architecture.” (EHI113)
<b>Cost</b>	Cost	Any mentions related to money.	Cost, Funding, Price, Pay, Money	“The only thing that was free was putting the poles up and getting linked up to the house. Now we had to pay the contractor ourselves for putting in our lights. He was paid for that.” (REI105)	“They're like any other vendor that they they're slow to move on things, they're very expensive to do any work.” (EHI107)
	Time/Opportunity Cost	Timing of implementation. Discussion of the cost of delays.	Time, Delays	“Eventually anyway, they all were willing enough to get it, but because they hadn't agreed in the beginning it took them much longer then to be connected up.” (REI104)	“I would say 95% of communication, I get back from the hospital is still in paper. Which is, which is a real pain because what happens then is we have to scan it to make a digital and then shred the paper and it's all awful waste of time.” (EHI106)

## Temporary Organising

I represent each case in terms of Lundin and Söderholms (1995) four T's of Time, Task, Team, and Transition in Tables 9 and 10 below. This is not for the purpose of conducting a comparison of the two, as that is not the focus of multiple case research, but to provide the reader with a summary of the context for each and show that each of these cases fit Lundins and Söderholms specifications for an example of temporary organising.

### Case 1: The Irish Rural Electrification Scheme

*Table 9. Case 1 represented in terms of Lundin and Söderholm's (1995) four T's.*

<b>Category</b>	<b>Details</b>
<b>TIME</b>	<p>Launched: 1946.</p> <p>Peak Activity: 1950s-1960s.</p> <p>Completion Phase: Late 1970s.</p>
<b>TEAM</b>	<p>Electricity Supply Board (ESB) - Led the project.</p> <p>Rural Electrification Office - Special division within ESB.</p> <p>Local Committees - Volunteers from each area to promote uptake.</p> <p>Electrical contractors and labourers - Many hired temporarily, including locals.</p> <p>Government departments &amp; local authorities - Provided policy and funding support.</p>
<b>TASK</b>	<p>Electrify rural Ireland by extending the national grid.</p> <p>Design and build poles, wires, and substations in rural areas.</p> <p>Convince rural households to opt in.</p> <p>Coordinate training, safety, and infrastructure standards.</p>
<b>TRANSITION</b>	<p>Once an area was connected, local committees disbanded.</p> <p>ESB scaled back the Rural Electrification Office.</p> <p>National grid operations were normalised under ESB.</p> <p>Long term effects: Modernisation of rural life, migration changes, and better economic equality between rural and urban Ireland.</p>

## Case 2 : Ireland’s National Electronic Health Record Programme

Table 10. Case 2 represented in terms of Lundin and Söderholm’s (1995) four T’s.

Category	Details
<b>TIME</b>	<p>Strategy Release: 2013 (eHealth Ireland established to lead).</p> <p>Initial Pilot Projects: mid 2010s (e.g., Individual Health Identifier rollout, Maternal &amp; Newborn Clinical Management System).</p> <p>Incremental Progress: late 2010s-2020s, phased deployments in hospitals and community services.</p> <p>Ongoing Implementation: 2020s, with aim for full national coverage over the next decade.</p>
<b>TEAM</b>	<p>Health Service Executive (HSE) - Oversight, governance, and service integration.</p> <p>eHealth Ireland - Technology and transformation arm of the HSE.</p> <p>Office of the Chief Information Officer (OCIO) - Digital health strategy and IT standards.</p> <p>Healthcare professions &amp; clinical leads - Input on usability, workflows, and clinical safety.</p> <p>IT contractors, vendors &amp; system integrators - Technical design, build, and maintenance.</p> <p>Government departments - Funding, regulatory, and policy support (Dept. of Health, Dept. of Public Expenditure).</p> <p>Patients &amp; advocacy groups - Consultation and stakeholder engagement.</p>
<b>TASK</b>	<p>Develop and deploy a national electronic health record (EHR) system.</p> <p>Standardise data structures across hospitals, GPs, and community care.</p> <p>Introduce the Individual Health Identifier (IHI) as the foundation for records.</p> <p>Ensure interoperability with existing healthcare IT systems.</p> <p>Implement training and change management programs for healthcare staff.</p> <p>Address data protection, privacy, and cybersecurity requirements (GDPR compliance).</p> <p>Deliver patient portals to give individuals access to their health data.</p>

<b>TRANSITION</b>	<p>Early phases: Parallel running of old paper based and digital systems. Gradual integration of hospitals, GP practices, and community health services.</p> <p>Consolidation under a single, patient centric digital record accessible across the healthcare system.</p> <p>Handover of pilot learnings into scaled national rollouts.</p> <p>Long term effects: improved care coordination, reduced duplication of tests, greater patient empowerment, and system wide efficiency gains.</p> <p>Ongoing transition: project remains in staged rollout with challenges in cost, procurement, and stakeholder adoption.</p>
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## The Institutional Logics in the Cases

The ideal types of institutional logics were particularly useful for me as an analytical lens to understand both the relationships among the logics within each case, and the interactions between those logics and the processes of temporary organising. Thornton et al (2012) do not prescribe the use of ideal types as a means of representing cases, but rather as a tool for the researcher to better understand the institutional logics at work, without developing entirely new categorisations of their own. It is from this understanding that I now draw to provide a higher level analysis of what is happening in the instances of temporary organising discussed in the cases. The following analysis is based on deep analytic coding of the data as outlined in the methods chapter. Institutional logics were identified by their Y-axis categories of the revised interinstitutional system ideal types, illustrating what X-axis category they belonged to, as illustrated previously in Table 2 (Page 34). It is important to remember that this is a multiple case study following Stake's (2006) Track Two design, which is not intended for direct comparison across cases. I offer a brief representation of the cases in terms of their ideal type institutional logics. My hope is that this overview will provide useful context for the discussion that follows.

## Case 1: The Irish Rural Electrification Scheme

Ranking from most prominent to least, the logics present in the rural electrification case were; Profession, Market, Community, State, and Corporation as illustrated in detail in Table 11 below. Using the ideal types categories maintained consistency in categorising coded material and ensured that this aligned with Thornton et al.'s definitions of the ideal types.

*Table 11. Institutional Logics present in Case 1.*

<b>Institutional Logic</b>	<b>X-Level Categories (in order of prominence)</b>	<b>How this manifested in the case</b>
<b>Profession</b>	<ol style="list-style-type: none"> <li>1. Status in Profession</li> <li>2. Association with Quality of Craft / Personal Reputation</li> <li>3. Membership in Guild or Association</li> <li>4. Personal Expertise</li> <li>5. Profession as a Relational Network</li> </ol>	<p>The importance of professional standing and the recognition that came from demonstrating expertise and quality in one's work.</p> <p>Belonging to professional networks or associations positioned individuals within a wider community that valued collaboration.</p>
<b>Market</b>	<ol style="list-style-type: none"> <li>1. Transaction</li> <li>2. Increase Efficiency / Profit</li> </ol>	<p>Most extracts under this logic focused on efficiency, not profit.</p>
<b>Community</b>	<ol style="list-style-type: none"> <li>1. Visibility of Actions</li> <li>2. Commitment to Community Values and Ideology</li> </ol>	<p>Emphasised alignment with community ideals and public accountability.</p>
<b>State</b>	<ol style="list-style-type: none"> <li>1. Increase Community Good</li> <li>2. References to Social and Economic Class</li> </ol>	<p>Reflected a concern with collective welfare and social structures.</p>
<b>Corporation</b>	<ol style="list-style-type: none"> <li>1. Market Position of Firm</li> <li>2. Board of Directors / Top Management</li> </ol>	<p>Least discussed logic; limited focus on organisational hierarchy and positioning.</p>

Even this outline of the main categories and their prominence in the data provides a good insight into the scheme, and one that does not fall into the trap of being overly field or organisation specific through use of field level logics. The Professional logic was most visible, focusing on individuals’ ability to carry out their professional duties and their standing within their wider professional community. This reflected a strong connection between skill, reputation, and belonging within a recognised professional group. The Market logic centred mainly on efficiency and transactional activity, with little direct focus on profit. The Community logic was also evident, highlighting the importance of aligning actions with shared community values and maintaining accountability to the public. The State logic reflected concern for the wider social good and awareness of social and economic structures that shape collective welfare. Finally, the Corporation logic, though less prominent, appeared through occasional references to organisational hierarchy and the role of senior management in guiding the project. Overall, the picture that emerges is of a project driven by professional standards and community expectations, supported by an awareness of market conditions and the oversight of organisational leadership.

## Case 2: Ireland’s National Electronic Health Record Programme

*Table 12. Institutional Logics present in Case 2.*

<b>Institutional Logic</b>	<b>X-Level Categories (in order of prominence)</b>	<b>How this manifested in the case</b>
<b>State</b>	1. Increase Community Good 2. State as Redistribution Mechanism	Focus on improving patient safety and access to care. State’s control over funding, policy and decision-making.
<b>Market</b>	1. Transaction 2. Status in Market	Ireland’s small size and position in the wider health technology market and cost of procurement.
<b>Profession</b>	1. Personal Expertise 2. Association with Quality of Craft/ Personal Reputation	Need for skilled professionals, and making sure people can work effectively together.

	3. Membership in Guild & Association	
<b>Community</b>	1. Commitment to Community Values & Ideology	Found mainly in smaller, disease specific EHRs and prison EHR, where values of inclusion and patient centred care prioritised.

This outline of the main categories and their prominence in Table 12 gives a clear picture of the combination of logics shaping Ireland’s National Electronic Health Record Programme. The State logic was most visible, centred on improving patient safety and access to services while reflecting the State’s control over funding, policy, and governance. The Market logic appeared in talk about efficiency, profit, and transactional activity, and was influenced by Ireland’s position as a small national market. The Professional logic highlighted the importance of personal expertise and maintaining professional standards, with collaboration seen as essential to getting the job done rather than as a shared identity. The Community logic was present mainly in smaller or more specific projects, such as disease-specific systems or the prison EHR system, where community values and patient needs were given greater emphasis. Visibility of actions is not included on the above table but the fact it was discussed so little is notable in itself. Visibility of actions was discussed primarily only by those higher up in the command chain close to the decisions that were being made about the national project suggesting that awareness of decision-making was largely confined to those at higher levels of management. Overall, the EHR case showed a narrower mix of logics compared with the rural electrification example, with State and Market influences taking precedence and professional and community concerns playing a more supporting role.

## Assertions

The assertions presented have been developed from the findings presented in chapter 5 and 6. These assertions (see table 13) set out to answer the research questions set out in the introduction of this thesis and reprised below. Some assertions will develop or advance theory, others will contribute to practice recommendations, and a few may accomplish both goals. Assertions are based on both cases unless specifically noted otherwise.

## Research Aim and Questions

This thesis examines the relationship between temporary organising and large scale project implementation. To address this, the following research questions were addressed:

1. What are the processes by which large scale projects are implemented?
2. What are the guiding beliefs and assumptions that underpin these processes?
3. How do different combinations of beliefs and assumptions affect implementation processes?
4. How does this contribute to improved theory and practice?

## Categorising the Findings

All case findings were categorised into four categories specific to the implementation process: Compliance, Competence Building, Collaboration and Cost. This categorisation is illustrated in the coding structure in Table 8.

Discussion in the following chapters will also cover the specific logics found in the two cases. To aid understanding of this discussion I present a general interpretation of the most prominent logics as can be understood from Thornton et al (2012) in Table 13 below.

Table 13. Outline of four main Institutional Logics based on Thornton et. al. (2012).

<b>Logic</b>	<b>Description</b>	<b>Key Characteristics</b>
<b>Community</b>	Emphasises social norms, collective values, and relationships within a community setting.	Decisions guided by the welfare of the community and its members. Trust and long term relationships are essential.
<b>Profession</b>	Centres around expertise, specialised knowledge, and adherence to profession standards.	Decisions influenced by expert opinions and ethical guidelines.
<b>Market</b>	Driven by competition, supply, and demand in the market economy.	Decisions aim to maximise individual gains and consider efficiency and customer preferences.
<b>State</b>	Focuses on government and regulatory influence.	Decisions influenced by public policy, laws, and regulations, with an emphasis on public interest and societal welfare.

## Categorised Assertions

In Stake's (2006) multiple case study analysis, assertions are interpretive statements which synthesise key patterns or insights across cases, helping the researcher move from individual case findings to broader, cross-case conclusions. The assertions produced from this analysis of cases are represented below. The assertions are categorised both according to the four emerging categories of this research: Compliance, Competence Building, Collaboration, and Cost, and Lundin and Soderholm's (1995) four T's of Time, Task, Team, and Transition.

## Time

In the context of Time, as can be seen in Table 14 below, assertions were centred around delaying decisions and delays to funding. There was a focus on opportunity cost in terms of benefit of training staff, and taking these staff away from their clinical duties in the EHR case. Timing of training needing to align with project life cycle stages also showed up in assertions relating to competence building.

*Table 14. Categorised Assertions in terms of Lundin and Soderholm's (1995) Time.*

Number	4C Category	Assertion	Illustrative Quote	Contribution
1	Cost	Delaying decisions for advanced technology can lead to obsolescence and compromise service delivery.	"I think the next generation, let's be honest with the health records... having worked in various places around the world, and I see the ones they're putting in here. They're like, they're the old versions... so we're... taking on problems of 20 years ago from other countries by putting in systems because our people don't realise... that they're... the old systems" (EHI112).	Highlights the time cost trade-off.

2	Cost	Return on investment expectations can delay funding and implementation. Historical spending comparisons can provide insights.	“So I suppose our resource concerns would be... .. a lot of funding is going to go into EHRs and shared care records, but again, it's constantly lobbying that... we're not the outward facing part of it, but we're fundamental to the success of the...engines or the outward facing pieces, and that we need to be resourced and remembered accordingly, (EHI118)	Combines time, cost, and project planning.
3	Cost	Opportunity costs of diverting personnel from core duties must be weighed against project benefits.	“It (the training to use an EHR) was long. It was too long, if I'm being honest... I think it was like seven hours one day, and then you had to go off and do case studies and come back...and it didn't need to be that long. (EHI115)	Balances time management, cost, and competence.
4	Competence Building	Training should align with project lifecycle stages, not just initiation.	“There is a massive preparation phase to be engaged in, first... and based on my experience in other industries, a massive preparation phase including up revving, ...upskilling the human resource that's available to support the implementation of this program (EHI113)	Ensures competence is developed when most effective.

## Task

In the context of Task, as can be seen in table 15, Compliance was important in terms of the need for, and the need to adhere to, policy guidelines. Fragmentation of implementation and the resulting piecemeal implementation that comes from a lack of policy, or lack of critical decision making centred largely around Cost.

*Table 15. Categorised Assertions in terms of Lundin and Soderholm's (1995) Task.*

<b>Number</b>	<b>4C Category</b>	<b>Assertion</b>	<b>Illustrative Quote</b>	<b>Contribution</b>
5	Compliance	Developing a designated separate organisation for project implementation is critical. Delays in the national EHR were linked to the inability to establish such an entity.	“I think going separate was terribly important. The ESB had a staff for maintenance, and repairs, and individual home bills. So they were building or connecting ... a one off house there, maintenance on the network, new line builds. ... Because we have a base staff to do what we need to do. There was no way anyone else could take that on, any area could take it on without bringing in a whole new organisation. Now it's contractors. Then they built it from inside. You know they probably took a reasonable number of experts from the day job or the standard ESB staff...So yeah, I think they did the right thing and sure they're doing the same thing today so it must be working.” (REI109)	Combines the need for strategic planning with producing an organisational structure.

6	Compliance	Policy should guide standardisation to ensure uniform implementation across regions.	“It was one standard national bill that went into the maternal and newborn clinic management system, which was built once and built well, as opposed to four or five or six hospitals, each reinventing the wheel and each coming up with their own flavour of how they implement what should be one national system” (EHI108).	Highlights state logic steering temporary organisations.
7	Compliance	Transparency in inputs vs outputs is essential. Stakeholders must understand policy development.	“You develop your policy, you get it signed off, everybody's agreed on that it. That's grand...That's 1/3 of it. The next third is to educate people make them aware of it. That's the second third. And then final third is actually the implementation, the oversight, the surveillance, the monitoring, the audits” (EHI110).	Connects to compliance and accountability.
8	Cost	Fragmentation should be considered in financial planning to prevent inefficiencies.	“I think they bought up three hundred and thirty something existing companies, because you ... couldn't guarantee what frequency they were going to generate at. So you couldn't connect them into the ESB system. So the government agreed then that there would be only one supplier of electricity in Ireland. And hence, if you go back eight, nine years	Supports discussion on project structuring and cost management.

			to America, one branch of a tree brought out whole of New York, because there was different suppliers feeding into the grid. Here you have one national grid. So... they were kind of way before their time in the sense that they planned this thing out. And this is the way it was going to be, you were going to have a national grid and ESB would be responsible for it.” (REI109).	
9	Cost	National value projects benefit from being structured as not for profit to align financial incentives with public good.	“A further justification for the course adopted is that, while the capital for rural electrification will be provided over a relatively short term of years, the benefits of the scheme will be of lasting character.” (REO1950.06).	Reinforces cost and cross case market logic.
10	Cost	Affordability constraints affect equitable access to implementation. Funding mechanisms should consider community needs.	“The family that was living there didn’t get electricity. And they didn’t get electricity because the people who lived near them, and the people who lived another half mile further down that road couldn’t afford to get electricity. And so they couldn’t afford to get it on their own because there was a charge for each electricity pole.” (REI101)	Highlights operational vs public facing logic misalignment.

11	Cost	Piecemeal implementation arises when upfront funding is insufficient, compromising efficiency.	Sometimes you have a massive hardware cost to get your... network up to speed, and then you've got massive running costs. State doesn't give us anything for that" (EHI107).	Reinforces cost management challenges.
12	Cost	Deviating from project objectives can occur when aiming for immediate results overshadow the central long term task.	" There's two bits, there's the strategy, which is the department's kind of wish list and then there's the implementation, which is the HSE, sort of offering to do it. ...At present, there's a new one, you probably know, which is due to come out...very shortly from both the department and the HSE, which will be kind of parallel related documents. (EHI106)	Highlights importance of maintaining task focus despite cost pressures.
13	Cost	Fragmented implementation without standardised affordability compromises access and efficiency.	"I am concerned that procurement legislation, and the interpretation of procurement legislation has led to a fragmented, piecemeal implementation that is gonna lead to more procurement costs in the long run. Because you're gonna be getting interoperability engines, you're going to be employing way more staff. And they're not actually going to be able to do as good a job as... one team could do, one national system" (EHI108).	Balances cost, task completion, and equitable access.

14	Cost	Competing logics (market vs state/community) can create resource misalignment.	“They're (two large vendors) really grumpy monopolies. They're just useless... Their interoperability is minimal to none, if possible. And that's some of our big projects totally stalled on that...They're... old fashioned, designed and built on... business models, how you bill patients, how you get your money back” (EHI107).	Highlights tension between operational and financial objectives.
15	Cost	Misalignment between profit motives and project goals can lead to inefficiencies.	“It's all bent towards how to save you money, as opposed to anything to do with the patient journey or the clinician's journey, or how it looks, how it feels. That's irrelevant. The people who pay the money for the EHR have nothing to do with patients and clinicians, they're ... management up top. So these things are all.. those. The big sellers are all built on management packages originally, and then they've evolved to bring in the EHR stuff on the back of a very robust management model. And you go around the world... that's what hospitals, health boards are investing in, these big, silly things that just don't work for function” (EHI107).	Emphasises cost challenges in temporary organisations.

16	Competence Building	Emphasising quality and skill within groups of professionals strengthens competence and reinforces logic guiding actions.	“We have had three interesting ideas from R.A.s recently and pass them on.” (REO1948.04).	Connects expertise with profession membership and influence.
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## Team

In the context of Team, as can be seen in Table 16, while training was important, Competence building here centred largely around the importance of leadership, more specifically, competent leadership. A major issue of concern was loss of reputation among leaders. Collaboration, in terms of maintaining relationships even with those not directly charged with the implementation, and clear communication in temporary relationships also pervaded these assertions.

*Table 16. Categorized Assertions in terms of Lundin and Soderholm's (1995) Team.*

Number	4C Category	Assertion	Illustrative Quote	Contribution
17	Competence Building	Profession diversity and exposure to other healthcare systems strengthens team competence and decision making.	“if you've trained and worked and lived in Ireland, all your life, you don't know what modern digital infrastructure is or technology. If you've worked in America, if you've worked in some of the private sectors, you've worked in England, Scotland, basically most modern countries, you will come back to Ireland and then you'll go ‘Are you	Combines competence building with cross context learning.

			serious? Am I to use this paper?’ The majority of people in Ireland don't see that” (EHI112).	
18	Competence Building	Training senior staff enhances team competence and ensures project sustainability.	“Once I was hired, it was a good six month training programme. So I wouldn't have interacted with customers for roughly six months. I would have been kind of learning from senior members of the staff. (EHI102)	Combines talent development with operational effectiveness.
19	Competence Building	Strong leadership anchors temporary organisations and enables timely decision making.	“the people that are in the positions to make these decisions are very shy of making any decision. Because if we make a decision, it could be wrong, and then it might impact your... role or your position, or your pension or whatever else. So people make no decisions, you know, and that's... a real problem” (EHI113).	Reinforces need for competent, decisive leaders.
20	Competence Building/Cost	Leaders must balance fear of reputational loss with immediate project needs to maintain team effectiveness.	“I suppose the pandemic was the place where we saw... a project that should have taken, realistically, five or six years to kind of evolve, done right, getting done within three, four weeks, especially the... electronic prescription transfer. That... was something that was done over like 27 zoom meetings over a weekend... hit the Oireachtas to	Leadership ties to competence and cost of lack of leadership.

			change legislation, and bam, two weeks later, it's up and running" (EHI107).	
21	Cost	Leadership turnover in temporary organisations disrupts alignment and trust.	“They wanted to do it themselves. They reckoned, the people who owned the project, obviously reckoned that (an) outside resource wouldn't be able to get the right response from hospitals. But they never gave us a chance. And we were used to working with hospitals, because we work so closely with the people at the front line that they develop a huge level of trust in us. There's great cooperation. We get things done. Instead of that, we had to put up with a project team that was parachuted in within the HSE, and all the little political power plays started happening, and people wouldn't talk to each other, and people wouldn't do this, and nobody would upset that person” (EHI113).	Highlights need for stability in temporary leadership.
22	Collaboration/Cost	Balancing frontstage and backstage logics to achieve	“When they came, they employed the men that lived in the house and in the community to work on digging the holes for poles, cutting the trees that	Combines efficiency,

		immediate results while building relationships.	made the poles...While they were in the area of the owner, the owners land, he was employed. When they moved to a different area, the next people were employed and they were paid by the ESB, as manual workers.” (REI102).	visibility, and community logic.
23	Collaboration	Temporary relationships with end users influence team engagement strategies and project outcomes.	Because when somebody's been in prison, we need to link back into make sure that GP is up to date with, ‘Okay, he's leaving prison now, after five months, five years. Here's his latest health update. Here's what's happened. This is what we've done. There you go.’” (EHI110).	Highlights collaboration challenges in temporary projects.
24	Collaboration	Transparent communication of successes and failures builds trust with staff and community.	“During the present year it is hoped to step up work to the rate of 40 areas per annum. The watchword is still 'Full Speed Ahead'“ (REO1948.05).	Supports collaboration and accountability.
25	Collaboration	Recognition of contributions from external stakeholders supports collaboration but requires clear communication.	“A pleasing feature of the report is the note that the local committee were very helpful throughout the construction period.” (REO1951.07)	Highlights dispersed communities and project visibility.

26	Competence Building/Collaboration	Visibility of team actions fosters ownership, reduces need for supervision, and enhances competence.	“Extracts from a report by Mr. Cameron Brown (Agricultural Adviser to the British Electricity Authority) following his visit to some of our rural areas.” (REO1949.03)	Connects collaboration with profession competence.
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## Transition

In the context of Transition, as seen below in Table 17, Cost was the primary focus. These concerns over cost involve viewing these large projects as long term investments, the need for timely decisions, and the need for maintenance considerations.

*Table 17. Categorized Assertions in terms of Lundin and Soderholm’s (1995) Transition.*

Number	4C Category	Assertion	Illustrative Quote	Contribution
27	Cost	Infrastructure investments should be considered long term to balance immediate costs with future efficiency.	“A further justification for the course adopted is that, while the capital for rural electrification will be provided over a relatively short term of years, the benefits of the scheme will be of lasting character.” (REO1950.06).	Connects transition, cost, and strategic planning.
28	Cost	Public facing commitments may diverge from operational realities. Transparent	“As you are probably tired of hearing, the finances of the rural scheme are slender in the extreme and it is, therefore, common prudence to ensure that the areas likely to give the best financial return are given priority in development. This,	Balances cost with reputation and public perception.

		communication of resource constraints is essential.	in fact, is a direction from the Government and in addition to giving the securest financial basis, serves the additional purpose of providing the basis for priority in selection.” (REO1951.10).	
29	Cost	Piecemeal implementation mitigates upfront cost but may hinder overall efficiency.	“deliver on the summary and shared care records instead of a national EHR” (Health Information and Quality Authority, 2021).	Links cost, task, and transition planning.
30	Cost	Early decisive investments reduce fragmentation and enable task completion. Delaying decisions increases cost and risk.	“First of all, for years, right from probably 2013, 15, 18, all through that period, they kept on inferring there was going to be a big decision about... an electronic health record. In fact, nothing ever happened, and nothing continues to happen...So instead of that, what they're focusing on right now is considering things like EHRs, which I'm just not sure that they realise the inordinate challenge that is going to be...And I think it's a worry that they're a bit naive about it” (EHI113).	Connects time, transition, and cost.
31	Cost	Temporary organisations may produce other temporary structures for maintenance, adding resource requirements.	“possibly something that we may have overlooked a little bit in our implementation. But...it's really, really important that there is a team on a site that will help maintain it” (EHI111).	Connects transition, cost, and long term sustainability.

## Recommendations for Practice

I build on the findings of the case chapters and the assertions developed above to provide recommendations for the implementation process in instances of temporary organising. Some of these recommendations may span multiple categories but are discussed here in terms of their most prominent one.

### Compliance

#### *Recommendations*

1. Sustained and collaborative relationships between government bodies, implementing organisations, and other stakeholders are essential to balancing user, governmental, and organisational requirements in both the short and long term.
2. A dedicated implementation organisation with sufficient authority and autonomy should be established to coordinate activities, oversee delivery, and ensure timely decision making.
3. Clear policy frameworks must be developed to guide standardisation across regions and organisations.

Developing a designated and separate organisation for project implementation is critical, as delays in national EHR programmes have often been linked to the absence of such an entity. Policy must guide standardisation to ensure consistent implementation across regions and organisational contexts. Transparency in how inputs translate into outputs is essential for maintaining stakeholder engagement and trust, as stakeholders must understand how policy decisions are made and how they influence implementation processes and outcomes.

The electronic health record case consistently demonstrates the importance of collaboration between government, implementers, and vendors in achieving compliance in large scale implementation processes. Central government involvement is crucial to ensuring that EHR systems meet user needs and requires close coordination with hospitals and local authorities (Jung et al., 2020). Government planners have greater capacity to influence public healthcare providers than private ones, positioning them to lead standardisation and guide strategic direction (Klecun et al., 2019). Relationships between organisations and policymakers are central to informing strategic decisions and shaping responsive policy (Cresswell, 2016). Evaluators must also form close relationships with policymakers to ensure lessons from implementation feed back into ongoing policy development (Cresswell, 2016).

Insights from the rural electrification case reinforce the importance of institutional structure and government involvement. Establishing a separate division within the utility dedicated to implementation is shown to be an effective approach (Foley, 1992). Strong leadership and firm government backing have enabled such organisations to overcome structural and operational challenges (Foley, 1992). The implementing body must be capable of addressing all aspects of the programme and have adequate authority to make and execute decisions efficiently and without interference (Manning & McDowell, 1984). Active participation by both central and local governments is essential to achieving broad and effective implementation (Niez, 2010). Efficient delivery also depends on appropriate regulations, market incentives, and sustained government engagement (Niez, 2010). Despite these demonstrated benefits, policymakers can be reluctant to invest due to the challenges of reaching remote areas and frequent subsidy programme failures (Barnes, 2005). A coherent policy framework is therefore a government responsibility, while detailed planning and operational activities are best managed by a utility or dedicated state body. Implementation and operations are almost always undertaken by such entities, with their specific roles shaped by industry structure (Davis, 1995).

## Competence Building

### *Recommendations*

4. Rebalance vendor-implementor relationships to support small site customisation and ensure that training drives sustained compliance and effective system use.
5. Ensure staff are adequately trained to use new systems, and that the timing and structure of this training align with the different stages of the implementation lifecycle rather than being concentrated solely at initiation.
6. Assess the forms of support required at each stage of implementation and ensure that this support is available for an appropriate duration, particularly during the go live period and early operational phases.

Competence building is not a discrete stage but an ongoing process woven throughout the implementation lifecycle. It depends on sustained collaboration between vendors and implementers, targeted and timely training that evolves with project needs, strong leadership that anchors temporary organisations, and layered support systems that extend beyond go live. Embedding these practices into implementation strategies strengthens team capacity, fosters

ownership, and enhances decision making, ultimately supporting sustained system use and project success.

The electronic health record case highlights the critical role of training, collaboration, and support in building competence for successful implementation. Within EHR initiatives, the vendor plays a central role, with numerous best practice sites viewing the vendor as an active partner in both implementation and compliance processes (McAlearney et al., 2013). Establishing key contact points and fostering open, regular communication between vendors and implementers such as through scheduled meetings supports collaboration and strengthens long term relationships. Breakdowns in communication and relationships, by contrast, can significantly damage implementation outcomes.

Training is identified as a cornerstone of competence building. It must be ongoing, embedded within workflows, and sufficiently flexible to meet the diverse needs of users (Takian et al., 2014). It is also clear that training should be closely aligned with implementation stages: sessions delivered near the time new technology is introduced are more effective, with the most successful programmes conducted within a few weeks of the system going live (McAlearney et al., 2013; Vadillo et al., 2016). Structured approaches include requiring staff to complete training by the end of the preparatory phase to retain system access (Banas et al., 2011), tailoring training to job roles, and deploying trainers on site during the first one to two weeks after go-live (Strong et al., 2014). Early training should also address practical concerns, such as the time required for practitioners to complete documentation (Tobler et al., 2017) and shift the focus from how the EHR functions to how it can be adapted to support clinical work (Tobler et al., 2017). Basic computer skills training, ideally delivered in classroom settings with an instructor, is also essential (Vadillo et al., 2016). Providing senior staff with IT training and opportunities to visit EHR enabled practices can further strengthen leadership capacity and enhance team competence (Zandieh et al., 2008).

Support during implementation, particularly around the go live period, is equally important. Having vendor support staff present on the day the system goes live, followed by the presence of expert users in clinical settings for several weeks, has been shown to facilitate smoother transitions (Carayon et al., 2009; McAlearney et al., 2013). The use of “super users” to provide immediate, peer based assistance is especially valuable, with some studies suggesting that user support may be even more important than initial training (Deokar & Sarnikar, 2016; deRiel et al., 2018). Other effective forms of support include vendor and industry assistance (Deokar &

Sarnikar, 2016; Fragidis & Chatzoglou, 2018), as well as informal channels such as peer to peer networks and social media platforms (Hertzum et al., 2021). Ongoing support throughout planning and implementation strengthens communication, clarifies roles, and underpins successful outcomes (Kiepek & Sengstack, 2019).

The rural electrification case reinforces these findings, emphasising the role of competence building, local engagement, and sustained support structures. Setting up committees or holding consumer meetings prior to implementation can help assess demand and avoid disputes, supporting smoother project delivery (Barnes, 2005). Delegating management responsibilities to local communities is another effective strategy, provided that permanent central institutional systems exist to offer long term support (Foley, 1992). Community commitment is a critical determinant of success, requiring communities to contribute substantially to installation and management costs ensures they prioritise and take ownership of the project (Foley, 1992). Successful programmes also rely on transparent and largely autonomous institutional structures tasked with managing implementation (Barnes & Foley, 2004).

## Collaboration

### *Recommendations*

7. Cultivate varied sources of support across stakeholder groups, ensuring engagement from political leaders, practitioners, and the broader community.
8. Pay particular attention to communication and collaboration during the implementation planning phase of initiatives.
9. Develop cross functional teams, appoint “opinion leaders” to represent practitioner concerns, and anticipate post implementation challenges and benefits to foster realistic expectations and sustained engagement.

Temporary organisations may prioritise outward facing logics to achieve objectives, while relationships with end users influence team engagement strategies and project outcomes. Transparent communication of both successes and failures builds trust with staff and the wider community. Recognition of contributions from external stakeholders supports collaboration but requires clear communication to be effective. Temporary organisations must balance short term visibility with long term benefits for the community to ensure sustainable outcomes.

The electronic health record case consistently demonstrates that strong and sustained commitment at the highest organisational levels facilitates collaboration processes and

contributes to successful implementation (Cucciniello et al., 2015). The types of support required are varied, encompassing political support (Cucciniello et al., 2015), practitioner support (Palvia et al., 2015), and social support (Stanczyk et al., 2017). Supporting interest in EHR initiatives is closely linked to implementation success (Boswell, 2011), while inadequate engagement with patients and the broader community can lead to challenges (Pearce et al., 2014). Effective communication processes are critical, particularly during the implementation planning phase (Collins et al., 2015; McAlearney et al., 2013). Stakeholders working toward change benefit from a close collaborative environment (van Offenbeek et al., 2024). The creation of cross functional teams (Deokar & Sarnikar, 2016) and the active involvement of physicians, hospital administrators, IT specialists, and state officials are integral to design and development processes (Hernández Ávila et al., 2013). Communication campaigns should balance expected benefits with realistic expectations of challenges, as each implementation occurs in a unique environment (Crowley et al., 2019). Competence building processes, including ongoing training and technical support, further contribute to successful implementation by enhancing staff capacity and confidence.

The rural electrification case supports these findings, emphasising full community involvement throughout decision making as a key contributor to programme effectiveness (Niez, 2010). Establishing rural electrification committees or holding consumer meetings prior to implementation can help assess demand, prevent disputes over rights of way, and avoid construction conflicts (Barnes, 2005). This participatory approach reduces costs and bureaucracy, broadens the reach of electrification, and makes service accessible to even the most remote communities, often representing the only realistic supply option for decades (Foley, 1992). As national power utilities are restructured, establishing suitable institutional frameworks and incentives ensures the continuation and expansion of rural electrification (Barnes & Foley, 2004).

## Cost

### *Recommendations*

10. Promote an understanding of large-scale projects as long term investments rather than one time expenditures.

11. Ensure financial planning incorporates both upfront and ongoing costs, including maintenance, upgrades, and operational support, to prevent piecemeal implementation and inefficiencies.
12. Consider affordability constraints across hospitals and communities, structuring funding mechanisms to align financial incentives with public good and equitable access.
13. Encourage early, decisive investments where feasible to reduce fragmentation, enable timely task completion, and mitigate long term risk.

Viewing projects as long term investments, planning carefully for both capital and operational costs, and structuring funding to align with the public good and equity are essential to reducing inefficiencies, ensuring sustainability, and achieving intended outcomes.

The electronic health record case emphasises the importance of recognising systems as ongoing investments rather than one off expenses. Some studies highlight the value of developing robust government reimbursement plans (Jung et al., 2020), but more central is the need to understand the system's total cost of ownership, ensuring investments are treated as long term commitments (deRiel et al., 2018). Selection processes should focus on the potential of EHR systems to improve clinical care rather than merely achieving cost savings (Takian et al., 2012). Inadequate practitioner consultation, delays, and tendering processes all increase costs (Boonstra & Van Offenbeek, 2017; Greenhalgh et al., 2010; Robertson et al., 2010). Findings also show that successful implementation benefits from meticulous planning, which reduces inefficiencies and unexpected expenses (McAlearney et al., 2013).

The rural electrification case reinforces the need for a long term perspective. Electrification is a dynamic, long duration problem solving process that requires guaranteed, ring fenced funding to prevent diversion to other activities (Niez, 2010). Cost recovery is critical to long term program success; most successful programs combine concessionary capital and grants, as commercial rates alone are unaffordable. Concessionary funding should only support organisations that can cover operating and maintenance costs to avoid worsening financial instability (Barnes & Foley, 2004). Financial provision should be made upfront for system installation and long term contracts for maintenance and upgrades to prevent system failure. Given the scale of electrification projects, long timelines are inevitable, making orderly and cost effective allocation of substantial capital investments crucial (Shiel, 2005)

## The Institutional Logic Relationships in the Cases

The assertions discussed above have also been used to identify the logic type relationship at play within the event the assertion is based on. Table 18 illustrates these institutional logic type relationships in the context of the assertions. Not all of the above assertions have been used here to discuss logic type relationships, as some of the findings were more appropriately suited to advancing practical recommendations for the implementation process. Though specific societal level logics are referenced here, this discussion of relationship is more about how these logics are operating rather than which specific logics are present.

*Table 18. Assertions categorised by Institutional Logics Relationships.*

<b>Assertion Number</b>	<b>Focus</b>	<b>Institutional Logics Involved</b>	<b>Logic Relationship Type</b>	<b>Explanation</b>
25	Acknowledging external assistance	Community, Market, Corporation	Decoupling	Community engagement is espoused but not practiced. Healthcare practitioners being unaware of changes, indicating symbolic adoption of community logic.
28	Public messaging vs actual logic	Community, Market, Corporation	Decoupling	Community logic is used in public messaging, but actual operations follow corporation/market logics.
12	Straying from original task	Community vs Corporation	Decoupling	Temporary organising drifts toward permanent organisational goals, decoupling from its founding task.
7	Transparency in policy	State, Community	Decoupling (Policy-Practice)	Policy is presented as rational and transparent, but the process is opaque, indicating symbolic compliance.

<b>21</b>	Leadership turnover	State, Corporation	Decoupling (Structural)	Instability in leadership disrupts the continuity of guiding logics and task execution.
<b>20</b>	Reputation vs need	Profession, Community	Decoupling (Symbolic)	Legitimacy seeking behaviour (reputation) delays urgent action, separating espoused state/community logic from practice.
<b>15</b>	Misaligned procurement despite recognised poor fit	Market, Profession	Decoupling (Symbolic)	Professions recognise misalignment, yet procurement continues. Symbolic adherence to external expectations.
<b>22</b>	Outward facing vs inward guiding logics	Community, Market, State	Decoupling / Logic Conflict	Outward messaging stresses community good, but internal decisions are constrained by market logics.
<b>10</b>	Software affordability and public access	Community, Market, State	Decoupling / Logic Conflict	Universal access (community logic) is espoused, but actual implementation depends on budgets (market logic).
<b>30</b>	Cost vs value in big decisions	Market, State	Decoupling / Logic Conflict	Market logic dominates decision making, undermining state/community aims despite rhetoric.
<b>13</b>	Fragmentation and cost vs value	Market, State, Community	Decoupling / Logic Conflict	Autonomy is framed as empowerment (community), but results in inequity and inefficiency (market).
<b>14</b>	Logic alignment in procurement	Market, State, Community	Decoupling / Logic Misalignment	Procuring market driven solutions that clash with state/community logics.

<b>16 &amp;17</b>	Professionals' experience shaping logics	Profession	Embedded	Profession logic becomes more embedded as competence grows, influencing decision making and organisational behaviour.
<b>6</b>	Policy standardisation	State	Embedded	Clear example of state logic steering implementation and ensuring uniformity.
<b>19</b>	Need for strong leadership	State, Profession	Embedded / Logic Shift	Leadership shapes which logic dominates, embedding certain logics over others.
<b>5</b>	Separate organisation for implementation	State, Corporation	Embedded / Decoupling	Strategy documents advocated a state led structure, but failure to establish one delayed implementation, showing divergence between planned state logic and actual practice.
<b>8</b>	Fragmentation consideration	State, Market	Logic Conflict	Fragmentation often reflects competing logics: state aims for uniformity vs market emphasis on autonomy and affordability.
<b>27</b>	Cost as long term investment	State, Market	Logic Conflict	State logic of long term investment contrasts with market pressure for immediate affordability.
<b>11</b>	Piecemeal vs big bang implementation	Market, State	Logic Conflict	Resource driven decisions reflect market logic even when state logic prefers large scale planning.
<b>18</b>	Training and opportunity cost	Market, Profession	Logic Conflict	Tension between market (efficiency) and profession (competence building) logics.

<b>3</b>	Time vs cost trade offs	Market, State, Community	Logic Conflict	Balancing immediate service delivery (community) with efficiency and cost concerns (market/state).
<b>2</b>	Return on investment before issuing further funding	Market, State	Logic Conflict	Market logic delays state/community driven action and large scale investment.
<b>1</b>	Waiting for ideal solution	Market, Community, State	Logic Conflict (Temporary)	Tension between future oriented market logic (efficiency, optimisation) and immediate community need.
<b>9</b>	Not-for-profit vs cost	Community, Market	Logic Conflict / Collaboration	Tension between community (public value) logics and market (profit) considerations in national projects.
<b>31</b>	Temporary organisation evolving	State, Corporation	Logic Shift	Transition from temporary to maintenance focused logic reflects a shift in institutional purpose.
<b>23</b>	Temporary vs permanent consumer relationship	Community, Market	Logic Shift	The type of service affects which logic (community vs market) is dominant in relationship building.

## Chapter 8. Discussion

### Introduction

This discussion presents the key theoretical and practical contributions of this thesis. I have conceptualised how institutional logics operate within instances of temporary organising. I have defined specific institutional logic relationship types (Embedded, Constellated, and Decoupled) that shape how temporary organisations function. I have discussed how these relationships influence and are influenced by the dynamics of Lundin & Söderholm's (1995) 4Ts (Time, Task, Team, and Transition) and how they connect with the 4Cs (Compliance, Competence Building, Collaboration, and Cost) of implementation. I now build on this to suggest that the type of institutional logic relationship present within a temporary organisation affects how effectively projects can be planned and implemented. I have typified these relationships through multiple case analysis, and I have outlined how they can be used to predict patterns of coordination, resistance, and adaptation in temporary organising. The contribution to practice lies in the series of practical recommendations for implementation discussed in the previous chapter which allow practitioners to anticipate challenges, align strategies, and manage transitions more effectively in time-bound organisational settings.

Building on the earlier Table 18, which identified institutional logic relationship types across the studied cases of temporary organising, the following sections discuss these relationships as Embedded, Constellated, and Decoupled, highlighting how each aligns with the 4Ts of the temporary organisation and the 4Cs of implementation. These assertions are regrouped here in Table 19, which summarises the institutional logic relationship types identified in this thesis.

Table 19. Identified Institutional Logic Relationship Types.

<b>Logic Relationship Type</b>	<b>Key Assertions</b>	<b>Summary of Focus &amp; Institutional Logics</b>	<b>Key Insights</b>	<b>Key Academic References</b>
<b>Decoupled</b>	7, 12, 15, 20, 21, 22, 25, 28, 10, 13, 14, 30	Focus on gaps between espoused goals and actual practice across Community, Market, Corporation, State, Profession logics	Organisations often symbolically adopt certain logics but fail to implement them fully. Internal practices diverge from stated goals, creating misalignment.	(Burke & Morley, 2016; Hannan & Freeman, 1998; Haveman & Gualtieri, 2017; Meyer & Rowan, 1977; Thornton et al., 2012; Weick, 1976 )
<b>Constellated</b>	1, 2, 3, 8, 9, 11, 18, 23, 27, 31	Focus on competing or evolving logics involving Market, State, Community, Profession, Corporation	Conflicting priorities emerge between efficiency, cost, long-term planning, and service quality. Temporary vs permanent structures, and changing consumer relationships, drive shifts in which logic dominates.	( Battilana & Dorado, 2010; Binder, 2007; Durand & Szostak Tapon, 2013; Goodrick & Reay, 2011; Greenwood et al., 2011; Hernes, 2022; Lawrence et al., 2009; Lok, 2010; Murray, 2010; Seo & Creed, 2002; Thornton et al., 2012; Tushman & O'Reilly, 1996; Waldorff et al., 2013 )

<b>Embedded</b>	5, 6, 16 & 17, 19	Focus on areas where certain logics take root and guide practice (State, Profession, Corporation)	When logics are embedded, policies, leadership, and professional practices consistently shape decisions and behaviour. Competence growth and clear governance strengthen logic integration.	( Battilana, 2006; Bresnen et al., 2004; DiMaggio & Powell, 1983; DiMaggio & Powell, 1991; Greenwood, 2013; Greenwood & Suddaby, 2006; Hong et al., 2000; Lindkvist, 2004; Morley & Silver, 1977; Morris & Gelfand, 2004; Seo & Creed, 2002; Sydow, 2004; Thornton et al., 2012; Zucker, 1977 )
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Temporary organising occurs in a variety of forms, including project organisations (Söderlund et al., 2014; van Donk & Molloy, 2008), committees (Sah & Stiglitz, 1988; Visser & Swank, 2005), consortiums (Dooley & O’Sullivan, 2007; Soares Piccoli et al., 2023), task forces (Barry, 1996; Pike, 2002), joint ventures (Rod, 2009; Trafford & Proctor, 2006), steering committees (Blackburn, 2002; König et al., 2013), virtual teams (Breu & Hemingway, 2004; Ratcheva, 2008), mergers and acquisitions teams (Nogeste, 2010; Riad, 2007), and special purpose entities (Sainati et al., 2017). This thesis focuses on two distinct instances of temporary organising, which have been examined in detail in earlier chapters.

Examining how logics cohere, endure, emerge, and transform offers valuable insight into institutional processes and the dynamics of organisational change (Lounsbury & Boxenbaum, 2013). Established organisational fields typically host multiple institutional logics (Goodrick & Reay, 2011; Greenwood et al., 2011; Lounsbury, 2007; Reay & Hinings, 2009; Waldorff & Greenwood, 2011). Recognising this plurality draws attention to the relationships among these logics and to how temporary organisations mediate between them (Waldorff et al., 2013). Within such contexts, actors must decide whether to adhere to established logics, adopt new ones, or hybridise multiple logics. This decision is particularly significant in temporary projects where roles, tasks, and priorities are fluid. Grabher (2002) and Sydow et al. (2004) emphasise that projects rely on networks, institutions, and norms, situating temporary organising within broader societal infrastructures.

The relationship between practices and logics is recursive. Existing institutional logics guide practices, yet when practices change or new ones are created, they can reproduce or transform those same logics (Thornton et al., 2012). The institutional logics perspective is also useful for addressing power dynamics and resistance (Lawrence, 2008). By highlighting how multiple logics both constrain and enable actors, the framework reveals the conditions under which actors resist institutional control and engage in political struggle within organisational fields (Oliver, 1991). Effective temporary organising therefore requires careful planning to maintain clear communication and collaboration within time-dependent relationships. Interdependencies between project phases and teams can complicate coordination (Granqvist, 2016), with delays in one area often having a domino effect on the overall timeline. Ensuring alignment and synchronisation across teams and processes is crucial to prevent such disruptions and achieve ‘successful’ delivery.

## Embedded

In this context, embedded refers to situations where temporary organisations become deeply rooted within existing institutional frameworks, such that the prevailing logics of the broader field shape and are reproduced through their practices. An embedded logic relationship therefore signifies a strong alignment between organisational behaviour and established institutional norms and values. This section discusses how instances of temporary organising reach a point where embedded relationship types emerge, the types of embedded relationships observed, and the consequences of these relationships for temporary organisations and their ability to act and adapt within institutional environments.

The assertions which illustrated the embedded logic relationship type were based equally in competence building and compliance. Neither collaboration nor cost appeared to feature strongly in embedded logic relationships. In terms of Lundin and Söderholm's (1995) 4T framework, the most prominent element in these assertions was task, with minor reference to team. **Together, these findings suggest that the interaction of task-focused implementation and compliance with institutional norms results in an embedded logic relationship. In other words, when temporary organisations emphasise competence building through task execution and adhere closely to institutional expectations, they tend to reproduce the institutional logic of their environment.**

Temporary organisations are situated within broader societal and organisational contexts (Sydow, 2004). Operating within established institutional frameworks, they draw upon existing norms and values and therefore cannot be understood as isolated entities. Conformity to an institutional logic within temporary organising refers to the extent to which the organisation, or individuals within it, adhere to the established norms, practices, and values of an institution. In such contexts, conformity may involve adopting particular organisational structures, management practices, or sector-appropriate processes. This institutional isomorphism (DiMaggio & Powell, 1983) occurs when temporary organising adopts similar structures and practices to other organisations in its sector, aligning with prevailing norms and mimicking peers. This conformity can be seen in instances where state logics shape project implementation through policy standardisation, ensuring uniformity across initiatives (Assertion 6). However, as both institutions and temporary organisations evolve, conformity to a logic may shift over time, reflecting adjustments in practices or policies that mirror changing expectations.

Adherence to institutional rules typically yields positive outcomes, such as enhanced legitimacy, social cohesion, and smoother collaboration. In the studied cases, the embedding of professional logics demonstrated how competence and expertise strengthened alignment with the profession logic, influencing decision making and organisational behaviour (Assertions 16 & 17). Yet, overly stringent adherence can foster resistance to change and organisational inertia, perpetuating outdated practices. Temporary organisations therefore face a constant tension between stability and adaptability, seeking legitimacy while remaining responsive to innovation.

The concept of embedded agency captures the simultaneous influence of individuals and organisations on their social and institutional environments, recognising the interplay between agency and structure. A central premise of the institutional logics perspective is that the interests, identities, values, and assumptions of actors are embedded within prevailing logics (Thornton & Ocasio, 2008; Seo & Creed, 2002; Battilana, 2006; Greenwood & Suddaby, 2006). This creates the paradox of embedded agency. If actors' rationalities are conditioned by the institutions they seek to influence, how can they also transform them? In practice, this dynamic was visible where leadership decisions determined which logic became dominant, embedding either a state or professional logic depending on the leader's orientation (Assertion 19).

Embeddedness manifests in two primary dimensions. Cultural embeddedness refers to the shared collective understandings that shape strategies and goals; individuals deeply embedded in a given logic tend to draw on knowledge consistent with it (Thornton et al., 2012; Hong et al., 2000; Morris & Gelfand, 2004). Political embeddedness highlights how institutional decisions are shaped by power relations among market and non-market actors, including the state. This dynamic surfaced where state and corporate logics diverged, for example, when strategy documents prescribed a state-led implementation structure, but the absence of one delayed execution (Assertion 5). In this case, state actors held the authority to legitimise processes, while corporate actors controlled operational resources, creating a tension between bureaucratic oversight and managerial autonomy. Such divergence illustrates how embeddedness can expose power asymmetries that influence both the pace and direction of organisational action.

Within project environments, decentralisation, short-term performance pressures, and distributed work practices strongly influence how new management practices are adopted and

embedded (Bresnen et al., 2004). The time-constrained and loosely coupled nature of projects complicates the diffusion of knowledge across boundaries (Lindkvist, 2004; Bresnen et al., 2004). This aligns with the observed emphasis on competence building through task execution, where embedded professional logics guided project-specific decision making (Assertions 16 & 17). This suggests that embedding occurs most readily when temporary structures mirror the enduring norms of professional communities, reinforcing legitimacy through practice rather than formal compliance alone. Over time, such embeddedness stabilises expected behaviours but may limit experimentation and adaptation when contexts shift.

From an embedded agency perspective, actors both shape and are shaped by institutional contexts. Dominant logics become taken for granted, guiding behaviour not through explicit rules but through core organising principles (Zucker, 1977; DiMaggio & Powell, 1991). These dominant logics influence managerial attention and strategic interpretation (Bettis & Prahalad, 1995), yet they also constrain choice. Still, embeddedness offers opportunities in that actors can reconstruct or reinterpret logics to align with their interests (Lok, 2010). Individuals embedded in different institutional logics may activate distinct goals or behaviours in response to the same situation, depending on which identity or schema is most important (Thornton et al., 2012; Greenwood, 2013). As James (1968, p. 42) suggested, individuals possess multiple social selves corresponding to the groups whose opinions they value. In temporary organising, this multiplicity allows shifting alignment between logics as contextual demands change.

Bryman et al. (1988) found that leaders in temporary organisations were typically task oriented, despite the fact that relationship-oriented leadership proved more effective overall. Morley and Silver (1977) similarly argued that successful temporary systems balance idea generation and decision-making phases. These findings resonate with the observed leadership-driven embedding of dominant logics (Assertion 19), where managerial interpretation and action determine how processes are enacted.

Ultimately, embedded institutional logic relationships highlight that temporary organising cannot be separated from its institutional environment. Organisational practices, leadership actions, and actor competencies are all framed within and continually reproduce the logics that shape their existence.

## Constellated

A constellation of logics refers to the simultaneous presence and interaction of multiple institutional logics within a single organisational field or activity (Goodrick & Reay, 2011). Unlike embedded relationships, which reflect deep alignment with a dominant institutional order, or decoupled relationships, which reveal disconnection between espoused and enacted logics, a constellation of logics represents a coexistence of multiple logics that compete, cooperate, or shift in dominance over time. Within temporary organising, such constellations arise when diverse institutional demands converge, requiring actors to continually negotiate priorities and reconcile conflicting goals. This section examines how temporary organisations come to experience constellated logic relationships, the types of such constellations identified in the studied cases, and their consequences for organisational practice and adaptability.

The assertions which illustrated the constellated logics relationship type were overwhelmingly representative of the Cost category, with only one assertion addressing Competence Building and one addressing Collaboration. In terms of Lundin and Söderholm's (1995) 4T framework, the four sections were relatively evenly represented, with Task and Time being equally dominant, narrowly followed by Transition and Team. **This pattern suggests that the interaction of Time and Task based pressures with cost constraints gives rise to constellated logic relationships. In such circumstances, temporary organisations must reconcile competing institutional demands, balancing efficiency and affordability with legitimacy, quality, and public value, resulting in fluid configurations of coexisting logics.**

Diversification of logics occurs due to exposure to diverse institutional pressures, such as differing stakeholder expectations or societal norms. The presence of multiple institutional logics within temporary organising highlights the complex interplay of competing goals, values, and time pressures that characterise project-based work. Temporary organising introduces additional challenges, as projects often bring together actors with distinct institutional orientations, requiring negotiation, hybridisation, or bricolage of logics (Binder, 2007; Durand & Szostak Tapon, 2013). This was evident where fragmentation reflected competing or conflicting logics, such as a state logic aiming for uniformity versus a market logic emphasising autonomy and affordability (Assertion 8).

The need for organisations to be ambidextrous by balancing conflicting logics is essential for addressing contextual challenges during temporary organising (Tushman & O'Reilly, 1996). These tensions often emerge where economic efficiency clashes with professional or societal

needs. For instance, training initiatives may reflect a tension between market and profession logics, where efficiency and opportunity cost concerns (market logic) conflict with the goal of building competence and expertise (profession logic) (Assertion 18). Temporary organising therefore requires balancing time and cost pressures in contexts where multiple logics shape priorities. Responding to unexpected circumstances is particularly important where time is finite and project endpoints are contractually defined (Lundin & Söderholm, 1995).

Conflicts between market, state, and community logics frequently emerge around these time constraints, such as when balancing immediate service delivery (community logic) with efficiency and cost concerns (market or state logic) (Assertion 3). Similarly, waiting for the ideal or most efficient solution (market logic) can delay immediate community need (community logic), reflecting a temporary conflict between market and community or state logics (Assertion 1). Such examples highlight how the constellation of logics demands constant trade-offs between competing institutional imperatives.

Institutional complexity intensifies when organisations face incompatible prescriptions from multiple logics (Greenwood et al., 2011). These tensions were visible in resource allocation decisions reflecting market logics of short-term affordability over state logics of long-term planning, such as in piecemeal versus big-bang implementation debates (Assertion 11) or when state logics advocating investment clashed with market logics demanding immediate returns before further funding (Assertion 2). Likewise, the long-term investment orientation of a state logic can contrast sharply with short-term market affordability pressures (Assertion 27).

While competitive relations imply that strengthening one logic necessarily weakens another, cooperative relationships suggest that alternative logics can jointly influence practice (Goodrick & Reay, 2011; Waldorff et al., 2013). This coexistence is often visible in not-for-profit ventures, where community logics emphasising public value intersect with market logics focused on cost efficiency (Assertion 9). When managed effectively, such hybrid arrangements support both legitimacy and sustainability, demonstrating that constellations can be productive as well as conflictual.

Institutional orders can also moderate one another. For instance, the state, profession, and community may check extreme market practices, while the market provides feedback that constrains overly dominant state influence (Thornton et al., 2012, p. 120). These moderating relationships were also evident in shifts between logics over time. For example, as temporary organisations evolve, a shift may occur between state and corporation logics, where an initial

state-led implementation gradually transitions toward maintenance and operational focus (Assertion 31). Similarly, relationships between service providers and users can shift as the organisation moves from temporary to more permanent arrangements, with the dominance of community or market logics changing accordingly (Assertion 23).

Institutional change within constellations is inherently dynamic, driven by shifts in leadership, societal values, or external events. Actors can mobilise logics strategically, hybridise multiple logics, or selectively adopt elements of one to reinforce another (Battilana & Dorado, 2010; Lawrence et al., 2009; Lok, 2010; Seo & Creed, 2002). The process of changing logics is variable and context dependent (Murray, 2010), with some temporary organisations demonstrating adaptability while others become entrenched in conflict. Competing priorities arise when different logics operate simultaneously for specific actions or decisions, creating temporal conflicts (Hernes, 2022) that challenge coordination and efficiency within temporary organising efforts.

Ultimately, multiple logics within temporary organising shape both organisational change and stability. They compel actors to engage in sensemaking about which logics to prioritise, how to balance efficiency with legitimacy, and when to adapt or resist. The interplay of competing, cooperating, and shifting logics is therefore central to understanding how temporary organising sustains coherence and effectiveness throughout the implementation process within complex institutional environments.

## Decoupled

In this context, decoupled refers to the separation between what an organisation publicly espouses and what it actually does in practice. Within temporary organising, this occurs when formal strategies, structures, or communications appear to align with one or more institutional logics, while day-to-day practices diverge to meet internal constraints or priorities (Meyer & Rowan, 1977; Thornton et al., 2012). In effect, frontstage logics, those presented to external stakeholders to maintain legitimacy, operate differently from backstage logics, which guide internal, technical, or operational decision-making. This section discusses how temporary organisations reach the point of experiencing decoupled logic relationships, the types of these relationships identified in the studied cases, and their consequences for organisational coherence and legitimacy.

The assertions which illustrated the decoupled logic relationship type were predominantly based in the Cost category, though there was at least one assertion from Compliance, Collaboration, and Competence Building. In terms of Lundin and Söderholm's (1995) 4T framework, these assertions predominantly applied to Task, partly to Team, and very minorly to Transition. **This distribution suggests that cost and task pressures, particularly where efficiency and accountability dominate, drive temporary organisations to present one logic publicly while enacting another internally. In such cases, decoupling serves both as a coping mechanism and a strategic tool for reconciling external legitimacy with internal efficiency.**

Decoupling involves a separation between formal structures and actual practices within an organisation (Meyer & Rowan, 1977). In the context of temporary organising, decoupling often manifests as a divergence between formal strategies designed to align with multiple institutional logics and the day-to-day practices implemented across different contexts (Thornton et al., 2012). For instance, the acknowledgement of external assistance in projects may be espoused publicly, yet healthcare practitioners were often unaware of these changes, indicating symbolic adoption of community logic without actual practice (Assertion 25). Thornton et al. (2012) reformulated the concept of decoupling to focus on the disconnection between institutional logics and institutional orders (Haveman & Gualtieri, 2017). This reformulation allows multiple logics to coexist within an organisation or field, recognising that a single logic may derive from multiple institutional orders. Such rationalisation can lead organisations to develop goals and actions that do not directly serve their core technical mission, as when temporary organising drifts from its founding task toward permanent organisational goals (Assertion 12).

Temporary organising processes are dynamic and prone to unanticipated developments (Burke & Morley, 2016), creating tension between satisfying external institutional requirements and accomplishing internal technical objectives. Organisations often manage these tensions by decoupling external structures from internal technical activities (Meyer & Rowan, 1977). For example, public messaging may emphasise community good, but internal decisions remain constrained by market logics (Assertion 22). Similarly, outward-facing initiatives to provide universal system access may be limited by budget constraints, even as public narratives frame them as universally inclusive, illustrating a decoupling of community versus market logics (Assertion 10). Here, outward communications preserve legitimacy with external audiences, while internal operations adapt pragmatically to financial realities. Loose coupling explains

why organisations adopt practices ceremonially without implementing them in the technical core (Weick, 1976; Meyer & Rowan, 1977). This mechanism serves both defensive and strategic purposes, maintaining internal efficiency while navigating conflicting institutional expectations (Hannan & Freeman, 1998). In practice, public messaging reflecting community logic may mask decision-making driven by corporation or market logics (Assertion 28).

Decoupling can also arise from leadership or structural instability. For example, turnover in leadership disrupted continuity of guiding logics and task execution, highlighting the tension between formal and enacted practices (Assertion 21). Temporary organisations depend heavily on the will, commitment, and ability of individuals for their creation, development, and termination (Lundin & Söderholm, 1995), making them particularly susceptible to decoupling when leadership or coordination is inconsistent. Temporary organisations may also symbolically adhere to logics even when internal processes contradict them. Misaligned procurement decisions, such as selecting suppliers based on cost rather than professional quality standards, illustrate a decoupling between market and profession logics. In such cases, professionals recognised the misfit but procurement continued according to external pressures (Assertion 15). Similarly, legitimacy-seeking behaviour can delay urgent action, as when compliance procedures designed to demonstrate accountability slowed service delivery, separating espoused community or state logics from actual practices (Assertion 20).

Decoupling becomes especially relevant when multiple logics interact under conditions of fragmentation and cost pressure. For instance, framing autonomy as empowerment (community logic) can create inefficiency when market logic dominates resource allocation (Assertion 13). This occurs because empowerment rhetoric increases expectations of participatory decision-making, yet market-driven controls restrict the autonomy required to act on those expectations. Misalignment in procurement between market, state, and community logics also reflects a decoupling of formal strategy and implementation (Assertion 14). In large decisions, market logic can dominate because such decisions typically attract greater scrutiny and financial oversight, leading to conservative, cost-based reasoning that undermines broader state or community aims despite rhetorical commitment to them (Assertion 30).

Ultimately, decoupling highlights the persistent tension between espoused and enacted logics in temporary organisations. It enables actors to manage legitimacy, navigate institutional complexity, and protect internal efficiency, but it also generates potential conflict between public-facing commitments and operational realities. This frontstage/backstage dynamic

reveals how temporary organisations strategically balance external expectations with internal imperatives, maintaining legitimacy while coping with the multiple, and often contradictory, institutional pressures that shape their work.

## Chapter 9. Contribution

This chapter outlines the theoretical and empirical contributions of the study by connecting the 4Cs (Compliance, Competence Building, Collaboration, and Cost) and the 4Ts (Time, Task, Team, and Transition) with the three proposed institutional logic relationship types: Embedded, Constellated, and Decoupled. Temporary organising offers flexibility, efficiency, and a dedicated focus on specific implementation processes. However, this very temporariness introduces ambiguity and uncertainty for the wider organisations or projects they support. Temporary organisations are highly responsive to changing circumstances, and their structures allow for quick adaptation to evolving requirements (Dille, 2018). This agility is crucial for addressing unpredictable challenges and mobilising resources efficiently. Changes in project scope, arising from new priorities or altered requirements, directly impact the nature of tasks and milestones.

Temporary organisations are designed to “make things happen” (Lundin & Söderholm, 1995), pursuing specific task objectives within a predetermined timeframe (Goodman & Goodman, 1976; Lundin & Söderholm, 1995; Burke & Morley, 2016). Uncertainty and ambiguity are fundamental characteristics of temporary organising (Ibert, 2004; Kreiner, 1995; Lundin & Söderholm, 1995), and deadlines serve as key evaluation criteria (Grabher, 2002), with progress toward predefined states defining project success (Lundin & Söderholm, 1995; Bakker et al., 2010). The limited time perspective inherent in temporary organisations focuses members’ attention on immediate tasks, reinforcing the critical importance of task execution (Bakker et al., 2013). This importance of Task was found consistently across both cases in this thesis.

## Findings Within the Logic Relationships

The analysis identified how combinations of 4C and 4T elements correspond to the emergence of particular institutional logic relationship types.

*Table 20. Proposed Institutional Logics Relationship types categorised by 4C's and 4T's*

		Logic Relationship		
		Embedded	Constellated	Decoupled
4C's	Competence Building & Compliance	Cost	Cost	
4T's	Task	Task & Time	Task (minor Team)	

### The Direction of Influence: How 4Cs and 4Ts Shape Logic Relationship Types

This thesis found that the focus on particular 4C and 4T elements determines the type of institutional logic relationship that emerges in temporary organising. Rather than seeing Embedded, Constellated, and Decoupled types as causes, the findings suggest they are outcomes of how strongly attention is directed toward specific combinations of Compliance, Competence Building, Collaboration, and Cost, and Time, Task, Team, and Transition.

Where the emphasis lies on Task, Competence Building, and Compliance, temporary organisations are most likely to exhibit an Embedded logic relationship. This configuration promotes alignment and stability between institutional and operational priorities, reinforcing professional expertise and adherence to institutional norms.

When attention is distributed across Task and Time, and dominated by Cost concerns, a Constellated relationship tends to arise. Here, multiple logics coexist, requiring negotiation and balance among competing priorities. These constellations reflect the dynamic tensions between efficiency, professionalism, and public value that typify temporary organising.

When Cost dominates and Task execution is prioritised over broader coherence, a Decoupled relationship is likely. This configuration indicates symbolic alignment at the formal level while actual practices diverge internally to manage operational constraints or efficiency demands.

Overall, the focus on particular combinations of 4Cs and 4Ts suggests a framework that helps to predict how different emphases within these categories give rise to distinct patterns of logic interaction in temporary organising. Where more than one logic is present, as in Constellated or Decoupled relationship types, there is a high likelihood that the issues relate to Cost and Task. This suggests that giving closer attention to events involving both Cost and Task may be critical for the effective functioning of temporary organisations. Embedded logic relationships are highly associated with Task and with both Competence Building and Compliance. Task and Cost emerge as the two most important and volatile elements of temporary organising found in this thesis. Understanding this interaction can help practitioners anticipate challenges and interpret their experiences in light of the institutional logics and assertions identified.

## Conceptual and Theoretical Contribution

This thesis has:

- Identified three distinct types of institutional logic relationships within temporary organising; Embedded, Constellated, and Decoupled each defined by combinations of Lundin & Söderholm's (1995) 4Ts and the 4Cs (developed in this study).
- Defined how the 4C categories and 4T framework operate as analytical lenses for identifying the balance between institutional expectations and task execution.
- Discussed how different configurations of these categories influence varied relationships between institutional logics, shaping both the stability and adaptability of temporary organisations.
- Demonstrated that the focus on Task and Cost consistently mediates the tensions between institutional logics, revealing a key mechanism through which temporary organising navigates implementation processes.
- Proposed a typology that allows prediction of which institutional logic relationship type is most likely to arise given a project's dominant 4C and 4T focus.

The findings suggest that understanding the balance of Task and Cost priorities under different logic configurations not only shapes process outcomes but also offers a practical tool for anticipating how tensions between institutional logics will manifest during implementation. Both examined cases exhibited characteristics of all three relationship types, as shown above

in Table 20. Recognising which temporary organising/institutional logic relationship is operating within a specific context enables organisations to plan more effectively for project implementation. The proposed types of temporary organising and institutional logic relationships are illustrated in Figure 6, offering a conceptual framework for identifying and managing the relationship type of logics in temporary organisations.

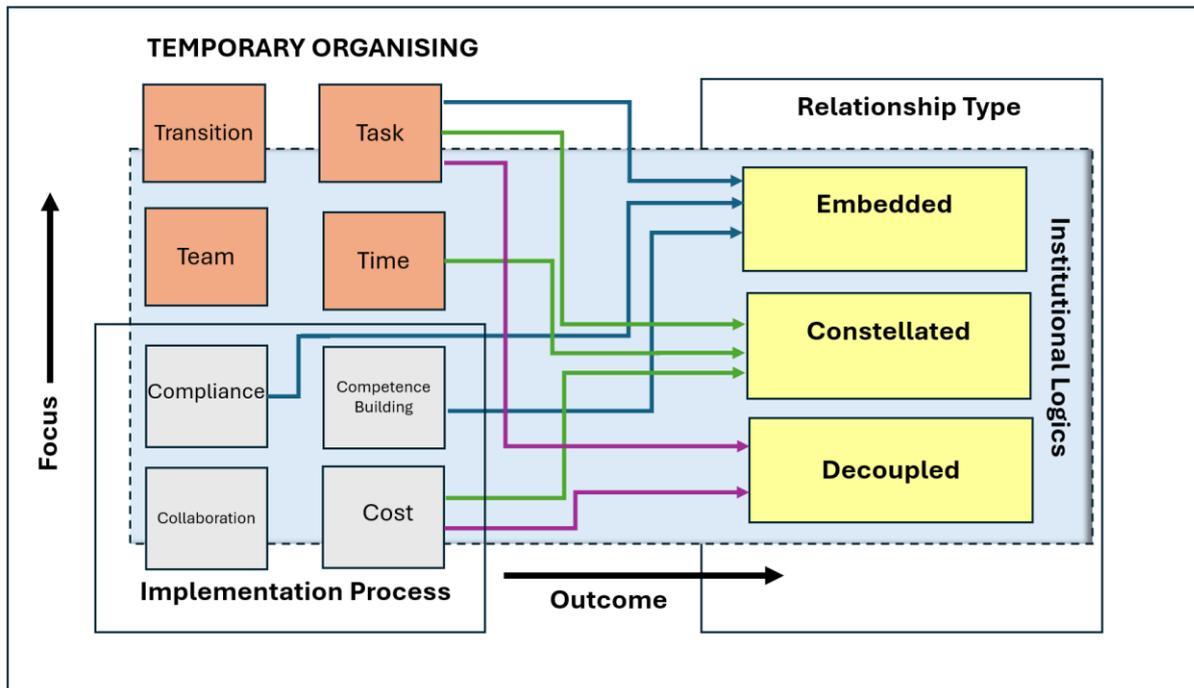


Figure 6. Conceptual Framework linking temporary organising characteristics with implementation process categories, illustrating the resulting institutional logic relationship types.

## Chapter 10. Conclusion

To conclude, this thesis has examined the complex dynamics between institutional logics and temporary organising in the context of large-scale project implementation processes. Moving beyond conventional analyses that focus solely on the institutional context of failed projects, this research has explored how institutional logics and temporary organising shape and influence one another in practice. Through a qualitative multiple case study of the Rural Electrification of Ireland and the implementation of a National Electronic Health Record system, I have shown how temporary organisations operate within, respond to, and at times reshape institutional environments. The study highlights the recursive nature of this relationship where institutional logics provide enduring structures and meaning systems that guide organisational action, while temporary organising mediates, adapts, and reconfigures those logics through time-bound practices and decisions.

A key contribution of this research is the identification of three distinct modes through which temporary organising interacts with institutional logics, described as Embedded, Constellated, and Decoupled. These categories provide a conceptual lens to understand the varying degrees of alignment and adaptation that occur in temporary organising contexts. By tracing these dynamics across two cases, the research heightens our understanding of how large-scale projects are implemented and how institutional logics shape, and are shaped by, temporary organisational forms.

The findings also carry practical implications. They offer insights for practitioners tasked with managing complex, time-bound initiatives. By understanding how instances of temporary organising engage with institutional logics, practitioners can design more adaptive strategies, anticipate challenges, and improve the likelihood of successful task completion. In particular, the focus on the 4Cs (Compliance, Competence Building, Collaboration, and Cost) and 4Ts (Time, Task, Team, and Transition) provides a predictive framework to assess which type of logic relationship is likely to emerge in a given temporary organising implementation context.

This thesis makes an original contribution to the literature on organisation studies, temporary organising, and institutional logics. Its primary theoretical contribution lies in advancing theory on temporary organising by showing how institutional logics are enacted, negotiated, and reconfigured within time-bound organisational forms. The typology of Embedded, Constellated, and Decoupled relationships, together with the 4Cs of implementation processes,

and 4Ts of temporary organisations, reveals mechanisms through which temporary organisations actively shape their institutional environments rather than merely responding to them. In addition, the thesis contributes to institutional logics scholarship by demonstrating that the enactment of logics is contingent on the temporal and structural characteristics of organising.

## Future Work

While this thesis provides detailed insights into the interaction between institutional logics and temporary organising, there are opportunities for future research. Investigating additional cases across different sectors and countries would test the generalisability of the proposed typology and the predictive framework based on 4Cs and 4Ts. Future work could also examine longitudinal changes in logic relationships, capturing how Embedded, Constellated, and Decoupled modes evolve over time as projects progress, policies shift, or organisational actors adapt to new pressures.

Another area for further exploration is the temporal dimension of delays in large-scale projects. In Ireland, as in many other contexts, implementation processes often experience delays due to evolving regulatory, political, and resource constraints. Future research could investigate how these delays interact with institutional logic relationships, and how temporary organisations manage trade-offs between efficiency, legitimacy, and compliance.

Overall, this thesis provides a conceptual and practical foundation for understanding temporary organising in complex institutional contexts and offers a roadmap for both scholars and practitioners to explore the relationship between institutional logics and time-bound organisational structures.

## Limitations

Several theoretical limitations of this research should be acknowledged, particularly relating to the scope and boundaries of the conceptual framework developed.

Firstly, the findings of this study regarding how Task and Cost priorities contribute to the emergence of Embedded, Constellated, and Decoupled institutional logic relationships are contextually bounded. The insights are derived from two specific large-scale projects in

Ireland: The Rural Electrification of Ireland and Ireland's National Electronic Health Record Programme. While these cases provide rich variation in terms of sector, organisational form, and institutional context, the generalisability of the proposed typology to other contexts, sectors, or countries may be limited. The theoretical connections established here should therefore be applied with caution outside comparable institutional and organisational environments.

Secondly, the two cases differ substantially in historical and technological context, which may influence the manifestation of institutional logics and temporary organising. The Rural Electrification programme occurred in a mid-20th century, post-war developmentalist state and focused on physical infrastructure, whereas the EHR implementation is situated in a digitally networked healthcare system shaped by contemporary governance, data protection legislation, and rapid technological change. These contextual differences may affect how Embedded, Constellated, and Decoupled relationships emerge, meaning that the framework may require adaptation when applied in settings with different temporal, technological, or regulatory conditions.

Thirdly, the proposed typology and its emphasis on Task and Cost as critical dimensions may not capture the full range of institutional logic relationships in all temporary organising scenarios. Other dimensions, such as political influence, inter-organisational negotiation, or emergent leadership practices, could play a more prominent role in alternative contexts. Consequently, while the typology provides a useful lens for understanding the interplay of institutional logics and temporary organising, it should not be treated as exhaustive or universally prescriptive.

In summary, these limitations do not undermine the core contributions of this thesis but frame the theoretical scope and bound the applicability of its findings. They highlight the importance of contextual sensitivity and conceptual reflexivity when applying the proposed framework to other large-scale projects. At the same time, they point to opportunities for future research, including testing the typology in additional contexts, exploring evolving terminologies, and further refining the understanding of institutional logics in temporary organising.

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# Appendices

## Appendix 1: Interview Topic Guides

### **Indicative Topic Guide for Semi Structured Interviews – Rural Electrification**

*Participants: Individuals with experience relating to the Rural Electrification Scheme*

Some questions will be not be asked in cases where they are deemed irrelevant to the participant's experience.

This research is examining how large scale technology projects are implemented into society. Specifically this research is looking at the institutional logics\* underpinning these technology projects. For this interview I will be asking questions regarding the rural electrification scheme. The research as a whole aims to pull learning from the rural electrification scheme was implemented and apply this to our understanding of how Electronic Health Record Systems should be implemented in Ireland. I will now give you some time to read over the information sheet and fill out the consent form. When that is completed, with your consent I will record the interview.

\* Institutional logics, are defined as the “socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organise time and space, and provide meaning to their social reality”

#### 1. PERSONAL ROLE

1.1 What was your professional role in relation to the Rural Electrification scheme?

1.2 Can you walk me through a typical day in your role?

1.3 Did you receive any training for this role? If yes, what kind of training did you receive?

1.4 What was your perception of the role before your involvement in the Rural Electrification scheme? Did this perception change over time, and if so, what were the reasons for the change?

1.5 How did your role in the Rural Electrification scheme make you feel?

1.6 How important was your role as a part of your identity during your involvement in the Rural Electrification scheme?

## 2. RELATIONSHIPS

2.1 What organisations/ government bodies did you work with closely in your role?

2.2 What kind of relationship did you/ your area have with these organisations?

2.3 How essential did you feel your organisation was in your own professional/personal community?

2.4 What sort of relationship did your organisation have with the consumers?

2.5 How were tasks and objectives communicated to your organisation? Who were they communicated from? Was your role to delegate any of these responsibilities/tasks?

2.6 Could you describe any hierarchy of roles present within your organisation?

2.7 Could you describe any hierarchy of organisations that existed with relation to the Rural Electrification scheme?

2.8 What or who do you think was the driving force behind the rural Electrification Scheme?

2.9 Was there any direct relationship between the government and your organisation?

## 3. STATE LOGIC

3.1 How did the Rural Electrification scheme contribute to changes in the lives of the public in Ireland?

3.2 How do you feel the rural electrification scheme addressed societal needs?

3.3 What efforts do you remember being made to ensure equitable access to electricity services through the rural electrification scheme for people from different social and economic backgrounds?

## 4. COMMUNITY LOGIC

4.1 Could you speak a little on the importance of community influence, seeing someone local adopting rural electrification, making purchases?

4.2 How was the reputation and public perception of the rural electrification scheme managed to foster trust and confidence among consumers?

4.3 How visible were the actions and progress of the rural electrification scheme to the public?

4.4 What measures were taken to communicate these efforts effectively?

4.5 To what extent did the rural electrification scheme demonstrate a commitment to local values?

#### 5. MARKET LOGIC

5.1 Could you speak a little about money, so how the scheme was funded, what did the money side of things look like as a consumer?

5.2 How did the need for increased progress and modernisation in the sector influence the decision to implement the rural electrification scheme?

5.3 In what ways did the rural electrification scheme focus on increasing efficiency?

5.4 What considerations were given to the cost of the rural electrification scheme?

5.5 How were financial investments justified in terms of long term benefits?

5.6 How were transactions and interactions between providers and vendors managed to ensure a smooth and successful implementation of the scheme?

#### 6. PROFESSION LOGIC

6.1 Were there expectations on staff to be accomplished in their jobs? What staff were expected to be accomplished? How did this expectation effect the design and implementation of the scheme?

6.2 Can you discuss any reputational issues that come to mind when thinking about staff and the scheme?

6.3 How were these concerns addressed to maintain the credibility and quality of the scheme?

6.4 How was the association between the rural electrification scheme and improvements to quality of life considered and communicated to enhance professional commitment to the project?

6.5 What, if any, strategies were employed to seek the involvement of staff in sharing knowledge and personal expertise during the rural electrification scheme?

7. Are there any areas you feel I have missed/ areas you would like to speak more about?

Family, Religion, Corporation.

## **Indicative Topic Guide for Semi Structured Interviews**

*Participants: Individuals with experience relating to Electronic Health Record Systems.*

Some questions will not be asked in cases where they are deemed irrelevant to the participant's experience.

This research is examining how large scale technology projects are implemented into society. Specifically this research is looking at the institutional logics\* underpinning these technology projects. For this interview I will be asking questions regarding Electronic Health Record Systems. I will now give you some time to read over the information sheet and fill out the consent form. When that is completed, with your consent I will record the interview.

\* Institutional logics, are defined as the “socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organise time and space, and provide meaning to their social reality”

### 1. PERSONAL ROLE

- 1.1 What is your professional role in relation to EHRs?
- 1.2 Can you walk me through a typical day in your role?
- 1.3 Did you receive any training for this role? If yes, what kind of training did you receive?
- 1.4 What was your perception of the role before your involvement? Did this perception change over time, and if so, what were the reasons for the change?
- 1.5 How does your role make you feel?
- 1.6 How important is your professional role as a part of your identity?

### 2. RELATIONSHIPS

- 2.1 What organisations/ government bodies do you work with closely in your role?
- 2.2 What kind of relationship do you/ your area have with these organisations?

- 2.3 How essential do you feel your organisation is in your own professional/personal community?
- 2.4 What sort of relationship does your organisation have with the consumers?
- 2.5 How are tasks and objectives communicated to your organisation? Who are they communicated from? Is it your role to delegate any of these responsibilities/tasks?
- 2.6 Could you describe any hierarchy of roles present within your organisation?
- 2.7 Could you describe any hierarchy of organisations that existed with relation to the implementation of EHRs?
- 2.8 What or who do you think is the driving force behind EHRs?
- 2.9 Is there any direct relationship between the government and your organisation?

### 3. STATE LOGIC

- 3.1 How will/have EHRs contribute/d to changes in the lives of the public in Ireland?
- 3.2 How do you feel EHRs address societal needs?
- 3.3 What efforts are being/have been made to ensure equitable access to EHRs for people/ medical facilities from different social and economic areas?

### 4. COMMUNITY LOGIC

- 4.1 Could you speak a little on the importance of community influence, seeing local practitioners adopting EHRs, making purchases?
- 4.2 How has the reputation and public perception of EHRs managed to foster trust and confidence among consumers?
- 4.3 How visible are the actions and progress of EHR implementation to the public?
- 4.4 What measures are taken to communicate these efforts effectively?
- 4.5 To what extent does implementation of EHRs demonstrate a commitment to local values?

### 5. MARKET LOGIC

- 5.1 Could you speak a little about money, so how EHR implementation is funded, and what does the money side of things look like for a consumer?
- 5.2 How has the need for increased progress and modernisation in the sector influenced the decision to implement EHRs?
- 5.3 In what ways is EHR implementation focused on increasing efficiency?

- 5.4 What considerations have been given to the cost of EHR implementation?
- 5.5 How have financial investments been justified in terms of long term benefits?
- 5.6 How are transactions and interactions between providers and vendors managed to ensure a smooth and successful implementation of EHRs?

## 6. PROFESSION LOGIC

Training of staff?

- 6.1 Are there expectations on staff to be accomplished in their jobs? What staff are expected to be accomplished? How does this expectation effect the design and implementation of EHRs?
- 6.2 Can you discuss any reputational issues that come to mind when thinking about staff and EHRs?
- 6.3 How are these concerns addressed to maintain the credibility and quality of EHR implementation?
- 6.4 How is the association between EHR implementation and improvements to quality of life considered and communicated to enhance professional commitment to the project?
- 6.5 What, if any, strategies are employed to seek the involvement of staff in sharing knowledge and personal expertise during EHR implementation?

## TEMPORARY ORGANISING

Implementation phase vs maintenance – What does that look like?

How do you think the nature of the project has impacted how objectives are delivered/the progress of the project.

7. Are there any areas you feel I have missed/ areas you would like to speak more about?

Family, Religion, Corporation.

## Appendix 2: Anonymised Interviewee Descriptor Table

<b>Code</b>	<b>Case Study</b>	<b>Descriptor</b>	<b>Length of interview (Min: Sec)</b>
<b>REI101</b>	1: Rural Electrification	Rural Electricity Consumer	65:44
<b>REI102</b>	1: Rural Electrification	Rural Electricity Consumer	65:44
<b>REI103</b>	1: Rural Electrification	Rural Electricity Consumer	28:28
<b>REI104</b>	1: Rural Electrification	Rural Electricity Consumer	19:59
<b>REI105</b>	1: Rural Electrification	Rural Electricity Consumer	21:58
<b>REI106</b>	1: Rural Electrification	Rural Electricity Consumer	38:39
<b>REI107</b>	1: Rural Electrification	Rural Electricity Consumer	38:39
<b>REI108</b>	1: Rural Electrification	Rural Consumer (Irish Countrywomen's Association Member)	66:05
<b>REI109</b>	1: Rural Electrification	ESB Staff Member	29:51
<b>EHI101</b>	2: Electronic Health	Trainer, Large EHR Vendor	24:54
<b>EHI102</b>	2: Electronic Health	Employee, Implementation Division at large EHR vendor	34:32
<b>EHI103</b>	2: Electronic Health	Senior HSE employee (eHealth)	32:26
<b>EHI104</b>	2: Electronic Health	Senior CHI employee (Health Informatics)	28:32
<b>EHI105</b>	2: Electronic Health	Project Nurse, EHR Implementer	50:58
<b>EHI106</b>	2: Electronic Health	Co-ordinator, National Group representing a subset of healthcare professionals (health informatics)	31:09
<b>EHI107</b>	2: Electronic Health	Project Manager, National Group representing a subset of healthcare professionals (health informatics)	55:45
<b>EHI108</b>	2: Electronic Health	Hospital Clinical Lead, EHR Workstream	59:47
<b>EHI109</b>	2: Electronic Health	Project Manager, EHR Project	69:27
<b>EHI110</b>	2: Electronic Health	Nurse, Irish Prison Service (eHealth)	59:58

<b>EHI111</b>	2: Electronic Health	Neonatal Intensive care nurse, EHR Implementer	34:09
<b>EHI112</b>	2: Electronic Health	Leadership Team Member, Independent Statutory Body	37:35
<b>EHI113</b>	2: Electronic Health	CEO informatics systems SME	73:00
<b>EHI114</b>	2: Electronic Health	Hospital Lead, National disease specific EHR project	35:00
<b>EHI115</b>	2: Electronic Health	Physiotherapist, Older People Services Operations	40:42
<b>EHI116</b>	2: Electronic Health	Digital Health Transformation Consultant	36:14
<b>EHI117</b>	2: Electronic Health	Director of Clinical Innovation, Private healthcare provider	58:11
<b>EHI118</b>	2: Electronic Health	Manager, Health Informatics, HSE	46:01

### Appendix 3: List of REO News Files

Code	Issue
REO1947.12	R.E.O. News December. (1947)
REO1948.01	R.E.O. News January. (1948)
REO1948.02	R.E.O. News February. (1948)
REO1948.03a	R.E.O. News March. (1948a)
REO1948.03b	R.E.O. News March. (1948b)
REO1948.04	R.E.O. News April. (1948)
REO1948.05	R.E.O. News May. (1948)
REO1948.06	R.E.O. News June. (1948)
REO1948.07	R.E.O. News July. (1948)
REO1948.08	R.E.O. News August. (1948)
REO1948.09	R.E.O. News September. (1948)
REO1948.10	R.E.O. News October. (1948)
REO1948.11	R.E.O. News November. (1948)
REO1948.12	R.E.O. News December. (1948)
REO1949.01	R.E.O. News January. (1949)
REO1949.02	R.E.O. News February. (1949)
REO1949.03	R.E.O. News March. (1949)
REO1949.04	R.E.O. News April. (1949)
REO1949.05	R.E.O. News May. (1949)
REO1949.06	R.E.O. News June. (1949)
REO1949.07	R.E.O. News July. (1949)
REO1949.08	R.E.O. News August. (1949)
REO1949.09	R.E.O. News September. (1949)
REO1949.10	R.E.O. News October. (1949)
REO1949.11	R.E.O. News November. (1949)
REO1949.12	R.E.O. News December. (1949)
REO1950.01	R.E.O. News January. (1950)
REO1950.02	R.E.O. News February. (1950)
REO1950.03	R.E.O. News March. (1950)
REO1950.04	R.E.O. News April. (1950)

REO1950.05	R.E.O. News May. (1950)
REO1950.06	R.E.O. News June. (1950)
REO1950.07	R.E.O. News July. (1950)
REO1950.08	R.E.O. News August. (1950)
REO1950.09	R.E.O. News September. (1950)
REO1950.10	R.E.O. News October. (1950)
REO1950.11	R.E.O. News November. (1950)
REO1950.12	R.E.O. News December. (1950)
REO1951.01	R.E.O. News January. (1951)
REO1951.02	R.E.O. News February. (1951)
REO1951.03	R.E.O. News March. (1951)
REO1951.04	R.E.O. News April. (1951)
REO1951.05	R.E.O. News May. (1951)
REO1951.06	R.E.O. News June. (1951)
REO1951.07	R.E.O. News July. (1951)
REO1951.08	R.E.O. News August. (1951)
REO1951.09	R.E.O. News September. (1951)
REO1951.10	R.E.O. News October. (1951)
REO1951.11	R.E.O. News November. (1951)
REO1951.12	R.E.O. News December. (1951)
REO1952.01	R.E.O. News January. (1952)
REO1952.02	R.E.O. News February. (1952)
REO1952.03	R.E.O. News March. (1952)
REO1952.04	R.E.O. News April. (1952)
REO1952.05	R.E.O. News May. (1952)
REO1952.06	R.E.O. News June. (1952)
REO1952.07	R.E.O. News July. (1952)
REO1952.08	R.E.O. News August. (1952)
REO1952.09	R.E.O. News September. (1952)
REO1952.10	R.E.O. News October. (1952)
REO1952.11	R.E.O. News November. (1952)
REO1952.12	R.E.O. News December. (1952)

REO1953.01	R.E.O. News January. (1953)
REO1953.02	R.E.O. News February. (1953)
REO1953.03	R.E.O. News March. (1953)
REO1953.04	R.E.O. News April. (1953)
REO1953.05	R.E.O. News May. (1953)
REO1953.06	R.E.O. News June. (1953)
REO1953.07	R.E.O. News July. (1953)
REO1953.08	R.E.O. News August. (1953)
REO1953.09	R.E.O. News September. (1953)
REO1953.10	R.E.O. News October. (1953)
REO1953.11	R.E.O. News November. (1953)
REO1953.12	R.E.O. News December. (1953)
REO1954.01	R.E.O. News January. (1954)
REO1954.02	R.E.O. News February. (1954)
REO1954.03	R.E.O. News March. (1954)
REO1954.04	R.E.O. News April. (1954)
REO1954.05	R.E.O. News May. (1954)
REO1954.06	R.E.O. News June. (1954)
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REO1954.08	R.E.O. News August. (1954)
REO1954.09	R.E.O. News September. (1954)
REO1954.10	R.E.O. News October. (1954)
REO1954.11	R.E.O. News November. (1954)
REO1954.12	R.E.O. News December. (1954)
REO1955.01	R.E.O. News January. (1955)
REO1955.02	R.E.O. News February. (1955)
REO1955.03	R.E.O. News March. (1955)
REO1955.04	R.E.O. News April. (1955)
REO1955.05	R.E.O. News May. (1955)
REO1955.06	R.E.O. News June. (1955)
REO1955.07	R.E.O. News July. (1955)
REO1955.08	R.E.O. News August. (1955)

REO1955.09	R.E.O. News September. (1955)
REO1955.10	R.E.O. News October. (1955)
REO1955.11	R.E.O. News November. (1955)
REO1955.12	R.E.O. News December. (1955)
REO1955.12s	R.E.O. News December (Supplement). (1955)
REO1956.01	R.E.O. News January. (1956)
REO1956.02	R.E.O. News February. (1956)
REO1956.03	R.E.O. News March. (1956)
REO1956.04	R.E.O. News April. (1956)
REO1956.05	R.E.O. News May. (1956)
REO1956.06	R.E.O. News June. (1956)
REO1956.07	R.E.O. News July. (1956)
REO1956.08	R.E.O. News August. (1956)
REO1956.09	R.E.O. News September. (1956)
REO1956.10	R.E.O. News October. (1956)
REO1956.11	R.E.O. News November. (1956)
REO1956.12	R.E.O. News December. (1956)
REO1957.01	R.E.O. News January. (1957)
REO1957.02	R.E.O. News February. (1957)
REO1957.03	R.E.O. News March. (1957)
REO1957.04	R.E.O. News April. (1957)
REO1957.05	R.E.O. News May. (1957)
REO1957.06	R.E.O. News June. (1957)
REO1957.07	R.E.O. News July. (1957)
REO1957.08	R.E.O. News August. (1957)
REO1957.09	R.E.O. News September. (1957)
REO1957.10	R.E.O. News October. (1957)
REO1957.11	R.E.O. News November. (1957)
REO1957.12	R.E.O. News December. (1957)
REO1958.01	R.E.O. News January. (1958)
REO1958.02	R.E.O. News February. (1958)

REO1958.03	R.E.O. News March. (1958)
REO1958.04	R.E.O. News April. (1958)
REO1958.05	R.E.O. News May-June. (1958)
REO1958.07	R.E.O. News July. (1958)
REO1958.08	R.E.O. News August. (1958)
REO1958.09	R.E.O. News September. (1958)
REO1958.10	R.E.O. News October. (1958)
REO1958.11	R.E.O. News November. (1958)
REO1958.12	R.E.O. News December. (1958)
REO1959.01	R.E.O. News January. (1959)
REO1959.02	R.E.O. News February. (1959)
REO1959.03	R.E.O. News March. (1959)
REO1959.04	R.E.O. News April. (1959)
REO1959.05	R.E.O. News May. (1959)
REO1959.06	R.E.O. News June. (1959)
REO1959.07	R.E.O. News July. (1959)
REO1959.08	R.E.O. News August. (1959)
REO1959.09	R.E.O. News September. (1959)
REO1959.09s	R.E.O. News September (Agricultural Supplement). (1959)
REO1959.10	R.E.O. News October. (1959)
REO1959.11	R.E.O. News November. (1959)
REO1959.12	R.E.O. News December. (1959)
REO1960.01	R.E.O. News January. (1960)
REO1960.02	R.E.O. News February. (1960)
REO1960.03	R.E.O. News March. (1960)
REO1960.04	R.E.O. News April. (1960)
REO1960.05	R.E.O. News May. (1960)
REO1960.06a	R.E.O. News June-July. (1960)
REO1960.08	R.E.O. News August. (1960)
REO1960.09	R.E.O. News September. (1960)
REO1960.10	R.E.O. News October. (1960)

REO1960.11	R.E.O. News November. (1960)
REO1960.12	R.E.O. News December. (1960)
REO1961.01a	R.E.O. News January. (1961a)
REO1961.01b	R.E.O. News January. (1961b)
REO1961.02	R.E.O. News February. (1961)
REO1961.03	R.E.O. News March. (1961)
REO1961.04	R.E.O. News April. (1961)
REO1961.05	R.E.O. News May. (1961)
REO1961.06	R.E.O. News June. (1961)
REO1961.07	R.E.O. News July. (1961)
REO1961.08	R.E.O. News August. (1961)
REO1961.09	R.E.O. News September. (1961)
REO1961.10	R.E.O. News October. (1961)
REO1961.11	R.E.O. News November. (1961)

## Appendix 4: Ethical Approval

MAYNOOTH UNIVERSITY RESEARCH ETHICS COMMITTEE  
MAYNOOTH UNIVERSITY,  
MAYNOOTH, CO. KILDARE, IRELAND



Dr Carol Barrett  
Secretary to Maynooth University Research Ethics Committee

21 March 2023

Harriet Emma Finnegan  
School of Business  
Maynooth University

**Re: Application for ethical approval for a Project entitled:** Health IT: Stories and Theories of Organisation and Innovation

Dear Harriet,

The above project has been evaluated under Tier 2 process, expedited review and we would like to inform you that ethical approval has been granted.

Any deviations from the project details submitted to the ethics committee will require further evaluation. This ethical approval will expire on 31/03/2024.

Please note: all projects now require an end of project report which is attached. Please complete and upload the end of project report to your RIS ethics record after the project end date.

Kind Regards,

A handwritten signature in black ink, appearing to read 'Carol Barrett', written over a light grey circular stamp.

Dr Carol Barrett  
Secretary,  
Maynooth University Research Ethics Committee

c.c. Dr Nicola Mountford, School of Business

Reference Number SRESC-2023-36163
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# Appendix 5: NVivo Coding Screenshots

This screenshot shows the NVivo interface for a project named 'Rural Chapter'. The left sidebar contains navigation options like 'Quick Access', 'Data', 'Organize', 'Cases', 'Notes', 'Sets', 'Explore', 'Queries', 'Visualizations', and 'Reports'. The main window displays a table of codes with columns for Name, Files, References, Created on, Created by, and Modified on.

Name	Files	References	Created on	Created by	Modified on
○ Sectors	48	535	31/05/2023 13:11	HF	14/07/2023 14:42
○ Personnel	46	128	31/05/2023 15:34	HF	17/08/2023 17:55
○ General Position of Scheme	44	80	31/05/2023 13:11	HF	17/08/2023 18:01
○ Materials Division	44	55	31/05/2023 13:11	HF	17/08/2023 17:52
○ Progress in Areas	45	52	31/05/2023 15:36	HF	17/08/2023 18:05
○ News Items	42	43	31/05/2023 15:35	HF	17/08/2023 17:58
○ As Others See Us	32	34	07/06/2023 16:53	HF	11/08/2023 15:56
○ Shows	20	33	07/06/2023 13:01	HF	09/08/2023 16:34
○ Technical Division	25	31	31/05/2023 13:12	HF	17/08/2023 17:50
○ Development Division	23	24	31/05/2023 15:37	HF	17/08/2023 17:38
○ Area Notes	19	19	20/06/2023 15:04	HF	17/08/2023 17:49
○ Design	13	19	31/05/2023 15:34	HF	22/06/2023 17:07
○ Cost Comparisons	11	12	01/06/2023 17:10	HF	13/06/2023 16:08
○ Editor's Note	2	2	07/06/2023 16:36	HF	23/06/2023 16:26
○ Distribution Dept	1	1	20/06/2023 12:36	HF	20/06/2023 12:38
○ Social & Personal	1	1	09/08/2023 16:54	HF	09/08/2023 16:55
○ Units of Work	1	1	22/06/2023 15:49	HF	22/06/2023 15:50
○ Feeling	49	351	31/05/2023 13:10	HF	14/07/2023 14:42
○ Praise	43	119	31/05/2023 13:10	HF	17/08/2023 18:00
○ Humour	37	103	01/06/2023 14:57	HF	05/12/2024 13:28
○ Involvement wanted	33	54	01/06/2023 15:01	HF	17/08/2023 18:01
○ Warning	29	50	31/05/2023 14:44	HF	17/08/2023 18:00
○ Disappointed	21	25	13/06/2023 12:22	HF	08/08/2023 14:28
○ Countries	47	292	31/05/2023 15:05	HF	14/07/2023 14:42
○ Actors	58	171	31/05/2023 14:59	HF	14/07/2023 14:42
○ Consumers	40	62	31/05/2023 15:00	HF	13/01/2025 12:45
○ Press	26	32	31/05/2023 16:56	HF	09/08/2023 14:49
○ Priests	18	25	31/05/2023 15:00	HF	27/06/2023 11:40
○ Local Committee	10	15	31/05/2023 16:54	HF	17/08/2023 17:48
○ TDs	11	15	31/05/2023 16:55	HF	23/06/2023 16:21
○ Muintir na Tire	8	8	02/06/2023 15:33	HF	22/06/2023 16:58
○ Young Farmers Club	3	5	02/06/2023 15:33	HF	27/06/2023 11:15
○ Irish Countrywomen's Association	3	3	02/06/2023 15:34	HF	23/06/2023 16:21
○ Dall	2	2	07/06/2023 14:54	HF	07/06/2023 16:10

This screenshot shows the NVivo interface for a project named 'EHR Chapter Project.npv'. The left sidebar contains navigation options like 'Quick Access', 'Data', 'Organize', 'Cases', 'Notes', 'Sets', 'Explore', 'Queries', 'Visualizations', and 'Reports'. The main window displays a table of inductive codes with columns for Name, Files, References, Created on, Created by, Modified on, and Modified.

Name	Files	References	Created on	Created by	Modified on	Modified
○ Interoperability	17	75	03/07/2025 13:30	HF	28/07/2025 14:46	HF
○ Training	17	53	03/07/2025 13:30	HF	28/07/2025 14:25	HF
○ Implementation	15	59	03/07/2025 13:30	HF	28/07/2025 14:33	HF
○ THE national project	15	64	03/07/2025 13:30	HF	28/07/2025 15:06	HF
○ Relationships	15	26	04/07/2025 15:09	HF	28/07/2025 14:43	HF
○ Money	14	57	03/07/2025 13:30	HF	28/07/2025 14:43	HF
○ Paper Notes	14	29	03/07/2025 13:30	HF	28/07/2025 14:39	HF
○ Staff	14	38	03/07/2025 13:30	HF	28/07/2025 14:41	HF
○ Time	14	61	03/07/2025 13:30	HF	28/07/2025 15:04	HF
○ Funding	14	23	09/07/2025 16:24	HF	28/07/2025 14:29	HF
○ Process	12	34	03/07/2025 13:30	HF	28/07/2025 14:41	HF
○ Efficiency	11	21	03/07/2025 13:30	HF	28/07/2025 14:45	HF
○ Government	11	23	03/07/2025 13:30	HF	28/07/2025 14:43	HF
○ Other Countries	11	35	03/07/2025 13:30	HF	28/07/2025 15:06	HF
○ Skills	11	18	04/07/2025 14:37	HF	28/07/2025 14:44	HF
○ Unimpressed	11	28	04/07/2025 15:08	HF	28/07/2025 14:33	HF
○ Control	11	32	09/07/2025 16:09	HF	18/07/2025 18:48	HF
○ Change	10	24	03/07/2025 13:30	HF	28/07/2025 14:33	HF
○ Management	10	25	03/07/2025 13:30	HF	28/07/2025 13:56	HF
○ Outdated	10	30	03/07/2025 13:30	HF	28/07/2025 13:57	HF
○ Data Analysis	10	21	04/07/2025 14:27	HF	28/07/2025 14:45	HF
○ Vendors	10	24	09/07/2025 16:06	HF	28/07/2025 15:05	HF
○ Communication	9	20	03/07/2025 13:30	HF	28/07/2025 14:06	HF
○ HSE	9	26	03/07/2025 13:30	HF	28/07/2025 13:33	HF
○ EHR	8	21	03/07/2025 13:30	HF	28/07/2025 12:11	HF
○ GPs	8	26	03/07/2025 13:30	HF	28/07/2025 14:44	HF
○ Different Needs	8	14	04/07/2025 14:39	HF	28/07/2025 13:57	HF
○ Procurement	8	14	04/07/2025 14:44	HF	18/07/2025 18:53	HF
○ Build	8	18	04/07/2025 15:24	HF	28/07/2025 14:22	HF
○ Standardisation	8	11	04/07/2025 16:19	HF	28/07/2025 14:02	HF
○ Maintenance	8	16	10/07/2025 16:39	HF	28/07/2025 14:25	HF
○ Planning	7	14	03/07/2025 13:30	HF	28/07/2025 14:07	HF
○ Safety	7	30	03/07/2025 13:30	HF	28/07/2025 14:00	HF
○ Data Processing	7	15	04/07/2025 14:22	HF	28/07/2025 15:04	HF
○ Improved Care	7	15	04/07/2025 14:40	HF	28/07/2025 14:45	HF

**Quick Access**

**IMPORT**

- Data
  - Files
  - Case Literature
  - Interviews
  - REQ News Files
  - File Classifications
  - Externals

**ORGANIZE**

- Coding
  - Codes
  - Institutional Logics**
  - Sentiment
  - Relationships
  - Relationship Types
- Cases
- Notes
- Sets

**EXPLORE**

- Queries
- Visualizations
- Reports

Name	Files	References	Created on	Created by	Modified on
Profession Logic	150	560	29/05/2023 14:22	HF	14/07/2023 14:42
Status in Profession	75	160	29/05/2023 16:20	HF	13/01/2025 14:23
Membership in guild & association	70	136	29/05/2023 16:19	HF	13/01/2025 14:31
Association with quality of craft Personal reputation	74	132	29/05/2023 16:17	HF	13/01/2025 14:20
Personal expertise	45	75	29/05/2023 16:15	HF	10/01/2025 15:55
Profession as relational network	32	37	29/05/2023 16:15	HF	08/01/2025 14:19
Professional association	10	10	29/05/2023 16:16	HF	08/01/2025 12:02
Increase Personal Reputation	8	8	29/05/2023 16:20	HF	06/12/2024 15:29
Celebrity Professionals	2	2	29/05/2023 16:21	HF	06/12/2024 13:48
Personal Capitalism	0	0	29/05/2023 16:22	HF	29/05/2023 16:22
Market Logic	139	404	29/05/2023 14:22	HF	14/07/2023 14:41
Transaction	113	243	29/05/2023 16:09	HF	13/01/2025 14:29
Increase efficiency profit	88	158	29/05/2023 16:12	HF	13/01/2025 12:45
Status in Market	2	2	29/05/2023 16:11	HF	14/06/2023 15:25
Self interest	1	1	29/05/2023 16:11	HF	20/06/2023 11:55
Faceless	0	0	29/05/2023 16:10	HF	29/05/2023 16:10
Industry analysts	0	0	29/05/2023 16:13	HF	29/05/2023 16:13
Market Capitalism	0	0	29/05/2023 16:13	HF	29/05/2023 16:13
Share Price	0	0	29/05/2023 16:09	HF	29/05/2023 16:09
Shareholder Activism	0	0	29/05/2023 16:09	HF	29/05/2023 16:09
Community Logic	119	263	29/05/2023 14:21	HF	14/07/2023 14:43
Visibility of Actions	101	168	29/05/2023 14:43	HF	13/01/2025 14:28
Commitment to community values & ideology	48	66	29/05/2023 14:39	HF	13/01/2025 13:27
Group Membership	11	12	29/05/2023 14:40	HF	06/12/2024 15:46
Emotional Connection Ego-satisfaction & reputation	4	4	29/05/2023 14:40	HF	16/06/2023 15:09
Increase status & honor of members & practices	4	4	29/05/2023 14:42	HF	06/12/2024 15:34
Unity of will belief in trust & reciprocity	2	4	29/05/2023 14:38	HF	27/06/2023 11:07
Cooperative Capitalism	3	3	29/05/2023 14:43	HF	14/06/2023 12:37
Common Boundary	1	1	29/05/2023 14:37	HF	16/06/2023 15:22
Personal Investment in Group	1	1	29/05/2023 14:41	HF	01/06/2023 15:00
State Logic	98	185	29/05/2023 14:21	HF	14/07/2023 14:43
Increase community good	89	141	29/05/2023 16:07	HF	13/01/2025 13:46
Social & Economic Class	19	27	29/05/2023 16:05	HF	17/08/2023 17:45
State as redistribution mechanism	7	9	29/05/2023 16:03	HF	17/08/2023 17:34

HF 70 Items

**Quick Access**

**IMPORT**

- Data
  - Files
  - Case Literature
  - EHR Interviews**
  - Empirical Studies
  - File Classifications
  - Externals

**ORGANIZE**

- Coding
  - Codes
  - Case Codes
  - Codebook
  - Institutional L...
  - Inductive Codes
  - JMIR Codes
  - Sentiment
  - Relationships
  - Relationship Types
- Cases
  - Cases
  - Case Classifications
- Notes
- Sets

**EXPLORE**

- Queries
- Visualizations
- Reports

Name	Codes	References	Modified on	Modified by
(EH112)	84	192	29/10/2025 21:34	HF
(EH1107)	60	155	29/10/2025 21:34	HF
(EH1117)	52	109	29/10/2025 21:34	HF
(EH1108)	46	122	29/10/2025 21:35	HF
(EH1102)	51	129	29/10/2025 21:35	HF
(EH1113)	62	179	29/10/2025 21:35	HF
(EH1103)	40	105	29/10/2025 21:35	HF
(EH1114)	32	58	29/10/2025 21:35	HF
(EH1115)	44	88	29/10/2025 21:35	HF
(EH1104)	40	94	29/10/2025 21:36	HF
(EH1118)	33	61	29/10/2025 21:36	HF
(EH1116)	40	71	29/10/2025 21:36	HF
(EH1109)	40	91	29/10/2025 21:36	HF
(EH1105)	43	100	29/10/2025 21:36	HF
(EH1110)	55	215	29/10/2025 21:37	HF
(EH1111)	38	91	29/10/2025 21:37	HF
(EH1101)	27	46	29/10/2025 21:37	HF
(EH1106)	38	75	29/10/2025 21:37	HF

HF 18 Items

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Files												
Case Literature												
Interviews												
REO News Files												
File Classifications												
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Case Classifications												
Notes												
Sets												
EXPLORE												
Queries												
Visualizations												
Reports												
Clipboard	Item	Organize	Query	Visualize	Code	Autocode	Range Code	Uncode	Case Classification	File Classification	Workspace	AI Assistant
REO News Files												
Name	Codes	References	Modified on	Modified by								
1948.02	43	84	09/03/2023 15:40	HF								
1947.12	26	45	09/03/2023 15:40	HF								
1948.01	31	62	09/03/2023 15:40	HF								
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1951.04	44	115	10/03/2023 14:15	HF								
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1948.08	35	68	10/03/2023 14:42	HF								
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1950.08	38	90	10/03/2023 14:43	HF								
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1953.08	11	22	10/03/2023 14:44	HF								
1954.08	11	27	10/03/2023 14:44	HF								
1955.08	8	22	10/03/2023 14:44	HF								
1948.12	25	38	10/03/2023 14:44	HF								
1949.12	36	106	10/03/2023 14:44	HF								
1950.12	33	90	10/03/2023 14:44	HF								
1951.12	8	11	10/03/2023 14:44	HF								
1952.12	10	16	10/03/2023 14:45	HF								
1953.12	4	4	10/03/2023 14:45	HF								
1954.12	5	12	10/03/2023 14:45	HF								
1955.12	3	8	10/03/2023 14:45	HF								
1955.125	4	4	10/03/2023 14:45	HF								
1949.02	30	46	10/03/2023 14:45	HF								
1950.02	51	132	10/03/2023 14:45	HF								
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HF 171 Items												

## Appendix 6: Interview Consent Form



### INFORMATION AND CONSENT FORM FOR RESEARCH PARTICIPANTS

#### Information Sheet

**Purpose of the Study.** I am Harriet Finnegan, a doctoral student, in the Department of Business, Maynooth University.

As part of the requirements for PhD Business and Management MH02D, I am undertaking a research study under the supervision of Dr Nicola Mountford.

The study is concerned with how large scale technology projects are implemented into society.

**What will the study involve?** The study will involve a 30 60 minute semi structured interview. It is unlikely there will be a need for a follow up interview. However, Harriet Finnegan may contact you in the event that there is a need for a follow up interview.

**Who has approved this study?** This study has been reviewed and received ethical approval from Maynooth University Research Ethics committee. You may have a copy of this approval if you request it.

**Why have you been asked to take part?** You have been asked because you have experience with Electronic Health Record Systems/ eHealth.

#### **Do you have to take part?**

You are under no obligation whatsoever to take part in this research. You are invited to take part in a short semi structured interview. It is entirely up to you to decide whether or not you would

like to take part. If you decide to do so, you will be asked to sign a consent form and given a copy and the information sheet for your own records. If you decide to take part, you are still free to withdraw at any time without giving a reason and/or to withdraw your information up until three months after the interview has been completed. A decision to withdraw up until this point, or a decision not to take part, will not affect your relationship with Maynooth University.

**What information will be collected?** Information will be collected involving your job or role regarding Electronic Health Record Systems/ eHealth.

**Will your participation in the study be kept confidential?** Yes, all information that is collected about you during the course of the research will be kept confidential. No names will be identified at any time unless you give explicit consent to allow this. All hard copy information will be held in a locked cabinet at the researchers' place of work, electronic information will be encrypted and held securely on MU PC or servers and will be accessed only by Harriet Finnegan.

No information will be distributed to any other unauthorised individual or third party. If you so wish, the data that you provide can also be made available to you at your own discretion.

*It must be recognised that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.*

**What will happen to the information which you give?** All the information you provide will be kept at Maynooth University in such a way that it will not be possible to identify you. On completion of the research, the data will be retained on the MU server. After ten years, all data will be destroyed (by Harriet Finnegan). Manual data will be shredded confidentially, and electronic data will be reformatted or overwritten by Harriet Finnegan in Maynooth University.

**What will happen to the results?** The research will be written up and presented at National and International conferences and may be published in scientific journals. A copy of the research findings will be made available to you upon request.

**What are the possible disadvantages of taking part?** I do not envisage any negative consequences for you in taking part.

**What if there is a problem?** At the end of the interview, I will discuss with you how you found the experience and how you are feeling. Should any issues arise, I will refer you to appropriate national helplines/resources. You may contact my supervisor: Dr Nicola Mountford (Nicola.mountford@mu.ie) if you feel the research has not been carried out as described above.

**Any further queries?** If you need any further information, you can contact me Harriet Finnegan, 0873538580, harriet.finnegan.2017@mumail.ie.

If you agree to take part in the study, please complete and sign the consent form overleaf.

**Thank you for taking the time to read this.**

## Consent Form

I..... agree to participate in Harriet Finnegan's research study titled HISTORI (Health IT: Stories and Theories of Organisation and Innovation).

Please tick each statement below

The purpose and nature of the study has been explained to me verbally & in writing. I've been able to ask questions, which were answered satisfactorily.

I am participating voluntarily.

I give permission for my interview with Harriet Finnegan to be audio recorded.

I understand that I can withdraw from the study, without repercussions, at any time, whether that is before it starts or while I am participating.

I understand that I can withdraw permission to use the data right up to three months after the interview has been conducted.

It has been explained to me how my data will be managed and that I may access it on request.

I understand the limits of confidentiality as described in the information sheet

I understand that my data, in an anonymous format, may be used in further research projects and any subsequent publications if I give permission below:

**[Select as appropriate]**

I agree to quotation/publication of extracts from my interview

I do not agree to quotation/publication of extracts from my interview

I agree for my data to be used for further research projects

I do not agree for my data to be used for further research projects

I agree for my data, once anonymised, to be retained indefinitely in the IQDA archive

I do not agree for my data once anonymised, to be retained indefinitely in the IQDA archive

Signed.....

Date.....

Participant Name in block capitals .....

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*I the undersigned have taken the time to fully explain to the above participant the nature and purpose of this study in a manner that they could understand. I have explained the risks involved as well as the possible benefits. I have invited them to ask questions on any aspect of the study that concerned them.*

Signed.....

Date.....

HARRIET FINNEGAN .....

*If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact the Secretary of the Maynooth University Ethics Committee at [research.ethics@mu.ie](mailto:research.ethics@mu.ie) or +353 (0)1 708 6019. Please be assured that your concerns will be dealt with in a sensitive manner.*

*For your information the Data Controller for this research project is Maynooth University, Maynooth,*

Co. Kildare. Maynooth University Data Protection officer is Ann McKeon in Humanity house, room 17, who can be contacted at [dataprotection@mu.ie](mailto:dataprotection@mu.ie). Maynooth University Data Privacy policies can be found at [https://www.maynoothuniversity.ie/data\\_protection](https://www.maynoothuniversity.ie/data_protection).

***Two copies to be made: 1 for participant, 1 for PI***



## INFORMATION AND CONSENT FORM FOR RESEARCH PARTICIPANTS

### Information Sheet

**Purpose of the Study.** I am Harriet Finnegan, a doctoral student, in the Department of Business, Maynooth University.

As part of the requirements for PhD Business and Management MH02D, I am undertaking a research study under the supervision of Dr Nicola Mountford.

The study is concerned with how large scale technology projects are implemented into society.

**What will the study involve?** The study will involve a 30 60 minute semi structured interview. It is unlikely there will be a need for a follow up interview. However, Harriet Finnegan may contact you in the event that there is a need for a follow up interview.

**Who has approved this study?** This study has been reviewed and received ethical approval from Maynooth University Research Ethics committee. You may have a copy of this approval if you request it.

**Why have you been asked to take part?** You have been asked because you have experience with the implementation of the Irish rural electrification scheme by the ESB.

### Do you have to take part?

You are under no obligation whatsoever to take part in this research. You are invited to take part in a short semi structured interview. It is entirely up to you to decide whether or not you would

like to take part. If you decide to do so, you will be asked to sign a consent form and given a copy and the information sheet for your own records. If you decide to take part, you are still free to withdraw at any time without giving a reason and/or to withdraw your information up until three months after the interview has been completed. A decision to withdraw up until this point, or a decision not to take part, will not affect your relationship with Maynooth University.

**What information will be collected?** Information will be collected involving your job or role regarding the implementation of rural electrification, and your experience of the rural electrification scheme.

**Will your participation in the study be kept confidential?** Yes, all information that is collected about you during the course of the research will be kept confidential. No names will be identified at any time unless you give explicit consent to allow this. All hard copy information will be held in a locked cabinet at the researchers' place of work, electronic information will be encrypted and held securely on MU PC or servers and will be accessed only by Harriet Finnegan.

No information will be distributed to any other unauthorised individual or third party. If you so wish, the data that you provide can also be made available to you at your own discretion.

*It must be recognised that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.*

**What will happen to the information which you give?** All the information you provide will be kept at Maynooth University in such a way that it will not be possible to identify you. On completion of the research, the data will be retained on the MU server. After ten years, all data will be destroyed (by Harriet Finnegan). Manual data will be shredded confidentially, and electronic data will be reformatted or overwritten by Harriet Finnegan in Maynooth University.

**What will happen to the results?** The research will be written up and presented at National and International conferences and may be published in scientific journals. A copy of the research findings will be made available to you upon request.

**What are the possible disadvantages of taking part?** I do not envisage any negative consequences for you in taking part.

**What if there is a problem?** At the end of the interview, I will discuss with you how you found the experience and how you are feeling. Should any issues arise, I will refer you to appropriate national helplines/resources. You may contact my supervisor: Dr Nicola Mountford (Nicola.mountford@mu.ie) if you feel the research has not been carried out as described above.

**Any further queries?** If you need any further information, you can contact me Harriet Finnegan, 0873538580, harriet.finnegan.2017@mumail.ie.

If you agree to take part in the study, please complete and sign the consent form overleaf.

**Thank you for taking the time to read this.**

## Consent Form

I..... agree to participate in Harriet Finnegan's research study titled HISTORI (Health IT: Stories and Theories of Organisation and Innovation).

Please tick each statement below

The purpose and nature of the study has been explained to me verbally & in writing. I've been able to ask questions, which were answered satisfactorily.

I am participating voluntarily.

I give permission for my interview with Harriet Finnegan to be audio recorded.

I understand that I can withdraw from the study, without repercussions, at any time, whether that is before it starts or while I am participating.

I understand that I can withdraw permission to use the data right up to three months after the interview has been conducted.

It has been explained to me how my data will be managed and that I may access it on request.

I understand the limits of confidentiality as described in the information sheet

I understand that my data, in an anonymous format, may be used in further research projects and any subsequent publications if I give permission below:

**[Select as appropriate]**

I agree to quotation/publication of extracts from my interview

I do not agree to quotation/publication of extracts from my interview

I agree for my data to be used for further research projects

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I agree for my data, once anonymised, to be retained indefinitely in the IQDA archive

I do not agree for my data once anonymised, to be retained indefinitely in the IQDA archive

Signed.....

Date.....

Participant Name in block capitals .....

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*I the undersigned have taken the time to fully explain to the above participant the nature and purpose of this study in a manner that they could understand. I have explained the risks involved as well as the possible benefits. I have invited them to ask questions on any aspect of the study that concerned them.*

Signed.....

Date.....

HARRIET FINNEGAN .....

*If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact the Secretary of the Maynooth University Ethics Committee at [research.ethics@mu.ie](mailto:research.ethics@mu.ie) or +353 (0)1 708 6019. Please be assured that your concerns will be dealt with in a sensitive manner.*

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***Two copies to be made: 1 for participant, 1 for PI***

## Appendix 7: Characteristic Table of selected Empirical EHR studies

Characteristics of Included Studies							
Author(s)/ Publication year	Country of Focus	Aim	Study Design	Type of Organization	Study Population	Record Type	Methods
<b>Abd Ghani et al. (2008)</b>	Malaysia, Singapore, Japan, Hong Kong, Taiwan	Presents an overview of the development approaches undertaken by four East Asian countries in implementing a national Electronic Health Record (EHR) in the public health system.	Qualitative	National Project	Four East Asian Countries	National Electronic Health Record (EHR) / Lifetime Health Record (LHR)	Literature Search, case study, interviews, archival documents.
<b>Alassia et al. (2017)</b>	Argentina	Describe a HelpDesk implementation process and its benefits to operational management and excellence applied to	Qualitative	Primary Care Centers	44 Primary Care Centers	Electronic Health records (Helpdesk)	Cross Sectional Study. Secondary analysis of

		the primary care level of Buenos Aires' public health system.					Helpdesk's Database.
<b>Banas et al. (2011)</b>	U.S.A	Provide a case study of the implementation of online provider documentation at a leading medical center with the establishment of an office of clinical transformation (OCT).	Qualitative	Academic Health Centre with an office of clinical transformation	One Academic Health Centre (1451 physicians)	Electronic Health Records	Case Study
<b>Barrett and Stephens (2016)</b>	U.S.A	This study offers a communicative perspective on EHR implementation. Study contributes to AST by empirically demonstrating the pivotal role change appropriation plays in achieving successful	Quantitative	Health care network	Pilot: 12 interviews, 16 online survey. Primary: 340 surveys	Electronic Health Records	Interviews, online survey, data from healthcare network.

		change outcomes. This research also contributes to scholarly work on planned organizational change by showing how social interaction, without providing adaptive tools, can create technology implementation problems.					
<b>Bogaert et al. (2021)</b>	Europe	Identify common enablers and barriers for optimal functioning of HISs across the European Union and associated countries, and to interpret what this means for the further development of HISs in Europe.	Qualitative	National Project	Nine European Countries	Health Information Systems, Electronic Health Records, Population based	Thematic Analysis

						information systems	
<b>Boonstra and van Offenbeek (2017)</b>	The Netherlands	Explore how tendering legislation shapes a buyer's software selection process through the lens of competing decision-making rationalities.	Qualitative	Large Health Services Provider	One Dutch Large Health Services Provider (31 actors interviewed)	Electronic Health Record	Interpretive single case study, interviews.
<b>Boonstra et al. (2017)</b>	The Netherlands	Analyzes the tensions evolving from project management dilemmas and how they relate to stakeholders in large technology projects	Qualitative	Large Teaching Hospital	29 interviews	Electronic Health Record	Case Study, interviews, meetings, document review
<b>Boswell (2013)</b>	U.S.A	Report findings on the implementation of electronic health records (EHR) by a multi-specialty physician group	Qualitative	Multi-specialty physician group	16 interviewees.	Electronic Health Record	Case Study, Interviews,

		in the greater south central Pennsylvania area and offers implications for HR professionals.					
<b>Boswell (2011)</b>	U.S.A	Explore the perceptions of employees at a multispecialty physician group regarding their readiness to implement HER.	Qualitative	Multi-specialty physician group	17 offices and 73 providers (16 interviews)	Electronic Health Record	Single Case study, interviews
<b>Bove et al. (2021)</b>	U.S.A	Describe the iterative human-centered design and pilot process for multiple sclerosis (MS) NeuroShare, a digital health solution that brings practical information to the point of care so that clinicians and	Qualitative	Nonprofit health system	Medical network: 272 primary care clinics, 5,500 physicians, 25 neurology clinics, 62 neurology clinicians)	MS Neuroshare - integrated into EHR.	Human centered design process, interviews, clinic workflow observations and mapping, design sessions,

		patients with MS can view, discuss, and make informed decisions together					stakeholder advisory group meetings, patient questionnaire.
<b>Brokel and Harrison. (2009)</b>	U.S.A	Describe how Trinity Health (a large multiorganization health care system) addressed EHR-based redesign of care processes in those hospitals preparing to adopt a commercial EHR product, which includes computerized physician order entry (CPOE) and decision support systems (DSS).	Qualitative	Large multiorganization health care system	Fourth largest US Catholic Health Care System: Provides resources to 44 hospitals, 379 outpatient facilities, numerous assisted living, home health, hospice, and senior housing programs	Electronic health Records	Case Study

					through 17 organizations.		
<b>Cacciatore et al. (2023)</b>	Italy	Map the positions of the various actors involved in the realization of EHRs in Italy, focusing on the implementation phase of the NRRP, and comparing the two sub-phases corresponding to the different governments in office, namely, the Draghi government (May 2021 – September 2022) and the Meloni government (since October 2022).	Qualitative	Government	Italian National Resilience and Recovery Plan (Draghi government & Meloni government)	National Electronic Health Record system	Document analysis, literature review, unstructured interviews.

<b>Calvo-Amodio et al. (2015)</b>	U.S.A	An evaluation of the previously-proposed transition phase management model is presented through three different EHR process change case studies.	Quantitative	Two Small Community Health Centers and a large regional hospital	Three case studies	Electronic Health Records	Case Study, historical data, interviews.
<b>Carayon et al. (2009)</b>	U.S.A	Examine the implementation of an electronic health records (EHR) system in a small family practice clinic. Evaluated user experience, work pattern changes, and organizational changes related to the implementation and use of the EHR system.	Mixed Method	Small Family Practice Clinic	Family medicine residency clinic in a small community with a population of about 1800. 6 family medicine faculty, 7 resident physicians, and 1 medical support and office staff. Approximately 11 000 patient visits annually.	Electronic Health Record	Survey, interviews, work analysis of staff.

<b>Collins et al. (2015)</b>	U.S.A	To understand existing CI governance structures and provide a model with recommended roles, partnerships, and councils based on perspectives of nursing informatics leaders.	Qualitative	Enterprise wide EHR.	Interview: 12 nursing informatics leaders	electronic health records	Cross sectional study, survey, semi structured interviews.
<b>Craven et al. (2014)</b>	U.S.A	Provide EHR implementation advice for CAHs from a spectrum of experts with an emphasis on recommendations from their peers at CAHs that have undertaken the process. The secondary objective is to begin to identify implementation process	Qualitative	Critical Access Hospitals	10 Critical Access Hospitals. Interviews: 41 experts incl. 16 CAH staff members from EHR teams at recently implemented EHRs	Electronic Health Record	Interviews, online survey, data from healthcare network.

		differences at CAHs v. larger hospitals.					
<b>Cresswell. (2016)</b>	England	Outline some prevalent existing health IT implementation evaluation frameworks and methods.	Mixed Method	Hospital	Five Hospitals	National EHRs	Case Study, interviews.
<b>Crowley et al. (2019)</b>	U.S.A	Evaluate an electronic health record (EHR) implementation across a large public health department to better understand and improve implementation effectiveness of EHRs in public health departments.	Quantitative	Large suburban county department of health and human services that provides clinical, behavioral, social, and oral health services	331 staff surveyed prior to EHR implementation, 229 staff surveyed 3 months post EHR implementation	Electronic Health Record	Two phase Cross sectional Survey.

<b>Cuccinello et al. (2015)</b>	Italy	Analyze the coordination practices and mechanisms used for implementing complex innovations in the health care sector, referring specifically to EPRs in two Italian regions, and highlighting any enabling conditions we noted in the two case studies.	Qualitative	Regional Health Care Projects	Lombardy Health Care System: 29 PHs and 15 LHAs. Veneto Health Care System: g twenty-one LHAs and two PHs	Electronic Patient Record	Case Studies, interviews, document analysis.
<b>Czerw et al. (2016)</b>	Poland	Present the starting point, progress, problems and forecasts regarding the implementation of electronic health records at health care entities which provide services within the scope of specialized outpatient care (SOC).	Quantitative	Health Care Entities	475 health care entities which provide services within the scope of specialized outpatient care (SOC)	Electronic Health Records	Survey Questionnaire

<b>Dansky et al. (1999)</b>	U.S.A	Identify specific attitudes or factors that should be targeted before implementing an EMR project, and demonstrate empirical support for a model of perceived usefulness of EMR..	Quantitative	Ambulatory care settings	Five private medical practices that are part of a staff plan HMO, and a university based health center.	Electronic Medical Records	Surveys
<b>Deokar and Sarnikar (2016)</b>	U.S.A	Describes how process change issues relate to implementation of large IT projects in healthcare settings.	Qualitative	Hospitals and health systems, physician practices, public health organizations, and community health organizations	Application reports submitted by recipients of the HIMSS Nicholas E. Davies Organizational Award of Excellence during the 10-year period 2000–2010.	Electronic Health Records	Content Analysis

<b>deRiel et al. (2018)</b>	Haiti	To apply Fritz et al.'s framework to a case study of a more mature system: Haiti's national EMR.	Qualitative	National Project	iSante', Haiti's national EMR in use in more than 100 sites and housing records for more than 750 000 patients	National EMR	Case Study, Document analysis.
<b>Deutsch et al. (2010)</b>	England, Germany, Canada, Denmark, Australia	Analyze programs from various countries with regard to the problems documented therein and derive, on a cross-country basis, the most common critical aspects of national electronic health record programs.	Qualitative	National Project	5 Countries; England, Germany, Canada, Denmark, Australia	Electronic Health Record	Project Reviews and Audits.
<b>Evio and Bonito. (2024)</b>	Philippines	This study determined the factors influencing the implementation of eHealth solutions in the Philippines, in	Qualitative	National Project	15 municipalities/cities in the Philippines	eHealth (electronic health records and patient registries)	Records review, interviews, content analysis.

		consideration of the development process and initial outputs of the Philippine eHealth Strategic Framework and Plan 2014-2020.					
<b>Faiella et al. (2019)</b>	U.S.A	Describe the implementation of enhanced health information technology (HIT), specifically an electronic health record (EHR), into the workflow of a charitable community pharmacy and to highlight the impact of the EHR on clinical service advancement, student and resident learning,	Qualitative	Nonprofit Community Pharmacy	The Charitable Pharmacy of Central Ohio has served over 6700 unique patients. The pharmacy is staffed by 1 full-time and 2 part-time pharmacists, 2 pharmacy technicians, 2 PGY-1 community pharmacy	cloud based Electronic Health Record	Feedback from stakeholders, discussion at staff meetings, quality improvement project.

		research, and grant support for the pharmacy.			residents, and 4-5 Advanced Pharmacy Practice Experience (APPE) students per month who participate in experiential rotations throughout the year. The pharmacy serves an average of 690 unduplicated patients per month, which includes approximately 50 new patients.		
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<b>Felt-Lisk et al. (2010)</b>	U.S.A	Offer current insights into the barriers and facilitators of EHR use in small and medium-sized practices.	Qualitative	small to medium sized physician practices	32 small- to medium sized physician practices in four States	Electronic Health Record	Interviews, online survey, data from healthcare network.
<b>Fleming et al. (2011)</b>	U.S.A	Inform real world health IT implementation decisions, especially in the context of the current national priority placed on the adoption of EHRs. Stimulate more comprehensive research on health IT implementation in the ambulatory care setting by clarifying the costs related to the implementation of an electronic health record system.	Mixed Method	Single large physician network	26 primary care practices in a physician network	Electronic Health Record	Interviews, cost data analysis.

<b>Ford et al. (2010)</b>	U.S.A	Assess complete versus incomplete HIT implementation levels among US hospitals in light of the various technology adoption strategies employed. Discuss the implications with respect to meaningful use for hospitals that have adopted the different HIT strategies.	Quantitative	Hospitals	1814 hospitals (12.7 percent for profit) (59.2 percent members of a hospital system)	Electronic Health Records	Logistic regression, Survey.
<b>Fragidis and Chatzoglou . (2018)</b>	Denmark, Austria, Sweden, Norway, the UK, Germany, the Netherlands	Identify the best practices applied during the implementation process of a national electronic health record (EHR) system. Explore the knowledge gained by experts from	Quantitative	National health systems	13 countries	Electronic Health Record	Survey

	, Switzerland , Canada, the USA, Israel, New Zealand and South Korea	leading countries in the field of nationwide EHR system implementation.					
<b>Gans et al. (2005)</b>	U.S.A	Assess current use of IT in medical group practices.	Quantitative	Medical Group Practices	Random sample of 34,490 medical groups	Electronic Health Record	Web, mail, telephone surveys.
<b>Garrety et al. (2016)</b>	Australia	Show how these projects can ironically take on the characteristics of the ‘wicked problems’ they are intended to solve, and how a failure to recognize and cope with these ‘wicked’ characteristics can lead to waste, conflict and	Qualitative	National Project	Interviews: 13 people	National Electronic Health Record	Case Study, document analysis, interviews.

		frustration among potential users.					
<b>Greenhalgh et al. (2010)</b>	England	Evaluate the policy making process, implementation by NHS organizations, and patients' and carers' experiences of efforts to introduce an internet accessible personal electronic health record (Health Space) in a public sector healthcare system.	Mixed method	Website	s 56 patients and carers, 3000 pages of documents, 160 interviews with policy makers, project managers, and clinical staff.	Personal Electronic Health Record	Multilevel case study.

<b>Greenhalgh et al. (2008)</b>	England	Explore the introduction of a centrally stored, shared electronic patient record (the summary care record (SCR)) in England and draw wider lessons about the implementation of large scale information technology projects in health care.	Mixed Method	Four early adopter sites (Each site: f a primary care trust, participating general practices, and one or more linked unscheduled care setting(such as an emergency department, walk-in center, out of hours service).	250 staff interviews, 1500 hours of ethnographic observation, interviews and focus groups with 170 patients and carers, 2500 pages of correspondence and documentary evidence, and incorporation of relevant surveys and statistics produced by others	Shared Electronic Records	Interviews, document analysis, surveys.
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<b>Gross et al. (2016)</b>	U.S.A	Describes how trust among team members and in the technology supporting them was eroded during implementation of an electronic health record (EHR) in an adult outpatient oncology practice at a comprehensive cancer center.	Qualitative	Comprehensive cancer center	One adult outpatient oncology practice	Electronic Health Record	Case study
<b>Hariyati et al. (2020)</b>	Indonesia	Explore and describe the usability and satisfaction of using electronic documentation.	Mixed Method	Hospitals	Focus group interviews involving eight nurses and a questionnaire survey to 219 nurses.	Electronic Nursing Documentation	Focus group interviews and a questionnaire survey.

<b>Heath and Porter. (2018)</b>	U.S.A	Gain understanding into the human factors which might impede the change process.	Qualitative	hospitals	28 physicians interviewed	Electronic Health Record	Semi structured interviews
<b>Heisey-Grove et al. (2014)</b>	U.S.A	Summarizes challenges to EHR adoption and MU based on nationwide data supplied by 55 Regional Extension Centers reporting over 19,000 issues representing over 43,000 unique health care providers.	Quantitative	Regional Extension Centers	55 Regional Extension Centers	Electronic Health record	Analysis of challenge reports.
<b>Helton et al. (2017)</b>	U.S.A	Study how decision makers in practices can view their available choices when	Qualitative	Small Clinics	Dental practice, Nonprofit health care organization, Pulmonary/family practice.	Electronic Health Records	Multi Case Study, interviews.

		implementing EHR software.					
<b>Heponiemi et al. (2021)</b>	Finland	Examine the associations of EHR-to-EHR implementations and the sufficiency of related training with perceived stress related to information systems (SRIS), time pressure, and cognitive failures among registered nurses. Moreover, we examined the moderating effect of the employment sector (hospital, primary care, social services, and others) on these associations.	Quantitative	Hospitals	3610 registered Finnish nurses	Electronic Health Records	Cross sectional survey

<b>Hernández-Ávila et al. (2013)</b>	Mexico	Assessing the design and implementation of an electronic health record (EHR) in the public health system of Colima, Mexico.	Qualitative	2 health centers and 2 hospitals	27 interviews, 4 focus groups	Electronic Health Record	Interviews and focus group discussions.
<b>Hertzum and Ellingsen. (2019)</b>	Norway, UK, Denmark	Compare the experiences from implementing Epic in the UK and Denmark with the preparations for implementing it in Norway.	Qualitative	National Projects	6 interviews	Electronic Health Records	Document analysis and interviews.
<b>Hertzum et al. (2022)</b>	Denmark and Finland	Analyze the Epic implementations in Denmark and Finland to understand how healthcare professionals experience this large-scale HER.	Quantitative	National Project	Document Analysis	Electronic Health Records	Documentary analysis, user surveys, assessment reports.

<b>Hertzum et al. (2021)</b>	Norway	Investigate how the early implementation process drives their expectations of an EHR that is being implemented in Norway.	Qualitative	GP clinics	9 interviewees	Electronic Health Records	Interviews
<b>Gabriel et al. (2014)</b>	U.S.A	Examine electronic health record (EHR) adoption, key EHR functionalities, telehealth, and teleradiology, as well as challenges to EHR adoption.	Quantitative	Critical Access Hospitals	793 hospitals	Electronic Health Record	Survey
<b>Jung et al. (2020)</b>	Russian Far East	Qualitatively investigate and analyze the current status of EHRs in the Russian Far East and derive	Qualitative	State medical information center, national children's hospital, outpatient	25 interviewees	Electronic Health Record	Semi Structured interviews

		implementation plans for nationwide EHRs.		hospital, private children's hospital, federal university hospital, Department of Health			
<b>Kang'a et al. (2017)</b>	Kenya	Focuses on the specific activities undertaken by I-TECH in Kenya in support of the Ministry of Health in Kenya focusing on the people, processes and technologies employed in the EMR implementation.	Qualitative	Health Facilities	342 implementations	Electronic Medical Records	Monitoring and evaluation data.

<b>Kiepek and Sengstack. (2019)</b>	U.S.A	Evaluate end-user support processes and personnel employed during the initial phase of EHR implementation at an academic medical center and identify facilitators of success, challenges, and lessons learned.	Qualitative	Large, complex health care system	One Complex Health Care System - main campus comprised an adult hospital, a children’s hospital, a behavioral health hospital, and a rehabilitation hospital with 1,131 licensed beds in total, ambulatory clinics located on campus and in over 240 remote locations	Electronic Health Records	Case Study
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<b>Klecun et al. (2019)</b>	Singapore, England	Proposes a framework that draws on both stakeholder and institutional theories to understand the complex dynamics of stakeholder interactions and institutional pressures over time during electronic health record systems implementation.	Qualitative	National Project	Singapore: 15 interviews, 74 documents. England (33 interviews previously conducted)	Electronic Health records	Interpretive case study, interviews, document analysis.
<b>Knight et al. (2014)</b>	Australia	The National E-health Transition Authority contracted the Improvement Foundation Australia to conduct a quality improvement collaborative based on 9 years of experience with the Australian Primary	Qualitative	National Project	56 practices. 926 patients. 650 shared health summaries uploaded. 519 patient views. 421 plan/do/study/acts submitted	Patient-controlled electronic health record	Workshops, reviewing data from healthcare summaries.

		Care Collaborative Program.					
<b>Maier et al. (2022)</b>	Denmark	Study the development of a smoldering crisis over time. The focus is on a nationwide news media and online news communication related to a smoldering crisis running in the Danish healthcare system since 2016: the problematic implementation of a large-scale electronic health record (EHR), technology entitled Sundhedsplatformen (SP), in the hospitals of the capital region of Denmark.	Qualitative	National Project	84 News Articles	Electronic Health Record	Case Study, longitudinal investigation of online news articles.

<b>Marca et al. (2014)</b>	Spain	Describe the level of adoption of electronic health records in Spanish hospitals and to identify potential barriers and facilitators to this process.	Quantitative	Hospitals	64 survey responses	Electronic Health Records	Observational cross-sectional design, survey.
<b>Martin et al. (2022)</b>	U.S.A	This exploratory case study looked to access socio-technical barriers and facilitators to EHR implementation specifically in the military.	Qualitative	Military Health System	implementation plans, evaluation reports, congressional reports, news articles, and relevant peer-reviewed literature related to military EHR implementation.	Electronic Health Record	Exploratory case study, Document review.
<b>Mbwambo and</b>	Tanzania	Assessed factors that influence the acceptance of interoperable	Quantitative	Clinics, polyclinics and hospitals	281 responses	Electronic Health Records	Questionnaire

<b>Mandari. (2023)</b>		electronic Health Records (EHRs) Systems in Tanzania Public Hospitals.					
<b>McAlearney et al. (2014)</b>	U.S.A	Comprehensively study and synthesize best practices for managing ambulatory EHR system implementation in healthcare organizations, highlighting applicable management theories and successful strategies.	Qualitative	Health care organization	45 Interviews (in healthcare organizations. 6 focus groups (with 37 physicians)	Electronic Health Records	Interviews, focus groups.
<b>McAlearney et al. (2013)</b>	U.S.A	To characterize elements of successful electronic health record (EHR) system implementation and to synthesize the key informants' perspectives about successful	Qualitative	Exemplars for successful ambulatory EHR implementation.	45 physician interviews (six organizations) 6 focus groups (37 physician providers)	Electronic Health Records	Interviews, focus groups.

		implementation practices.					
<b>McGinn et al. (2012)</b>	Canada	Understanding EHR users' perspectives is key to the success of EHR implementation projects. This Delphi study aimed to assess in the Canadian context the applicability, the importance, and the priority of pre-identified factors from a previous mixed-methods systematic review of international literature.	Quantitative	Healthcare professional associations, organizations and interest groups	64 participants from 4 EHR user groups (non-physician healthcare professionals, health information professionals, managers, and physicians.)	Electronic Health Records	Delphi Study
<b>Muinga et al. (2018)</b>	Kenya	Present a descriptive case study of the implementation of an open source electronic health record system in	Qualitative	Public Hospitals	5 site visits	Open Source Electronic Health Records	Historical case study, Semi structured interviews, group discussions.

		public health care facilities in Kenya.					
<b>Naeem and Alqasumi. (2020)</b>	Kingdom of Saudia Arabia	Uncover and address the issues of electronic medical record (EMR) implementation in public sector hospitals in the Kingdom of Saudi Arabia (KSA).	Qualitative	Public Sector Hospitals	40 participants	Electronic Medical Records	Interviews
<b>Noblin et al. (2013)</b>	U.S.A	Prior studies focused on conversions from paper to electronic records. Many provider impressions, therefore, may have been influenced by reactions to the process of being required to change well established patterns. In order to help separate	Qualitative	New health center	7 interviews (3 physicians, 4 medical assistants)	Electronic Health Records	Case study, survey, semi structured interviews.

		such reactions from true evaluations of the efficacy of the EHR, we decided to survey the providers in a new health center.					
<b>Palvia et al. (2015)</b>	U.S.A	Using the lens of stakeholder theory, we examine the differing views of stakeholders (namely, medical providers and vendors) in the implementation of electronic health record (EHR) systems.	Quantitative	Clinical Providers and Vendors	Pilot study (13 executives from EHR vendors) Full Study (328 responses)	Electronic Health Records	Surveys (based on EHR readiness surveys).
<b>Pearce et al. (2014)</b>	Australia	Describes the processes undertaken and the experiences of introducing the PCEHR into 74 general practices	Quantitative	General Practices	84 staff responses	Personally Controlled Electronic Health Record	Online survey

		across a specific area of metropolitan Melbourne.					
<b>Pine et al. (2016)</b>	U.S.A	Empirically examine how different forms of coordinating emerge depending on the ways in which integrating conditions are achieved in practice.	Qualitative	Mid-sized independent university-owned teaching hospital	55 observations (varying in time from 4-14 hours)	Electronic Health records	Participant observation over 16 months. 32 semi structured interviews (32 caregivers, 28 additional).
<b>Pohlmann et al. (2020)</b>	Germany	Identify policies, structures, and practices of the German health care system that influence the uptake and use of a PHR.	Qualitative	National Project	33 interviews (23 different health care professionals, 10 key actors in German health care system eHealth experts)	Personal Electronic Health Record	semi structured interviews

<b>Poss-Doering et al. (2018)</b>	Germany	Outline findings of the posttrial qualitative study carried out to evaluate user-reported experiences, perceptions, and perspectives, focusing on their interpretation of PEPA beyond technical usability and views on a future nationwide implementation	Qualitative	General Practice	Interviews (11 patients, 3 physicians)	Web-based personal electronic health record prototype	Semi structured guide based interviews.
<b>Rau et al. (2024)</b>	Germany	characterize the structural factors relating to the adoption of the EHR in more detail from the perspective of representatives of stakeholders working in the German healthcare system and to identify	Qualitative	health insurance, pharmacies, healthcare research, EHR development and panel doctors	5 male interviewees	Electronic Health Record	Expert interviews

		existing barriers to implementation and the need for change.					
<b>Robertson et al. (2010)</b>	England	Describe and evaluate the implementation and adoption of detailed electronic health records in secondary care in England and thereby provide early feedback for the ongoing local and national rollout of the NHS Care Records Service.	Mixed Method	Acute hospital and mental health trusts	5 acute hospitals and mental health trusts	Electronic Health Records	longitudinal, multisite, sociotechnical case study, semi structured interviews, document analysis, field notes, quant data.
<b>Scott et al. (2005)</b>	Hawaii	Examine users' attitudes to implementation of an electronic medical record system in Kaiser Permanente Hawaii.	Qualitative	Clinics, Hospitals	4 primary healthcare teams in four clinics & 4 specialty departments in one hospital. (26 senior clinicians,	Electronic Medical Records	Semi structured Interviews

					managers , and project team members)		
<b>Ser et al. (2014)</b>	England	Investigate the perceptions and reported practices of mental health hospital staff using national hospital electronic health records (EHRs) in order to inform future implementations, particularly in acute mental health settings.	Qualitative	Mental Health Hospitals	33 interviews	Electronic Health Records	Secondary analysis of semi structured interview data.
<b>Sheehan et al. (2023)</b>	Ireland	Describe the key observations and lessons learned from the national project team implementing the MN-CMS.	Qualitative	Maternity Units/ Hospitals	National Project	Electronic Health Records	Discussions with the project team, post go-live workshops, phase one closure report

							developed by the national project team in conjunction with key stakeholders.
<b>Sheikh et al. (2011)</b>	England	Evaluate the implementation and adoption of the NHS detailed care records service in “early adopter” hospitals in England	Qualitative	Hospitals	431 interviews, 590 hours of observations	Electronic health records	Interviews, observations, document analysis.
<b>Shield et al. (2010)</b>	U.S.A	Examine the effects of EHR implementation, especially regarding physician-patient communication and behaviors and patients’ responses.	Mixed Method	Family Medicine outpatient center	170 clinical encounters	Electronic Health Record	22-month, triangulation design, interviews, time measurements of clinical encounters, focus groups,

							unstructured observations.
<b>Sidek and Martins. (2017)</b>	Brunei	Identify the perceived critical success factors of EHR system implementation in a dental clinic context.	Qualitative	Dental Clinic	11 interviews	Electronic Health Record	Case study, Grounded theory, interviews, focus groups.
<b>Snowden and Kolb. (2017)</b>	Scotland	Explore the impact of implementing an electronic health record system on staff at a Scottish hospice.	Mixed Method	Hospice	150 employees of hospice	Electronic Health Record	Surveys, focus groups.
<b>Stanczyk et al. (2017)</b>	Netherlands	Assess the role of involvement and its effects on socio-cognitive beliefs regarding the	Quantitative	Hospital	359 questionnaire responses	Electronic Health Records	Questionnaire

		implementation of a new EHR system.					
<b>Standing and Cripps. (2013)</b>	Slovenia, Australia	Identify the factors impacting on successful e-health implementation.	Qualitative	National Project	Australia (23 participants) Slovenia (19 interviews)	Electronic Health Records	Case studies, interviews.
<b>Strong et al. (2014)</b>	U.S.A	identify points of leverage for managers in order to improve the record of reaching desired goals from EHR investments.	Qualitative	Multisite medical group	110 interviews	Electronic Health Record	Longitudinal study, grounded theory, interviews.
<b>Takian. (2012)</b>	England	Reports the arrival, implementation process, and stakeholders' experiences of one EHR software (Millennium) at a National Health Service's (NHS) general hospital participating in NPfIT.	Qualitative	Hospital	63 interviews, 22 hours of observation, 123 documents	Electronic Health Record	Interviews, documentary analysis, observation.

<b>Taikan et al. (2012)</b>	England	Describes the arrival, the process of implementation, stakeholders' experiences and the local consequences of the implementation of an EHR system into a mental health hospital.	Qualitative	Mental Health Hospital	48 interviews, 26 hours observations, 65 documents	Electronic Health Record	Longitudinal, case study, interviews, document analysis.
<b>Taikan et al. (2014)</b>	England	Explore the role of organizational learning in enabling implementation and supporting adoption of electronic health record systems into two English hospitals.	Qualitative	Hospitals	63 interviews, 41 hours observations, 218 documents	Electronic Health Records	Longitudinal, case study, interviews, document analysis.
<b>Threath et al. (2019)</b>	U.S.A	Describe the design objectives, capabilities, adoption, and provide usage statistics of a mobile application that	Mixed Method	University Medical Centre	727 task logs	Electronic Health Records	Agile process design.

		assisted in our largescale EHR implementation and change management process.					
<b>Tobler et al. (2016)</b>	U.S.A	Explains CMUA, prior research that uses the CMUA model, and the need to study over time and within time.	Mixed Method	Ambulatory, multispecialty group	Seven clinicians, five mid-level practitioners, 25 clinical staff, and 15 administrative staff (15 clinicians observed)	Electronic Health Records	Quasi experimental, observation.
<b>Trocin et al.(2024)</b>	Italy	Advance our knowledge of the emergence of unintended consequences from the implementation of Electronic Health Record (EHR) systems.	Qualitative	Primary and secondary care	Region Project (31 interview participants)	Electronic Health Records	Case Study, semi structured interviews.
<b>Vadillo et al. (2016)</b>	U.S.A	Explored factors influencing EHR adoption in a critical care	Mixed Method	Small Urban Hospital	65 (survey) 6 (focus group)	Electronic Health records	Survey, focus group.

		unit (CCU) at a small urban hospital and ways to better engage staff in the process.					
<b>van Offenbeek and Vos. (2015)</b>	The Netherlands	Develops a multilayered stakeholder–issue framework that makes the connections between stakeholders and issues explicit with the aim of helping project managers analyze and prioritize the issues that stakeholders confront them with.	Mixed Method	Large Teaching Hospital	583 (survey) 13 (interviews)	Electronic Health Record	Design Approach, interviews, survey.
<b>van Offenbeek et al. (2023)</b>	Denmark	Unravel how clinical departments’ adoption of this organization-wide system was primarily shaped by their critical work system dependencies rather than	Qualitative	large hospital	36 interviews	Electronic Health Records	Interpretive case study, interviews.

		their role during its implementation.					
<b>Currie and Finnegan. (2011)</b>	UK	Reports the findings from a seven-year study on the UK National Health Service on the introduction of an electronic health record for 50 million citizens.	Qualitative	National Project	123 interviews	Electronic Health Records	Longitudinal research, interviews document analysis.
<b>Weston et al. (2023)</b>	U.S.A	Describe the first year of implementation of the integrated health care delivery model, barriers to implementation, challenges to sustainability, and successes.	Qualitative	Clinics	5 clinics	Electronic Health Records	Case study, interviews, document analysis, observations.
<b>Yung. (2017)</b>	Australia	Present details of the adoption process, use of the EHR system,	Qualitative	Physiotherapy Clinic	2 clinics	Electronic Health Record	Case Study, observation, demi

		physiotherapists' satisfaction and concerns.					structured interviews.
<b>Zandieh et al. (2008)</b>	U.S.A	Determine how ambulatory leaders differentiate implementation approaches between practices that are currently paper-based and those with a legacy EHR system (EHR-based).	Qualitative	Large Teaching Hospital	23 interviewees.	Electronic Health Record	Interviews

## Appendix 8: Reference List of selected Empirical EHR Studies

ID	Reference
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