Researching Corporate Entrepreneurship: Findings of the Corporate Entrepreneurship track at Chalmers School of Entrepreneurship 2026

by

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Preface

Tobias Fredberg & Johanna Envall Pregmark

The thorough studies of the corporate entrepreneurship students have since 2015 provided us with increasingly deep insight into the entrepreneurial process inside mature organisations. The studies done in ten organisations during ten months 2025-2026 do not overturn the underlying themes from the earlier reports, but sharpen them. The 2026 papers ask how, when, and through which everyday mechanisms support or obstruct corporate entrepreneurship projects. As you will find, the students have done six different, but related, studies across the ten organizations. The studies provide the reader with deep insight into these six areas. The studies, however, also show reoccurring themes that cut across the areas (but may have its most pronounced home in one). Our short preface is intended to provide the reader with a guide to these themes. The strongest common thread is that entrepreneurial initiatives must be made governable without being suffocated:

- Ideas must be translated into formal decision language without losing their novelty
- Data must be objectified and governed without becoming trapped in compliance paralysis
- Leaders must be enabled by structures without being over-bureaucratized.
- Employees must be evaluated in ways that encourage learning and experimentation, not only delivery
- Long-term initiatives must receive protected ownership and resources, not just initial permission
- Friction must be reduced by simplifying work, not by adding more process

The analysis moves from broad conditions such as alignment, leadership, culture, resources, and structure toward the concrete mechanisms that make ideas survive or die. They include pre-formal translation, protected ownership, dataset objectification, appraisal criteria, accumulated cuts, and the transition from exploration to scaling.

1. From "enabling conditions" to "how conditions are produced"

Earlier years, students have focused on organizational conditions for innovation. This year, the studies help specify which conditions matter and how they are produced in practice. For example, the 2026 finance paper argues that the challenge is not simply financial allocation, but a broader organizational resource allocation problem involving legitimacy, governance, ownership, staffing, coordination, and protection of time and resources. The findings suggest

that organizations may say they support innovation, but the real test is whether they can sustain the conditions around an initiative long enough for it to mature.

2. Alignment through translation

A strong new conceptual development is the idea of translation. Several papers emphasize that much of corporate entrepreneurship happens before formal decisions are made. Ideas are tested, framed, protected, supported, and made credible before they enter official processes.

The strategy paper argues that innovation requires translation work - the activities through which actors prepare ideas for formal evaluation. Formal processes provide legitimacy and resources. Informal practices shape how ideas are adapted, supported, and carried forward. The analysis asks how actors make ideas fit the organization's language, criteria, decision forums, and resource logic.

4. Designing organizations to enable better leadership

The entrepreneurial leadership paper shifts the focus away from "what good leaders do" to what organizational context allows entrepreneurial leaders to be effective. It explicitly argues that the more pressing question is what organizational conditions allow leadership benefits to materialize. This refines the leadership theme by making it less individualistic. Entrepreneurial leaders are not simply heroic change agents. They are constrained or enabled by the architecture around them.

5. The challenge of resource allocation for ownership and scaling

The finance paper broadens the finance perspective to include organizational resource allocation. It argues that the bottleneck in organizations often is not the absence of ideas, but the absence of clear ownership and protected resources over time.

This is a major refinement of the classic ambidexterity theme of exploration vs. exploration logics (March, 1992; Tushman & O'Reilly, 1996). Exploration may be tolerated in early phases through pilots, pre-studies, prototypes, or simulations, but the real challenge comes later, when initiatives need scaling, implementation capacity, operational integration, and sustained mandate. The analysis suggests that many firms are not bad at starting innovation. They are bad at carrying it across the valley between early exploration and organizational adoption.

6. How reward systems support or stifle innovation

The organizational development paper examines whether performance appraisal systems actually reward the behaviors that support employee-driven innovation (e.g. knowledge sharing, learning, collaboration, risk-taking, and learning from failure). Its conclusion is that alignment is partial and uneven. Collaboration and competence development are often included, but knowledge sharing, risk-taking, and learning from failure are largely absent. The analysis asks whether the organization's evaluation systems actually make a learning culture or psychological safety rational for employees. A challenging finding is that though organizations may want innovation, they still measure people in ways that discourage experimentation.

7. The necessity of objectification

The paper on managing intellectual assets focuses on data governance and dataset objectification. It argues that the decisive bottleneck is not access to data, regulatory complexity, or technical capability, but the failure to deliberately identify and name data as a bounded, knowable object. Data that has not been named cannot be governed, protected, shared, or effectively used.

8. Friction as measurable project damage

The "Death by a Thousand Cuts" paper links small organizational obstacles to project outcomes. It connects cuts to the Iron Triangle of time, cost, and quality. The findings show that time is the most frequently affected parameter, while financial cuts are less frequent but more severe when they occur. It also distinguishes between structural/resource cuts, which tend to show up as delays, and communication/culture cuts, which tend to affect quality. Instead of saying that bureaucracy, misalignment, or silos slow innovation, the paper asks: what kind of damage does each type of cut produce, when does it appear, and what mitigation might actually remove the cause rather than merely help teams cope with it?

In summary, the 2026 analyses show that established organizations do not primarily fail at innovation because they lack ideas. They fail when ideas, assets, people, and projects cannot be translated into forms that the organization can recognize, protect, resource, evaluate, and carry forward without smothering them.

It is our hope and belief that established organizations will find great guidance from these cross-company studies.

Happy reading!

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1. Management of Intellectual Assets

Josefine Andersson, Måns Carlberg & Jakob Renmark

1.1 Introduction

The transition towards data-driven business models has fundamentally altered the corporate landscape. Over the past decade, data has evolved from being a mere byproduct of IT systems and operational processes into a primary strategic resource. The ability to collect, analyze, and deploy data is now a critical driver for corporate entrepreneurship, enabling established organizations to identify new market opportunities, optimize processes, and develop innovative value propositions (McAfee & Brynjolfsson, 2012; OECD, 2015). Consequently, the management of data assets is no longer solely a technical issue, but a core strategic imperative for corporate survival and growth.

Parallel to this technological shift, the regulatory playing field for data management is being radically redrawn, particularly within the European Union. The EU is actively pursuing a "European strategy for data," aimed at creating a single market for data where information can flow freely across borders and sectors to stimulate innovation and economic growth (European Commission, 2020). While earlier regulatory efforts primarily focused on the protection of personal privacy through the General Data Protection Regulation (GDPR), the legislative focus has recently expanded to encompass industrial and non-personal data.

The strategic significance of data as an intellectual asset has recently been acknowledged at the highest levels of European policy-making. In Commission Recommendation (EU) 2023/499 of 1 March 2023 on a Code of Practice on the management of intellectual assets for knowledge valorisation in the European Research Area, the European Commission explicitly recognises that sound intellectual asset management including the identification, structuring, and valorisation of data, know-how, and standards is a prerequisite for converting research and innovation activities into economic value. This Recommendation represents the first time the EU has set a codified direction for how organisations should govern their intellectual assets as a class, extending well beyond formal intellectual property rights to encompass any result of knowledge-generating activity. Its adoption signals that the governance challenge studied in this report is no longer confined to corporate strategy: it is a matter of regulatory expectation and policy priority across the European Research Area.

A cornerstone of this new landscape is the newly implemented EU Data Act (Regulation (EU) 2023/2854). The Data Act introduces harmonized rules on the fair access to and use of data generated by connected products and related services. It mandates data sharing in both business-to-business (B2B) and business-to-consumer (B2C) contexts, challenging traditional corporate mindsets of data exclusivity. Combined with existing frameworks such as the EU Trade Secrets Directive (Directive (EU) 2016/943), which protects confidential business information, datasets have become highly complex legal objects. Organizations must now

balance the political push for a "free flow of data" and open innovation with the strict legal necessity to protect business-critical information and ensure regulatory compliance.

This study operates simultaneously on two levels. As an academic contribution, it examines how datasets are structured, utilised, and governed across nine corporate innovation projects, and what organisational capabilities are required to make data function as a strategic resource. As a practical exercise, the study constitutes a structured intervention into those same projects: by applying the IIS-DRIV Framework to each organisation's data landscape, the process of mapping and objectifying datasets provides each project team with a new analytical dimension, a documented understanding of what data it holds, how that data is protected, and where its governance gaps lie. In this sense, the report is not merely a retrospective analysis of how these organisations handle data; it is itself an act of data governance, generating structured knowledge about assets that, in many cases, had not previously been identified as such. The findings presented here therefore serve both the academic community and the organisations studied, offering each project team a baseline inventory that can inform data strategy, legal compliance, and innovation planning throughout the full programme year.

1.1.1 Problem Statement

Despite the recognized strategic value of data, operationalizing it within established organizations remains highly problematic. In early-stage corporate innovation projects, datasets are often managed on an ad-hoc basis, relying heavily on tacit knowledge, distributed spreadsheets, and unstructured information rather than formally objectified datasets.

The challenge of governing data assets is, at its root, a challenge of making the invisible visible. Writing in the foundational literature on intellectual capital management, Sullivan (1998) argued that intangible assets as knowledge, competencies, and information holdings generate no economic value until they have been identified, named, and constituted as discrete, manageable objects. This argument was paralleled by Edvinsson and Malone (1997), who demonstrated that an organisation's most competitively significant assets are precisely those absent from its balance sheet: tacit knowledge, accumulated experience, and proprietary information that exist in people and processes rather than in formal systems. Both works converge on a single foundational insight: a dataset does not exist as a strategic resource until an organisation has performed the cognitive and organisational act of recognising it as one. Prior to objectification, data remains latent potential, present in systems and minds, but unavailable for governance, protection, or deliberate use. This study proceeds from that premise: the first obstacle to data-driven innovation is not analytical capability, but the prior act of constituting data as a bounded, knowable, and governable object.

Before data can be effectively utilized to drive innovation, it must be clearly defined in terms of format, boundaries, and content. Without this fundamental structure, organizations cannot effectively harness data as a strategic resource.

This unstructured approach creates a severe bottleneck when navigating today's complex regulatory landscape. Innovation teams are caught in a paradox: they are expected to drive agile, data-driven initiatives while simultaneously ensuring strict compliance with emerging frameworks like the EU Data Act and GDPR. Improper data handling now carries significant legal and strategic risks, yet there is a distinct lack of empirical knowledge regarding how early-stage projects practically connect data utilization with appropriate structuring mechanisms and legal governance. Consequently, there is a critical need to understand how these projects currently assess their datasets and what organizational capabilities are missing to govern them effectively.

1.2 Research Questions

Main Research Question

How can datasets in innovation projects at established organizations be structured and assessed as strategic resources, and what organizational capabilities are required to govern and utilize them effectively?

Sub Research Questions

To answer the main research question, the study investigates three distinct dimensions of dataset management, formulated as the following sub-research questions:

- How are datasets identified, structured, and classified in terms of format, content, and IP protection within early-stage innovation projects?
- To what extent are these objectified datasets utilized, and what strategic purposes do they serve within the innovation projects?
- How does the regulatory landscape constrain dataset utilization, and what compliance challenges arise at the project level?

1.3 Theoretical Framework

To effectively analyze how datasets are structured, utilized, and governed across the investigated innovation projects, this thesis employs a theoretical framework composed of two primary components: a structuring model and a set of analytical lenses.

The foundation of the analysis is the "Method for data-driven research and innovation," developed by the Institute for Innovation and Social Change (IIS) at the University of Gothenburg (Hermansson & Petrusson, 2024). This process model provides a systematic approach to evaluating datasets as manageable objects, enabling the primary data collection to be categorized by identification, format, content, and utilization.

Once the data is structured according to the IIS model, it is analyzed through a three-pillar framework. This "analytical package" applies established theories on strategy, innovation, and regulatory governance to assess the datasets as strategic resources.

1.3.1 Pillar 1: Objectification

The first analytical pillar focuses on how data is identified, structured, and packaged. Before a dataset can be utilized effectively, it must be objectified, meaning its boundaries, format, and content must be clearly defined (Hermansson & Petrusson, 2024). This objectification process is a critical organizational capability, as it transforms abstract, raw information into a manageable and tangible asset.

The decision to treat dataset objectification as the foundational analytical step of this study is not arbitrary: it reflects a core principle of Intellectual Asset Management (IAM) theory as developed by Petrusson. In the IAM framework, any knowledge-based resource including data exists as a manageable asset only once it has been constituted as such through a deliberate process of identification, delimitation, and formalisation. A dataset that has not been named, bounded, and described in terms of its content, format, and access conditions is, from the perspective of governance and legal protection, non-existent: it cannot be owned, cannot be protected, and cannot be transferred or licensed. Petrusson's framework emphasises that objectification is therefore not merely a prior analytical step, but the act that calls the asset into being. The IIS-DRIV process model used in this study operationalises this principle through its structured questionnaire, which guides project teams through the act of naming, delimiting, and characterising each dataset in turn. By applying this method, the study performs the same function that a patent application performs for an invention: it constitutes the object. The objectification process documented in this study is accordingly one instance of a broader organisational capability that Petrusson identifies as central to any knowledge-intensive firm's capacity to capture and govern the value of its intellectual assets.

1.3.2 Pillar 2: Utilization

The second pillar examines the practical application of the objectified datasets. This is theoretically grounded in Data-Driven Innovation (DDI), defined as the use of data and

analytics to foster new products, processes, and organizational methods (OECD, 2015). This lens is used to assess how the studied corporations transition their datasets from static stored information into active drivers of strategic decision-making and value creation.

1.3.3 Pillar 3: Legal and Regulatory Governance

The third pillar addresses the external constraints imposed on dataset utilization. While the IIS model helps identify data that requires special legal handling, this pillar applies specific regulatory frameworks to analyze compliance and market approval requirements. The governance structures are divided based on the nature of the data:

- Personal Data: Datasets containing identifiable individual information are analyzed against the General Data Protection Regulation (Regulation (EU) 2016/679) and the supplementary Swedish Data Protection Act (SFS 2018:218). The focus is on principles such as consent, data minimization, and legitimate interest.

- Non-Personal and Industrial Data: Datasets comprising machine-generated or industrial data are evaluated against emerging frameworks such as the EU Data Act (Regulation (EU) 2023/2854), which dictates rules for fair data access and sharing.

Together, the structuring capabilities of the IIS model and the three-pillar analytical framework provide a comprehensive tool. This tool will be applied in Chapter 6 to cross-analyze the empirical findings and determine what organizational capabilities are required to manage datasets effectively.

1.4 Methodology

It is important to note that all primary data used in this study was collected as part of a university based master's thesis project. Consequently, the research reflects the scope, resources, and perspective of master's students conducting academic research. The findings and analyses should therefore be interpreted within the context of a master's student study, where data collection and evaluation were carried out to fulfill academic objectives and contribute to scholarly understanding of the research topic. Primary data were collected through standardized questionnaires containing both closed and open-ended questions, supplemented by a facilitated workshop in which the collected data were iteratively reviewed and analyzed. Secondary data in the form of established frameworks and empirical findings are used to support the analysis.

1.4.1 Research Context and Sample

The study was conducted within the CORP track (2025/2026) of the Master's program in Entrepreneurship and Business Design at Chalmers University of Technology, part of Chalmers School of Entrepreneurship. As part of this program, students carry out a master's project embedded within a company, working alongside employees and supervisors. This context is central to the study, as it provided structured access to organizational environments that would otherwise be difficult to reach through conventional research channels.

The study encompasses nine companies, referred to as C2 through C10, with two students placed at each company, resulting in a total of 18 participants. Participants were instructed to focus specifically on their experience within their respective company project when responding. The sampling approach was one of convenience rather than random selection, as participation was tied to enrollment in the CORP track. To protect the confidentiality of the organizations, no company names or identifying information are disclosed, and all datasets are labeled according to their corresponding company identifier.

1.4.2 Data Collection

The Data Collection section presents the data collection process employed in the study. It outlines the structured questionnaire used as the primary instrument, the type of information collected, and the procedure through which the questionnaires were distributed and completed by the participants.

1.4.2.1 Instrument

Data were collected using a structured Excel-based questionnaire (Appendix A) divided into five tabs: (1) MIA Instruction, providing guidance on the framework used; (2) Data Input Instruction, with instructions for completing the questionnaire; (3) an Example tab to support participants; (4) Part 1 – Input Reflection, consisting of open-ended questions providing contextual background about the company and the student's experience; and (5) Part 2 – Input

Data, structured data input following a defined categorization format. The full questionnaire is provided in the appendix.

In Part 2, participants classified data entries according to company identifier, dataset ID, an identification label, and content corresponding to the objectification step of the analytical framework used in this study. Participants then completed a utilization assessment as the second component of the framework.

1.4.2.2 Procedure

The questionnaires were distributed to all 18 participants; all but one team completed them individually based on their respective company projects. Participants had access to supervisors and colleagues within their companies during the data collection process, which supported the accuracy and relevance of the input. The reflections gathered in Part 1 served a dual purpose: providing contextual understanding of each company's situation and preparing participants for the subsequent workshop.

1.4.3 Data Analysis

In the Data Analysis section the analytical process used to interpret the collected data is explained. It outlines the workshop-based iterative review of the questionnaire responses, the application of SWOT analysis to structure the legal assessment, and the subsequent aggregation and synthesis of the data into a consolidated format for further interpretation.

1.4.3.1 Workshop and Iterative Review

Following the collection of all completed questionnaires, a workshop was held with all participating students. During the workshop, the objectification and utilization entries from each group's dataset were iterated through collectively, enabling cross-comparison and refinement. The workshop then transitioned into a legal analysis phase, conducted through a joint SWOT analysis.

1.4.3.2 Legal Analytical Scope

The legal analysis in this study applies European Union legislation as its primary reference frame. This choice reflects a deliberate calibration between two boundary conditions. At one extreme, Swedish national law alone would be an insufficient reference frame: the companies studied are embedded in European and international markets, subject to EU regulations that apply directly and uniformly regardless of the Member State of operation, and increasingly dependent on data assets that cross national borders. GDPR, the EU Data Act, and the EU Trade Secrets Directive, among others, create obligations and protections that are independent of Swedish domestic law. At the other extreme, a global legal analysis would lack actionable precision for early-stage innovation projects operating primarily within the EU regulatory space. The complexity of non-EU jurisdictions as varying trade secret standards, divergent data sovereignty regimes, and inconsistent IP protections introduces analytical noise that would

obscure the governance challenges most immediately relevant to the companies studied. European Union law therefore represents the appropriate analytical scope: broad enough to capture the full regulatory environment these organisations operate within, specific enough to generate actionable compliance and governance insights. Where Swedish national law supplements or implements EU frameworks such as the Swedish Patient Data Act (PDL) and the Swedish Data Protection Act (SFS 2018:218) it is incorporated as a complement to, rather than a substitute for, the EU baseline.

1.4.3.3 SWOT Analysis

The SWOT framework was used to categorize findings along both internal and external dimensions, with particular attention to legal relevance: Strengths and Weaknesses capturing internal organizational characteristics, while Opportunities and Threats addressed external factors, notably of a regulatory and legal nature.

1.4.3.4 Data Aggregation and Synthesis

Following the workshop, all data were anonymized and compiled into a consolidated Excel file, separated into a reflections section and a dataset section, with the SWOT results also integrated. An AI model was used at two specific and clearly delimited stages of this process: first, to compile fully anonymized data into comparable tables enabling side-by-side analysis of organizations: and second, to support proof-writing by assisting with structure and grammar, without altering content. The AI model was not used to generate any analysis or results. All findings and interpretations are either directly collected from participants or reflect the researchers' own reasoning.

1.4.4 Ethical Considerations

Ethical considerations were carefully addressed throughout the research process. All participants were informed about the purpose of the study and how the data would be used, ensuring informed consent prior to participation. No company names or identifying details are disclosed; participating organizations are referred to solely by their assigned codes (C2–C10), and any potentially sensitive information has been handled to prevent identification.

The data were used solely for academic purposes and were not shared with unauthorized parties. All collected material was stored securely and accessed only by the researchers involved. The study adhered to relevant data protection principles, including those outlined in the General Data Protection Regulation (GDPR), particularly regarding data minimization and confidentiality. Efforts were also made to ensure that the research process did not cause harm or disadvantage to the participating organizations, and findings are presented in a neutral and responsible manner.

1.4.5 Limitations

Several limitations apply to this study. The sample size of 18 students across nine companies is relatively small, which may have introduced inconsistencies in data collection and limits the generalizability of findings. The convenience-based sampling approach further constrains external validity. The anonymization of participating companies, while ethically necessary, reduces transparency and makes it difficult to fully assess the organizational context. Finally, as data rely on self-reported information from students embedded within the organizations, there is an inherent risk of response bias.

1.5 Empirical Findings & Analysis

This chapter presents the empirical material collected across nine corporate innovation projects participating in the CORP-year at Chalmers School of Entrepreneurship. All participating companies have been anonymised and are referred to throughout by company codes (C2 to C10). One additional company (C1) did not contribute usable data and is therefore excluded from the analysis.

The chapter is organised to follow the analytical rhythm of the IIS-DRIV Framework and the logic of the study itself. It begins by presenting the organisational and project contexts in which data is created, accessed, and experienced, before moving to the objectification of data: how information is structured, classified, and transformed into identifiable and manageable dataset objects. From there, the chapter examines how those objectified datasets are actually utilised within each project, and what role they play in driving innovation activity. The chapter concludes by mapping the legal and regulatory implications that arise from the datasets identified, including applicable frameworks, compliance obligations, and IP claim types.

This sequencing reflects the view that understanding what data is in each organisational context must precede any evaluation of what data does, and that both of these must be understood before the legal and strategic implications of data use can be meaningfully assessed. The findings presented here form the empirical foundation for the analysis and discussion that follows in Chapter 5.

1.5.1 Data in Context: Understanding Data Across the Nine Projects

Before any dataset can be identified or evaluated, it must be understood within the organisational and project context in which it exists. The contextual reflections gathered from each project team reveal that the role, nature, and accessibility of data varies substantially across the nine companies. This section presents those contextual portraits, structured around three cross-cutting themes: how each project understands and relates to data; how organisational conditions shape data access and flow; and where the key limitations and uncertainties lie.

1.5.1.1 How Each Project Relates to Data

The nine projects do not share a common understanding of what data means within their work. For some teams, data is the operational foundation of the project: without specific datasets, the project cannot function. For others, data plays a background role, lending support to decisions that are primarily driven by qualitative judgement and expert knowledge.

C10 (transport compliance and fatigue management) represents the most comprehensively data-dependent project. The entire value proposition is built on structured, machine-generated records from tachograph systems and Driver Monitoring Systems (DMS), supplemented by incident reports and driver schedule data. The project was initiated precisely because interview insights and deviation reports revealed systemic fatigue and compliance failures, and the

proposed solution cannot be designed, validated, or delivered without continuous access to this operational data. Data is not merely supportive here: it is the material the project works with.

C3 (uptime platform for industrial machinery) occupies a similarly data-dependent position. The platform that the project is building requires machine identity records, time-series operation logs, operator data, and maintenance histories as direct technical inputs. Critically, however, the project does not own the data it depends on. Most machine operational data is generated on equipment controlled by Original Equipment Manufacturers (OEMs), and C3 accesses it only through contractual data-sharing arrangements. The project team acknowledges this as a fundamental structural constraint: data availability, quality, and completeness are all determined by OEM decisions rather than by the project itself.

C5 (outdoor mobility rental) shares a structurally similar dependency on external parties. The rental agreement records, usage statistics, and inspection reports that drive the project all flow from partner booking systems and partner staff, not from C5's own data infrastructure. The company aggregates and analyses what partners report, and variations in partner reporting practices directly determine the reliability of the resulting insights.

C4 (mid-segment market entry) and C9 (servitization strategy) are characterised by the project teams themselves as data-supported rather than data-driven. Both projects rely heavily on qualitative, unstructured inputs gathered through interviews and internal stakeholder discussions. C4 explicitly identifies the absence of structured mid-segment market data as the primary limitation of its analytical base. C9 similarly concentrates its data in a corporate strategy document and a set of internal interviews with senior employees, where strategic knowledge is held by a small number of individuals rather than embedded in systems.

C7 (hydropower operations and cost modelling) occupies a distinctive position. The project did not begin as a data-driven initiative. As the team's own reflection notes, data exists in the background in this project: it appears through models, expert assumptions, and operational experience rather than as formalised pipeline inputs. Over time, as the project focused on the development of the ODC (Operational Decision Cost) model, data became more central. The model itself is now the primary data artefact, but it is manually maintained and depends on expert judgement for many of its parameters.

C6 (maritime pilotage) and C8 (healthcare at home) sit between these poles. C6 has access to a broad and reliable portfolio of operational and administrative data, accumulated through its formal responsibilities in a regulated public-sector environment. However, data access is still partly shaped by person-dependent routines, and the organisation has not yet developed a strong culture of systematic data use. C8 initiated its project on the basis of external published evidence about Healthcare at Home initiatives elsewhere in Sweden and internationally, and subsequently gathered complementary internal data through interviews and anonymised patient statistics.

1.5.1.2 Organisational Conditions Shaping Data Access and Flow

Across the nine projects, organisational structure, security architecture, and institutional context emerge as primary determinants of how data is accessed, shared, and used. Four conditions are particularly prominent.

The first is the presence of information silos. Multiple project teams report that data exists within their organisations but is not accessible to them due to departmental boundaries, system fragmentation, or cultural norms around information sharing. C7 provides the most striking example: employees often do not know what data exists, and even when it is known, multiple security layers must be navigated to obtain access. The hydropower unit is classified as national critical infrastructure under the NIS2 Directive, imposing restrictions that go beyond standard corporate governance. C7 notes that at least one previous project, an AI model initiative, was terminated because the necessary data access could not be secured.

The second condition is person-dependency. In C7, C6, C2, and C9, access to key data is mediated by specific individuals. In C6, on-demand data requests depend on the availability and capacity of a small BI team. In C7, plant operational knowledge is held by experienced engineers whose departure would constitute a material data loss event. In C9, the strategic insights driving the project are concentrated in a handful of senior managers whose interview input is sensitive and cannot be shared externally without compromising GDPR obligations.

The third condition is the public authority context. As a government agency with a statutory mandate, C6 operates under obligations that differ from those of private entities. Under the Swedish principle of public access (offentlighetsprincipen) and the EU Open Data Directive, non-personal aggregates from C6's pilotage records may be subject to open-data publication requirements, which can contrast with internal data management practices. Furthermore, operating outside a traditional competitive market environment has shaped the organisation's internal drivers, meaning there has been less immediate commercial pressure to prioritise the development of advanced analytical capabilities.

The fourth condition is the distributed architecture of data across systems, people, and external partners. C10's operational data spans fleet management platforms, in-vehicle hardware, compliance monitoring systems, and external data providers. C3's data is distributed across OEM cloud environments, customer sites, and internal Microsoft tools. In both cases, the project team cannot govern or even inventory the data from a single point, and governance complexity scales with the number of actors involved.

1.5.1.3 Limitations, Risks, and Uncertainties

The contextual reflections reveal a consistent set of data-related risks and uncertainties across the projects. The most widely reported limitation is the incompleteness or inconsistency of available data. In C4, the absence of structured mid-segment customer data means that strategic decisions rest on a thin evidential base. In C5, partner reporting inconsistencies reduce the reliability of usage and inspection datasets. In C10, tachograph data accurately captures

compliance behaviour but may not fully reflect actual driver fatigue, creating a gap between what is measured and what the project needs to understand.

A second risk category is external dependency. In C3, C5, and C10, the project's analytical capability is structurally contingent on the willingness of third parties, whether OEMs, rental partners, or fleet operators, to share data on acceptable terms. Any renegotiation, restriction, or withdrawal of data access by these parties would directly impair the project's ability to function.

A third risk is tacit knowledge attrition. In C7, C6, C9, and C2, substantial amounts of strategically valuable knowledge exist only in the minds of individuals. This knowledge has not been systematically captured, documented, or formalised. The departure of key individuals would constitute a genuine and in some cases irreversible loss of data capability.

Finally, several projects face legal and ethical uncertainty around data use. C8 operates under the strictest data governance conditions in the study: patient data is governed by the Swedish Patient Data Act (PDL) and Patient Safety Act (PSL) in addition to GDPR, and any research use of patient data requires ethical approval under the Act on Ethical Review of Research Involving Humans (EPL 2003:460). The project team had no direct access to medical journals, and all patient-related outputs required prior anonymisation. C10 faces emerging uncertainty around the EU AI Act classification of its DMS technology, which may impose conformity assessment obligations that the project has not yet addressed.

1.5.2 Dataset Objectification: Identifying and Structuring Data Assets

The first analytical task of the IIS-DRIV Framework is the objectification of data: transforming information that exists in organisational contexts into identifiable, structured, and evaluable dataset objects. This section presents the results of that objectification process across all nine companies, covering the scope and composition of the dataset portfolio, the formats and structures in which data exists, and the degree to which data has already been formalised prior to this study.

1.5.2.1 Dataset Portfolio Across the Nine Companies

A total of 40 datasets were identified and mapped across the nine companies. The distribution is uneven, ranging from two datasets in C9 to eight in C7. This variation does not simply reflect the volume of data available: it reflects the degree to which each project has identified, named, and delimited its data assets as discrete objects. C7's eight datasets emerged from an extensive mapping effort that surfaced both formalised records and previously unnamed tacit knowledge assets. C9's two datasets reflect a project where strategic knowledge is concentrated in a small number of documents and conversations, most of which had not been previously articulated as data.

Code	Company Context	No.	Datasets Identified
C2	Innovation Management	5	Employee innovation ideas, problem/opportunity CRM, stakeholder CRM, action logs, previous project reports
C3	Uptime Platform (Telematics)	6	Machine identity data, operation data, operator data, maintenance data, customer validation interviews, market research
C4	Mid-segment Market Entry	3	Customer needs and pain points, market and competitor intelligence, employee competence data
C5	Outdoor Mobility Rental	3	Customer rental agreement data, usage statistics, inspection and damage reports
C6	Maritime Sector	3	Pilotage statistics, research and project documents
C7	Hydropower Operations	8	Operational consequences data, wear cost data, ODC model, investment data, user interview insights, electricity market data, flex revenue data, organisational structure data
C8	Healthcare at Home	4	Patient statistical data, employee interview data, medical journals, published medical research
C9	Servitization Strategy	2	Company strategy document, employee interviews on servitization
C10	Transport Compliance (Fatigue)	6	Tachograph data, Driver Monitoring System data, rest area data, driver schedules, incident reports, customer and user interview insights

Table 1: Dataset portfolio overview across all nine companies (total: 40 datasets)

The total of 40 datasets represents a lower bound. Several projects acknowledge additional data sources that exist but could not be fully documented: operational data held by OEMs in C3, historical financial records not yet compiled in C7, and performance indicators referenced but not available in C9. The dataset objects identified here are those that the project teams could name, describe, and characterise with sufficient precision to permit evaluation under the framework.

1.5.2.2 Data Types, Formats, and Structures

The formats and structures of the datasets identified span a wide range. Table 2 presents the data types present across the nine companies.

Data Type	Companies	Examples from the Dataset
Text and Qualitative	C2, C3, C4, C6, C8, C9, C10	Interview notes, strategy documents, stakeholder observations, research reports
Numerical and Quantitative	All companies	Costs, market sizes, operational frequencies, financial projections
Structured Database or System-generated	C3, C4, C5, C6, C7, C10	CRM records, ERP extracts, BI exports, JSON transactional logs
Time-series and Event Data	C3, C7, C10	Machine operation logs, electricity market prices, tachograph records
Geospatial and Location Data	C6, C10	Pilotage routes, rest area locations, vessel traffic data
Images and Visual Data	C5, C8	Inspection photographs, medical documentation
Machine and IoT-generated Data	C3, C5	Telematics sensor data, rental equipment monitoring
Biometric and Health Data	C8, C10	Patient care records, DMS eye-tracking and fatigue indicators
Tacit and Expert Knowledge	C2, C4, C7, C9	Unexternalised operational expertise, strategic judgment, market intuition

Table 2: Data types present across the nine companies

Numerical and quantitative data is present in all nine companies, reflecting the universal need for measurable evidence in innovation decision-making. Text and qualitative data is almost equally prevalent, found in eight of nine companies, and in several cases constitutes the primary data type: C4, C9, and C8 rely on interview notes, strategic documents, and published research as their most important data inputs.

The most distinctive finding at the format level is the prevalence of tacit and expert knowledge as an explicitly identified data type in four companies. In C7, operational knowledge about plant behaviour and component wear has not been captured in any system and must be extracted from the minds of experienced engineers. In C9, the strategic understanding driving the servitization programme exists primarily as senior management judgment. In C2, innovation managers hold contextual knowledge about which ideas are strategically relevant that is not encoded in the idea database. This pattern indicates that for a significant subset of the projects studied, the process of dataset objectification is itself an active and incomplete task, not a prior condition that the project team can take as given.

Structured database and system-generated data is present in six companies, generally in combination with other data types rather than as the sole format. Time-series and event-driven data appears in C3, C7, and C10, where it constitutes the operational backbone of platform or model-based projects. IoT-generated data is present in C3 and C5, carrying specific regulatory implications under the EU Data Act. Biometric and health-adjacent data appears in C8 and C10, triggering the most stringent personal data protection obligations encountered in the study.

1.5.2.3 Degree of Prior Formalisation

A notable dimension revealed by the objectification process is the degree to which data existed as a recognised and managed object before the IIS-DRIV mapping was applied. Across the nine projects, three categories can be distinguished.

In the first category, data is fully formalised and system-managed. C10's tachograph and DMS datasets are generated automatically by regulatory and hardware systems, stored in fleet management platforms, and accessed through defined interfaces. C6's pilotage statistics are compiled and maintained within an internal BI environment. Prior to the mapping exercise, the datasets were already organised to some extent, with established routines for how they were managed, accessed, and used internally.

In the second category, data exists in organisational systems but has not been explicitly identified or managed as an asset. C2's action logs (C2-4) and previous project reports (C2-5) were accessible on the company intranet but had not been evaluated for their strategic or legal significance. C5's inspection and damage reports (C5-3) were collected by rental partners but had not been systematically compiled or analysed at the company level. For these datasets, the objectification exercise involved surfacing and delimiting material that was technically available but functionally invisible.

In the third category, data exists only as tacit knowledge with no prior formal existence. C7's operational consequences dataset (C7-1) was being compiled into Excel at the time of the study, based on interviews with plant engineers. C9's servitization interview data (C9-2) consisted of notes held on personal and shared drives, with no unified structure or access policy. In these cases, the objectification exercise was itself the beginning of the formalisation process.

1.5.3 Dataset Utilisation: How Data Drives Innovation Activity

Once datasets have been objectified, the second analytical question concerns how they are actually used within the projects. Utilisation here refers to the specific functions that data performs in driving or supporting innovation activity: how datasets contribute to problem formulation, concept development, decision-making, validation, and product or service design. This section examines utilisation patterns across the nine companies and identifies the key dynamics that shape how effectively data is converted into innovation value.

1.5.3.1 Utilisation Modes Across the Nine Companies

The datasets identified span a spectrum of utilisation intensity, from projects where data is the operative material of the innovation process to projects where data plays a legitimising or contextualising role. Table 3 summarises the utilisation mode and primary data functions for each company.

Code	Utilisation Mode	How Data Drives the Project
C2	**Data-supported**	Innovation idea repository used for opportunity identification; project reports inform go/no-go decisions; stakeholder CRM supports network activation
C3	**Fully data-dependent**	Machine data feeds the platform directly; maintenance logs train predictive models; customer interviews validate product direction
C4	**Data-supported**	Interview insights guide market entry framing; competitor data informs pricing; employee competence data shapes resourcing decisions
C5	**Data-driven (via partners)**	Rental records enable service model development; usage statistics guide product design; inspection data drives durability improvements
C6	**Data-informed**	Pilotage statistics support market size estimation; research documentation enables feasibility analysis and regulatory argumentation
C7	**Emerging data-influenced**	ODC model is the analytical centrepiece; wear cost and investment data ground economic consequence analysis; tacit knowledge provides input to model assumptions
C8	**Evidence-grounded**	Published research legitimises HaH concept; patient statistics scope the operational context; interview data informs logistics platform design
C9	**Data-supported**	Strategy document sets organisational direction; employee interviews surface servitization barriers and opportunities
C10	**Fully data-dependent**	Tachograph and DMS data are the core product inputs; schedule and deviation data enable fatigue risk modelling; interviews define the service design

Table 3: Dataset utilisation modes across the nine companies

The distinction between fully data-dependent and data-supported projects, which was introduced as a contextual observation in Section 4.1, becomes more precise at the utilisation level. In C10 and C3, datasets are not merely consulted: they are the operational substrate of the project. The C10 project team cannot evaluate fatigue risk, design scheduling interventions, or validate service concepts without direct access to tachograph records, DMS event logs, and deviation reports. In C3, the predictive maintenance model at the heart of the platform cannot be trained, validated, or deployed without machine operational and maintenance data.

In contrast, C4 and C9 use data primarily to structure and legitimise decisions that are driven by qualitative judgement. C4's customer needs and pain point dataset (C4-1) consists of interview notes and workshop outputs that inform the framing of a mid-segment value proposition, but the core strategic decisions about whether and how to enter the segment rest on commercial judgment rather than statistical evidence. C9's strategy document (C9-1) sets the organisational direction for the servitization programme, but it is interpreted and applied by senior managers whose tacit knowledge of the organisation shapes how the strategy is enacted.

1.5.3.2 The Innovation Phases in which Data is Used

Across the 40 datasets, data is used at different phases of the innovation process. Drawing on the phase categories from the IIS-DRIV Framework, research and evidence gathering, concept development, decision support, and validation are all represented, but their distribution across companies reveals distinct utilisation profiles.

Data use in the research and evidence phase is the most widespread, present across all nine companies. This includes the use of market data and competitor intelligence (C4-2, C3-6) to define the opportunity space, published medical research (C8-04) to legitimate the Healthcare at Home concept, and historical electricity market data (C7-6) to contextualise the commercial logic of flexible hydropower operation. This phase-level usage is characterised by data serving a framing function: it establishes the problem, positions the project within a broader landscape, and provides the evidential foundation for the innovation claim.

Data use in concept development is prominent in C5, C3, C10, and C7. In C5, usage statistics and inspection reports directly inform product redesign decisions: which components fail, under what conditions, and at what rate. In C3, customer validation data (C3-5) and market research (C3-6) shape the feature set and positioning of the uptime platform. In C7, the ODC model is itself the concept being developed, and its construction is driven by wear cost data (C7-2), investment records (C7-4), and operational knowledge (C7-1).

Data use for ongoing decision support is most clearly evident in C6, where pilotage statistics are used to produce market size estimates and strategic analyses for internal stakeholders, and in C2, where the innovation idea database (C2-1) and problem/opportunity CRM (C2-2) structure the evaluation and prioritisation of innovation initiatives. In C10, the integration of tachograph, DMS, and schedule data is intended to provide a continuous decision support function for fleet operators and back-office planners.

1.5.3.3 The Gap Between Data Availability and Data Use

A recurring finding at the utilisation level is the gap between the data that is available and the data that is actually used. This gap takes several forms across the projects.

In C7, the ODC model (C7-3) is the most actively used data asset in the project, but the model's analytical power is constrained by the manual, expert-dependent character of its inputs. The

wear cost data (C7-2) and operational knowledge (C7-1) that feed the model exist partly in documents and partly in the minds of engineers, and the process of extracting and formalising these inputs is slow and resource-intensive. The gap between the data that is theoretically available and the data that can be practically mobilised is large.

In C6, a substantial operational dataset is accumulated as part of the organisation's regular activities. While this data represents a potentially valuable resource, the internal capacity for managing and analysing it remains limited. As a result, the organisation has not yet fully developed the structures, routines, and capabilities needed to use the data systematically for learning and development.

In C2, the innovation idea database (C2-1) contains a large volume of employee-submitted ideas, many of which represent untapped opportunities. The team acknowledges that log-based data receives more systematic attention than the experiential knowledge held by innovation managers, even though the latter may carry higher strategic value. This reflects a structural preference in the organisation for data that is already formalised over data that requires active extraction.

1.5.3.4 Third-Party Data Utilisation and Its Constraints

For C3, C5, and C10, the utilisation of data is inseparable from the governance of third-party relationships. In each of these projects, the most valuable datasets are generated by or held within external organisations, and the project team's ability to use the data depends on negotiated access.

For C3, OEM data-sharing agreements are the gatekeeping mechanism for the entire platform. If an OEM restricts or withdraws access to machine operational data, the affected product lines lose their analytical foundation. The project team is aware of this dependency and has structured its data-sharing contracts accordingly, but the fundamental asymmetry of data ownership remains.

For C5, the quality of data utilisation depends on the operational practices of rental partners. Partners who submit incomplete or inconsistently formatted inspection reports degrade the reliability of the product safety and usage insights that C5 derives from the data. The project team cannot control this from within the company: it requires active partner management and, ultimately, investment in standardising reporting interfaces.

For C10, DMS sensor data requires in-vehicle hardware integration that is controlled by fleet operators. While tachograph data flows through mandated regulatory channels and is therefore reliably accessible, DMS data remains subject to operator willingness. The commercial proposition of the C10 project depends in part on closing this access gap.

1.5.4 Legal Implications: Regulatory Compliance, IP Claims, and the SWOT Perspective

The final analytical layer of the IIS-DRIV Framework maps the legal and strategic implications that attach to each dataset once it has been objectified and its utilisation understood. This section presents the regulatory frameworks applicable across the 40 datasets, the IP claim types identified for each dataset, and a cross-company SWOT analysis that captures both the protective potential and the vulnerability of the data assets studied.

1.5.4.1 Applicable Legal Frameworks

The legal analysis reveals a complex and multi-layered regulatory landscape. Table 4 summarises the key frameworks applicable across the nine companies.

Legal Framework	Applicable Companies	Dataset Context
GDPR (Reg. 2016/679)	All 9 companies	Personal employee, operator, customer and patient data is present across all projects without exception
GDPR Art. 9 (Special Category)	C8, C10	Patient health records (C8); biometric-adjacent DMS data requiring DPIA (C10)
EU Trade Secrets Directive (2016/943)	C2, C3, C4, C5, C7, C9, C10	Innovation models, strategy documents, ODC model, customer insights, market intelligence
EU Data Act (Reg. 2023/2854)	C3, C5	IoT-generated machine and rental usage data; new data-sharing and portability obligations
EU AI Act	C3, C10	Predictive analytics components (C3); Driver Monitoring Systems as potential high-risk AI (C10)
EU Database Right (Dir. 96/9/EC)	C3, C4, C5, C6, C7, C10	Compiled structured datasets built through substantial organisational investment
NIS2 Directive (2022/2555)	C7	Hydropower as national critical infrastructure; layered security and incident reporting obligations
Swedish PDL and PSL (Patient Data)	C8	Medical journals and patient data in the Healthcare at Home project
EU Tachograph Regulation 165/2014	C10	Mandatory tachograph and driving-time data collection and retention
EU Product Safety Regulation (2023/988)	C5	Inspection and damage data constitutes product safety monitoring evidence

Legal Framework	Applicable Companies	Dataset Context
REMIT (EU Reg. 1227/2011)	C7	Historical electricity market data from spot and balancing markets

Table 4: Legal frameworks applicable across the nine companies

GDPR applies to all nine companies without exception.[1] This universality reflects the near-unavoidable presence of personal data in corporate innovation contexts: employee names and roles appear in innovation idea databases (C2), action logs (C2), stakeholder records (C2), interview documentation (C4, C7, C9), operator identity data (C3, C10), customer rental records (C5), and pilotage statistics data (C6). Even projects that are not primarily concerned with personal data encounter GDPR obligations at the margins of their dataset portfolios.

The intensity of GDPR obligations varies significantly across the nine companies. At the lower end, C4's employee competence data (C4-3) involves standard professional data governed by employment law and GDPR Article 6 legitimate interest. At the upper end, C8's medical journal data (C8-03) is classified as special category data under GDPR Article 9, subject to the Swedish Patient Data Act and Patient Safety Act, and accessible only to authorised clinical personnel. Any research use requires prior ethical approval under the Act on Ethical Review of Research Involving Humans (EPL 2003:460). C10's DMS data occupies a similarly elevated risk category: the eye-tracking and fatigue-indicator data generated by driver monitoring cameras is biometric-adjacent and may trigger the enhanced obligations of GDPR Article 9 in addition to requiring a mandatory Data Protection Impact Assessment under Article 35.

The EU Trade Secrets Directive (2016/943)[2] is the second most widely applicable framework, covering seven of the nine companies. Its reach extends across strategic documents, innovation idea databases, the ODC model, customer needs insights gathered under NDA, and interview-derived market intelligence. The directive's practical value depends, however, on the organisation taking reasonable steps to maintain secrecy: a prerequisite that is not always formally documented in the projects studied.

The EU Data Act (Regulation 2023/2854) introduces significant new obligations for C3 and C5.[3] Under the Data Act, users of connected products have a right to access the data generated by those products, and manufacturers face obligations around data portability and sharing. For C3, the Data Act may alter the contractual landscape of OEM data access, potentially providing a regulatory pathway to data that OEMs might otherwise restrict. For C5, rental equipment that generates inspection or usage data may fall within the Act's scope. Both companies will need to assess how the Data Act interacts with their existing contractual arrangements.

[1] *See End Notes "1"*
[2] *See End Notes "2"*
[3] *See End Notes "3"*

The EU AI Act introduces obligations for C3 and C10 that are currently unresolved. In C10, the DMS constitutes a candidate high-risk AI system under Annex III of the Act, given its safety-critical function in transport. If classified as high-risk, the system would require conformity assessment, technical documentation, registration in the EU AI database, and ongoing monitoring obligations. The interaction between the AI Act's high-risk classification and GDPR's DPIA requirement creates compounding compliance obligations that the project team has not yet formally mapped.

C7 presents the most complex regulatory environment of all nine companies. The hydropower infrastructure context brings NIS2 Directive obligations, Swedish MSB security frameworks, and REMIT compliance for electricity market data into a single project. As a state-owned enterprise, C7 also faces specific obligations around financial transparency and public procurement that restrict how CAPEX and investment data can be handled and shared. No other company in the study operates under this breadth of overlapping regulatory constraints.

1.5.4.2 IP Claim Types

The IIS-DRIV Framework identifies four IP claim types applicable to data assets. Table 5 presents the distribution of these claim types across the nine companies.

IP Claim Type (IIS-DRIV)	Companies	Count	Observations
Contractual and Organisational Claiming	All 9 (C2 to C10)	9 / 9	The universal baseline: access controls, NDAs, intranet restrictions, employment contracts, and data-sharing agreements
Trade Secret-based Claiming	C2, C3, C4, C5, C7, C9, C10	7 / 9	Applied to strategic documents, innovation idea databases, the ODC model, customer insights, and market intelligence
IP - Database Right	C3, C4, C5, C6, C7, C10	6 / 9	Structured datasets compiled through substantial investment: maintenance logs, pilotage statistics, usage statistics
IP - Digital Content (Copyright)	C2, C3, C5, C6, C8, C9	6 / 9	Authored reports, strategy documents, technical documentation, and published research

Table 5: IP claim types across the nine companies (IIS-DRIV Framework)

Contractual and organisational claiming is the only IP strategy present in all nine companies. Access controls, NDAs, employment contracts imposing confidentiality obligations, intranet restrictions, and data-sharing agreements with third parties form the common foundation. This universality reflects the practical accessibility of contractual protection: it does not require registration, specific legal criteria, or formal IP expertise. It attaches to whatever access and confidentiality architecture the organisation already has in place.

The strength of this protection varies, however. C3 has developed well-articulated data-sharing agreements with OEMs and fleet operators, reflecting the operational necessity of contractual governance in a multi-stakeholder platform environment. C7, by contrast, enforces access restrictions primarily through security clearance protocols rather than formally drafted IP-claiming documents. The presence of contractual and organisational claims across all nine companies therefore conceals significant variation in the depth and deliberateness of the protection in place.

Trade secret protection is identified in seven companies and represents the most strategically significant IP claim type in the study. The ODC model in C7 is the clearest case: a proprietary analytical model embedding expert knowledge about the relationship between operational behaviour, component wear, and economic cost, developed through years of internal investment and not publicly disclosed. The innovation idea database in C2, the servitization strategy in C9, and the customer needs insights gathered under NDA in C4 are further examples where trade secret protection is both legally available and strategically valuable.

Across several companies, however, trade secret protection is asserted implicitly rather than managed explicitly. The EU Trade Secrets Directive requires that the information be commercially valuable, not publicly known, and subject to reasonable and active secrecy measures. The last condition is not always formally documented. For tacit knowledge assets in C7-1, C9-2, and C2-1, the knowledge has not yet been externalised into a document, and secrecy measures depend on informal organisational norms rather than policy. This converts a potential legal right into an unenforceable informal expectation.

The EU Database Right (Directive 96/9/EC) protects databases in which there has been substantial investment in obtaining, verifying, or presenting the contents. It is identified as applicable in six companies. The maintenance data compiled in C7, the pilotage statistics accumulated in C6, and the aggregated usage statistics in C5 all represent datasets built through substantial organisational investment. Despite this eligibility, database rights are rarely invoked or managed by the project teams. Unlike trade secret protection, database rights attach automatically upon creation of a qualifying database, making the absence of awareness about this right a governance gap rather than a legal obstacle.

Digital content copyright is identified in six companies, covering authored documents, technical reports, strategy documents, and published research. Copyright vests automatically in original works and does not require registration, but its practical enforceability depends on clear documentation of authorship, creation date, and organisational ownership. These elements are often absent from the informal documentation practices observed in the study.

1.5.4.3 Cross-Company SWOT Analysis

The legal and strategic analysis was complemented by a dataset-level SWOT exercise conducted collaboratively with each project team. The cross-company synthesis is presented in Table 6.

Strengths	Institutionally mandated or legally required datasets provide structural legitimacy and cannot easily be replicated by competitors (C10 tachograph, C6 pilotage). Expert knowledge embedded in individuals and BI analyst capability represent human-capital strengths (C7, C6). Several companies hold unique or monopolistic data assets: C6 possesses a statutory monopoly over Swedish maritime pilotage data; C5 accumulates real-world product usage evidence from rental operations that competitors cannot access.
Weaknesses	Over-reliance on individual people for knowledge continuity creates fragility across multiple projects (C7, C6, C9). Data fragmentation across disparate internal systems reduces analytical capacity and increases access friction (C10, C7, C2). Tacit knowledge has not been formalised into structured datasets in most projects, leaving a large proportion of strategic knowledge undocumented and unprotected.
Opportunities	Upcoming regulation creates commercial pull: the AIDW regulation expected in July 2026 establishes mandatory requirements for DMS-integrated services in heavy transport, directly benefiting C10. Rental and usage datasets can serve as the foundation for external partnerships and data-driven value propositions (C5, C9). Cross-referencing multiple operational datasets, such as combining tachograph records, DMS alerts, and deviation reports in C10, could unlock systemic predictive insights not yet exploited. The EU Data Act may strengthen C3 and C5 access to OEM and partner data through new regulatory portability rights.
Threats	GDPR exposure is pervasive across all nine companies, with particular severity in C8 where unauthorised access to patient data carries criminal liability, and in C10 where DMS data requires a mandatory Data Protection Impact Assessment. Strategic data assets in C2 and C9 are stored in widely shared intranet and SharePoint environments, creating a meaningful risk of inadvertent external disclosure. Tacit knowledge attrition is an existential risk if key individuals leave (C7, C6). Regulatory uncertainty around EU AI Act classification creates compounding compliance obligations for C3 and C10 that project teams have not yet formally addressed.

Table 6: Cross-company SWOT synthesis

The SWOT synthesis confirms several findings from the preceding analysis while adding a strategic dimension. The most significant strength across the companies is the institutional legitimacy of mandated datasets: tachograph records in C10 and pilotage operational statistics in C6 are not only reliable but structurally uncontestable, because they are legally required to be collected. Competitors cannot access or replicate these datasets through market mechanisms alone, creating a durable data-based advantage.

The most pervasive weakness is the fragility of person-dependent knowledge. Across C7, C6, C9, and C2, the departure of specific individuals would constitute a material and in some cases irreversible data loss event. The SWOT exercise conducted by the C7 team captures this tension directly, identifying tacit knowledge in people as simultaneously the project's greatest strength,

because it represents deep operational expertise, and its most acute vulnerability, because it cannot be retained or transferred without deliberate formalisation effort.

The most significant near-term opportunity is regulatory-driven. The AIDW regulation expected in July 2026 creates a mandatory compliance context for driver monitoring technology in the heavy transport sector, generating commercial demand for precisely the integrated DMS-based fatigue management services that C10 is developing. Regulation here functions not as a constraint but as a market creation mechanism, rewarding early investment in compliant data infrastructure.

The most pervasive threat is GDPR exposure, present across all nine companies. Beyond individual dataset-level risk, the SWOT analysis highlights a systemic vulnerability: strategic data assets in C2 and C9 are stored in broadly accessible intranet and SharePoint environments, where the technical ease of sharing is inversely related to the sophistication of the access controls in place. The risk of inadvertent disclosure is not hypothetical: it reflects a genuine gap between the sensitivity of the data and the governance architecture surrounding it.

1.6 Discussion & Conclusion

The study's central research question asks: “How can datasets in innovation projects at established organizations be structured and assessed as strategic resources, and what organizational capabilities are required to govern and utilize them effectively?”. The empirical findings across nine innovation projects provide a clear, and somewhat uncomfortable, answer: the decisive bottleneck is not access to data, not regulatory complexity, and not technological capability. It is the absence of a far more elementary organisational practice: the deliberate identification and naming of data as a bounded, knowable object.

1.6.1 Objectification as the Absent Prerequisite

The IIS-DRIV Framework positions dataset objectification as the foundational step in any data governance process. The findings of this study suggest that objectification is not merely a framework-prescribed formality – it is the precondition without which data cannot function as a strategic resource at all. Across the nine projects, a substantial portion of the data assets identified were not previously recognised as such by the project teams themselves. C2's project reports, C5's inspection records, C6's historical pilotage archives: all existed, all were accessible, yet none had been evaluated as strategic or legal objects before this study applied a structured mapping process. Data that has not been named cannot be governed, and data that cannot be governed cannot be protected, shared, or effectively utilised.

This finding inverts the conventional framing of the "data-driven organisation." The popular narrative assumes that the challenge is analytical, extracting insight from data that is already structured and available. What this study reveals is that for a significant proportion of corporate innovation projects, the prior challenge has not been solved: the data has not yet been constituted as data. The organisations studied are not failing to exploit their datasets; in many cases, they have not yet completed the work of identifying what those datasets are.

The variation in objectification maturity across the nine projects is instructive in this regard. C10 and C3, the two most data-dependent projects, have also developed the most deliberate data governance arrangements: structured access agreements, defined dataset boundaries, and explicit awareness of the regulatory frameworks that attach to their most sensitive data types. This is not coincidental. The projects that depend most operationally on data have been forced by necessity to objectify it. The projects where data plays a supporting or legitimising role C4, C9 and C7 have largely not been. The implication is that objectification capability does not develop organically in most organisations: it requires either operational necessity or deliberate structural intervention.

1.6.2 Legal Protection as a Governance Capability, Not a Compliance Layer

The legal analysis produces a finding that is both precise and significant: in seven of nine organisations, trade secret protection is the most appropriate and strategically valuable IP

mechanism available for their most sensitive datasets. Yet across several of these organisations, the conditions for trade secret protection are not met. The EU Trade Secrets Directive requires that commercially valuable information be subject to reasonable and active secrecy measures, a condition that cannot be documented for data that has not been identified, bounded, or formally access-controlled. For tacit knowledge assets in C7, C9, and C2, the practical consequence is that commercially sensitive information that qualifies in principle for legal protection is, in practice, unprotected. The organisations do not know what they have, and therefore cannot protect it.

This reveals that legal governance of data is not primarily a legal problem. It is a governance capability problem. The organisations studied generally do not lack legal access to protection mechanisms, database rights attach automatically, trade secrets require no registration, GDPR compliance frameworks are well-established. What they lack is the organisational discipline to activate these mechanisms: to document what data exists, who has access to it, and what secrecy measures are in place. The legal layer sits ready; the foundational governance layer beneath it is absent.

The SWOT analysis adds a further dimension to this finding. The most significant systemic threat identified across the study the. Storage of strategic data assets in broadly accessible intranet and SharePoint environments in C2 and C9 is not a consequence of malicious access or sophisticated attack. It is a consequence of organisations not recognising that what they are storing constitutes a protectable asset. The risk of inadvertent disclosure is inversely proportional to awareness of what is worth protecting.

1.6.3 The Capability the Organisations Actually Need

The research question asks what organisational capabilities are required for effective dataset governance. The empirical answer is specific: not more data infrastructure, not more regulatory compliance expertise, and not more analytical capacity. The primary capability gap identified across the nine projects is attention to the deliberate organisational habit of looking at information and asking whether it constitutes a data asset, who controls it, under what legal framework it sits, and what would be lost if it were disclosed or destroyed.

For fully data-dependent projects like C10 and C3, this attentional capability is already partly embedded in the project's operational design. For data-supported projects, it remains largely absent. Closing this gap requires not only frameworks which this study and the IIS-DRIV model provide but the organisational intentionality to apply them: the explicit decision, at the level of innovation project governance, to treat data identification and documentation as a structured and recurring task rather than an ad-hoc response to specific legal queries.

The external dependency cases C3, C5 and C10 introduce a further dimension. For these projects, governance capability must extend beyond the organisational boundary: the quality of data access, and therefore the quality of the innovation it enables, is determined partly by the contractual architecture surrounding third-party data relationships. The EU Data Act offers a regulatory pathway for improving this architecture for IoT-generated data, and C10's position

ahead of the AIDW regulation demonstrates that regulatory compliance can function as a competitive moat rather than merely a cost. The organisations that invest in data governance infrastructure now are building the capability to leverage compliance obligations as market advantages when those obligations become mandatory for competitors.

The central implication of this study is therefore precise: data becomes a strategic resource at the point when an organisation can answer three questions about it; what is it, who controls it, and what protects it. For the majority of innovation projects studied, these questions remain partially or wholly unanswered. Answering them is not a technical challenge. It is an organisational one.

End Notes

1

Article 4(1), Regulation (EU) 2016/679 (GDPR): '"personal data" means any information relating to an identified or identifiable natural person ("data subject"); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

Article 4(2), Regulation (EU) 2016/679 (GDPR): '"processing" means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.' Article 4(7), Regulation (EU) 2016/679 (GDPR): '"controller" means the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data; where the purposes and means of such processing are determined by Union or Member State law, the controller or the specific criteria for its nomination may be provided for by Union or Member State law.'

2

Article 2, Directive (EU) 2016/943 (Definitions): 'For the purposes of this Directive, the following definitions apply: (1) "trade secret" means information which meets all of the following requirements: (a) it is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question; (b) it has commercial value because it is secret; (c) it has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret; (2) "trade secret holder" means any natural or legal person lawfully controlling a trade secret.'

3

Article 1(1), Regulation (EU) 2023/2854 (Data Act): 'This Regulation lays down harmonised rules, inter alia, on: (a) the making available of product data and related service data to the user of the connected product or related service; (b) the making available of data by data holders to data recipients; (c) the making available of data by data holders to public sector bodies, the Commission, the European Central Bank and Union bodies, where there is an exceptional need for those data for the performance of a specific task carried out in the public interest; (d) facilitating switching between data processing services; (e) introducing safeguards against unlawful third-party access to non-personal data; and (f) the development of interoperability standards for data to be accessed, transferred and used.'

Article 1(2), Regulation (EU) 2023/2854 (Data Act): 'This Regulation covers personal and non-personal data, including the following types of data, in the following contexts: (a) Chapter II applies to data, with the exception of content, concerning the performance, use and environment of connected products and related services; (b) Chapter III applies to any private sector data that is subject to statutory data sharing obligations; (c) Chapter IV applies to any private sector data accessed and used on the basis of contract between enterprises; (d) Chapter V applies to any private sector data with a focus on non-personal data; (e) Chapter VI applies to any data and services processed by providers of data processing services; (f) Chapter VII applies to any non-personal data held in the Union by providers of data processing services.'

Article 1(3), Regulation (EU) 2023/2854 (Data Act): 'This Regulation applies to: (a) manufacturers of connected products placed on the market in the Union and providers of related services, irrespective of the place of establishment of those manufacturers and providers; (b) users in the Union of connected products or related services as referred to in point (a); (c) data holders, irrespective of their place of establishment, that make data available to data recipients in the Union; (d) data recipients in the Union

to whom data are made available; (e) public sector bodies, the Commission, the European Central Bank and Union bodies that request data holders to make data available where there is an exceptional need for those data for the performance of a specific task carried out in the public interest and to the data holders that provide those data in response to such request; (f) providers of data processing services, irrespective of their place of establishment, providing such services to customers in the Union; (g) participants in data spaces and vendors of applications using smart contracts and persons whose trade, business or profession involves the deployment of smart contracts for others in the context of executing an agreement.'

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Appendix

Appendix A: Data collection questionnaire

Instruction from MIA RQ Team

No interviews are required for this assignment.
The MIA research question is divided into **two parts**.
Part 1 consists of a written reflection.
Part 2 focuses on concrete input regarding the datasets used in your project.
The reflection in Part 1 serves both as a way to help you get started and as a basis for us to understand **how you reason about data** in your project.

Part 1: Reflection

Understanding Data in Your Project
What is *data* in the context of your project?

Data as a Driver of the Project
What data served as the basis for initiating the project?
In what way is the project driven by data or information?

Use and Purpose
In what parts of your project will the data be used?
(e.g. problem formulation, concept development, decision-making, validation)

Source and Dependency
Are you dependent on **internal information**? Which, and how?
Are you dependent on **external information**? Which, and from where?

Form and Accessibility
Is the information documented in datasets (e.g. reports, logs, databases), or does it exist as common knowledge?
If it exists as common knowledge, where does it originate and how is it shared?

Control and Sensitivity
Where is the critical data stored (systems, documents, people)?
Does any data contain sensitive information or business-critical knowledge?
Are there any legal, ethical, or organizational constraints related to the data?

Contextual Reflection
How does the organizational context affect how data is created, accessed, or used?
What limitations, risks, or uncertainties related to data can you identify?

Part 2: Input Datasets

See detailed instructions for this part on next sheet.

Make a **copy of the provided Excel file**.
Fill it in **for your partner company**, based on your CORP project.
Name the file after your company (e.g. *CompanyName_DataMapping.xlsx*).
Use the template to document and input **which datasets exist** in your project and how they relate to your work.

Step 1
Identification

i. How can we claim and characterize data, datasets and dataset catalogs within the framework of the project?

- To what extent does dataset contain
  - scientific information and results?
  - technical information and results?
  - information from usage?
  - information on test results?
- What is the purpose of the collection of the datasets?
- What is the origin of the dataset?

Is collected data from
- authority register?
- quality register?
- research databases?
- clinical studies?
- biobanks?
- register with private business operators?

Is the data collected through
- own or someone else's procedure?
- automated means through your own or someone else's procedure?
- own or someone else's operating tools or other equipment?
- datamining?

Is collected data subject to
- local or remote storage?
- storage on collection tools or other such equipment?
- storage on computer equipment and computer systems?

Step 2
Format and structure

How can we claim and characterize data, datasets and catalogs of data/datasets based on format and structure?

- What data types does the dataset include?
- What is the physical materiality of the dataset?
- What is the digital materiality of the dataset?
- What is the digital format of the dataset?

- The dataset includes *data types* such as
  - numerical data?
  - geospatial data?
  - text data?
  - still image data?
  - audio data?
  - video data?
  - biological data?
  - other data type?

- What is the dataset's digital format, see file format?
- To what extent does the dataset's digital format contribute to
  - machine readable format?
  - open format?
  - open standards etc.?

Step 3

Content

How can we claim and characterize datasets based on content?

- To what extent does the data set include personal data?
- To what extent does the data set contain data that does not relate to people?
- What do the functional properties look like around the data in the dataset?
- To what extent is the data in the dataset anonymised and pseudonymised?
- To what extent is the data in the dataset, or the dataset itself, publicly available?

To what extent does the data set include personal data such as

- information about physical persons?
- biological conditions?
- state of health?
- personal behaviors?
- information from personal surveillance, etc.?

To what extent is the data in the dataset, or the dataset itself

- available for everyone to use?
- available to use with some user restrictions?
- available to use for specific stakeholders?
- not available to use at all?

Step 4

Utilization

To what extent can the dataset be used in public and private actors' innovation work such as

- industrial manufacturing?
- healthcare?
- mobility and transport?
- urban planning?
- climate change?
- security monitoring, etc.?

To what extent can the dataset be used in innovation phases such as

- research work and evidence?
- development of product innovation?
- basis for production?
- market analysis for product?
- market approval and market surveillance for product?

- As part of the utilization, the data set will be processed by data being
  - collected?
  - registered?
  - structured?
  - stored?
  - shared etc.?

Company name (fill in)

Dataset				
ID	**Identification**	**Format and strucutre**	**Content**	**Utilization**
Company name + 01	lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler	lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler	lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler	lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler lorem ipsum coler
Company name + 02				

2. Organizational Change

Ebba Ankarås, Emil Ekdahl Leeman, Emil Ragnarsson Öhrn

2.1. Introduction

Not only do companies experience increased competitive pressure due to globalization, but they also operate in a world that is rapidly transforming and where technological progress is commonly characterized as exponential rather than linear (McKinsey & Company, 2022). For example, approximately half of the Fortune 500 companies have vanished since 2000, having failed to respond effectively to market signals and to innovate rapidly enough, even when strategic intentions were present (Hoffman, 2025). As a result, organizations face greater pressure than ever before, requiring them to be more innovative than ever to sustain competitiveness and relevance. Research shows that innovative organizations are more likely to maintain a competitive advantage, as they are better equipped to respond rapidly to changes in their external environment (Johannessen & Skaalsvik, 2015). In addition, prior research demonstrates that creativity and innovation in products, processes, and services contribute to an organization's long-term growth and overall success (Lin & Chen, 2007; Zhou & Shalley, 2008). This indicates the importance of organizations facilitating innovation.

However, in general, the most valuable market insights and innovative ideas do not originate from top management, but rather emerge from employees operating at lower levels who search for solutions to work-related problems (Kristensen, 2018). Employee-driven innovation (EDI) involves the initiation of new ideas, processes, or products by an individual or a group of employees. The search for ideas, idea development, and implementation are all part of EDI (Voxted, 2018). Consequently, organizations benefit from fostering an environment that encourages and supports employee involvement in innovation.

Today, KPIs and appraisal systems are extensively used in organizations to concretize goals and guide employee behavior toward achieving desired results, both at the individual and organizational level (Riana et al., 2020). When individual evaluation criteria are well structured, they can promote an organization's innovative capabilities (Naagbo, 2025; Riana et al., 2020; Rompho & Truktrong, 2024). Furthermore, global studies have consistently shown that effective appraisal systems support innovative work behavior (DeNisi & Murphy, 2017). However, not all organizations have well-designed appraisal systems, and many times goal

displacement occurs, as organizations' official goals differ from their actual incentives (Kerr, 1975). Therefore, this study aims to investigate the extent to which organizations evaluate employee performance and apply appraisal systems based on criteria that support innovation among employees according to academic research, using performance management as a tool to facilitate innovation in order to remain competitive and successful.

2.1.1. Aim and Research Question

Aim:

This study aims to examine how organizations have designed, or not designed, their evaluation criteria and appraisal systems for innovation-focused employees in a way that supports behaviors that promote innovation according to academic research.

Question:

- *To what extent do organizations apply evaluation criteria and appraisal systems for innovation-focused employees that align with behaviors identified in research as fostering innovation?*

In this study, "innovation employees" refers to employees working within R&D, product development, innovation, and business development functions. Furthermore, evaluation criteria may include both hard and soft measures, where hard criteria typically consist of quantitative indicators such as KPIs (e.g., number of ideas generated), while soft criteria encompass qualitative aspects such as personal skills, behaviours, and interpersonal competencies.

2.2. Theoretical Framework

This chapter introduces the theoretical framework of the thesis. Important topics within EDI, such as risk-taking, knowledge acquisition, and cross-functional collaboration, are covered with the aim of establishing a foundation of theory for the analysis of how employees are evaluated.

2.2.1. Risk-Taking and Failure

One of the major organizational barriers to innovation is risk aversion. Therefore, creating a risk-tolerant culture that allows individuals to fail and learn, rather than penalising mistakes, is just as important as rewarding and recognising innovation. Encouraging innovative ideas is essential, even when there is calculated risk and uncertainty regarding their success (Coetzee & Leach, 2025). Moreover, tolerance for risk-taking and acceptance of failed innovative efforts is identified as an essential work environment factor for innovative behaviour. Harel et al. (2021) mention the importance of fostering an organizational culture that supports employees' risk-taking, encouraging them to take risks even when the result is unclear and to explore new ideas.

Moreover, Cannon and Edmondson (2005) emphasize that a substantial body of research indicates that high-performing organizations deliberately put failure to work as a means of driving innovation and improvement. They argue that failure should be understood as "a first critical step in a journey of discovery and learning," rather than something to be avoided or concealed. Their work highlights the importance of not only acknowledging failure, but also supporting employees in it (Cannon & Edmondson, 2005). When managed in a thoughtful and constructive way, failure can become a powerful source of insight and development. Furthermore, they stress the value of creating an environment in which individuals have an incentive, or at least do not face disincentives, to identify and openly discuss failures. This underscores the importance of not only rewarding successful outcomes, but also encouraging the behaviors that enable learning, transparency, and continuous improvement through failure (Cannon & Edmondson, 2005).

Hence, encouraging and promoting risk-taking, such as experimenting with new ideas and trying new things, despite uncalculated risks, uncertain outcomes, or uncertainty, is a key aspect of fostering innovation within organizations and should be taken into account when evaluating employees. In addition to accepting failure, organizations should create an

environment in which failures can be openly discussed and used as opportunities for learning, as well as be incorporated into performance discussions or evaluation criteria.

2.2.2. Knowledge Sharing

Knowledge sharing is described as the activity of transferring knowledge from one person, group, or organization to another, encompassing both tacit and explicit knowledge (Lee, 2001). Moreover, it can be defined as the exchange of experiences, skills, and knowledge among individuals within an organization (Yeboah, 2023). Since innovation requires the transformation and exploitation of existing organizational knowledge through knowledge sharing (Riana et al., 2020), organizations aiming to foster innovation should encourage knowledge sharing among employees. This is important not only because it enables the exchange of knowledge, but also because it supports the creation of new knowledge (Essawi & Tilchin, 2014). Furthermore, according to Yeboah (2023), such sharing facilitates innovation in the workplace by enabling employees to access and build on one another's knowledge. In addition, it enhances individual potential, supports problem-solving, and contributes to improved work performance. Additionally, knowledge sharing has been shown in extensive research to have a strong influence on employees' innovative behaviour (Pian et al., 2019). Knowledge sharing not only has a direct positive relationship with performance, but also influences innovation, which in turn contributes to firm performance and competitive advantage (Lee et al., 2023; Yeboah, 2023; Wang, 2023; Wang & Wang, 2012).

Therefore, incorporating aspects that encourage knowledge sharing into performance discussions and evaluation criteria tend to promote both innovation and overall firm performance. This applies across different contexts, including knowledge sharing among employees within teams or departments, as well as broader forms of employees engaging in knowledge sharing together with university collaborations, research initiatives and other companies.

2.2.3. Learning Culture and Knowledge Acquisition

Organizational learning has the potential to strengthen a firm's capabilities and competitive advantage and refers to the process through which an organization develops new competencies and knowledge derived from employees' knowledge base, insights, and experiences (Huber, 1991; Jiménez-Jiménez & Sanz-Valle, 2011; Slater & Narver, 1995). Moreover, a large body of research shows that organizational learning has a positive effect on firm performance, as it

facilitates innovation (Azeem, 2021; Jiménez-Jiménez & Sanz-Valle, 2011). Therefore, aspiring to develop a learning culture that supports innovation is of great importance. A learning culture is a culture that encourages employees to acquire new knowledge in order to continuously improve the skills and intellectual capabilities of employees at all levels (Rattanawichai et al., 2022). Organizations that intentionally encourage knowledge creation and knowledge acquisition increase idea generation and the development of new solutions, and stimulate innovative work behaviour and innovation (Cristache et al., 2025; Fierro Moreno et al., 2013; Wang, 2023), making it highly important. In addition, the engagement of employees in external market knowledge acquisition and external technological knowledge acquisition enhances opportunity identification and supports internal business development activities.

Consequently, this facilitates the updating or reconstruction of the firm's internal knowledge base, which ultimately contributes to improved innovation performance (Li & Gao, 2023). In a study conducted by Curzi et al. (2019) on performance appraisal and innovative behavior, performance assessments that focus on new competencies developed by employees were found to have a stronger effect on innovative behavior than result oriented appraisal. This suggests that how organizations evaluate employee performance, particularly in relation to new learning and skill development, can significantly influence their capacity to foster innovation.

As organizational learning and a learning culture have been empirically shown to be positively associated with innovation and business performance, it is important to design appraisal systems and evaluation criteria that encourage employees to take responsibility for their own competence development and actively engage in knowledge acquisition in order to continuously learn new skills and insights.

2.2.4 Teamwork and Cross-Functional Work

Organizational culture that supports innovation includes behaviors that demonstrate an appreciation of teamwork (Harel et al., 2021; Hoegl and Gemuenden, 2001; Love & Roper, 2009). An extensive body of theoretical literature consistently highlights the importance of teamwork for the success of innovation processes and innovative projects (Hoegl & Gemuenden, 2001). However, Hoegl and Gemuenden (2001) emphasize that teamwork must function effectively in order to truly add value. The authors conclude that "good teamwork" can be evaluated based on several dimensions: *communication*, which refers to whether team members engage in sufficiently frequent and open exchanges; *coordination*, which concerns

how well individual efforts are structured and synchronized within the team; *balance of member contributions*, which considers whether all team members are able to apply their expertise to its full potential; *mutual support*, which examines the extent to which team members assist and help each other in completing their tasks; *effort*, which refers to whether members are fully committed and put energy into the team's work; and *cohesion*, which reflects the degree to which team members are motivated to stay in the team and maintain a strong sense of team spirit.

Moreover, research has increasingly highlighted the importance of cross-functional teams for innovation, and they have been strongly advocated in the context of innovation processes. Several studies have found that such teams have a positive impact on innovation outcomes (Jassawalla & Sashittal, 2006; Love & Roper, 2009). For example, Jassawalla and Sashittal (2006) conclude that cross-functional teams can innovate more effectively by developing new products faster and at lower cost, and it is especially efficient in relation to innovative product design and development and product engineering (Love & Roper, 2009).

Hence, collaboration, particularly in the form of work across functional areas and effective teamwork, constitutes a critical dimension to promote and incorporate into employee performance evaluations, as it serves to foster and sustain innovation.

2.3. Methodology

The thesis adopts a dual approach, combining a literature review with a qualitative study based on interviews and observations.

A qualitative research design is particularly appropriate when the aim is to develop an in-depth understanding of complex social phenomena, focusing on how processes are experienced, interpreted, and enacted, rather than on measuring variables or testing hypotheses statistically. Such an approach enables the exploration of meanings, practices, and underlying mechanisms within their contextual settings (Creswell, 2013; Denzin & Lincoln, 2011; Patel & Davidsson, 2019). Consequently, a qualitative approach is well suited for this study, as the purpose is to investigate how employee performance is evaluated within organizations and which criteria are applied in these evaluations, as well as how these practices relate to factors previously identified in the literature as conducive to employee innovation.

By employing semi-structured interviews with both employees and managers, the study enables the collection of rich and detailed accounts of organizational practices and experiences. This is further supported by a thematic analysis, which facilitates the identification of recurring patterns and themes within the empirical material, thereby allowing for a structured yet flexible interpretation of the data.

2.3.1. Literature Review

Firstly, the extensive literature review of 158 articles, aimed at developing a comprehensive understanding of what existing research identifies as facilitating innovation among employees. The literature review was conducted through a structured search of relevant peer-reviewed articles using scholarly databases such as Chalmers' Library and Scopus, and search engines such as Google Scholar. A broad set of keywords and search strings was applied to capture relevant literature, including combinations of terms related to innovation, employees, employee-driven innovation, innovative behaviours and structures, performance management, KPIs, and human resource practices. Examples of search strings included combinations such as "employee driven innovation OR EDI AND performance", "performance appraisal AND innovation" as well as broader terms such as ""promoting innovation" AND employee* OR worker* OR staff.".

The selection of sources was guided by predefined inclusion criteria, focusing on peer-reviewed articles and relevant empirical studies within the field. Both foundational theories

and recent publications were included to ensure a balanced and up-to-date theoretical foundation. In addition, a keyword analysis was conducted to identify recurring and relevant terminology across the literature, which helped refine the search process and improve the relevance of the selected sources.

Following the selection process, a thematic analysis was conducted. The identified literature was systematically reviewed, coded, and grouped into key themes based on recurring concepts, patterns, and findings. This approach enabled the synthesis of insights across studies and facilitated the identification of central factors and mechanisms associated with innovation among employees. These were later used as the theoretical foundation for discussing whether organizations use evaluation criteria and appraisal systems that include aspects shown by research to promote innovation among employees.

2.3.2. Data Collection

Semi-structured interviews are commonly used to study complex phenomena within organizations because they offer a flexible approach. This format allows the discussion to develop based on the interviewee's experiences and perspectives, while still being guided by the study's overall research focus (Brinkmann & Kvale, 2015). Therefore, a qualitative interview study was conducted with the aim of gaining a deeper understanding of how employees are evaluated within organizations and which criteria are used in these assessments. This is particularly relevant as the study also seeks to examine the extent to which these practices align with prior research on factors that promote employee innovation.

The study is based on interviews with 14 respondents from seven different organizations (anonymized through C#-codes, see Table 1 below). The sampling strategy was outlined by purpose, as all organizations were selected based on their affiliation with the Chalmers School of Entrepreneurship CORP track (which revolves around early-stage projects with a focus on innovation), as well as their explicit orientation toward innovation. The empirical material was collected through semi-structured interviews with both employees who are subject to evaluation and managers who are responsible for evaluating employee performance. The semi-structured approach enabled a flexible yet systematic data collection process, allowing respondents to elaborate on their answers while the conversation remained guided by the thematic scope of the study. The interview guide was developed based on the purpose of the study and the theoretical framework, and included questions related to how performance is evaluated and which criteria are used in these evaluations.

Finally, a workshop was conducted with representatives from each company to validate the findings from the interviews and data analysis. During the workshop, participants were introduced to the factors identified in the research as facilitating employee innovation and were asked questions related to how employees are evaluated in relation to these aspects. In addition to validating the data and analysis, the purpose was also to enrich the findings by incorporating participants' reflections and observations, drawing on their direct experience of the organizational environment.

2.3.3. Data Analysis

The collected material was analyzed using thematic analysis, which is a preferred method when analyzing qualitative interviews (Bryman, 2016). The analytical process began with a thorough review of the interview notes in order to establish a holistic understanding of the data. The material was then coded based on recurring patterns and themes related to employee evaluation and performance criteria. Furthermore, the data was analyzed in relation to theory, with particular emphasis on five factors identified in prior research as promoting employee innovation. This enabled a comparative analysis between empirical practices and theoretically identified innovation-promoting factors.

While the use of semi-structured interviews entails both strengths and limitations, a key advantage lies in the ability to obtain rich and nuanced descriptions of respondents' experiences. At the same time, there is a risk of subjectivity, both in the respondents' answers and in the interpretation of the material. To enhance the trustworthiness of the study, the interviews were conducted using an interview guide and the analysis was carried out systematically. Also, the interviewees were anonymized, and the interviews were not audio-recorded with the aim of increasing participants' sense of comfort and openness. While this approach may have limited the level of detail in the data, which could affect the study's reliability, detailed notes were taken during the interviews and expanded immediately afterwards to mitigate this limitation. In addition, supporting documents used by the organizations in performance appraisal processes, such as materials related to salary discussions and employee performance reviews, were collected. These documents were used to complement the interview data and further strengthen the reliability of the study.

2.3.4. Credibility and Trustworthiness

Trustworthiness in qualitative research refers to the extent to which the findings can be considered credible, dependable, confirmable, and transferable, replacing the conventional quantitative criteria of validity and reliability with qualitative standards of quality and rigor (Bryman, 2016; Creswell & Poth, 2018; Patel & Davidsson, 2019). It concerns the degree to which the research process is transparent, systematically conducted, and grounded in the empirical material, ensuring that interpretations are well supported and contextually meaningful.

In order to enhance trustworthiness, several strategies were applied in this study. First, as mentioned above, a semi-structured interview guide was used to ensure a consistent structure across interviews while still allowing flexibility for respondents to elaborate on their experiences, thereby strengthening credibility through rich and comparable data. Second, detailed notes were taken during each interview and expanded directly afterwards to reduce the risk of information loss, which contributes to dependability by ensuring a transparent and traceable documentation of the data collection process. Third, triangulation was applied through the use of multiple data sources, including interviews with both employees and managers as well as supporting organizational documents related to performance evaluation processes, thereby enhancing credibility through data corroboration. In addition, a validation workshop was conducted with representatives from the participating organizations to discuss and reflect on preliminary findings, which strengthens the confirmability of the analysis by ensuring that interpretations are grounded in participants' perspectives. Finally, respondent anonymity was ensured in order to promote openness in responses and reduce potential response bias, thereby indirectly supporting both credibility and confirmability.

Table 1: *Overview of the organizations included in the study*

Company	**Sector**	**Industry**
C1	Private	Manufacturing
C3	Private	Tech
C4	Private	Manufacturing
C6	Public	Maritime
C7	Private/Public	Energy
C8	Public	Healthcare
C9	Private	Manufacturing

2.4. Empirical Findings

This chapter of the thesis introduces the empirical findings of the study, gathered from interviews with employees from the participating organizations. The findings cover what actions, behaviors and goals are deemed as positive and promoted by the organizations, as well as how they are measured internally.

2.4.1. Result Orientation and Achieving Objectives

The empirical findings indicate that results constitute a central and recurring dimension in how employee performance is conceptualized across the studied organizations, although the degree of formalization and the way results are defined vary. In C9, results orientation is explicitly captured through the criterion "*drive results*" which emphasizes the importance of setting clear, measurable goals and consistently delivering on them. Performance is closely tied to the attainment of predefined targets, and managers highlight that these targets should be aligned with business outcomes such as budget adherence or direct contributions to revenue. Similarly, "Results" was one of the evaluation criteria for C1, and the company was primarily assessed based on its ability to deliver- particularly in terms of execution, as well as its ability to drive improvements through optimization and new proposals. This reflects a strongly outcome-oriented approach in which individual performance is evaluated based on tangible and quantifiable outputs.

In C6, results orientation is not articulated as a single, standalone criterion but is embedded within several guiding principles. The principle "*I take responsibility for the whole*" is particularly relevant, as it implies that employees are expected to contribute to the organization's overarching mission and objectives. While the organization operates within a public sector context where financial performance is not the sole indicator of success, there remains a clear emphasis on delivering concrete results and maintaining cost awareness. Results are thus understood in relation to fulfilling the organizational mandate and achieving collectively defined objectives rather than narrowly defined individual targets.

At C3, results were conceptualized through the lens of "*value creation"*. This introduces a reflective component to results orientation, as employees are encouraged to evaluate and, if necessary, adjust their tasks to ensure that they contribute tangible value. Results are therefore not only measured in terms of output but also in terms of perceived usefulness and relevance to stakeholders within and outside the organization.

In C7, results orientation is reflected in the organizational value of being "*active*" which entails delivering on commitments and contributing to shared goals. Employees are expected to take responsibility for achieving what has been agreed upon, while also contributing to continuous improvement in ways of working. Results are thus associated with both execution and ongoing refinement of processes, suggesting that performance is not only judged by outcomes but also by the ability to sustain and improve those outcomes over time.

Similarly, in C8, results orientation is embedded within the dimension of *professionalism*. *Professionalism* referred to the ability to apply knowledge from education, research, and experience in practical work to benefit the organization, while taking responsibility for how one's work impacts the whole and contributing with commitment to achieving organizational goals. It also included demonstrating sound judgment by ensuring quality and efficiency in both approach and execution.

In contrast, C4 lacks clearly defined criteria for results orientation within its performance evaluation framework for all employees. The company does incorporate evaluation frameworks for managerial positions, where criteria are decided between the evaluated and the evaluator, that are followed up on during recurring meetings. However, non-managerial employees report that the absence of explicit goals and indicators makes it difficult to determine what constitutes successful performance. Instead, innovative projects are evaluated as whole projects (by their contribution to the organization's revenue) rather than examining individual employees' contributions. This lack of structure distinguishes C4 from the other organizations, where results, whether defined in quantitative, qualitative, or value-based terms, form an integral part of performance expectations. Actually, C4 did not express having any formalized evaluation criteria at all for non-managerial employees.

Lastly, across the interviews several employees in the different organizations emphasized that the perception of driving results and producing outcomes was what carried the most weight and what was, in practice, rewarded. One respondent said: "*Frankly speaking, my manager does not give a shit if I have taken a new course or learned something new, it will not lead to a higher salary for me, even though development is one of the criteria we are evaluated on*.".

2.4.2. Collaboration and Collective Responsibility

Collaboration emerges as a central and consistently emphasized dimension across all organizations, though it is conceptualized and operationalized in different ways. In C9, *collaboration* is one of the three core performance criteria and is defined as an individual's ability to work effectively with others to achieve shared objectives. This framing positions collaboration as a measurable competence at the individual level, suggesting that interpersonal effectiveness is an assessable aspect of performance.

In C8, *collaboration* was also one of three main performance dimensions. Including expectations on employees, supporting colleagues, contributing to problem-solving, and engaging in constructive feedback processes. Collaboration was also associated with maintaining respectful interactions with patients, colleagues, and other stakeholders, thereby extending beyond internal teamwork to include professional conduct in broader relational contexts. Likewise, C1 had "People" as one evaluation criteria, aiming at their ability to be team players and utilizing colleagues' differences.

C6 also adopts a more comprehensive and multi-layered approach to collaboration, which is reflected in several guiding principles. One evaluation was "*I collaborate internally*" which focused on actively cooperating with colleagues and across different parts of the organization to ensure collective success, with an emphasis on contributing to a good working environment within one's own team as well as fostering effective collaboration between groups. Moreover, the evaluation criteria "*I collaborate externally*" referred to the responsibility to engage with external stakeholders in a professional manner while representing C6 appropriately in all external interactions.

In comparison, C3 indirectly incorporates collaboration primarily within the dimension of contributing to the work environment. Employees are expected to support colleagues, participate in shared activities, and contribute to a positive and cooperative workplace culture. Collaboration is therefore closely linked to social behavior and team cohesion rather than solely to task execution, highlighting its role in shaping the organizational environment.

At C7, collaboration was not a stand-alone explicit evaluation criterion but rather embedded within the value of being "*open*." "*Open*" emphasizes collaboration, learning from others, and sharing knowledge, as well as engaging in constructive dialogue and actively giving and

seeking feedback to support both individual and collective performance. This reflects an understanding of collaboration as both a behavioral and cognitive process that supports organizational learning and performance.

Since C4 does not have any formal evaluation criteria for non-managerial employees regarding collaboration and teamwork capabilities. Though, all interview respondents from C4 stated that a will and ability to collaborate was of utmost importance for all employees throughout the organization.

2.4.3. Individual Development and Learning

Individual development and continuous learning constitute another key dimension across the organizations, although the responsibility for development is distributed differently between individuals and organizations. In C9, *self-development* is one of the three primary performance criteria and is defined as the employee's ability to improve their own competencies by building on strengths, addressing weaknesses, learning new things and taking responsibility for ongoing professional growth. This reflects a strongly individualistic perspective in which employees are expected to actively manage and drive their own development trajectories. Similarly, a substantial part of C1's evaluation criteria for employees revolved around personal development, but it was quite open to interpretation.

C6 similarly emphasizes individual development through the principle "*I develop myself*" stating the importance of taking responsibility for one's own motivation and professional development in order to continuously enhance the ability to contribute to the organization's mission, including maintaining engagement and actively developing relevant competencies.

At C7, individual development or learning was not an explicit standalone evaluation criterion. However, under the criterion "*Open*" employees were expected to learn from others, share knowledge, and actively give and seek feedback to support both individual and collective performance. Development is thus framed as a social process facilitated by interaction, dialogue, and collective reflection, rather than solely as an individual responsibility.

In C8, *development* is an explicit performance dimension alongside professionalism and collaboration. Employees are expected to take initiative in developing their competencies, contribute to organizational improvement, and continuously evaluate and adapt their working

methods based on new knowledge and experiences. This indicates a proactive and ongoing approach to professional growth that is closely linked to both individual and organizational learning.

Lastly, neither C3 nor C4 had any evaluation criteria related to competence development.

2.4.4. Responsibility and Beyond Assigned Work Duties

The final cluster concerns responsibility-taking and the extent to which employees are expected to act beyond their formal job descriptions. For example, at C3, *responsibility-taking* is explicitly defined as an expectation that employees go beyond their assigned roles by supporting colleagues, addressing issues outside their immediate responsibilities, and taking accountability for broader decisions and outcomes.

C6 also places strong emphasis on responsibility through multiple guiding principles. The principle "*I take responsibility for the whole*" highlights the expectation that employees understand and contribute to the organization's overall mission, while "*I take responsibility for my work group*" underscores accountability for team performance and working conditions. This dual focus suggests that responsibility is both individually held and collectively shared, encompassing both task execution and broader organizational stewardship.

At C7, responsibility is primarily reflected in the value of being "*active*," where employees are expected to deliver on commitments, take ownership of their tasks, and contribute to shared objectives. Responsibility is thus closely associated with reliability, accountability, and proactive behavior in fulfilling assigned duties.

In C8, responsibility is embedded within the dimension of *professionalism*, where employees are expected to apply their expertise in ways that consider the broader impact of their work. This includes ensuring quality and efficiency, as well as understanding how individual actions contribute to organizational outcomes and stakeholder value.

In C9, responsibility is implicitly connected to both result orientation and self-development. Employees are expected to take ownership of achieving their goals while also managing their own professional growth. Responsibility in this context is therefore distributed across both the evaluation criteria, driving result and self development.

2.5. Discussion

At first glance, it may appear that most organizations place a strong emphasis on learning and knowledge acquisition. The majority of the companies assessed employee performance based on aspects related to competence development, and the explicit term "development" was directly included as an evaluation parameter by several of them. One organization, for instance, even stated that employees were expected to be "actively developing relevant competencies." However, a closer examination suggests that some organizations primarily encourage employees to deepen and refine their existing competencies, rather than acquire new knowledge or competencies. This could be interpreted as a focus on improving efficiency and expertise within current roles through incremental knowledge expansion, rather than fostering the acquisition of new skills, perspectives, or areas of understanding. Notably, only C9 explicitly articulated expectations that extended beyond improving current performance to include addressing individual weaknesses and engaging in learning that broadens one's competence base. Interestingly, even though several studies have identified that organizations that intentionally encourage knowledge creation and knowledge acquisition enhance idea generation, the development of new solutions, innovative work behavior, and innovation (Cristache et al., 2025; Fierro Moreno et al., 2013; Wang, 2023).

Furthermore, no direct or indirect expectations or evaluation criteria related to knowledge sharing were identified among a majority of the companies even though a large body of research shows that organizational learning has a positive effect on firm performance, as it facilitates innovation (Azeem et al., 2021; Jiménez-Jiménez & Sanz-Valle, 2011). Actually, C7 was the only company that clearly emphasized that employees are expected both to learn from others and to share their knowledge. However, only C6 clearly valued employees initiating or engaging in collaborations with external actors, such as universities or other companies, by using "I collaborate externally" as one evaluation criteria during performance appraisal reviews. In contrast, the remaining organizations appeared to place limited or no formal value on knowledge-sharing practices as it was largely absent from formal expectations and assessment frameworks. Interestingly, C4 lacked evaluation criteria and relied on hiring "the right people" instead, by searching for people who have a passion for exploring and testing new ideas, while also being able to take ownership and responsibility over self-driven innovative projects.

At least, even though none of the companies had any specific KPIs, performance measurements, or evaluation criteria explicitly referring to “teamwork” or “cross-functional work,” all companies stated collaboration as one parameter when evaluating employees, and those companies that have a formal evaluation template or guideline had incorporated collaboration as one parameter. However, the focus was primarily on the employee’s ability to work with others, rather than the extent to which they engaged in collaboration, initiated collaborative efforts, or took responsibility for cross-functional work to solve common problems or, for example, improve processes. Interestingly, even though the companies primarily emphasized the employee’s ability to work with others, only one company had a clear definition of what “being good at collaborating” meant, implying that there may be value in companies considering Hoegl and Gemuenden (2001) definition of effective teamwork when formulating expectations and evaluation templates.

Moreover, the empirical findings revealed almost no evaluation guidelines or criteria designed in a way that encourages or explicitly addresses tolerance for risk-taking and failure. Although, extensive academic literature highlights risk aversion as one of the major organizational barriers to innovation is risk aversion, arguing for creating a risk-tolerant culture that allows individuals to fail and learn is just as important as rewarding and recognising innovation (Cannon & Edmondson, 2005; Harel et al., 2021).

Likewise, stating that encouraging innovative ideas is essential for innovation, even when there is calculated risk and uncertainty regarding their success (Coetzee & Leach, 2025). Such as evaluating time spent on exploration (e.g., working on a pilot, developing something in a new or different way) or the extent to which employees reflect on failures and what can be learned from them. Rather, the opposite was observed, as several employees mentioned that delivering results and performance were most highly valued and heavily emphasized. One company even included “Drive results” as an explicit performance evaluation criterion. Only one company, well known for its innovative products and solutions, did not place a strong focus on results. Instead, they evaluated employees based on “value creation,” where employees are expected to continuously assess whether their work generates meaningful outcomes for others. Their employees also tended to feel free to try new things and experiment, as long as they themselves had a clear intention and the work had the potential to create value, even if it might not succeed in the end. In contrast, the other companies appeared to be much more focused on results and outcomes, for example by evaluating employees based on delivering as promised, achieving

concrete results, reaching goals, and contributing to the organization's overarching objectives. This could, of course, increase the tendency of risk aversion, as it may not create an environment in which employees are encouraged to try new ideas or work differently in support of innovation. It may also indirectly penalize failure, leaving little room for mistakes and fostering a culture in which people are hesitant to fail, thereby hindering innovation.

2.6. Conclusion

Overall, the findings suggest a partial and uneven alignment between theory and practice- even in cases where companies explicitly aim to be innovative. Firstly, in relation to learning culture and knowledge acquisition, a vast majority of the companies considered competence development when evaluating employees. However, they primarily focused on the refinement of existing skills within one's current role rather than the broader acquisition of new knowledge, perspectives, or competencies. This implies that the evaluation criteria could be improved in this regard, focusing not only on knowledge expansion but also on the acquisition of new knowledge. Or at least, by becoming aware of this, companies could compensate for it through alternative means (e.g., inviting employees to seminars on new technologies) to promote a learning culture and knowledge acquisition among employees in order to facilitate innovation.

Secondly, despite knowledge sharing being strongly emphasized in the literature as a key driver of innovation, it is largely absent as a formal evaluation criterion across the studied organizations. Only one company explicitly incorporates both learning from others and sharing knowledge as part of performance expectations. This indicates that knowledge sharing is still rarely institutionalized in appraisal systems, even though it is widely recognized as important for innovation performance and could be improved.

Thirdly, in contrast collaboration was consistently included across all organizations, typically as a formal evaluation parameter. However, the findings show that collaboration is primarily understood as the ability to work with others, rather than the extent to which employees engage in cross-functional initiatives or external collaborations. This suggests that while collaboration is formally recognized, its innovation-driving potential may not be fully captured in evaluation practices and the evaluation criteria could be elaborated.

Finally, risk-taking and learning from failure are largely absent from performance evaluation systems. Only one organization stands out by explicitly focusing on "value creation" and allowing space for experimentation and uncertainty. In contrast, the dominant emphasis on results-oriented evaluation may contribute to risk aversion and reduce employees' willingness to experiment, thereby potentially constraining innovation. This underlines the importance of balancing evaluation criteria based on results with those that support experimentation and learning from failure. If it is inconvenient or difficult to design such evaluation criteria, it

further highlights the importance for organizations to develop and maintain a culture that accepts failure and trial-and-error, thereby steering desired behaviours that promote innovation.

2.7. Contributions, Limitations and Future Research

From a theoretical perspective, this study contributes by extending existing research on employee performance management in relation to innovation by integrating insights from employee-driven innovation literature with empirical evidence from organizational appraisal practices. While prior research has emphasized the importance of innovation-supportive behaviors such as learning, collaboration, knowledge sharing, and experimentation, this study shows that these elements are only partially reflected in formal evaluation systems.

Furthermore, from a practical perspective, the study offers several implications for organizations seeking to enhance their innovation capabilities through performance management systems by reviewing and redesigning their evaluation criteria. The findings highlight the need for organizations to broaden their evaluation criteria beyond traditional result-oriented metrics by more explicitly incorporating behaviors that support innovation, such as knowledge sharing, cross-functional collaboration, and external engagement. In particular, the study emphasizes the importance of promoting risk-taking and experimentation. Organizations are therefore encouraged to complement results-oriented KPIs with evaluation elements that explicitly recognize learning processes, iteration, and constructive failure.

However, the study is subject to limitations due to its relatively small sample of companies and would benefit from further validation of how these practices appear in a broader and global context. Furthermore, future research could advantageously explore in greater depth how performance review discussions and evaluation criteria for employees should be designed not to hinder innovation, but rather to serve as a guiding tool that supports and promotes innovation.

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3. Entrepreneurial Leadership

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3.1 Introduction

A company's ability to innovate is crucial in a competitive environment. Rapid technological change, shifting market demands, and intensifying global competition creates a growing pressure for established firms to develop new products, services, and business models while at the same time maintaining efficiency, profitability, and stability (O'Reilly & Tushman, 2013, 1996). Organizational ambidexterity refers to a firm's capacity to simultaneously pursue both of these imperatives, and the ability to balance short-term performance with long-term renewal has become a defining condition for organizational survival in rapidly evolving markets (O'Reilly & Tushman, 2013, 1996).

According to March (1991), this dual focus creates an inherent internal tension. The author describes it as the conflict between exploitation, the refinement and efficient use of existing knowledge and capabilities, and exploration, the search for new knowledge, innovation, and opportunities. Organizations that overinvest in exploitation risk becoming rigid and vulnerable to disruption, while those that overinvest in exploration may fail to generate the stable returns needed to sustain operations (Lavie et al., 2010). Importantly, this is not a tension that can be resolved through organizational design alone. As O'Reilly and Tushman (2013) argue, managing the explore-exploit balance is fundamentally a leadership challenge, requiring individuals who can hold both orientations simultaneously, allocate attention and resources across competing priorities, and promote exploration.

Entrepreneurial leadership has emerged as a particularly relevant response to this challenge (Gupta et al., 2004). Entrepreneurial leaders motivate employees to move beyond established routines, align people around a shared vision of opportunity-seeking, and create the conditions needed for exploration to take place alongside exploitation (Renko et al., 2015). Their influence on corporate entrepreneurship and innovation performance is well documented across industries and organizational contexts (Leitch & Volery, 2017). However, research also shows that the effectiveness of entrepreneurial leadership is not unconditional, and that it is significantly shaped by the organizational context in which leaders operate (Ireland et al., 2003). This implies that the challenge for established organizations in promoting exploration in the explore-exploit balance is not necessarily the absence of entrepreneurial leaders, but rather the inability of existing systems to fully leverage their potential.

Kreiser et al. (2019) build on this by arguing that corporate entrepreneurship depends on the alignment of three internal elements: a transformational strategic vision, a pro-entrepreneurship organizational architecture, and transformational processes and behaviours. When these elements are misaligned, even capable leaders may struggle to translate innovative intent into impact. This points to a gap in the existing literature: while considerable research examines leadership qualities or organizational structure in isolation, less attention has been paid to how the full configuration of organizational design shapes a leader's capacity to drive innovation within established firms.

This study addresses that gap by examining how organizational design, analysed through the STAR model (Galbraith, 2002), enables or constrains leadership throughout an innovation

process. Because innovation projects are not static, the demands placed on leaders and organizational structures can be expected to evolve as a project moves from early exploration toward later-stage implementation. The STAR model, which aligns strategy, structure, processes, rewards, and people, provides a framework for capturing the configuration of these elements at any given point (Galbraith, 2002), and it can be argued to be important to consider how that configuration may need to shift dynamically as a project matures. For this alignment to support innovation, organizations must consciously design environments and architectures that reinforce and legitimize the behaviours needed across all phases of the innovation process (Kreiser et al., 2019).

3.1.1 Motivation

Entrepreneurial leadership has well-documented beneficial effects on innovation and organizational performance (Leitch & Volery, 2017). For this reason, whether entrepreneurial leadership is beneficial is not the focal question of this study. The more pressing, and less resolved question, is what organizational conditions allow those benefits to be realized, and what prevents them from materializing in practice.

To examine this question with sufficient breadth, the study operates with the concept of entrepreneurial leadership as its primary construct. Entrepreneurial leadership encompasses a broad orientation: the ability to identify and pursue opportunity under uncertainty, mobilize resources across boundaries, and sustain a climate in which innovation is treated as a strategic priority (Gupta et al., 2004). This broad framing is well suited to the organizational design question at the center of this study, as it captures the full range of leadership behaviours that established firms need to navigate with regards to the explore-exploit tension, without restricting the analysis to a single, narrowly defined leadership style.

By connecting insights from the broader concept of entrepreneurial leadership, and by analysing the organizational conditions for these leaders through the STAR model (Galbraith, 2002), this study sets out to provide support for organizations seeking to take concrete action. Specifically, it seeks to understand how the organizational design can be configured, and reconfigured across the phases of an innovation project, to fully leverage the capacity of their leaders to drive innovation.

3.1.2 Aim

The aim of this study is to examine how organizational factors shape entrepreneurial leaders' ability to pursue intrapreneurial initiatives within established organizations. Through this, the study aims to develop insights into how organizations can leverage the full potential of entrepreneurial leaders by forming the organizational context in such a way that it enables and incentivizes innovation and intrapreneurship. The study does so by tracing how organizational conditions, analysed through the STAR model (Galbraith, 2002), enable or constrain leadership across the phases of an innovation project.

3.1.3 Research Questions

Main Research Question

- How do organizational factors influence entrepreneurial leaders' ability to initiate and drive intrapreneurial initiatives?

Sub Research Questions

- How can organizations intentionally design these conditions through the STAR Model?

3.2 Theoretical Framework

This study examines how organizational factors shape entrepreneurial leaders' ability to initiate and drive intrapreneurial initiatives, and how organizations can intentionally design those conditions. The theoretical framework builds a cumulative argument across three sections. Organizational ambidexterity (Tushman & O'Reilly, 1996) establishes the strategic condition that frames the problem. The STAR model (Galbraith, 2002) explains how that strategic condition translates into organizational design, and where tensions arise in that translation. The intrapreneurship enablers framework then specifies what organizational-level conditions the literature identifies as enabling entrepreneurial action within that design context.

3.2.1 Organizational Ambidexterity

Organizational ambidexterity describes a firm's capacity to simultaneously exploit existing capabilities and explore new opportunities (Tushman & O'Reilly, 1996). Exploitation focuses on efficiency, incremental refinement, and the execution of established business models. Exploration involves search, experimentation, and the pursuit of new trajectories. Most established firms are structurally configured for exploitation, and the introduction of an exploratory strategic intent creates an inherent internal tension between these two logics (Tushman & O'Reilly, 1996).

March (1991) characterized this as a self-reinforcing dynamic: success in one mode tends to drive further investment in that same mode, making sustained balance difficult to achieve. Organizations that focus exclusively on exploitation risk obsolescence as markets shift, while those that pursue exploration without sufficient exploitation may fail to capture returns from their innovations (March, 1991; Lavie et al., 2010).

For the purposes of this study, ambidexterity is relevant primarily as a strategic condition. Many established firms today operate with strategies that explicitly contain both exploratory and exploitative objectives. However, exploration and exploitation do not simply require different emphases within the same design configuration, but rather they frequently require opposing ones (Tushman & O'Reilly, 1996). A structure built for efficiency risks working contradictory to the flexibility that exploration demands (March, 1991). It is precisely this tension that the STAR model, presented in the following chapter, allows us to examine (Galbraith, 2002).

3.2.2 The STAR Model

The STAR model, introduced by Galbraith (2002), conceptualizes organizational design as a set of interrelated policy domains that are directly controllable by management and that shape employee behavior and organizational capability. The model comprises five dimensions: strategy, structure, processes, rewards, and people. A central premise of the model is that strategy drives all other design choices, meaning that all dimensions should all be configured in alignment with the strategic direction (Galbraith, 2002). The author argues that the five dimensions must be mutually aligned and reinforcing with each other, as shown in *Figure 1*. Coherent design provides consistent behavioral guidance, while misalignment generates ambiguity and conflicting signals for employees.

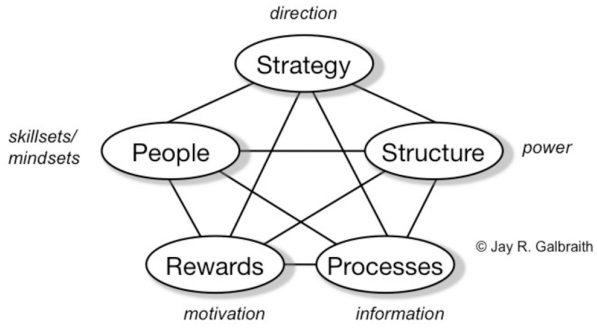

Fig. 1: The design of the STAR Model (Galbraith, 2002)

Strategy defines the organization's direction, specifying goals, values, and the intended basis for value creation. It functions as the starting point from which all other design choices follow, establishing the criteria against which structural arrangements, processes, and resource allocations are evaluated (Galbraith, 2002).

Structure determines how authority, responsibility, and decision-making power are distributed. It shapes both vertical control and horizontal collaboration, and directly affects whether leaders and employees have the autonomy and access to resources required to act on strategic priorities (Galbraith, 2002).

Processes refer to the mechanisms through which information flows and decisions are made across the organization. They govern planning, budgeting, and coordination, and can operate vertically through resource allocation routines or horizontally across functional boundaries (Galbraith, 2002).

Rewards align individual motivation with organizational objectives through compensation, performance evaluation, incentives, and recognition. The reward system signals what behaviors and outcomes are valued, and must be consistent with the other dimensions to reinforce rather than undermine desired action (Galbraith, 2002).

People concerns human resource policies related to recruitment, development, and capability building. This dimension recognizes that organizational effectiveness depends not only on formal systems but on the alignment between design choices and the competencies and mindsets of those operating within them (Galbraith, 2002).

The STAR model’s alignment logic has a direct implication for ambidextrous organizations. If strategy is the starting point for all design choices, then a strategy that contains both exploration and exploitation must be systematically reflected across each of the remaining design dimensions to achieve true internal fit (Galbraith, 2002; Kreiser et al., 2019). However, exploration and exploitation do not simply require different emphases within an organizational configuration; they frequently demand opposing ones (Tushman & O'Reilly, 2004). Structures supporting exploitation tend toward centralization and standardization, whereas exploration requires decentralization and high flexibility. Consequently, an ambidextrous strategy risks producing structural contradictions. It is precisely within these operational tensions that

executive leadership must actively operate and manage competing agendas, ensuring that the organizational design is tailored for and manages the ambidextrous strategy (Tushman & O'Reilly, 2004).

As shown in *Figure 2*, strategy affects several connected elements. When these elements are aligned, they can guide the employees towards a behaviour that supports the organization's goals, leading to a stronger organizational culture and performance (Galbraith, 2002).

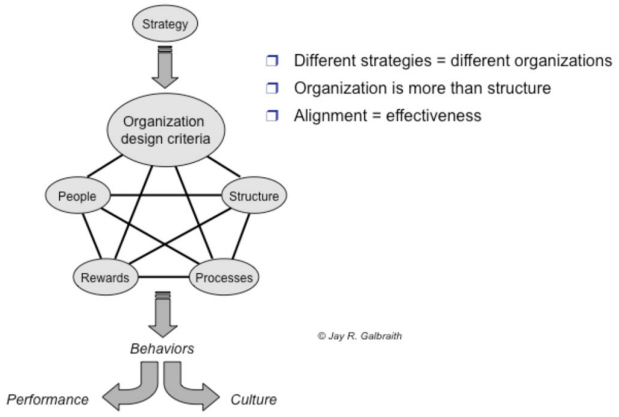

Fig. 2: How organizations design can affect employee behaviours and company culture (Galbraith, 2002)

3.2.3 Organizational Enablers of Intrapreneurship

Given the design tensions that ambidextrous strategies produce, the question becomes what organizational conditions the literature identifies as enabling entrepreneurial action in practice. Intrapreneurship refers to entrepreneurial initiatives undertaken by employees within established organizational boundaries, including opportunity recognition, the development of new practices, and the pursuit of internal ventures (Antoncic & Hisrich, 2003). While such behavior is sometimes attributed to individual disposition, research consistently shows that it is strongly shaped by the organizational context in which individuals operate (Kreiser et al., 2019).

Huang et al. (2021) propose a framework for understanding how intrapreneurship is cultivated, arguing that it emerges through the interaction of individual-level enablers, organizational-level enablers, and facilitating mechanisms. Huang et al. (2021) propose a framework for understanding how intrapreneurship can be promoted, stating that it comes through the interaction of individual-level enablers, organizational enablers, and facilitating mechanisms. For this study, the focus is placed on the organizational level, as this corresponds directly to the design conditions that organizations can intentionally shape.

Huang et al (2021) categorize organizational enablers of intrapreneurship in four domains. The first is about development support and work design, which includes active management support, employee discretion, managerial coaching, development monitoring, and supportive job design. The second domain relates to resource availability and highlights the importance of providing financial resources, technological systems, workshops, related knowledge, and

broader innovation capabilities. A third domain concerns the managerial style, where transformational leadership, managerial framing, and receptiveness to new ideas are important enablers. Finally, the author highlights the importance of an innovation culture characterized by employee autonomy, tolerance for failure, encouraging risk-taking, and extension of individual networks across the organization.

These conditions define the space within which entrepreneurial initiatives can be initiated and sustained, and map directly onto the STAR model dimensions established in the preceding section. This implies that the STAR model and the Huang et al. (2021) framework are not parallel lenses but complementary ones: the STAR model identifies the design mechanism through which organizational conditions are produced, while the intrapreneurship enablers framework specifies what those conditions need to look like for entrepreneurial action to occur. Where the STAR model dimensions are configured in ways that are misaligned with an ambidextrous strategy, the enabling conditions identified by Huang et al. (2021) are likely to be absent, and entrepreneurial leaders will face structural barriers that constrain their capacity to act regardless of their individual capability.

3.3 Methodology

This chapter explains the methodological choices made to address the research aim and questions of this study. The aim is to examine how organizational factors shape entrepreneurial leaders' ability to pursue intrapreneurial initiatives, and how organizations can leverage these insights, through the study's theoretical frameworks, to design those factors intentionally. Achieving this requires an approach that can capture the experiences and perspectives of people working inside real organizations, across multiple different contexts. This chapter covers the research approach, data collection, and analysis procedures, as well as ethical considerations and limitations.

3.3.1 Research Approach

This study takes a qualitative approach, as the aim is to understand how entrepreneurial leaders experience and navigate organizational factors rather than to measure or quantify outcomes. This places the study within an interpretivist tradition, where social reality is understood through the subjective experiences of individuals (Bryman & Bell, 2015; Creswell & Poth, 2018).

The study applies abductive reasoning, moving iteratively between empirical data and theory (Saunders et al., 2019). Data was collected without a theoretical structure imposed on the respondents, allowing them to speak on their own terms. The theoretical frameworks were then applied to interpret the findings, while also remaining open to themes that the frameworks did not anticipate.

The research design is a multiple case study across ten organizations (Yin, 2018). Each case is interpreted individually through the theoretical frameworks of the study, and findings are discussed in relation to theory rather than across companies. This allows for meaningful patterns to emerge while respecting the uniqueness of each organizational context (Merriam & Tisdell, 2016).

3.3.2 Participating Companies

To maintain confidentiality, the identities of the participating companies will not be disclosed in this study. Each organization has been assigned a unique identifier consisting of the prefix “C” followed by a specific number (e.g., C1, C2). Of the 10 evaluated companies, 1-2 interviews have been conducted. In the cases where two interviews have been conducted at the same company, they are separated by a second specific number (e.g., C1-1, C1-2).

3.3.3 Data Collection

The study utilizes two sources of data: insights from respondents at the evaluated companies gathered through a number of semi-structured interviews at the companies and reflections from the embedded researchers at the companies, gathered through a structured workshop.

3.3.3.1 Semi-structured Interviews

Semi-structured interviews were chosen as the primary data collection method, as they allow for focused conversation around specific topics while giving respondents the space to elaborate in their own words (Bryman & Bell, 2015). This flexibility is important when exploring

complex, experience-driven phenomena such as intrapreneurship, where the most valuable insights often lie in the details and nuances of individual accounts (Kvale & Brinkmann, 2015).

A total of 13 interviews were conducted, 1-2 per organization. The respondents were selected through criterion sampling, meaning that participation was based on a specific set of criteria rather than convenience (Patton, 2015). Each respondent was required to have personally driven an intrapreneurial project within their organization, ensuring that the data reflects direct, firsthand experience. The envisioned respondent that met this criterion is someone within the company who has championed an innovation initiative and felt ownership for the progress of the initiative. Essentially, someone who has taken it upon themselves to drive the initiative forward and recruit support from others in that process. Their perspective on what enabled them to achieve this, what encouraged or discouraged them from driving innovation, and what structures and processes were helpful or limiting will provide insights into how the different companies' approaches differ.

The interviews were conducted by the embedded researchers, each of whom had been placed within their respective organization for five months before data collection. Through this extended presence, the embedded researchers had become part of the organizational culture, which provided two important advantages. First, it gave them the contextual understanding needed to conduct interviews that were sensitive to each company's specific setting (Brannick & Coghlan, 2007). Second, and critically for the validity of the sampling, it meant they were well positioned to verify that each respondent genuinely met the criterion for participation.

The interview guide was structured around four themes, each representing a phase of the intrapreneurial project:

- *The Project*: background, motivation, and context of the initiative.
- *Early Stage*: how the project was initiated and what conditions existed at the outset.
- *Driving the Project*: how the project was advanced, and what enabled or hindered progress.
- *Outcome*: results, reflections, and lessons learned.

The purpose of this structure was to trace enablers and barriers as they appeared across the lifecycle of each project, providing a chronological and contextual basis for the analysis. The interviews were documented through a combination of manual note-taking and audio recording, followed by transcription, depending on the preferences and consent of each respondent. The full interview guide can be viewed in section B in the appendix.

3.3.3.2 Workshop

The workshop was conducted as a complement to the semi-structured interviews, serving as a second source of data collection. While the interviews captured the experiences of entrepreneurial leaders within each organization, the workshop drew on the observations and reflections of the embedded researchers themselves. Having spent nine months inside their respective organizations and driven intrapreneurial projects of their own, the embedded

researchers are in this study regarded as entrepreneurial leaders in their own right. This dual role as both researchers and practitioners makes their collective observations a valuable and distinct source of insight (Coghlan & Brannick, 2014).

The purpose of the workshop was to gather aggregated data across all ten organizational settings, based on what the embedded researchers had observed and experienced firsthand. Specifically, the workshop focused on identifying enablers and barriers to intrapreneurship, examining when these occurred during the project lifecycle, understanding the reasons behind them, and discussing how they could be leveraged or mitigated. This aggregated perspective adds a layer of analytical depth that the individual interviews alone could not provide (Morgan, 1997).

The workshop made use of two digital tools, each serving a distinct purpose. *Mentimeter* was used to collect aggregated responses from the embedded researchers in real time. Importantly, these responses were not tied to any specific company, meaning the data reflects the collective picture across all ten organizational settings rather than individual cases. A *Miro* board was used to map findings in a more structured and detailed way. For each enabler and barrier identified, the embedded researchers captured the following: *a brief explanation, the project phase in which it occurred, its impact, and either how it could be mitigated in the case of a barrier, or how it could be further enhanced in the case of an enabler.* The structure of the session followed the same four phases as the interview guide, ensuring consistency between the two data sources and enabling the findings to be analyzed within the same thematic framework.

3.3.4 Data Analysis

The data from both the interviews and the workshop were analyzed using thematic analysis, which is a method for identifying, organizing, and interpreting patterns of meaning within qualitative data (Braun & Clarke, 2006). Thematic analysis was chosen because it is flexible enough to work across diverse data sources while still providing a systematic and transparent process for translating raw data into findings.

The analysis began with the interview data. Each interview was reviewed and coded individually, with the four themes of the interview guide serving as the initial organizing structure. Within each theme, the data were examined for recurring patterns, notable experiences, and specific references to enablers and barriers. This process was conducted separately for each company, meaning that the findings from each case were first developed on their own terms before being considered in relation to the broader dataset (Yin, 2018). The coded findings were then interpreted using the study's theoretical frameworks, in line with the abductive approach described in Section 3.1.

The workshop data from the Miro board was analyzed separately and used to complement and enrich the interview findings. Rather than being treated as case-specific data, it was read as an aggregated layer of insight reflecting patterns observed across all ten organizational settings. Together, the two data sources inform the empirical findings chapter, where the identified enablers and barriers are discussed in relation to the theoretical frameworks.

3.3.5 Ethical Guidelines and Trustworthiness

Ethical Guidelines

All participants were informed about the purpose of the study before taking part, and participation was voluntary throughout. To protect the privacy of participants, all data was anonymized. Individual respondents are not identifiable in the reported findings, and company names are not disclosed. The handling of personal data followed the principles of the General Data Protection Regulation (GDPR), ensuring that data was collected, stored, and processed in a manner that respects the rights of participants (European Parliament, 2016).

Given that the embedded researchers occupied insider positions within their respective organizations, reflexivity is an important ethical consideration. Their prolonged presence and personal involvement in intrapreneurial projects may have influenced both the data collected and the interpretations made. This is acknowledged as an inherent feature of embedded research rather than a flaw, and steps were taken throughout the process to maintain awareness of how personal perspectives could shape the analysis (Coghlan & Brannick, 2014).

Trustworthiness

In qualitative research, trustworthiness is evaluated through four criteria established by Lincoln and Guba (1985): credibility, transferability, dependability, and confirmability.

Credibility refers to the accuracy of the findings in representing the experiences of participants. The nine-month embeddedness of the researchers within their organizations strengthens credibility, as it allowed for deep familiarity with the context before any data was collected. The use of two complementary data sources, interviews and the workshop, further supports credibility through triangulation (Patton, 2015).

Transferability refers to the extent to which findings can be relevant beyond the immediate study context. While the findings of this study are not intended to be statistically generalized, the detailed accounts of ten organizational cases provide a rich empirical base from which readers can assess the relevance of the findings to other settings (Lincoln & Guba, 1985).

Dependability concerns the consistency and stability of the research process. The use of a structured interview guide across all ten cases, combined with a shared Miro board framework in the workshop, ensured that data were collected in a consistent manner across different organizational contexts (Bryman & Bell, 2015).

Confirmability refers to the degree to which the findings are shaped by the data rather than by the researchers' own preferences or biases. The use of thematic analysis as a transparent and systematic process, combined with the explicit acknowledgment of the researchers' insider roles, supports confirmability by making the analytical process visible and open to scrutiny (Braun & Clarke, 2006).

3.3.6 Potential Limitations

Several limitations of this study should be acknowledged when interpreting the findings.

First, the ten organizations in this study vary considerably in size and internal structure. These differences may influence how intrapreneurial projects are initiated, resourced, and supported, and by extension, how respondents perceive and describe the enablers and barriers they encountered. While the theoretical frameworks provide a common lens for interpretation, the findings should be read with awareness that organizational size and structure form part of the context shaping each account (Yin, 2018).

Second, the data collected through interviews is inherently subjective. Each respondent reflects on their own personal experience of driving an intrapreneurial project, which means that the findings capture individual perceptions rather than objective organizational realities. Two people within the same organization may have experienced the same project very differently. The findings should therefore not be treated as definitive or exhaustive descriptions of any given company, but rather as accounts that illuminate how organizational factors are experienced from a specific vantage point (Kvale & Brinkmann, 2015).

Third, the embedded researchers' insider positions, while methodologically valuable, also introduce the risk of subjectivity in observation and interpretation. Despite efforts to maintain analytical awareness, personal involvement in the organizations may have shaped what was noticed, emphasized, or interpreted during both data collection and analysis (Coghlan & Brannick, 2014).

Finally, with one interview conducted per organization in most cases, the study captures a single perspective from each case. This limits the depth of the case-level analysis and means that findings cannot be taken as fully representative of the broader organizational experience within any one company (Patton, 2015).

3.4 Empirical Findings

This section presents the data collected from the interviews and the conducted workshop. The findings are organized into four main themes, based on the key topics in the interview guide. Each theme presents the main ideas that emerged from the interviews, and together they provide a structured overview of what the participants shared and how they understand the topic. The findings from the workshop are divided into aggregated responses to multiple-choice questions and more nuanced reflections from a structured table in Miro.

3.4.1 Project Background

Project Descriptions
The interviews conducted across the 10 participating case companies cover a range of different innovation projects. These can broadly be grouped into three categories: product and technology development, process and organizational change, and initiatives combining both.

Several projects focus on developing a new product or technology. C3-2 is developing a new product line, C4 and C5 are developing a new product, C9 is creating a new type of sensor alongside an algorithm, and C10 is developing a new, larger, and heavier product.

Other projects center on process improvement or new ways of working. C1-2 pursued a new way for the organization to structure its project teams, moving from traditional platforms and roles to innovation platforms. C1-1 focuses on global incubation, and C6 is undertaking a cross-functional internal process and governance enhancement, with project model alignment and investment decision integration as its focal points. C7 describes the initiation of a new development team positioned closer to operations, rather than leaving development to IT.

Some projects combine both dimensions. C2 focuses on removing a barrier for transformation by implementing a new technology as a service in the market. C8-1 describes a central part of a transformation program, using new workflows and digital support to deliver the organization's services to users at home. C8-2 describes a project that applies a novel, data-driven way of working within operations to uncover user movement patterns and identify suitable candidates to receive services at home.

Motivation for the Projects
The motivations behind the projects vary across the case companies. They can broadly be grouped into three categories: exploration and innovation, business growth, and broader purpose and proactivity. Several respondents describe exploratory motivations. C2 was building a knowledge base and exploring different use cases, with the specific project being inspired by an encounter with a startup from another industry, which sparked ideas for how the startup's technology could be applied to their own products. C3-1 was motivated by a desire to create something that did not yet exist, alongside a wish to foster an innovative environment. C5 appreciated the idea of having something different on the market while also pushing their brand. Other projects are driven by clear business motivations. C3-2 was motivated by growing the product offering and extending the business, and C9's project carries the potential to save the company billions.

A third group of respondents describes motivations tied to a broader purpose or a proactive mindset. C6's motivation relates to structure and order, both increasing the organization's ability to implement change and making things easier for future employees, while also seeing

value in improving Sweden's visibility. C8-1 is motivated by the necessity of the task, viewing it as an existential transformation for the organization and feeling a responsibility to develop a system that works in the long run, for both users and staff. C10 is driven less by financial benefits and more by how technology can contribute to a better climate, wanting to showcase that technical solutions can make a real difference. C7 describes a desire to shift from an organization that observes and reacts to one that anticipates and actively shapes the future. C8-2 is motivated by gaining an overview and being able to influence the user's path, with the view that reviewing the past makes it possible to learn how to act in the future.

3.4.2 Early Stage of the Projects

Origin of Idea
The origin of the project ideas varies considerably across respondents and organizations. Three main sources emerge: internal management, external inspiration, and customer or market insight.

Several projects were initiated by management. C1-1 states the idea came from the responsible manager, C1-2 explains it came from the CEO, who was convinced it was needed for the organization, and C4 describes how executive management was inspired by a competitor, which is where the assignment originates. C8-1 explains that the program stems from the strategic vision of the organization's leadership to address future challenges, with low-hanging fruit and high-impact areas identified early on, and the initiative to provide services to users at home is recognized as a key driver. C5's initiative was also put in motion by management, in this case the respondent themself, who, as manager, emphasized lower production costs and differentiation by selecting a new target segment to convince the team.

Other projects were sparked by external inspiration. As previously noted, C2 was inspired by a meeting with a startup from another industry, which sparked ideas for applying their technology to the company's products. C10 got inspired by a study trip to Australia.

A third source of origin is the customer or market perspective. C2 also describes how working through different use cases led to a deeper understanding of customer needs, which sparked the idea. C3-2 similarly explains that ideas typically originate from customer needs. C8-2 describes how the idea originated from recognizing the need to improve at identifying the right users. C5 further describes seeing a flaw in the current offering of a product type and deciding to create a new product without it.

Resistance and Support from the Organization
The respondents describe experiencing various forms of resistance across their projects and initiatives. Three recurring themes emerge: financial constraints, the need to prove value, and internal skepticism or misalignment.

Financial constraints are the most commonly cited source of resistance. C2 describes the feeling of having found a “golden nugget”, with a positive customer ready to buy, but when gathering organizational stakeholders, the experience was as if the “organization's immune system had attacked.” The organization repeatedly asked for a business case, and despite the relatively small amount of money involved, the respondent had to go high up the chain to get a decision. C7 faced a similar situation, where the initial funding needed was modest but still difficult to secure, as a business case was required to spend money, yet for something never done before, the business case could only be built by actually doing it, calling the situation a

“Catch-22.” C10 also faced financing-related resistance, as the project had no access to an internal budget and relied solely on governmental financing. C3-2 notes that limited resources, lack of budget, and clashing timelines can all provide resistance.

Some projects faced little to no financial resistance. C9 faced no organizational resistance at all, as their innovation group had its own budget and mandate to make decisions. The only constraint was that the budget could be quite limited when it came to actually driving and developing the project. When the innovation group was later shut down during the early to mid-stage, the project was handed over to a new owner and team, a transition made easier by the project having a strong internal sponsor. C8-1 similarly explains that an allocated budget was essential for being able to experiment without depleting everyday operational budgets. C4 received economic support from the organization and the group company, giving the project full backing.

A second theme is the need to prove the value of the initiative before proceeding. C5 was met with skepticism when pitching a new product, which was initially perceived as low quality. Developing a prototype and demonstrating otherwise was central to gaining the team's support. C8-2 describes how a significant part of early life was proving the value of spending time on analysis, rather than operational work. The respondent also notes that while support comes in the form of a mandate to proceed, the limitations of existing systems often act as a source of resistance, and that the organization, though interested, is large and sometimes sluggish.

A third theme is internal skepticism or misalignment. C3-2 describes one form of resistance as not being in sync with the product roadmap or internal strategy. C7 highlights that few people understood the direction of the project, but still experienced resistance from the rest of the organization, with people questioning the purpose of data requests, causing months of delay just to access basic information. C8-1 encounters both skepticism and enthusiasm, as established structures fear losing resources or service quality, while intrapreneurs who have been waiting for a new way of working offer strong support. C3-1 describes significant internal support but apprehension at the parent company level. C6 similarly faces a mix, with the work sanctioned by their manager, but with a risk of attracting unwanted attention and having the initiative shut down if it becomes too visible.

From Idea to Something Concrete

The respondents highlight several different approaches and enabling factors when it comes to developing ideas into something concrete. Some respondents emphasize the importance of making things tangible quickly. C3-1 states they move ideas into proofs of concept, trying to showcase something real and steer clear of PowerPoint as fast as possible. C6 describes a range of concrete actions, including workshops, translation work, mapping terminology and process steps, developing responsibility allocation, and connecting documentation requirements to financial decision timing. C7 illustrates how early tangible results can shift organizational dynamics entirely: by finding a financial opportunity that covered the initial funding within just three weeks, the concept was proven, skepticism turned around, and management began to pay attention.

Others highlight the importance of securing the right conditions before moving forward. C8-1 explains that it was vital to establish a program structure providing the mandate to operate across traditional department silos, and also important to secure early political and high-level management support. C8-2 found it crucial to gain access to data from various entities and to allocate dedicated time for methodical review work. C9 had the advantage of leading an

innovation group and controlling the budget, which made moving from idea to reality relatively straightforward. C10 secured external financing to create something real-world testable, then anchored it internally once it could be further developed.

3.4.3 Driving the Projects

Barriers
The respondents describe various barriers that impact the development of projects as they move forward. These can be grouped into four themes: internal stakeholders and organizational structures, resource constraints, technical and regulatory challenges, and incentive gaps.

Internal stakeholders and organizational structures are a recurring source of friction. C2 explains how having too many people involved who only observe and criticize, without contributing, can drain energy and ultimately kill a project. C7 similarly describes how it was crucial to shield the project from the rest of the organization in order to maintain both energy and creativity, and also quantified dimensions such as clarity, efficiency, confidence, and psychological safety, orchestrating regular discussions when these declined. C2 further notes that while organizational structure is necessary, innovation requires knowledge and passion, and structure leads to the wrong resources being assigned. C2 also poses the consideration that the project could become a big business, but they do not know where it fits into the organization, and also that there are rules that the organization cannot make an exception for, even though it would not destroy anything, leading to it getting political. C8-2 adds that existing structures are often built for present-day service delivery rather than long-term development work. C10 describes a political barrier at the outset, with a person in a leading authority role actively working to slow the project down. Resource constraints are also widely cited. C8-2 and C3-2 both identify a lack of resources earmarked for innovation as a barrier.

Technical and regulatory challenges form a third theme. C3-1 encountered significant technical issues and found it cheaper to design and produce a needed component internally than to purchase it. C3-2 also notes the presence of technical barriers. C4 describes their subcontractor being overloaded and unwilling to meet demand, which slowed the project. C8-1 highlights how the regulatory environment, particularly MDR and GDPR requirements alongside a slow-moving public procurement process, is not built with agile innovation in mind, with these administrative demands frequently reducing the speed of technical implementation. Safety concerns add another layer, with C10 describing safety as a barrier and C6 noting that it is very difficult to justify any project unless it demonstrably contributes to improved safety.

Finally, incentive gaps present a distinct barrier. C9 states that there is no incentive for employees to contribute to innovation projects outside of their expected scope, meaning that colleagues needed to drive the project forward had to do so on top of their normal workload. C6 describes the broadest range of barriers, including silo thinking, multiple process languages, a lack of shared understanding, missing process ownership following a reorganization, difficulty securing time and attention, competing priorities, managers deprioritizing the initiative, the risk of the project being shut down if it becomes too visible, the absence of a prioritization forum, and capability gaps.

Driving the Project Forward
The respondents describe different approaches to driving their projects and initiatives forward. Two themes emerge: creating structure and enabling progress, and managing resources and teams.

Several respondents emphasize the importance of creating structure and scope. C1-2 both led and were responsible for the workstream, including implementation and follow-up, describing the process as defining the problem, dividing activities into manageable steps, and using workshops to track progress. C6 focuses on cross-silo structuring, clarifying responsibilities, developing a common language, and making cross-functional collaboration possible. The respondent also takes on a moderator role, ensuring decisions are made and documented, and draws on informal methods when formal structures fall short. C8-1 describes their role as clearing the path at a strategic level, managing legal and financial barriers so the operational team can focus on operational work, and highlights the development of collaborative arenas and the use of clear milestones to demonstrate progress. C7 similarly describes their role as energizing the team rather than directing it.

Others focus on resource and team management. C7 started by securing a small budget and assembling a team, initially drawing on IT support and external consultants, with the allocated funding growing as the initiative demonstrated return on investment. The respondent notes that using consultants who were only partially dedicated to the project proved more expensive and less effective than hiring full-time personnel, and that building a stable team with the right dynamics became a key principle. The respondent further stated it was necessary for knowledge to be kept within the team and that continuity was most important of all.

C9 worked with external actors to fill a knowledge gap and, lacking a budget outside of the innovation group, waited for the right moment to integrate the project into the general company budget, while also depending heavily on a solid idea and a committed sponsor. C8-2 took a focused approach, concentrating on one thing at a time to avoid being overwhelmed, and generated momentum to expand into further areas by demonstrating clear results early on. C10 describes a broad range of team activities, including work on rule changes, communication and knowledge sharing, engagement with municipalities and regional authorities, cooperation with customers and suppliers, and research and safety work.

3.4.4 Outcome of the Projects

The respondents view the outcomes of their projects differently, and what defines success is largely subjective, with each project requiring its own measure of evaluation.

Several projects are described as successful or largely successful. C1-1 considers the project successful on the basis that it remains active, even though the end result has not yet been reached. C1-2, from the same company but on a different project, considers it successful for having reached an implementation stage, but identifies the greater success in the snowball effect it had on a major strategic shift within the company. The project drove the organization away from having to prioritize between long-term R&D and application projects toward a much clearer focus and better-aligned vision across different revenue streams. C8-1 and C8-2 also view their outcomes as successful, both highlighting the importance of top management support, which enabled the projects to be driven with considerable freedom and generated strong commitment from their respective project groups. C8-1 notes, however, that future work should incorporate more cross-functional collaboration to avoid getting stuck in slow-moving administrative processes. C8-2 adds that a tradition of focusing on present-day crises, combined with an organizational structure that does not allocate sufficient resources for innovation, remains a structural challenge. C7 describes one of the clearest successes, with the project moving from a yearly discussed topic to an integral part of how the organization operates, and with a strong financial outcome. On a personal level, it was also a major success,

though broader organizational adoption across the whole company continues to move slowly due to organizational complexity. C10 is similarly viewed as highly successful, with the organization becoming a first-mover in the European Union. The respondent attributes this to the enthusiasm of the individuals involved, their ability to take action, and the capacity to align on a way forward despite significant external involvement.

Other projects present more mixed or unclear outcomes. C4 crossed the finish line but with an end result that fell short of expectations, due to bad timing and uncertain internal conditions. The project has since grown in sales and begun achieving the results it deserves externally. The respondent reflects that the uncertainty slowing the project could have been mitigated by proactively communicating, through internal channels, that the project carried a high degree of uncertainty from the outset. C9 is described as partially successful. The idea itself is considered groundbreaking for the industry, and external involvement was not only a growth enabler but also a key factor in whatever success has been achieved. However, the internal team lost momentum before the handover to a new project group, and the respondent believes the same results could have been reached in half the time. The respondent also notes that a successful implementation would represent a personal milestone, describing it as an indicator of retirement. C6's project is still ongoing, with its success yet to be determined. The respondent intends to give it one final attempt before retirement, but highlights that internal friction, including unsynchronized processes and unclear responsibilities, has significantly slowed progress despite the initiative's high relevance to the organization. The respondent believes management's distance from operational reality is the primary factor holding the project back.

Two projects are described as not being a success currently or being unsuccessful. C5 considers the project currently unsuccessful, as sales initially were halted because of an issue. C3-2 is also defined as unsuccessful, with the project clearly misaligned with the company's core fundamentals, including its product roadmap, timeline, strategy, value creation, and gross profit targets. This misalignment led the project in diverging directions, and moving parts of it externally further fragmented the strategic vision. This is reinforced by another respondent at the same company, C3-1, who considers their own project successful and emphasizes the importance of speed of execution and the right team composition, specifically the combination of fearless risk-takers and grounded, realistic individuals. The respondent closed the interview with: "*Not everyone can be entrepreneurs, and not everyone can be process-oriented. The right mix leads to success.*"

3.4.5 Workshop

As previously mentioned, the insights from embedded researchers are divided into aggregated responses and more nuanced responses in Miro.

3.4.5.1 Aggregated Responses from Embedded Researchers

The embedded researchers present at the workshop answered a number of multiple-choice questions related to their organizations. Responses vary between 10 and 13 researchers per question. In this section, the key insights from those answers are presented, with the embedded researchers referred to as respondents. The full answer material is available in the study's appendix.

Sources of ideas and process maturity
The most common primary source of novel ideas was bottom-up, receiving seven out of 13

answers, while top-down and external inspiration each received three. Seven out of 11 respondents believed their organization does not have a defined process for driving explorative initiatives.

Organizational barriers
Among 11 respondents, the three most commonly encountered barriers were established structures and processes (9 answers), resource limitations such as financial constraints and allocated man-hours (6 answers), and internal stakeholders hindering or blocking the project (5 answers). When asked which single barrier had been the biggest hindrance, four barriers tied at two answers each: internal stakeholders hindering or blocking the project, fitting the project into the organization, regulatory limitations, and resource limitations.

Organizational enablers
Drawing on the organization-level enablers presented by Huang et al. (2021), except transformational leadership, the four most commonly encountered enablers among 11 respondents were management support (9 answers), autonomy (7 answers), development advice and mentoring (5 answers), and managerial receptiveness (5 answers). When asked which absent enabler would be most helpful, financial resources and innovation capability tied at four answers each among 10 respondents. When asked which enabler, present or not, was most important overall, the top responses were management support (6 answers), tolerance for failure (6 answers), and encouraging risk-taking (5 answers), among 10 respondents.

STAR model
Eight out of 11 respondents identified the People parameter of the STAR model as the most impactful for driving explorative initiatives.

Likert-scale statements
Eleven respondents rated four statements on a scale of 1 to 5. The organization balances exploring and exploitation received an average score of 1.9, and the organization's incentivizing innovation received 2.1. The organization supports initiatives outside of the normal scope, and averaged 2.1, while the organization promotes psychological safety in exploring outside of established work, scoring 2.6.

Suggested improvements
Ten respondents provided input on what they would change to make their projects easier. The insights spanned a range of topics, from project scoping and stakeholder interactions to resource allocation and supervisor support.

3.4.5.2 Miro

During the workshop, the embedded researchers used the STAR model to identify and document three enablers and three barriers relevant to their respective organizations, each linked to one of the model's parameters. Each entry was rated by impact on a scale of 1 to 5, assigned to a project phase, accompanied by a brief explanation, and paired with a suggested mitigation (barrier) or enhancement (enabler). The findings below are organized by STAR parameters, with barriers and enablers presented together within each.

People
The People parameter surfaces a tension between individual motivation and the broader

organizational culture. Several respondents identify risk aversion and resistance to change as barriers. C1 notes that some stakeholders are highly reluctant to try new things and are risk-averse, rating this a high-impact barrier of 5 during the project-driving phase, and suggesting that a clear internal alignment strategy is needed to address it. C4 describes employees as being stuck in established ways of working, with internal resistance emerging when innovative ideas are brought forward, while C7 points to a slow-moving culture with safety as its highest priority, which leads innovation projects to meet considerable resistance from people. C6 highlights a more specific dynamic, where highly competent professionals exploit their standing to act as barriers to development and innovation work, proposing that involving people who are open to change and exploration from early on could help align perspectives. C5 notes that employees across the organization are overwhelmed with work, leaving no time for innovative thinking, and suggests that freeing up calendar space and allocating dedicated time for longer-horizon exploration could help mitigate this.

On the enabler side, the picture is more optimistic at the individual level. C4 rates individual employees as highly innovative and creative, giving this the highest impact score of 5, and suggests that providing freedom to explore without resistance or barriers would amplify this asset. C7 similarly identifies passionate employees who combine company commitment with outside-the-box thinking, noting that entrepreneurial leaders exist within the organization even if the overall culture does not reflect this, and also rates this a 5 during the project-driving phase. C8 points to highly motivated employees as a driver of bottom-up innovation in the early stage, while C9 highlights a broad organizational knowledge base paired with a shared eagerness to develop better products. C6 notes that driven employees who feel a strong sense of purpose represent a meaningful enabler, with the suggested enhancement being to communicate this more openly, and C2 describes people's willingness to share knowledge and offer insight into their ways of working as a quiet but consistent enabler across the organization.

Strategy

Strategy-related barriers tend to cluster around clarity and alignment. C3 identifies a lack of clear strategic direction as a barrier, noting that the current strategy amounts to little more than a broad value-creation mandate, which can lead to reduced motivation and misaligned initiatives. The proposed mitigation is to allow successful projects to gradually shape a more precise strategy over time. C8 describes the absence of a clear strategy for supporting innovative initiatives as a 4-impact barrier during the project-driving phase and suggests developing a structured approach to project execution to address this. C2 raises a more systemic challenge, where the complexity of aligning an innovation hub with the strategies of different parts of a large corporation could create friction. C1 notes that when an initiative falls outside the recognized strategy, it becomes difficult to motivate and gain support for, particularly in the early stage, and suggests that new initiatives should be encouraged even when they fall outside the core area.

On the enabler side, strategic clarity and budget autonomy are highlighted as important assets. C7 notes that innovation is an explicit goal within the group strategy, providing a direction that is both encouraged and supported, and suggests using this formulated strategy when selling projects internally. C9 describes a strategic direction that is actively challenging decades-old ways of working, viewing this as a potential catalyst for a more entrepreneurial environment. C4 highlights the ability to manage and allocate funds internally for non-group-level projects as a 4-impact strategic enabler and suggests keeping decisions and budget allocations internal where possible to maintain momentum. C1 also notes that innovation is generally easier in domains that align with the existing strategy.

Processes

Process-related barriers are largely centered on rigidity and the weight of administrative demands. C1 rates process overload as the highest-impact barrier in its entire dataset, scoring it a 5 in the early stage, describing a situation where the workload of simply following processes displaces the time and focus available for innovation. The proposed mitigation is a less-is-more approach to processes early on. C7 similarly describes an environment where instructions and policies exist for everything, creating bureaucracy, and suggests that management support is needed to challenge and adapt these norms. C2 describes the innovation hub as potentially being slowed down by its dependency on various company-level processes and proposes giving it more freedom to operate outside the normal organization while reintegrating only the highest-potential outcomes. C5 points to financial instability as a process-level barrier, creating ambidexterity challenges when trying to move forward, and suggests developing new workflows that enable investment in innovation without requiring large budgets.

Several respondents also identify process-related enablers. C3 highlights a stage-gate process that allows flexibility depending on the project as a 4-impact enabler, and suggests this flexibility should be preserved. C2 describes the innovation hub's established structure for quickly testing startup collaborations as another 4-impact enabler, with the enhancement suggestion of extending relevant parts of this process to other innovation scenarios. C5 notes, specifically in the context of their project rather than the broader organization, that the absence of rigid long processes enables faster decision-making, also rated at 4. C8 describes local areas having considerable freedom to try new things and explore ideas, and C9 notes that the company's size still allows for some informal decision-making and communicative channels, though this could be strengthened by providing clearer guidance on decision-making authority.

Structure

Structural barriers are among the most widely cited across the dataset. C9 gives the highest impact score of 5 to the challenge of accountability in cross-functional projects, describing a situation where no one is willing to take responsibility for delivery during the project-driving phase, and proposing that much clearer instructions on project leadership and delivery ownership are needed. C9 also rates unclear decision-making authority as a 4-impact barrier, suggesting that a simple fix would be to update a shared platform with clear guidance on who to approach for different types of decisions. C4 highlights two structural barriers: the difficulty of securing approval and funding from the group level, rated at 4 in the early stage, and a silo-focused culture with limited communication between units, rated at 3 during project driving. C8 describes a large organization with a rigid culture as a barrier to large-scale change, and C3 notes that employees being spread across multiple projects with fluctuating levels of commitment negatively affect project progress.

Structural enablers tend to revolve around autonomy and dedicated innovation infrastructure. C7 describes innovation hubs existing at different levels and parts of the organization as a 3-impact enabler in the early stage, suggesting that actively building networks with them can amplify their value. C5 highlights the freedom to structure one's own project and scope as a 4-impact enabler, though notes this applies to the specific project rather than the broader organization. C2 describes the global composition of the innovation hub as enabling full geographic coverage and strong collaborative capacity. C8 notes that despite being a large structure, the organization is able to change and adapt at the local level, suggesting that departments should work toward a more dynamic, bottom-up culture. C1 points to existing support structures that help new people understand and follow established best practices as a quiet but steady organizational enabler.

Rewards

The Rewards parameter produces the most consistent pattern across the dataset: the absence of formal incentives for innovation is cited as a barrier by the majority of respondents. C7 describes innovation as not being incentivized through bonuses or KPIs, rated at 4, noting that informal social recognition exists but that new formal incentives are not currently being considered. C9 similarly identifies a lack of incentives for employees who drive innovative solutions, also rated at 4, and proposes creating a clear incentive system that could be tied to salary discussions. C2 points to limited extrinsic motivators as possibly reducing employees' willingness to think outside the box or go against the stream, rated at 4, and suggests making exploratory contributions more visibly rewarding. C8 describes the near-complete absence of compensation for innovation as hindering positive change during the project-driving phase, and C5 notes that a lack of financial motivation, combined with a general shortage of time, creates a situation where there is little reason for employees to pursue innovative ideas outside of their normal workload. C6 identifies the absence of reward and incentive programs for innovation work as a barrier, suggesting that integrating such incentives into role descriptions could be a starting point. C3 notes that the organization previously offered employee stakes but has discontinued this practice, proposing that reintroducing stakes in certain cases could restore a sense of long-term incentive.

Two respondents identify reward-related enablers. C3 highlights a bonus structure based on helpfulness and involvement in activities beyond direct project work, rated at 4, and describes this as worth preserving and building on. C4 notes that innovative initiatives are generally encouraged and appreciated within the organization, rating this at 3 in the early stage, and suggests that introducing more tangible individual rewards for innovative contributions could further strengthen this culture.

3.5 Discussion

In this chapter, both the interpretations of the collected data and the common patterns identified across the cases are presented. The discussion is divided according to the different phases of the project. The purpose is to identify common enablers and barriers related to how organizations create the conditions for entrepreneurial leaders during these different phases.

By examining how the different phases relate to both the type of project and the cross-case findings from various projects, the discussion aims to provide a more nuanced understanding of how organizational factors influence entrepreneurial leaders' ability to initiate and drive intrapreneurial initiatives, and how organizations intentionally can design these conditions through the STAR model (Galbraith, 2002).

3.5.1 Early Stage

In the early stage of projects, there is a lot of uncertainty and a number of influencing factors. However, based on the collected findings, it is especially interesting to consider the rewards, structure, and process parameters of Galbraith's (2002) STAR model.

Rewards - Motivation to Initiate Entrepreneurial Projects
Many interviewees describe facing significant resistance, which indicates that a high level of motivation is required just to get these projects off the ground. In the context of Galbraith's (2002) Star Model, the Rewards component is traditionally designed to drive performance through formal mechanisms like KPIs and financial incentives. However, the findings in this study suggest a gap between these formal structures and what actually motivates entrepreneurial leaders.

While traditional models emphasize extrinsic rewards like salary and bonuses, the leaders in this study rely heavily on intrinsic motivation. Their drive does not come from personal gain, but from a sense of "the greater good," a responsibility toward Sweden's development, or a desire to improve the organization from within. Notably, none of the respondents mentioned money as a motivator. This internal drive appears to be a key factor in navigating initial hurdles, providing the endurance needed for these projects to eventually materialize. This reveals a paradox: although Galbraith suggests that organizations can steer behavior through reward systems, intrinsic motivation is notoriously difficult to "engineer" through formal policies. Instead, this motivation seems linked to the organization's culture and purpose, which creates a sense of belonging and a desire to make things better.

Many organizations today have an explicit innovation strategy, yet the findings suggest that the success of such projects often relies more on individual grit than systemic support. In the context of the Star Model, this indicates a potential misalignment between Strategy and Rewards. While the strategy may call for innovation, the reward systems might fail to capture and support the intrinsic motivation, such as a sense of "the greater good", that leaders in this study highlighted as their primary driver. If the motivation to innovate depends entirely on the personal passion of a few individuals to overcome systemic resistance, the organization's ambidextrous capability risks becoming fragile. This can also be linked to ambidexterity by Tushman & O'Reilly (1996), where exploratory initiatives are often driven by individuals rather than the organization, as exploit-oriented systems often do not provide direct incentives for innovation work.

According to these findings, the organization may therefore need to shift focus from traditional KPIs toward value-based rewards. By using symbolic rewards or cultural recognition, the organization can reinforce a leader's sense of purpose, bridging the gap between formal structures and the internal values that actually sustain leadership in demanding environments. This is further validated by "tolerance for failure" being one of two organizational enablers suggested by Huang et al. (2021) that was deemed most important by the highest number of embedded researchers in the Mentimeter survey.

Structure - Management Support

The interviews reveal a clear pattern where ideas in early-stage innovation projects tend to flow top-down, initiated by managers, CEOs, or executive management, or they require active support from these levels to succeed. This aligns with Galbraith's (2002) assertion that structure determines where formal power is situated, but the findings extend this by showing how such power dynamics create specific barriers for innovation leaders operating outside established hierarchies.

A central challenge that emerges is the difficulty for project leaders at lower organizational levels to generate traction for their initiatives on their own. The cause appears to reside in prevailing power structures: financial support, mentioned by numerous respondents as critical, is considerably easier to secure when the idea originates from or is endorsed by individuals who already hold formal authority. As C2 notes, they needed to go high up in the organization to gain the support needed. Similarly, C8-1 describes how establishing a program structure with the mandate to operate across departmental silos proved vital, while also emphasizing the importance of securing early political and high-level management support.

A contrasting case is seen in C9, where organizational resistance was essentially absent. The project operated with its own dedicated budget, limiting the interaction and support required from the broader organization. Resources were, in effect, pre-granted. This illustrates how power in innovation contexts is often manifested through financial capital: control over budget translates into autonomy and gives the power needed to drive the project forward.

This power structure thus creates toll gates, both formal and informal, that filter which initiatives acquire the traction and power necessary to move forward. At the same time, alternative pathways to legitimacy exist: ideas aligned with the strategic vision, or backed by customer demand, appear to gain a form of borrowed power that helps them pass through organizational gatekeeping. This points to a central dilemma within organizational ambidexterity: while exploitation is sustained by established routines, exploration is often dependent on external power injections. In a structure optimized for efficiency, exploratory projects must 'borrow' authority from the top management to secure the financial and political space necessary for survival. This is further motivated by "management support" along with another enabler, being the most common answers from embedded researchers, of which of Huang et al.'s (2021) organizational enablers were deemed most important.

Process - Catch 22

Another interesting aspect when covering exploratory initiatives is the distinction between creating value and showing that value is being created. Relating this to the process parameter of Galbraith's (2002) STAR model, there is an argument that the process of developing something new in many organizations is highly dependent on proving value, or proving that it is a good idea, assuming the organizations have a predisposition towards exploiting. Several respondents in some way highlight the need for proving that the project is a good idea in

different ways, either by proving a business case, as was the case for C2 and C7, proving a prototype as in C5's situation, or proving the time spent on analysis, as was the case for C8-2. The need for proving value is understandable, but at the same time, if the organization is demanding results or proof early in the process, this could be hard to provide, and might actually be counterproductive, as working towards proving value and actually creating value can be two completely separate areas.

Here, it could be helpful to utilize the insight from C3-1 to move ideas into proofs-of-concept, trying to showcase something real and steer clear of PowerPoint as fast as possible. Also, it could be beneficial to showcase a financial opportunity covering the initial investment, as C7 did to prove the value. But it could also be relevant to consider how the organization could form the process to, in the initial stage, somewhat mitigate the need to prove value, and thus enable the entire focus of the entrepreneurial leader and team to focus on creating value further down the line. This notion is further motivated by "autonomy" being the second most occurring of Huang's et al.'s (2021) organizational enablers for the embedded researchers.

This, of course, ties back into the complexity of being able to balance exploring with exploiting. As described by Tushman & O'Reilly (1996), this contradiction of proving value instead of creating it leads to a risk of the organization suppressing innovation through the same systems designed to protect stability.

3.5.2 Driving the Project

After the project has been initiated and moved beyond the early exploratory stages, the focus shifts toward driving the project forward and ensuring its practical implementation. According to findings, this phase of the project's most relevant parameters are structures, people, and strategy.

Structure - Translating Across Silos
According to C6, one of the leader's main responsibilities at this stage was to act as a translator among organizational silos to create a shared vision within the team. Rather than focusing only on generating new ideas, the leader needed to ensure alignment across departments and focus on communication between actors with different priorities and perspectives. This highlights how entrepreneurial leadership in later project phases becomes increasingly dependent on coordination, further strengthening the importance of the structure parameter in the STAR model presented by Galbraith (2002) for this stage. This is further highlighted by the Mentimeter survey, which shows that established structures and processes are the most commonly encountered organizational barriers among embedded researchers.

This need for translation across silos can be understood as a consequence of limited ambidexterity, where exploratory initiatives must be manually applied to exploitative organizational parts rather than being supported by the structure itself.

Strategy and Structure - Ambidexterity
A similar perspective was expressed by C1, who stated that structuring the work, rather than focusing on innovation itself, became a common activity during this phase. As projects progress, planning and resource coordination tend to take over experimentation and ideation. While this supports exploitation, it also creates tensions regarding innovation capacity and the exploratory strategy the company first set out to pursue. This points to a gap between the Strategy parameter and the Structure parameter as presented by Galbraith (2002). Furthermore,

it highlights the importance of aligning the exploration and the exploitation within the strategy of the organization itself, and the importance for management to actively manage this balance (Tushman & O'Reilly, 1996).

This was further highlighted by C2, who argued that innovation requires both knowledge and passion, while too much structure often results in the allocation of the wrong resources. When organizations prioritize established routines and formal processes too much, there is a risk that projects lose the entrepreneurial energy that at first drove the project forward. Instead of enabling entrepreneurial leaders to support innovation, structures may lower creativity and reduce the project's ability to adapt accordingly.

People - Motivating the Team
This connects to the importance of protecting and energizing the team, as highlighted by C7, as well as the need to remove financial and managerial barriers, as highlighted by C8. In this stage, entrepreneurial leaders are not only expected to lead the innovation itself, but also to shield the team from organizational resistance and maintain motivation despite increasing administrative demands. This relates to the People parameter in the STAR model, which emphasizes the importance of having the right competencies, motivation, and support systems within the team. It also aligns with the Mentimeter findings, where the embedded researchers voted on "management support" as of the most important enablers of intrapreneurship identified by Huang et al. (2021). This suggests that the entrepreneurial leader takes on this responsibility to support the team and compensate for the lack of support from the organization.

This concludes that organisations push entrepreneurial leadership towards more structured approaches, where the leader becomes less of a visionary and more like an enabler who aligns initiatives by paving the way for their teams. This may lead to a loss in creativity, passion, and innovation needed to drive the project forward and connect to the STAR model by Galbraith (2002). Thus, if structure becomes too strong, it can reduce the entrepreneurial spirit needed for innovation. Organizations can mitigate this by aligning their structures with their strategies, allowing the entrepreneurial leader to focus more on encouraging the team rather than on shielding it from organizational barriers. This mitigation approach was highlighted during the workshop, where the embedded researchers emphasized the importance of aligned values in reducing these risks. This also reflects the human side of amidexterity, where maintaining motivation becomes important in exploratory phases since it has limited clear goals and predictability that often exists with exploitative work (Tushman & O'Reilly, 1996).

3.5.3 Outcome

Whether or not a project was successful was objective, dependent on timing and which perspective was taken, and not only determined by implementation or financial outcomes. Instead, the success was determined by how well the portfolio remains aligned with the company's strategy and long-term value creation. The most relevant parameters in the STAR model during the final stage of the projects are strategy, people, and processes.

Strategy - Moving from explore towards exploit
Towards the end of exploratory projects, one could argue for the importance of reaping the rewards of what has been developed, and leveraging the learnings made along the way. To be able to make this transition, it could be central to fit the project outcome into the larger organizational context and achieve alignment with, or even influence, the broader organizational strategy, thus connecting to the overarching strategy parameter in the STAR

model (Galbraith, 2002). Motivating this is C3-2's project, which was unsuccessful as it was misaligned with company fundamentals, including the company strategy. However, successful projects potentially also show signs of having achieved this integration, with C7's project now being a core organizational function, and one of the reasons for success in C10's project was being able to align the way forward. The insights from C1-2 hint at even more successful strategy alignment, as the project's success had a snowball effect into a strategic shift of the company. Based on these insights, it could be argued that the process of aligning the outcome of the project with the organizational strategy is central in creating project success, but also influencing company success overall, and its ability to convert exploratory initiatives into opportunities to exploit. Thus, there is possibly an important two-way strategy alignment that should happen, both aligning the results from the project with the broader organizational strategy, but also incorporating the insights from the project to enhance the corporate strategy.

As Tushman & O'Reilly (1996) describe, organizations must not only generate new ideas, but also convert them into business value. This hints that the true challenge of innovation is not only idea generation, but the organizational ability to move from exploration to exploitation. Initially, this might intuitively lead to the conclusion that the entrepreneurial leader needs to be very efficient in shaping the project result and path forward in a way that makes it fit into the organizational strategy, which, of course, should not be underestimated. However, taking the opposite perspective, it might also be highly interesting to pose the question of how the organization can actively support the integration of new initiatives, synchronizing them within a broader context of the strategy, maintaining direction, while also leaving space for new opportunities to be included.

People - Diversity in the Team

In the early stages, entrepreneurial leaders and risk-taking individuals are important for driving exploration and challenging the status quo. However, as the project approaches the implementation and outcomes, the focus shifts from creating the idea to integrating it into the organization and building on what the project created. According to Tushman & O'Reilly (1996), this diversity supports the integration of exploratory and exploitative knowledge, enabling the project to move from idea generation to actual implementation.

This was reinforced by C3-1, which highlighted the importance of having the right mix of people, both risk-takers and rational individuals. Innovation, therefore, depends not only on creativity but also on the ability to turn ideas into business outcomes, which aligns both with C7 highlighting the importance of having the right and the responses from the embedded researchers, stating that the People parameter is the most important dimension in the STAR model when driving exploratory initiatives. This correlates to the importance of the People parameter in the STAR model by Galbraith (2002), where having the right mix of competencies and roles is of importance. Moving from explore to exploit, an organization must support this balance, for without it, projects miss the opportunity to capitalize on the innovation they have created.

Processes - Loss of Momentum

C9 highlights that even though the idea itself was good and considered valuable, the project was hindered by slow decision-making processes and loss of momentum over time. This hints that the success of intrapreneurial projects is not only dependent on the quality of the idea, but also on how the organization is able to move the project forward. Delays in decision-making and long processes can lower engagement and make it difficult to maintain the

energy needed to implement the idea. This connects to the process parameter in the STAR model by Galbraith (2002), which focuses on how workflows and decision-making are designed at the organization. If these processes are too slow or unclear, they create barriers that could stop innovation from reaching implementation. In this case, the project risked failing at this stage due to the loss of momentum and not because the idea wasn't innovative. This shows that a successful project does not only require good leadership, but also organizational processes that support fast execution.

This loss of momentum can be understood as an imbalance between explore and exploit within the organization, where exploratory initiatives are unable to sustain progress when meeting with the exploitative needs for instant results.

3.6 Conclusion and Future Research

In this chapter, the main conclusions are presented, reflecting on how findings answer the research questions. It summarizes the most important insights from the analysis and connects them to the overall purpose of the study. This chapter also presents suggestions for further research, focusing on areas that could be explored in more depth in order to develop a broader understanding of the topic.

3.6.1 Conclusion

This study set out to examine how organizational factors influence entrepreneurial leaders' ability to initiate and drive intrapreneurial initiatives, and how organizations can intentionally design those conditions through the STAR model for the different stages of the innovation project. The findings, drawn from ten case companies through interviews and a workshop with embedded researchers, point to a consistent and consequential conclusion: established firms do not fail to innovate because they lack capable leaders, but because their organizational conditions are configured for exploitation even when their strategy calls for exploration. The gap is not one of leadership capacity but of organizational alignment.

In the early stage, the most significant constraint is passive misalignment across the Rewards, Structure, and Processes parameters of the STAR model. Formal reward systems fail to capture the intrinsic motivations that actually sustain entrepreneurial leaders through initial resistance, while the workshop data confirms that innovation incentives are broadly absent across the studied organizations. Structurally, exploratory initiatives depend on borrowed authority from senior management to gain the financial and political legitimacy needed to proceed, creating a dependency that makes bottom-up innovation inherently fragile, making managerial support a key enabler to address this. And existing processes, designed around the demands of exploitation, impose a burden of proof at precisely the point when proof cannot yet exist, a structural paradox that risks suppressing innovation before it has had the chance to demonstrate its value.

As projects move into the driving phase, the challenge shifts from gaining permission to sustaining exploratory momentum within a structure that increasingly pulls toward exploitation. Established structures and processes were identified as the most commonly encountered organizational barrier across the workshop, and the findings reveal a pattern in which the strategic intent for innovation is rarely translated into operational clarity, leaving entrepreneurial leaders navigating ambiguity as well as organizational resistance. Most consequentially, organizations gradually push entrepreneurial leaders away from being visionaries and toward being enablers who absorb friction and clear the path for their teams. While this role is often necessary, it carries a real cost: the creative energy and entrepreneurial drive that originally animated the project are consumed by the demands of organizational management rather than being directed toward the innovation itself.

At the outcome stage, success depends less on the quality of the idea and more on whether the organization can complete the transition from exploration to exploitation. The findings point to the importance of a two-directional strategic alignment process: project outcomes need to connect to the organizational strategy, but the organization equally needs mechanisms that allow successful exploratory projects to feed back into and enrich that strategy. Team composition also becomes decisive at this stage, with the right mix of risk-takers and implementation-oriented individuals determining whether the value created during exploration

can actually be captured. And process continuity matters more than is often recognized. Several projects in this study came close to failing, not because the idea was weak but because slow decision-making and a loss of organizational momentum eroded the conditions needed to reach implementation.

Taken together, the findings and discussion reveal an answer to the main research question: organizational factors influence entrepreneurial leaders primarily through passive misalignment rather than active obstruction. Reward systems fail to recognize the intrinsic motivations that drive exploratory behavior. Structural power dynamics create dependency on top-down endorsement. Processes designed for exploitation impose demands that are structurally incompatible with early-stage exploration. And as projects mature, organizational friction gradually shifts the leader from visionary to organizational enabler, consuming the very energy the innovation depends on.

The answer to the sub research question is that organizations can intentionally address this through the STAR model by designing reward systems that balance purpose and risk-taking alongside financial performance, structural arrangements that give exploratory initiatives genuine autonomy rather than borrowed authority, processes that protect space for exploration rather than demanding proof before value has had the chance to be created, and a strategic framework that treats exploratory project outcomes as inputs that can shape the organizational strategy rather than simply deliverables to be measured against it.

3.6.2 Future Research

While this study takes a holistic perspective, covering different parameters, this results in several interesting insights across parameters that could, on their own, be further developed. For example, how organizations can create intrinsic motivation to innovate, if extrinsic motivation is lacking, how organizations should balance creating value with proving that value has been created, or how organizations can provide optimal conditions for integrating project outcomes into the organizational strategy are all areas that can be further evaluated to form more nuanced and actionable conclusions for organizations to utilize. There are also a number of potential differentiators that were not covered in this study, but could prove interesting to look into further. For example, how does company size, industry, age, or profitability affect the organizational factors influencing entrepreneurial leaders?

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3.8 Appendix

A. Aggregated responses from embedded researchers

Fig. A1. Origin of novel ideas (Mentimeter generated diagram)

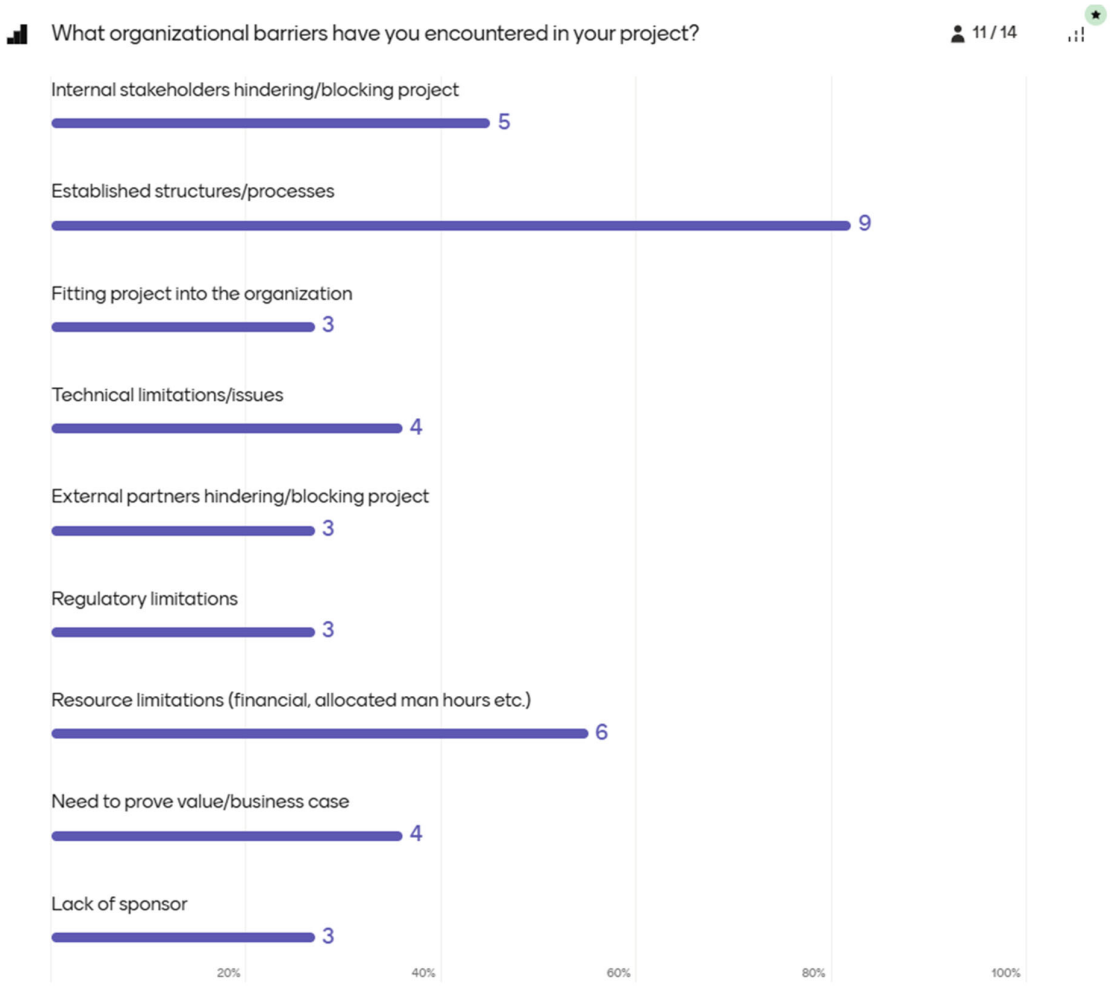

Fig. A2. Encountered organizational barriers (Mentimeter generated diagram)

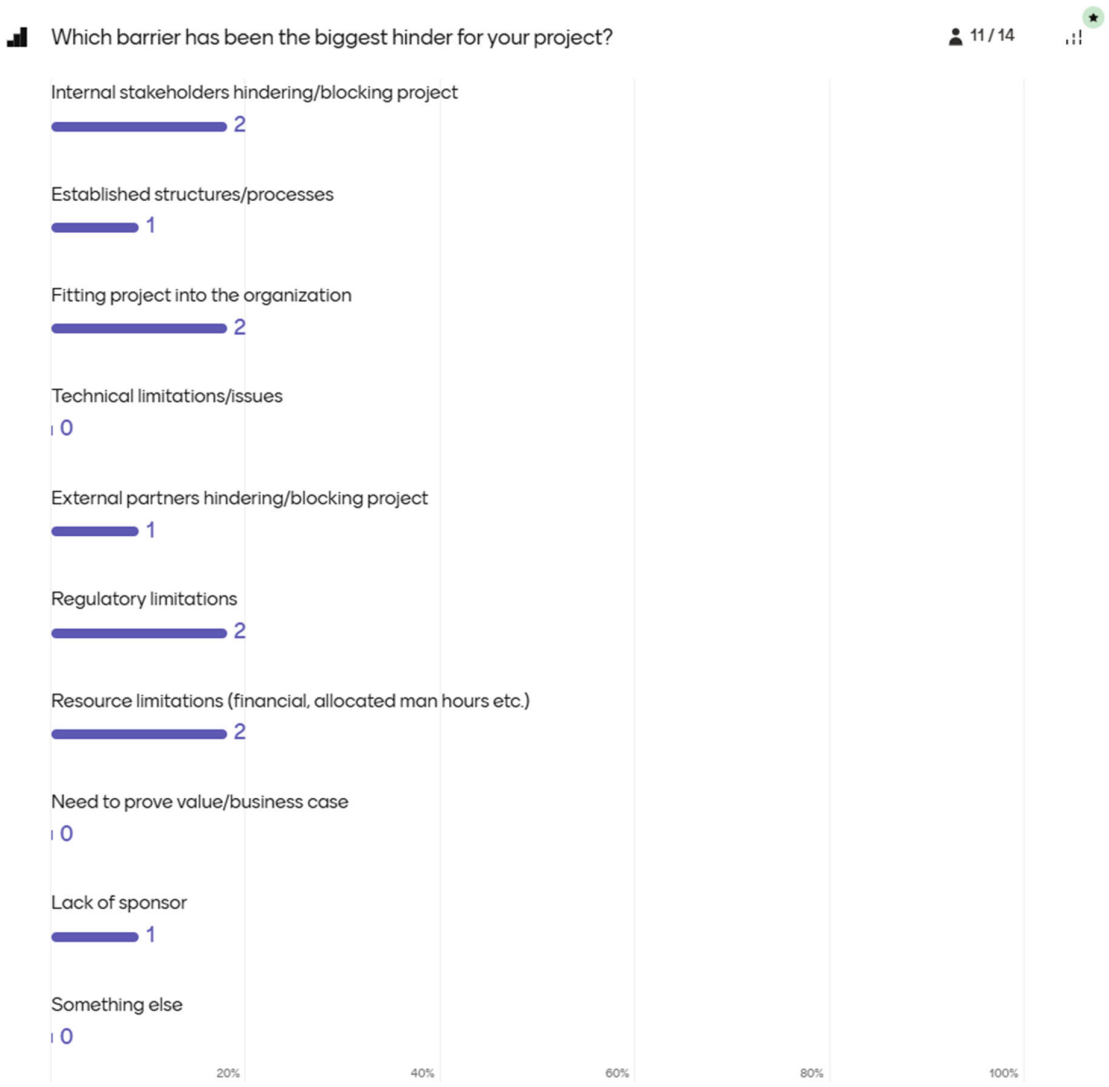

Fig. A3. Barriers that are the biggest hinders (Mentimeter generated diagram)

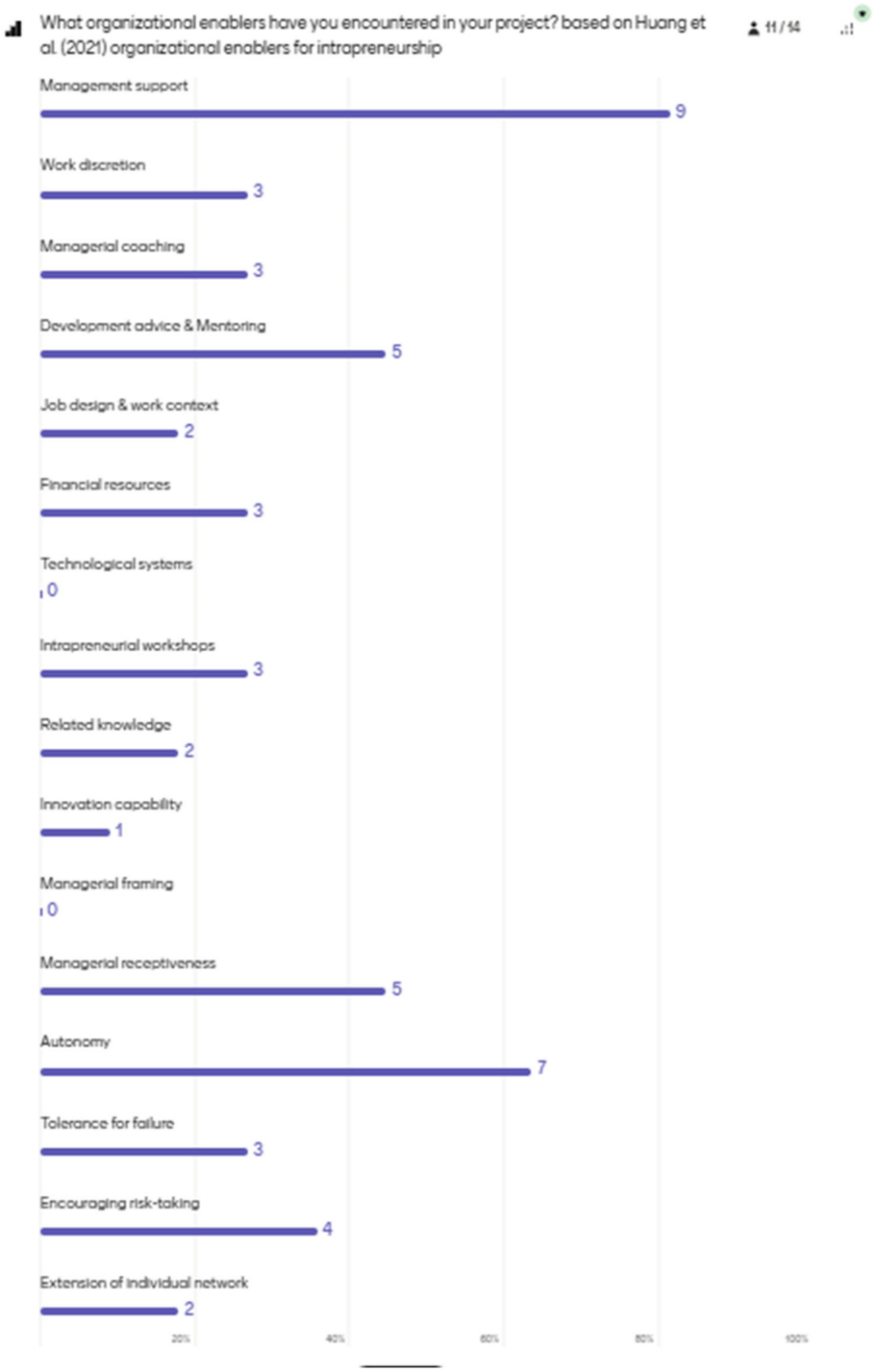

Fig. A4. Encountered enablers (Mentimeter generated diagram)

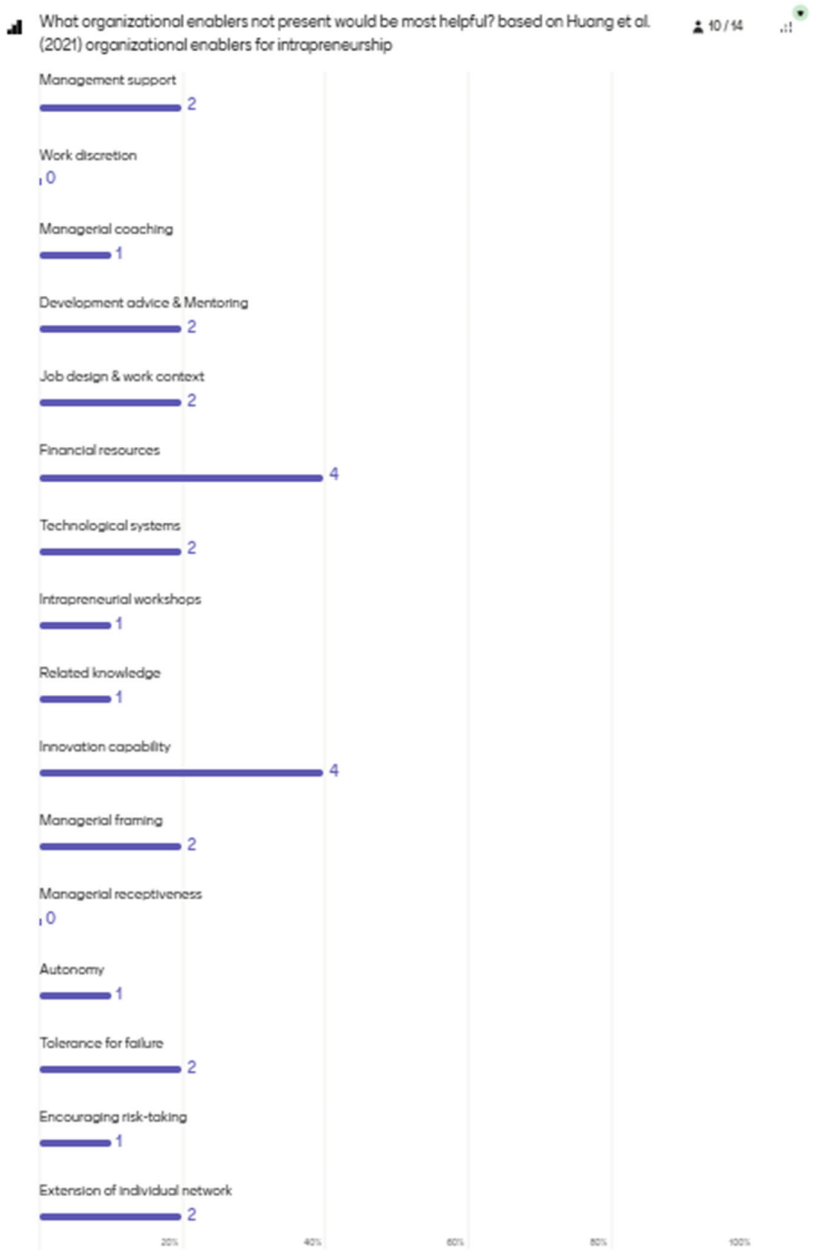

Fig. A5. Most helpful present enablers (Mentimeter generated diagram)

Fig. A6. Most important enablers, present or not (Mentimeter generated diagram)

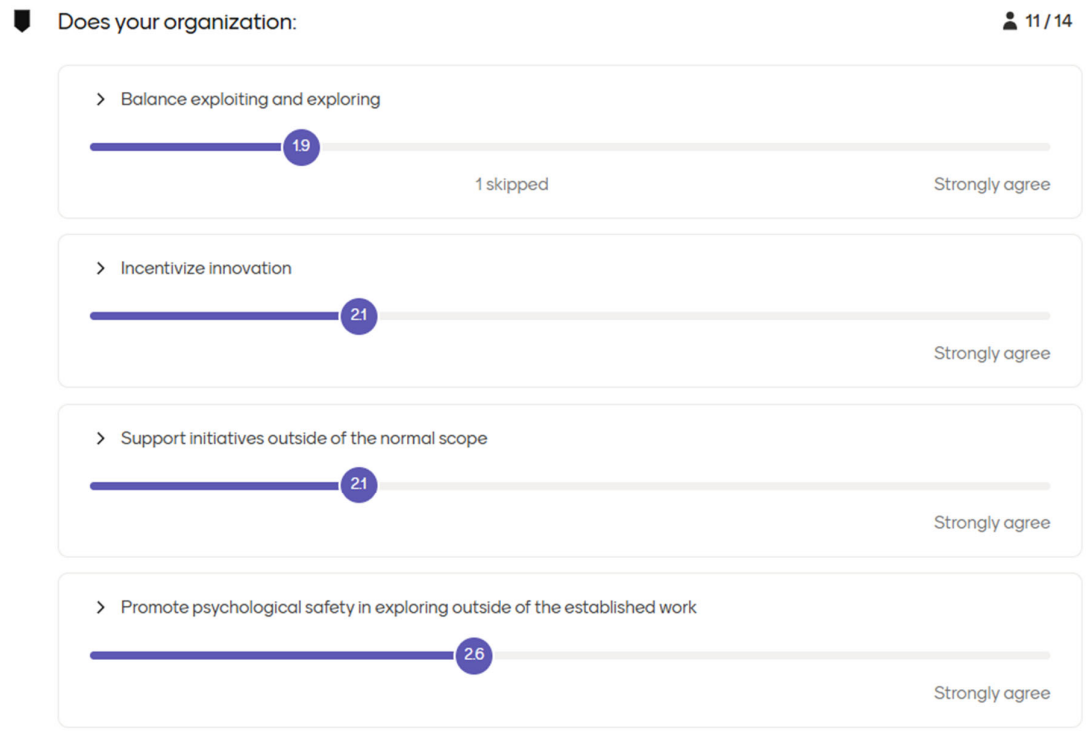

Fig. A7. How well the organization fits into four statements (Mentimeter generated diagram)

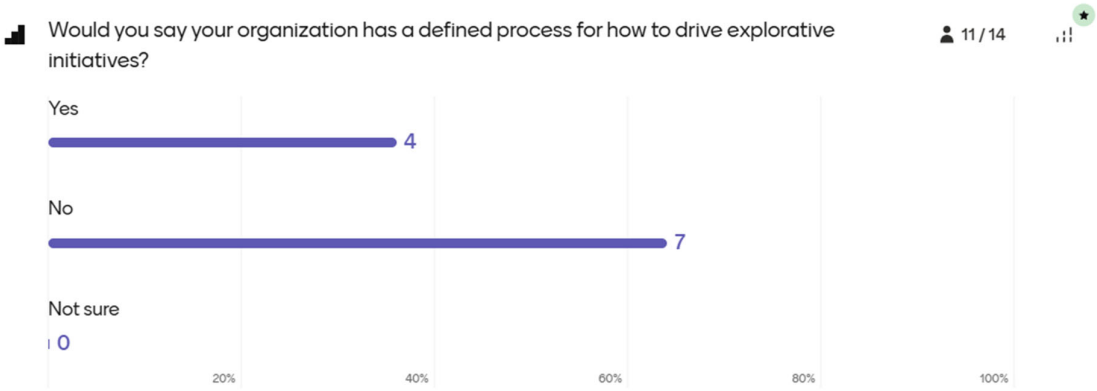

Fig. A8. Presence of a defined process for exploratory initiatives (Mentimeter generated diagram)

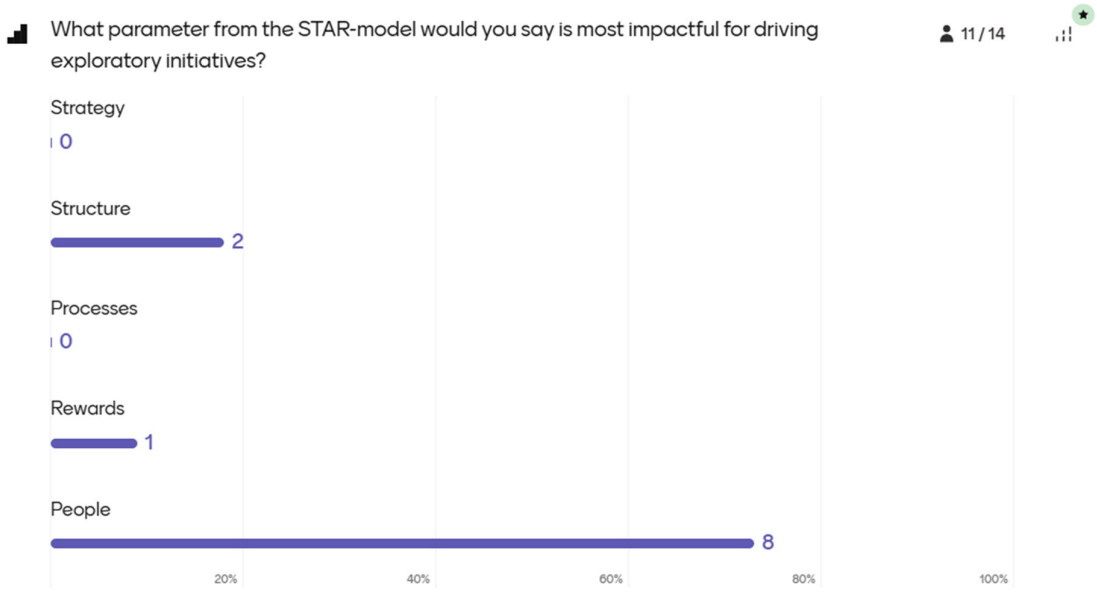

Fig. A9. Most impactful STAR-parameter for exploratory initiatives (Mentimeter generated diagram)

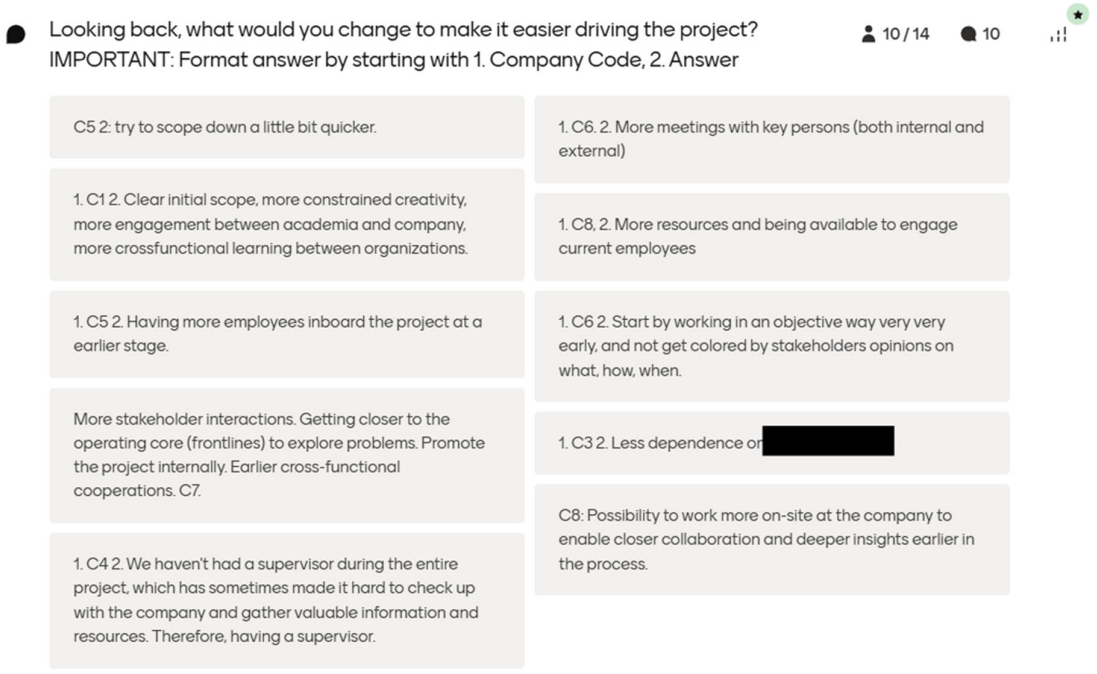

Fig. A10. What would have made the diagram easier (Mentimeter generated diagram)

B. Interview Guide

B.1 What is the purpose of the interviews?

The purpose of the interviews conducted on the various partner companies is to get a first-hand recollection of how corporate structures, processes and incentives have impacted entrepreneurial leaders' ability to drive innovation within the company. By gathering insights from the different participating companies, the goal is to compare how these dimensions differ from company to company, and the effect it has had on the entrepreneurial leaders in question.

B.2 Who should be interviewed?

The envisioned respondent is someone within the company who has championed an innovation initiative and felt ownership for the progress of the initiative. Essentially, someone who has taken it upon themselves to drive the initiative forward and recruit support from others in that process. Their perspective on what enabled them to achieve this, what encouraged or discouraged them from driving innovation, and what structures and processes were helpful or limiting will provide insights into how the different companies' approaches differ.

The goal is to gather information from **1 interview** per participating company in the study.

B.3 How should the interview be formulated?

The interviews are to be conducted in a semi-structured manner, where relevant questions to ask the respondents are provided, but still leaving room for the interviewers to adapt the questions to fit their organization and the person interviewed. The aim is also for the interviewers to have the freedom to ask suitable follow-up questions, and shift the gravity of the interview more towards one dimension or another, depending on what aspects of the interviewees' answer appear most valuable to the study.

The interviews are aimed at capturing the **stories** of entrepreneurial leaders who have driven an innovation initiative or project. In each theme, search for organizational support, structures and incentives. Try to focus on the "why?" - Why did things progress as they did? What we want you to ask are the Main questions/Themes, to get the conversation flowing. The questions under "Search for" are more to give guidance into what information we are looking for, and these questions can be asked if you feel they add value, progress the conversation, or prevent aspects from being left out. However, all these questions do not have to be asked. Rather, they are questions that guide the purpose of the interview. The rationale is to utilize a semistructured approach to get a deeper understanding of the interviewee's perspective.

Table B1. Interview Guide

Theme	**Main question/Theme**	**Search for**
The project	What was the project or innovation initiative you were involved in?	● What was the problem or opportunity addressed? Why did you do this project? ● What kind of project was it?

		• What was YOUR motivation for doing the project?
Early stage	Where did the idea come from, and how did the project start?	• How did it go from an idea to something more concrete? • Did you face resistance or get support from the organization during the early stage?
Driving the project	What did you (and the team) do in the project, and how did you drive it forward?	• How did the organization support the progression of the project? • Did you encounter any barriers that slowed you down?
Outcome	What eventually happened to the idea or project?	• Was the project successful? Why or why not? • Looking back, what would you change to make the process easier?

4. A Re-Work of: “Death By A Thousand Cuts”

By Herman Olvik, Matilda Håman, Naweed Khushal & Viktor Johansson

4.1 Introduction

4.1.1 Background & Purpose

Innovation projects in established organizations often struggle not because of one major setback, but due to many small obstacles. This study refers to the phenomenon as "death by a thousand cuts." Cuts are small inefficiencies such as delays in decision-making, unnecessary meetings, unclear processes, or unfit IT systems. Individually they may seem minor, but

together they reduce speed, increase costs, and weaken innovation capacity (Ederberg et al., 2025). Because these cuts often go unnoticed at first, their full impact may only become visible once the damage is irreversible.
This study is a cross-industry analysis in which ten student-research teams investigate different companies, comparing results to identify both company-specific insights and broader patterns. It builds on a 2025 study that mapped different types of cuts, extending that work by examining why these inefficiencies arise and how organizations can address them. Using the same theoretical framework and project life cycle structure as the previous study, this paper draws on new empirical data from 2026 to identify recurring patterns and differences across companies and years. The aim is to deepen understanding of how organizational friction affects innovation work and how it may be managed in practice.

4.1.2 Research Questions

Definition of a cut: A "cut" is a small inefficiency or minor obstacle that seems harmless on its own, but becomes a real threat when several build up together within the same project.

1. *How do different types of cuts affect project performance across time, quality, and financial outcomes?*
2. *Why do cuts emerge in innovation projects at large organizations, and what can be done to mitigate them?*
3. *What does a cross-year comparison of cut patterns reveal about the nature of organizational friction in innovation projects?*

4.2 Theoretical Framework

4.2.1 Measuring Project Outcomes: Time, Cost and Quality

The previous study presented by Ederberg et al., (2025) focused on how small seemingly harmless disruptions, referred to as ”cuts”, build up over time in projects and could collectively contribute to project failure. However, the study did not connect these “cuts” to specific performance dimensions, which potentially could enable the analysis of how such small disruptions affect the overall outcome of a project.
A widely used framework for measuring project performance is the “Iron Triangle”, also known as the “Triple Constraint”. This framework defines project success through three dimensions: time, cost, and quality (Atkinson, 1999; Albert et al., 2017). While some literature uses the term “performance” or “scope” rather than “quality”, this study uses “quality” as the term. According to the “Iron Triangle” a project is considered successful when it is delivered on time, within budget, and meets the agreed quality or scope requirements (Atkinson, 1999). These three dimensions are closely connected, meaning that when one is affected, the others will likely also be affected. For example, a communication problem that causes a delay will extend the project timeline, which then increases costs and may lead to shortcuts in quality. Understanding which cuts affect which dimensions, and in what order, is therefore important for analyzing how small problems grow into larger failures. Although the Iron Triangle has been criticized for offering too narrow a view of project success, it remains one of the most commonly used and well-recognized models in project

management research and practice (Atkinson, 1999; Shenhar et al., 2001; Albert et al., 2017). Its strength lies in offering a clear and practical basis for measuring project performance. However, it is worth noting that the Iron Triangle has received a lot of criticism in later years (Atkinson, 1999; Albert et al., 2017). Atkinson furthermore presented a broader framework called ”the Square Route’, which adds dimensions such as system quality, organizational benefits, and stakeholder satisfaction alongside the Iron Triangle (Atkinson, 1999). While this wider perspective is a valuable direction for future research, the Iron Triangle serves as a suitable and well-grounded starting point for this study, due to its direct connection to measuring project outcomes. We have therefore decided upon staying within the scope of ”The Iron Triangle” in order to enable a less complex, yet effective data collection and analysis.

By introducing time, cost, and quality as measuring parameters, this study extends the original work on cuts by connecting them to established performance measures. The types of cuts identified in the previous study can each show up as measurable problems across these three dimensions. To exemplify our reasoning, communication and misalignment cuts could potentially, initially, affect time through delays and repeated work, while resource cuts may impact both cost and time through budget shortfalls and a lack of staff. Distrust and culture cuts, which could be harder to see, may instead show up most clearly in quality outcomes through withheld information, poor teamwork, and weaker results. This is particularly relevant given that some research suggests soft factors may account for as much as half of overall project success (Müller & Jugdev, 2012 as cited in Albert et al., 2017), underscoring the importance of capturing less visible cuts such as those related to distrust and culture. By connecting cuts to the above mentioned parameters, this places the concept of ”death by a thousand cuts” within a well-established theoretical context in project management literature.

4.2.2 Refining the “Death by a Thousand Cuts” Framework

Previous research on the “death by a thousand cuts” phenomenon has contributed to theory by conceptualizing project failure as the cumulative effect of multiple minor and often overlooked issues rather than the result of a single critical event (Ederberg et al., 2025). By empirically identifying and categorizing these “cuts” across different phases of the project life cycle the prior study provides a structured understanding of how their frequency, timing, and severity interact to influence overall project outcomes. This perspective advances project management theory by highlighting the importance of micro-level disruptions and their systemic impact on project performance.

Building on this foundation, the paper seeks to deepen the existing body of research in two key ways. First, it extends the analytical framework by incorporating additional parameters related to time, cost, and quality, thereby linking the concept of cuts more directly to established project performance dimensions. Second, this paper broadens the empirical base by introducing additional data points collected in new focus companies, enabling a more comprehensive analysis of how these minor disruptions manifest and interact in practice. Through this extension, the study aims to refine and further develop the theoretical understanding of how accumulated micro-level issues influence project success, while also

providing a more nuanced basis for future analysis within project management research.

To support this refinement, a theoretical framework from the prior study is retained and applied in a more targeted way: the Project Life Cycle (PLC). Rather than reintroducing these frameworks from the ground up, this section focuses on how their application is developed and extended in the context of the new analytical parameters introduced in the preceding sub-chapter.

4.2.3 The Refined Use of the Project Life Cycle

In the prior study, the PLC served as a structural lens for identifying when cuts were most likely to occur across the five phases of a project; initiation, planning, execution, monitoring, and closure. The findings showed that the large majority of cuts were concentrated in the first three phases, with execution carrying the highest frequency (Ederberg et al., 2025). This mapping provided a valuable foundation for understanding how the timing of disruptions relates to their overall impact on a project.
In this study, the PLC is used in the same way but with an added dimension. Rather than mapping cuts only to the phase in which they occur, this study also maps them to the Iron Triangle parameter they primarily affect within that phase. This means that the PLC now serves a dual analytical purpose, capturing both the timing and the performance dimension of each cut. For example, a communication cut occurring during the planning phase may primarily affect quality through unclear goal setting and poor specification, while the same type of cut during execution may instead affect time through delays and the need for repeated work. By combining phase and parameter mapping, it becomes possible to identify not just where cuts cluster but what they damage and when, offering a more complete picture of how disruptions accumulate into project failure.

4.2.4 The Combined Analytical Lens

Together, the PLC and the Iron Triangle form a layered analytical framework for this study. Used in combination, these two frameworks allow for a richer and more structured analysis of how minor disruptions accumulate and result in altered project outcomes across time, cost, and quality dimensions. This integrated approach not only builds directly on the theoretical foundation established in the prior study, but also advances it by providing a structured basis for examining how minor disruptions translate into measurable impacts on project performance.

4.3 Methodology

4.3.1 Research Approach

This study follows a mixed-methods design that combines qualitative and quantitative research. The qualitative material consists of interviews and observations, which are used to capture how cuts emerge and are experienced within innovation projects. To enable comparison across cases, each identified cut is systematically coded according to a set of predefined parameters. This allows the material to be aggregated and analyzed quantitatively, while still retaining the context of the original observations. This approach reflects the logic

of mixed methods research, where qualitative depth is combined with quantitative aggregation (Bell et al., 2019).
The research logic is abductive, meaning that the analysis iterates between empirical material and theoretical frameworks. Rather than strictly testing predefined hypotheses or developing theory inductively, the study follows a process of systematic combining, where empirical observations are continuously compared with and interpreted through theory (Dubois et al., 2002). The starting point is the theoretical frameworks presented in Chapter 2, including the Project Life Cycle and the Iron Triangle, together with the categorization of cuts developed in the prior study from 2025. These frameworks guide the analysis and are extended through the inclusion of cause and mitigation as additional qualitative dimensions.
The study is designed as a multiple-case, cross-industry analysis. Ten student teams each study a different company and collect data within their respective organizational contexts. This design makes it possible to identify both company-specific dynamics and patterns that recur across industries. The research teams are themselves actively working on a project within the company they study. This insider position provides direct access to organizational processes and enables the documentation of cuts as they occur in practice, rather than relying solely on retrospective accounts.
The method consists of two main steps:

1. **Data collection.** The student teams identify cuts within their projects through interviews and observations and categorize them according to the parameters defined in Section 3.3.1.
2. **Data analysis.** The collected data is analyzed in two stages. The 2026 data is first analyzed on its own. The 2026 data is then merged with the 2025 dataset and analyzed together in a comparative step, with the aim of identifying differences, continuities, and aggregated patterns across the two cohorts.

4.3.2 Data Collection

Interviews and observations are structured around two frameworks introduced in Chapter 2: the Project Life Cycle (Ederberg et al., 2025; see Section 2.3) and the Iron Triangle (Atkinson, 1999; see Section 2.1). Data will be gathered from three main sources:

1. **Literature Study:** A key input will be last year's student report *Organizational Friction: Death by a Thousand Cuts* (Ederberg et al., 2025). The findings and data from this report will be reviewed and used as a foundation for this study, in addition to other research papers that may prove insightful.
2. **Interviews**: Interviews will be conducted with actors within each company, such as a project manager or a team member. The interview questions are carefully designed to encourage open discussion and fact-based insights about *cuts*, while minimizing defensive responses. Each project team is required to execute and document two interviews with two different respondents within their organization. The complete interview guide is provided in Appendix 8.1.
3. **Observations**: Project groups will actively observe and document "hidden cuts" encountered throughout their project work. These observations will be registered

consistently in a quick and accessible format for further data-analysis. Each group is required to collect *at least* 10 observations within *at least* 3 different categories.

4.3.3 Data Analysis

The analysis will be based on the data collected by the 10 project teams about the 10 different companies.

Firstly, the results will be analyzed by the authors of this paper, combining newly collected data with the findings from last year's IMIT report, *Researching Corporate Entrepreneurship: Findings of the Corporate Entrepreneurship track at Chalmers School of Entrepreneurship 2025* (Ederberg et al., 2025). In order to strengthen the results of this paper, a similar analysis approach has been used in this study to compare our results with the findings of the previous year. By comparing the results of this study with the earlier study, it strengthens the reliability of the analysis and results.

This will be followed by a cross-functional workshop including all RQ-teams, where the findings will be discussed and further developed. Lastly, the authors of this paper will once more analyse the data discussed in the cross-functional workshop in order to incorporate different perspectives within the paper.

The analysis will be structured around six levels:

Severity

We will assess the severity of each cut and grade it on a scale in order to compare and highlight which cuts are more critical on a 1-5 scale, from least to most severe, while being minor enough to still be defined as a *cut*. The definition of a cut that is minor is always subject to interpretation, thus the reader needs to understand that a minor cut could be seen as major in another context and vice versa.

Project Phase

The cuts will be categorised according to five phases - initiation, planning, execution, monitoring, and closure - drawn from the Project Life Cycle as applied in Ederberg et al. (2025 - see Section 2.3). This will enable analysis of the project lifecycle to identify when cuts arise and detect potential patterns.

Categories of Cuts

The material will be categorised into different types of cuts. This report will continue to categorize *cuts* with the same structure as last year to simplify the process of cross-analysis. In last year's study, the categories which were used in order to analyse the dataset were *personal, communication, resource, misalignment, culture, distrust, organizational complexity*, and *project structure* (Ederberg et al., 2025).

Affected Parameter

In the process of collecting as well as analysing data, cuts will also be categorized by which of the three Iron Triangle parameters, described in section 2.1, they primarily affect This dual categorization allows for a more structured analysis, making it possible to identify patterns between the type of cut and the performance dimension it impacts, and thereby gain a deeper understanding of how different disruptions translate into measurable project outcomes. Since the parameters are often tightly connected when a cut occurs, the affected parameter refers to the first or main affected parameter.

Cause
For each cut, the underlying organisational, structural, or behavioural factors associated with its occurrence are described. This suggested cause is an informed assumption made by the student team. Causes are analysed thematically rather than categorically, as they often span multiple categories and reflect broader organizational conditions. This thematic analysis seeks to identify recurring drivers behind cuts.
Mitigation
For each cut, a suggested action that could reduce or prevent its occurrence is also documented. The suggested mitigation is an informed assumption made by the student team. Mitigations are analysed qualitatively, with attention to the level at which they operate and to their feasibility within the organisational context. This thematic analysis complements the categorical parameters by addressing not only the nature and impact of cuts but also how they may be addressed in practice.
Cause and mitigation are documented for each cut and analyzed thematically. These dimensions are not classified into predefined categories but are examined in order to capture the contextual conditions surrounding the cuts.

4.3.4 AI-Disclaimer

AI tools, specifically LLMs (large language models), have been used in a supporting capacity during the production of this report. First, AI tools have been used to assist in the quantitative analysis of the empirical material. AI has also been used to assist the generation of diagrams and visual illustrations of the data presented in Chapter 4. Additionally, AI has been used to perform a thematic analysis. Furthermore, it has been used for language refinement, including grammar and language corrections of the written text.

4.4 Results

4.4.1 General Findings

4.4.1.1 Distribution of Cuts by Category

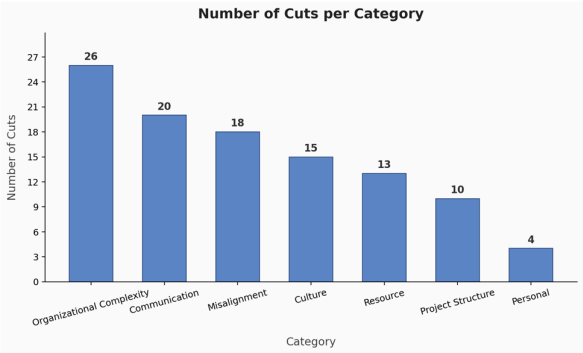

Figure 1 - "Visualisation of Cuts per Category"

Each identified cut is classified into one of eight categories based on its underlying nature: Personal, Communication, Resource, Misalignment, Culture, Distrust, Organizational Complexity, and Project Structure. This allows patterns in where and how project friction arises to be identified across different organizations.

A total of 106 cuts were identified across the participating companies. Organizational Complexity was the most common category, accounting for 26 cuts (24.5%), followed by Communication with 20 cuts (18.9%) and Misalignment with 18 cuts (17.0%). Culture represented 15 cuts (14.2%), Resource 13 cuts (12.3%), and Project Structure 10 cuts (9.4%). Personal issues were relatively rare at 4 cuts (3.8%), and no cuts related to Distrust were identified.

4.4.1.2 Distribution of Cuts by Project Phase

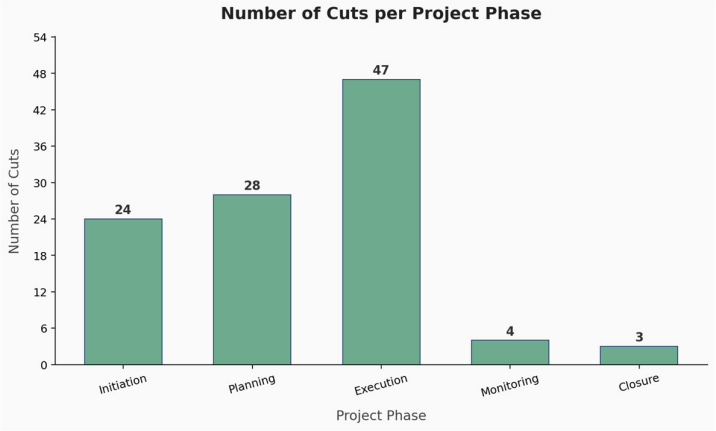

Figure 2 - "Visualisation of Cuts per Project Phase"

Each cut is mapped to the phases in the project life cycle in which it was identified, following the conventional structure: Initiation, Planning, Execution, Monitoring, and Closure. This reveals at which points in a project friction is most likely to emerge.

The 106 cuts were distributed across all five phases. Execution was by far the most represented, accounting for 47 cuts (44.3%), consistent with it being the longest and most active stage of most projects. Planning followed with 28 cuts (26.4%), and Initiation with 24 cuts (22.6%). Monitoring and Closure were considerably less represented, with 4 cuts (3.8%) and 3 cuts (2.8%) respectively.

4.4.1.3 Distribution of Cuts by Affected Parameter

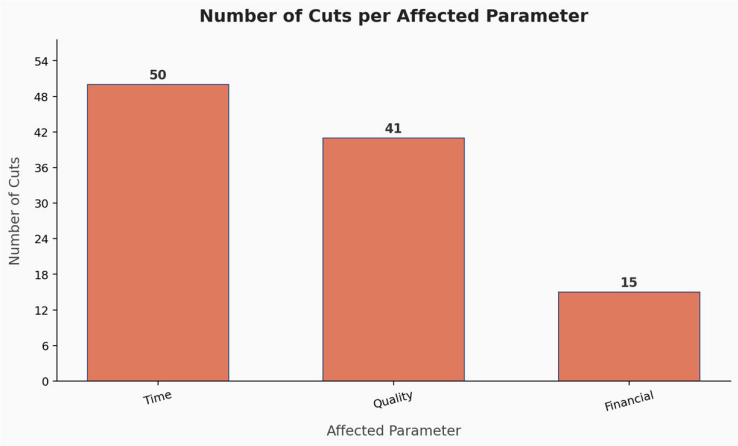

Figure 3 - "Visualisation of Cuts per Affected Parameter"

Each cut is classified according to which project outcome it primarily impacts: Quality, Time, or Financial. This provides insight into how different types of friction translate into tangible project effects.

Time was the most frequently affected parameter, with 50 cuts (47.2%) primarily impacting schedule or deadlines. Quality was affected by 41 cuts (38.7%), while Financial impact was associated with 15 cuts (14.2%). This distribution suggests that project friction most commonly manifests as delays and scheduling pressure rather than cost overruns or quality degradation.

4.4.2 Thematic Analysis of Causes and Mitigation

Causes and mitigations were analysed thematically at two levels: first-order themes and second-order themes. The resulting thematic structures are presented in *Figure 4* and *Figure 5* below, followed by an explanation of the identified major themes.

4.4.2.1 Root Causes of Cuts

The thematic analysis of causes resulted in four second-order themes: Strategic and Cultural Misalignment, Organizational Design Failures, Information and Knowledge Deficits, and Capacity and Resource Constraints (see *Figure 4*). These themes capture different but interrelated causes behind the identified cuts.

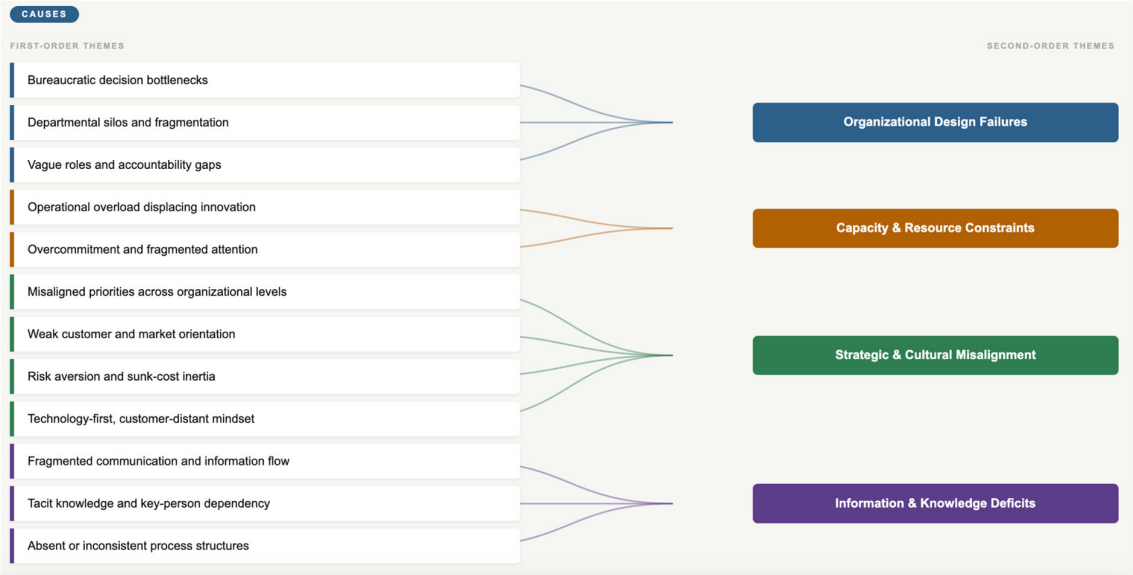

Figure 4 - “Visualisation, Thematic Analysis of Causes”

Strategic and Cultural Misalignment

These causes capture friction that arises when priorities, value assumptions, or strategic orientations differ across organizational levels and units. The theme includes tensions between exploitation and exploration, where group-level priorities differ from those of the unit; weak customer orientation, where projects are initiated without sufficient validation of real customer problems; risk aversion and sunk-cost inertia, where the fear of failure or the difficulty of stopping approved projects outweighs the willingness to test or pivot; and a technology-first mindset, where solutions are developed before customer needs are properly understood. The core issue is therefore not how the organization is formally structured, but what the organization values and prioritizes in practice.

Organizational Design Failures

Organizational design failures refer to problems that arise from the organization's structural setup, including its authority hierarchy, decision-making procedures, and the way responsibilities and boundaries are divided between units. The theme includes bureaucratic decision bottlenecks, where decisions require many actors and infrequent meetings; silos and fragmentation, where similar work is conducted in parallel across different parts of the organization; vague accountability, where no one clearly takes ownership; and absent or inconsistent process structures, where projects must navigate ad-hoc routines rather than established ones. In these cases, progress slows because work must pass through multiple organizational interfaces before action can be taken.

Information and Knowledge Deficits

Information and knowledge deficits create friction when the right information, context, or know-how does not reach the people who need it, when they need it. This shows up as limited communication, poor handovers between teams or project phases, and critical knowledge being held by a small number of individuals. As a result, progress depends on personal networks, informal conversations, or a handful of key people, which in turn creates bottlenecks and delays.

Capacity and Resource Constraints

These issues stem from a lack of time and attention available for innovation among the people doing the work. Day-to-day operations consistently take priority over new initiatives, and individuals are too overburdened to sustain focus on early-stage work. The core problem is not a lack of motivation, coordination, or ideas, but the absence of protected time and dedicated capacity in which to pursue innovation.

4.4.2.2 Identified actions for cut mitigation

The thematic analysis of mitigations resulted in five second-order themes: Knowledge and Communication Systems, Governance and Structural Reform, Strategic Reorientation, Capacity and Innovation Space, and Collaboration and Integration (see *Figure 5*). These second order themes represent suggestions to reduce or prevent specific cuts.

Figure 5 - “Visualisation, Thematic Analysis of Mitigation”

Knowledge and Communication Systems

This captures improving the visibility and transfer of practical information, expectations, and know-how. It includes greater transparency, for example introducing structured feedback systems and communication campaigns that surface decisions and progress, and stronger knowledge formalisation, for example documenting processes and incorporating project and process information into onboarding. The general approach is to create reliable information channels so that the right information reaches the right people at the right time.

Governance and Structural Reform

This theme is about replacing ad-hoc arrangements with clear, repeatable structures. It includes decentralising decisions—defining a core decision group, limiting stakeholder approval layers, and delegating decisions outward—and clarifying roles and processes through clearer project ownership, defined decision rights, and formalising support structures rather than relying on informal relationships. The mitigation is, in essence, to introduce missing routines or clarify unclear authority structures.

Strategic Reorientation

Strategic reorientation is about changing what the organization actually chooses to work on by basing decisions on proven customer value and outcomes. Suggested actions include validating customer value before starting new projects, using design thinking and jobs-to-be-done methods, and setting clear requirements for data and evidence in prioritization. Success is judged less on documents and output metrics and more on the value that is actually delivered. This is supported by cultural efforts to build a mindset that can handle both the exploration of new ideas and the improvement of existing ones.

Capacity and Innovation Space

This mitigation pattern deals with the workload and focus of the people doing the work, with the goal of creating protected room for innovation. Proposed measures include reserving fixed time for innovation initiatives, giving teams protected time for early investigations, cutting back on meetings and sharpening them so they have clear purposes and outcomes, and planning resources so that knowledge is more evenly spread and fewer people end up as bottlenecks.

Collaboration and Integration

This theme focuses on shrinking the distance between teams that depend on each other by making collaboration more structured and more frequent. Suggested actions include setting up regular shared checkpoints across teams, agreeing on shared success measures early in projects, colocating teams when possible, requiring certain key meetings to be in person, and arranging team-building activities to bridge cultural and organizational gaps. The overall goal is to create intentional, repeated contact so that dependencies are handled early and openly instead of only when problems appear.

4.4.3 Visually presented trends

Figure 6 - “Cuts Matrix; Company, Phase, Severity”

Figure 6 provides an overview of all 106 identified cuts distributed across the ten participating companies, plotted by project phase on the horizontal axis and severity on the vertical axis. Each cut is represented individually, and companies are color-coded as C1 through C10 to preserve anonymity. The figure allows both within-company patterns and cross-company comparisons to be read simultaneously.

Several observations can be made at a glance. First, the concentration of cuts in the *Execution* phase is visible across virtually all companies, confirming that this pattern is not driven by one or two outliers but is consistent across the sample. Second, the severity distribution varies

noticeably between companies. Some companies show a relatively even spread across severity levels, while others cluster more heavily in the mid-to-high range of three to five. Third, the *Monitoring* and *Closure* phases are sparsely represented across all companies, with only isolated cuts appearing in these later stages regardless of company size, sector, or organizational type. Fourth, cuts rated at severity 1 and 2 are relatively seldom found across the dataset. This may suggest that minor inefficiencies are harder to identify, and are therefore more likely to go undocumented.

It is also worth noting that the number of cuts per company is not uniform. This reflects differences in organizational context, project complexity, and the nature of the access rather than differences in how thoroughly data was collected. In some cases the data represents a broad company-wide perspective, while in others it captures a specific team or department.

Figure 7 - "Cuts Matrix; Category, Phase, Severity"

Category 1: Personal

"Personal" includes cuts related to staffing and employee management within a project. With only 4 cuts, Personal is the least frequent category in this year's dataset, marked in light pink in *Figure 7*. Cuts are spread across initiation, planning, and execution, with an average severity of 2.5, which is the lowest of all categories. The cuts that were identified share a common theme: employees are overstretched, leaving insufficient capacity for project work.

Category 2: Communication

"Communication" covers cuts related to sharing information clearly and effectively within and between teams. With 20 cuts, Communication is the second most frequent category, marked in red in *Figure 7*. Cuts concentrate in execution (9) and planning (7), with an average severity of 3.2. Notably, 9 out of 20 cuts are rated at severity 4, suggesting that communication issues cause more significant disruption than frequency alone implies. The

most common issues are unclear ownership and authority structures causing confusion around decisions, communication challenges in online-first or hybrid environments, and information not reaching the right people across silos or hierarchical layers.

Category 3: Resources

"Resources" includes cuts related to having sufficient conditions and support needed for the successful completion of a project. Resources accounts for 13 cuts, marked in orange in *Figure 7*, and is the most execution-heavy category, with 10 of 13 cuts appearing in that phase alone. The average severity is 3.46, with 5 cuts at severity 4 or 5. This reflects situations where over-allocation and competing priorities made it practically impossible to sustain project momentum. The most common issues are key employees being over-allocated across daily operations and project work, lack of access to relevant knowledge, networks, or test environments, and internal process focus, such as documentation requirements, consuming capacity that should go toward delivery.

Category 4: Misalignment

"Misalignment" includes cuts related to situations where goals, processes, or expectations are not clearly aligned within the project team or among stakeholders. Misalignment is the third most frequent category, with 18 cuts, and is marked in green in *Figure 7*. Unlike other categories, its cuts are heavily front-loaded, with 13 of 18 appearing in initiation or planning. This indicates that misalignment typically originates before active project work begins. Severity ranges from 1 to 5, with an average of 3.17. Several high-severity cases involve strategic conflicts between organizational levels. The most common issues are projects being scoped without adequate validation of real customer needs or operational realities, conflicting expectations between organizational levels, innovation teams developing solutions that cannot be integrated into day-to-day operations, and stakeholders with competing incentives pulling projects in incompatible directions.

Category 5: Culture

"Culture" includes cuts related to behaviors and attitudes among employees that negatively affect the work environment and project outcomes. Culture accounts for 15 cuts, marked in light blue in *Figure 7*, concentrated mostly in execution (7) and planning (4). The average severity is 3.4, with 3 cuts at severity 5. These are cases where cultural resistance effectively blocked progress entirely. A recurring theme across companies is a technology-driven or seniority-driven culture, where hierarchy and risk aversion outweigh openness to new approaches. The most common issues are resistance to innovation or new ways of working due to established norms or fear of failure, decision-making driven by seniority rather than evidence, and lack of cross-functional accountability on shared projects.

Category 6: Organizational Complexity

"Organizational complexity" includes cuts related to internal structures, decision-making processes, and organizational complexity that slow down or complicate project work. Organizational Complexity is the single most frequent category, with 27 cuts, and represents the largest share by a clear margin. It is marked in gray in *Figure 7*. Cuts appear primarily in execution (15) and initiation (7), with an average severity of 3.59 and 6 cuts at severity 5. This combination of high frequency and high severity makes it the most consistently impactful category in the dataset. The most common issues are slow decision-making

requiring escalation across multiple organizational levels, silos within and between departments leading to duplicated efforts and poor knowledge sharing, dependence on internal champions to unlock resources and legitimacy, and global teams creating coordination overhead and fragmented communication.

Category 7: Project Structure

"Project structure" includes cuts related to how a project is set up and managed. Project Structure accounts for 10 cuts distributed across all project phases and is marked in yellow in *Figure X.* Severity spans the full range from 1 to 5, with an average of 3.4. Notably, high-severity cuts already appear in initiation, suggesting that foundational structural flaws can cascade throughout the entire project. The most common issues are applying the same project model to fundamentally different project types, errors in early designs or blueprints that propagate through later phases, unclear roles and missing competencies in key positions, and projects lacking steering groups, leaving managers without an escalation path.

4.5 Discussion

The empirical material collected across ten organizations and 106 identified cuts points to a consistent pattern: innovation friction in established organizations is rarely the result of individual mistakes or isolated incidents. Instead, the root causes lie in how organizations are structured, how teams communicate, and how people and cultures interact. This finding aligns with the core of the "death by a thousand cuts" concept, where no single cut is decisive, but their accumulation gradually undermines project performance across time, cost, and quality dimensions.

To understand how cuts affect innovation outcomes, this chapter first examines why cuts emerge, then how they translate into measurable damage, then what organizations can do in response, and finally whether these patterns are stable over time.

4.5.1 From Friction to Impact: Linking Cut Types to Project Outcomes

The distribution of cuts across the three Iron Triangle parameters shows that organizational friction in innovation projects most commonly appears as schedule pressure. Of the 106 cuts identified roughly translates to 47%, primarily affected Time. In the same time approximately 39% primarily affected Quality and 14% primarily affected financials. The dominance of Time as the most affected parameter reflects the nature of the most common cut categories, where slow decision-making, bureaucratic bottlenecks, and resource competition tend to show up as delays before they become visible as cost or quality problems. However, a more interesting pattern emerges when the data is examined at the category level.

When cuts are broken down by category, a clear divide appears in how different types of friction translate into project outcomes. Both the categories of Organizational Complexity and Resource, are strongly associated with Time, with 65% and 77% of cuts in each category primarily affecting delivering on schedule. In contrast the combination of the categories Communication and Culture, are strongly associated with Quality, with 60% of cuts in each

category primarily affecting that parameter. This pattern was anticipated in the theoretical framework presented in Chapter 2, where it was suggested that a potential pattern could identify cuts related to communication and culture would be more likely to show up in quality outcomes through poor coordination, withheld information, and weakened collaboration. Our results suggest that the type of Cut somehow predicts how it damages the project. When organizational structure is the source of friction, time is more likely to be the affected parameter. However, when relational and cultural dynamics are the source, it is the quality of the output that suffers from the cut.

Two additional patterns in the data are worth noting.

First, Misalignment stands out as the most evenly distributed category across all three parameters, with 39% of its cuts affecting Quality, 33% affecting Time, and 28% affecting Financial outcomes. This reflects the hybrid nature of misalignment as a type of cut. Unlike purely structural or purely relational categories, misalignment operates across strategic, organizational, and interpersonal dimensions simultaneously, which means it has the potential to damage project outcomes in multiple ways at once.

Second, while Financial was the least frequently affected parameter, it recorded the highest average severity score of the three, at 4.0, compared to 3.22 for Time and 3.24 for Quality, meaning that when cuts do reach the budget, the consequences tend to be serious. The relatively low frequency of Financial cuts may however reflect a form of survivorship bias rather than a genuine organizational pattern. Survivorship bias describes the tendency to draw conclusions from cases that survived a selection process while overlooking those that did not, a concept illustrated by Wald's analysis of aircraft damage during World War II. Wald's that the areas without visible damage on returning planes were likely the location of where fatal hits had occurred on aircraft that never made it back (Mangel & Samaniego, 1984). In this study, data was collected from ongoing or recently active projects within functioning organizations, meaning that projects terminated early due to severe financial damage are unlikely to be represented in the sample. The cuts that were captured in this study may therefore resemble the bullet holes on returning aircraft, in other words as cuts from projects that survived long enough to be noticed by the students. The most consequential Financial cuts may be precisely those attached to projects that never reached a stage where they could be documented. Interpreted this way, the low frequency of Financial cuts in this dataset should be read as a limitation of the sampling approach rather than as evidence that budget impact is rare in practice, a point that is returned to in Section 5.8.

Taken together, these findings suggest that innovation projects in established organizations face two distinct threats from accumulated cuts. The more immediate and visible threat is schedule disruption, driven largely by structural complexity and resource constraints that slow decisions and fragment attention. The less visible but potentially more serious threat is quality degradation, driven by communication and cultural friction that is harder to detect and slower to surface. The severity data for Financial cuts, combined with the survivorship bias argument, further suggests that the true cost impact of organizational friction may be considerably greater than what this dataset is able to capture. This distinction matters for how

organizations should think about identifying and responding to cuts early, which is explored further in the following sections.

4.5.2 From Single Cuts to Systemic Response: Linking Causes and Mitigations

Both the causes and mitigations discussed here are empirical data, not prescriptions. They reflect what student teams observed and proposed during fieldwork, with the same status as the cuts themselves, not independently validated interventions. That distinction matters for what follows.

When the four second-order causes are set against the five second-order mitigation themes, most causes have a direct mitigation counterpart that targets the same problem area. Strategic and cultural misalignment is mainly addressed by Strategic Reorientation; design failures by Governance and Structural Reform; knowledge deficits by Knowledge and Communication Systems; and capacity constraints by Capacity and Innovation Space. The exception is Collaboration and Integration, which does not map to single causes but instead appears as a response to several at once. Collaboration as a mitigation thus functions as a multi-dimensional mitigation that organizations draw on when the problem spans more than one type of cause.

This thematic correspondence reflects the study's "death by a thousand cuts" mechanism introduced in section 1.1. Innovation is undermined not by a single event but by an accumulation of small frictions. In the data, most cuts are minor on their own, such as meetings scheduled too far apart or incomplete handovers, and would not individually disrupt innovation. The damage instead arises from their combined effect over time. In contrast, the second-order mitigation themes cluster responses into broader patterns that target organizational conditions where several cuts tend to appear together, such as the decision system, documentation regime, prioritization logic, and cross-functional interfaces. Because the harm is collective and cumulative, mitigation must operate at that collective level, changing the patterns that repeatedly produce cuts rather than treating each cut in isolation.

Although the mapping between causes and mitigations is symmetric in form, it is not symmetric in effect. Some mitigations work directly on the cause by removing or reducing the source of friction: bureaucratic bottlenecks are met with decentralized decision rights and fewer approval layers, vague accountability with formal ownership and clearer mandates, and weak customer orientation with explicit validation requirements and methods such as design thinking and jobs-to-be-done. In these cases, the mitigation can plausibly remove the cause rather than merely mask its effects.

Other mitigations leave the cause in place and only help projects cope with it. Capacity issues are typically addressed at the individual level, where employees are expected to renegotiate their time or justify innovation work to their managers, placing the responsibility for relief on the same overstretched individuals the cause affects. Cultural causes such as risk aversion or technology-first mindsets are rarely changed; instead, projects navigate around them through pilots, mid-project reviews, and informal legitimacy. Together, these patterns suggest that organizations have institutional responses for governance and process problems but rely on individual effort and workarounds when the cause lies in capacity or culture.

An additional tension is that mitigations can themselves create the conditions for new cuts. Several proposed actions, such as additional checkpoints, structured templates, documentation routines, communication campaigns, and new coordination forums, are closely linked to the activities that appear in the cut data as bureaucratic bottlenecks, fragmented attention, and meeting overload. The same mechanism, whether a meeting, process step, or sign-off, can either reduce uncertainty or add friction, depending on how it is implemented and what it replaces. The pattern in the data is therefore not that more structure is better, but that structure should replace informal coordination rather than be layered on top of it.

Collectively, the analysis suggests three main points about how cuts arise and how they can be reduced. First, cuts often result from friction in moving innovation work through the organization: in making decisions, finding information, protecting time, and working across functions. The responses most likely to help are those that target and remove these specific sources of friction, rather than relying on broad structural change alone. Second, organizations appear more capable of addressing structural causes than those related to capacity or culture, where solutions depend heavily on individual effort and workarounds and are therefore less durable. Finally, mitigations are not always beneficial. A coordination process, documentation requirement, or extra meeting can either eliminate a cut or create a new one. Before implementing any mitigation, the key question is whether the proposed action simplifies the work that follows or merely introduces another step to navigate.

4.5.3 A Cross-Year Comparison

The comparison between the 2025 and 2026 datasets helps assess whether the patterns identified in the current study are isolated findings or reflect more stable dynamics in innovation projects within established organizations. In line with the abductive logic of the study, the comparison is not treated as a statistical test, but as a way to interpret empirical patterns through the theoretical framework developed in Chapter 2. The Project Life Cycle is used to examine when cuts emerge, while the categories show what type of organizational friction dominates across the two years.

Project Phase

Across both years, cuts are concentrated in the early and middle parts of the project life cycle. To account for differences in coding between the two datasets, multi-phase cuts in the 2025 data were counted fractionally before calculating phase shares. Execution is the most represented phase in both datasets, increasing from **37.3% in 2025** to **44.3% in 2026**. Planning decreased from **29.8% to 26.4%**, while Initiation remained almost unchanged, moving from **22.2% to 22.6%**. Monitoring and Closure were low in both years.

Project Phase	2025	2026	Change
Initiation	22.2%	22.6%	+0.4 pp
Planning	29.8%	26.4%	-3.4 pp

Execution	37.3%	44.3%	+7.0 pp
Monitoring	5.1%	3.8%	-1.3 pp
Closure	5.6%	2.8%	-2.8 pp

Figure 8 - "Table, Comparison of Cuts by Project Phase"
Note. Some 2025 cuts were coded across multiple project phases. These were counted fractionally, meaning that a cut assigned to two phases was counted as 0.5 in each phase, ensuring that each cut contributed only once in total.

This supports the relevance of the Project Life Cycle as an analytical lens. The dominance of Execution suggests that many cuts become visible when plans, assumptions, and organizational structures are put into practice. However, the continued presence of cuts in Initiation and Planning indicates that many execution problems may originate earlier, through weak stakeholder alignment, unclear ownership, poor scoping, or insufficient customer understanding. Thus, the comparison supports the "death by a thousand cuts" logic: friction may begin early, but its accumulated effects often become most visible during execution.

The low number of Monitoring and Closure cuts should be interpreted carefully. It may indicate that fewer cuts occur in later phases, but it may also reflect a visibility issue, as respondents may be less involved in post-project evaluation and long-term learning.

Category

The category comparison shows a shift in the nature of cuts between the two years. In 2025, the most common categories were **Resource** and **Communication**. In 2026, the dominant category shifted to **Organizational Complexity**, followed by **Communication**, **Misalignment**, and **Culture**. The table below highlights the key shifts most relevant for interpreting this change.

Category	2025	2026	Change
Organizational Complexity	12.8%	24.5%	+11.7 pp
Communication	21.1%	18.9%	-2.2 pp
Misalignment	11.9%	17.0%	+5.1 pp
Culture	2.8%	14.2%	+11.4 pp
Resource	22.0%	12.3%	-9.7 pp

Figure 9 - "Table, Key Shifts in Category Comparison"

The strongest shift is the rise of **Organizational Complexity**, which becomes the largest category in 2026. This suggests that friction is increasingly connected to how established organizations are structured, including slow decision-making, unclear interfaces, approval layers, fragmented ownership, and silos.

Communication remains important in both years, but the 2026 data suggests that communication issues are often linked to organizational design rather than only interpersonal misunderstanding. Similarly, the increases in **Misalignment** and **Culture** points to deeper organizational conditions, such as unclear priorities, competing interpretations of project goals, risk aversion, and resistance to new ways of working.

At the same time, the decline in **Resource** cuts suggests a shift away from immediate project-level shortages toward more systemic barriers affecting how resources are accessed, coordinated, and mobilized. Categories not shown in the table, such as **Project Structure**, **Personal**, and **Distrust**, should be interpreted carefully, as similar dynamics may have been coded under broader categories such as **Communication**, **Misalignment**, or **Organizational Complexity**.

Combined Interpretation

Overall, the cross-year comparison shows both continuity and change. The continuity lies in the clustering of cuts around Initiation, Planning, and especially Execution, supporting the Project Life Cycle as a useful framework for understanding when organizational friction becomes visible. The change lies in the type of cuts. While the 2025 dataset emphasized Resource and Communication issues, the 2026 dataset points more strongly toward Organizational Complexity, Misalignment, and Culture.

This strengthens the central argument of the thesis: innovation projects in established organizations are rarely harmed by one single dramatic failure. Instead, they are slowed and weakened by repeated small frictions that accumulate across phases and categories. From an Iron Triangle perspective, these cuts are likely to appear first as delays, particularly during Execution, but may later affect quality and financial outcomes. The 2026 data therefore deepens the “death by a thousand cuts” argument by showing that the most damaging cuts may not only be operational, but embedded in organizational structures, cultural assumptions, and strategic misalignment.

4.5.4 Theoretical Contributions

The 2025 study established that innovation projects rarely fail due to a single critical event (Ederberg et al., 2025). Rather, failure results from the accumulation of many small frictions over time. Using the Project Life Cycle and the Theory of Constraints as analytical lenses, the prior study mapped when cuts occur and how severe they tend to be (Ederberg et al., 2025). It found that cuts concentrate in the first three project phases, particularly during the execution phase. Furthermore, it describes how early-stage problems in the Initiation and Planning phase often do not become fully visible until the project is actively underway (Ederberg et al., 2025).

This study extends that work by connecting cuts to specific project outcomes rather than describing them in isolation. By introducing the Iron Triangle framework (Atkinson, 1999), it becomes possible to identify not just where friction appears, but also what it damages. The

results show that structural cuts, driven by organizational complexity and resource constraints, primarily affect time, while relational cuts, driven by communication and culture, primarily affect quality. The iron triangle thus serves not only as a measurement tool, but also as a diagnostic one: the dominant type of a cut in a project tends to signal which performance dimension is most at risk.

4.5.5 Limitations

The dataset is based on ten companies, with each research team contributing two interviews and approximately ten observations from their own project companies. While this insider position offers direct access to organizational processes, the data often reflects a specific team or department rather than the entire company. The findings should therefore be read as illustrative of dynamics within innovation projects, not as representative of a full organisation.

The analysis also rests on subjective judgments at several levels. The severity ratings, categorization of cuts, and assignment of affected Iron Triangle parameters are all informed assessments made by the student teams based on interviews and observations, as are the proposed mitigations. Although the teams are embedded in their projects at the case companies and have contextual insight from their ongoing work, the mitigations should be regarded as informed proposals based on fieldwork rather than validated organizational interventions.

A further limitation is survivorship bias, as discussed in Section 5.1. Because data was collected from ongoing or recently active projects, projects already terminated due to severe friction are absent from the sample, which likely understates the true impact of the most damaging cuts.

4.5.6 Future research

Future research should address the survivorship bias identified in this study by focusing explicitly on innovation projects that were terminated or failed early. Since the current dataset mainly captures ongoing or recently active projects, severe cuts, especially those with major financial impact, are likely underrepresented. Studying discontinued projects would make it possible to assess whether certain types of cuts, such as organizational complexity, misalignment, or cultural resistance, are more strongly associated with early project termination.

Further studies should also adopt a longitudinal design. Following projects over time would allow researchers to observe how cuts emerge, accumulate, and interact across project phases, rather than relying on retrospective identification. This would strengthen understanding of how early-stage cuts in initiation and planning translate into delays, quality loss, or financial failure during execution.

Finally, future research should empirically test the mitigation actions identified in this study. While this paper proposes responses such as clearer decision rights, protected time for innovation, and improved knowledge-sharing structures, their actual effectiveness remains unverified. Comparative or intervention-based studies could examine which mitigations reduce cuts in practice, and under what organizational conditions they are most effective.

4.6 Conclusion

Across 106 cuts from ten companies, three findings stand out;

1: The type of cut predicts the type of damage.

Structural cuts, rooted in organizational complexity and resource constraints, primarily damage time, showing up as delays, slow decisions, and blocked momentum. Relational cuts, rooted in communication and culture, primarily damage quality, through poor coordination, withheld information, and weakened output. Financial impact is the least frequent but most severe when it does occur, and is likely underrepresented due to survivorship bias: the most budget-damaging cuts may belong to projects that never survived long enough to be studied.

2: Cuts emerge from four recurring conditions:

organizational design that creates bottlenecks and blurs accountability; capacity constraints that permanently subordinate innovation to operations; strategic and cultural misalignment that leaves priorities contested and customers unvalidated; and information deficits that make progress dependent on individual champions rather than shared systems. Mitigations for structural causes exist and are actionable. Mitigations for capacity and culture, however, tend to place the burden on the people already harmed by the cause, and several proposed fixes are structurally indistinguishable from the friction they claim to address. The root that no mitigation touches is the absence of a clear organizational commitment to what innovation is supposed to cost.

3: These patterns are not incidental, and they are not new. The cross-year comparison between 2025 and 2026 shows the dominance of Execution as the most cut-dense phase is consistent and growing. The nature of cuts is shifting, however: Resource and Communication issues are giving way to Organizational Complexity, Misalignment, and Culture. Innovation friction in established organizations is becoming less about immediate project-level shortages and more about deep structural and cultural conditions that individual projects cannot resolve from within.

Taken together, the findings confirm the core premise, that innovation in established organizations is worn down, gradually and predictably, by frictions that are each too small to trigger a response, until their accumulated weight halts projects.

Together with the 2025 study, these findings move the “Death by a thousand cuts” concept forward: from mapping what cuts exist and when they occur, to understanding what they damage and where they originate. The Iron Triangle framework provides the missing link between organizational friction and measurable project outcomes, offering a more complete basis for both future research and organizational practice.

4.7 References

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4.8 Appendix

4.8.1 Interview Guide - Organizational Friction: "Death by a Thousand Cuts"

Objective:

The objective is to have *at least 2* interviews within your partner organization. These interviews shall be conducted with respondents who have experience of either leading or contributing to innovation projects within the organization. The interviews shall be conducted according to the interview guide, however, we strongly encourage you to ask follow-up questions if you feel that it would be beneficial. An interview is anticipated to last around 30 minutes. Do not forget to thoroughly read through the Three Pager before starting your first interview in order to comprehend the different aspects of information that will be valuable for the analysis of the data. The data will be categorized within these sections: *Severity, Project Phase, Category of Cut, and Affected Parameter*.

Severity

We will assess the severity of each cut and grade it on a scale in order to compare and highlight which cuts are more critical on a 1-5 scale, from least to most severe, while being minor enough to still be defined as a *cut*.

Project Phase

The cuts will be categorised according to the five phases *Initiation, Planning, Execution, Monitoring, and Closure*. This will enable analysis of the project lifecycle to identify when cuts arise and detect potential patterns.

Categories of Cuts

The material will be categorised into different types of cuts. This report will continue to categorize *cuts* with the same structure as last year to simplify the process of cross-analysis. In last year's study, the categories were *personal, communication, resource, misalignment, culture, distrust, organizational complexity*, and *project structure* (Ahlström et al., 2025).

Affected Parameter

We aim to analyse how different cuts have affected the outcome of different projects. This will be performed by categorizing the cuts within the following parameters; *Financial, Quality,* and *Time.*

Introductory Questions:

Could you briefly describe your role and involvement in innovation or development projects within your organization?

Identifying and Understanding "Cuts" - *Identify concrete examples of small inefficiencies or frictions in innovation work.*

Have you experienced innovation projects that have failed or dropped through? Why did it fail?

Do you think there could have been other small underlying reasons for the project failing?

When did these cuts appear? (*Initiation, Planning, Execution, Monitoring, and Closure)*

What types of small obstacles or inefficiencies ("cuts") do you encounter most often? *(For example: slow decision-making, unclear roles, conflicting priorities, or overly complex processes.)*

Do some issues get overlooked in projects because they seem too minor to pay attention to? If yes, what kinds of issues are these?

Impact, Consequences & Solution - *Explore the practical effects of small inefficiencies on project outcomes, underlying reasons and potential ways to mitigate friction.*

How do these small inefficiencies affect project outcomes in terms of time, cost, or quality?

In your view, which types of small obstacles are the most critical or affect the outcome of a project the most?

Why do you think these small inefficiencies arise and persist over time?

Have you seen examples where your organization successfully reduced or removed such obstacles? What made that possible?

What do you think would be needed to make it easier to drive innovation without getting stuck in these small frictions?

Reflection and Closing - *Summarize and give space for open reflection.*

If you could give one piece of advice to leadership for reducing organizational friction, what would it be?

Is there anything we haven't discussed that you think is important for understanding how innovation gets slowed down in your organization?

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5. Strategy

John Tran, Thea Johansson & Andreas Essén

5.1 Introduction

Innovation is often described as something that can be organized through structured processes. Many organizations rely on formal models that define how ideas should move from initial conception toward evaluation, development, approval and implementation (Cooper, 1990). These processes are important, particularly in established organizations where new initiatives must compete with existing priorities, budgets, routines and risk considerations. However, they do not fully explain how innovation ideas progress in practice.

Rather than moving smoothly from one official stage to the next, innovation often develops through a combination of formal and informal activity. Ideas may be shaped through conversations before meetings, adapted to fit decision criteria, supported by personal networks, or developed through early experiments before they become formally visible. This is consistent with research on emergent strategy and informal innovation work, which shows that ideas may develop through action, learning, autonomous initiatives and informal experimentation before they are formally recognized (Mintzberg & Waters, 1985; Burgelman, 1983; Criscuolo et al., 2014).

The concept of emergent strategy provides a useful theoretical lens for examining this dynamic. Mintzberg and Waters (1985) distinguish between deliberate strategies, which are planned in advance, and emergent strategies, which develop over time through patterns of action. Applied to innovation, this suggests that ideas may be shaped gradually through repeated decisions, adaptations and negotiations before they become formally recognized.

However, while emergent strategy helps explain why innovation does not always follow deliberate plans, it provides less insight into how emergent activity becomes connected to formal innovation processes. Building on translation perspectives, this study focuses on the work through which actors develop, align, legitimize and adapt ideas so that they can be recognized, assessed and supported by formal innovation processes (Czarniawska & Joerges, 1996; Røvik, 2016).

The purpose of this study is to explore how formal innovation processes and informal practices interact in shaping the realization of innovation ideas within organizations. The study is guided by the following research question:

In what ways does the interplay between formal innovation processes and informal practices affect how innovations are realized within organizations?

Empirically, the study draws on data from ten organizations operating in Sweden, spanning both public and private sectors. The variation across organizations provides a basis for

comparing how formal and informal innovation work appears across different organizational settings. The material consists of semi-structured interviews with individuals involved in innovation and project development, together with observations and insights from a cross-organizational workshop. This makes it possible to compare how innovation is formally structured with how it unfolds in practice across different organizational contexts.

By focusing on this interaction, the study contributes to a more practice-based understanding of emergent strategy in innovation settings. The central argument is that innovation is not realized through formal processes or informal practices alone, but through pre-formal translation work: the activities through which actors prepare ideas for formal evaluation before they become formally visible. Formal processes provide structure and legitimacy, while informal practices shape how ideas are adapted, supported, and carried forward. Together, they influence which innovation projects progress, how they change along the way, and whether they eventually gain formal commitment and move toward realization within the organization.

5.2 Theoretical Framework

This study draws on four related streams of literature to understand how innovation ideas move from early emergence toward organizational realization. First, emergent strategy research shows that strategy and innovation may develop through action, learning, and adaptation over time, rather than only through deliberate planning. Second, research on informal innovation work shows that actors may develop, protect, promote, and sell ideas through activities that take place before, beside, or partly outside formal processes. Third, literature on formal selection, legitimacy, and resource allocation shows that ideas do not become realized simply because they exist. They must also become credible, legitimate, and connected to organizational priorities, decision forums, and resources. Finally, this study uses translation work as an analytical link between these streams.

Taken together, these perspectives suggest that innovation realization is not only a question of idea generation or formal process design. Rather, it depends on how actors move ideas between informal development and formal evaluation. The theoretical framework therefore focuses on how ideas are translated into forms that the organization can recognize, assess, support and connect to resources.

5.2.1 Emergent Strategy and Informal Emergence

Formal innovation processes often assume that ideas move through planned stages, such as idea generation, evaluation, development, approval, and implementation. Such processes can provide structure, coordination, and accountability, especially in established organizations where new initiatives must compete with existing priorities. However, strategy and innovation do not always develop in a linear or fully planned way. Emergent strategy research suggests that realized strategy may develop through patterns of action over time, where learning, experimentation, and adaptation gradually shape what the organization actually does (Mintzberg & Waters, 1985; Mintzberg, 1978).

From this perspective, strategy is not only formulated in advance and then implemented. It may also develop through local initiatives, repeated decisions, and practical responses to uncertainty. This is especially relevant for innovation, where actors often cannot know in advance which ideas will work, what resources will be needed, or how the organization will respond. Innovation may therefore begin through exploratory action before it becomes formally recognized as a project. Research on autonomous strategic behavior and corporate entrepreneurship similarly suggests that new strategic initiatives may emerge from lower levels of the organization, rather than only from top-down planning (Burgelman, 1983, 1991). Strategy-as-practice research also supports this view by emphasizing strategy as something people do through everyday activities, rather than something that only exists in formal plans (Whittington, 2006).

For this study, emergent strategy is useful because it explains why innovation ideas may begin before, beside, or outside the official process. Ideas may be shaped through experiments, conversations, early prototypes, customer interactions, or informal alignment before they are visible in formal decision structures. This suggests that innovation processes should not only be studied through official process models, but also through the practical actions that precede and shape formal recognition.

However, this perspective also has a limitation. While emergent strategy helps explain how new directions can develop through action over time, it says less about what happens when emergent initiatives encounter formal organizational evaluation. An idea may emerge informally, but it still needs to survive decision criteria, resource constraints, governance requirements, and legitimacy expectations. This perspective therefore explains that strategy can emerge, but says less about how emergent initiatives survive formal organizational evaluation.

5.2.2 Informal Innovation Work: Bootlegging, Championing and Issue Selling

A second stream of literature helps explain the informal work through which ideas are developed and promoted inside organizations. Informal innovation work can take several forms, including bootlegging, championing, and issue selling. These concepts are useful because they show how actors may continue working on ideas even when formal support is limited, unclear, or not yet available.

Bootlegging refers to innovation work that takes place without formal organizational approval or direct support. It may involve employees using discretionary time, informal resources, or hidden experimentation to develop an idea before it is officially recognized (Criscuolo et al., 2014). Such activity can create room for exploration when formal structures are too slow, risk-averse, or uncertain to support an idea at an early stage. Related research on creative deviance also suggests that actors may continue developing ideas even after being discouraged from doing so, particularly when they believe the idea has potential value for the organization (Mainemelis, 2010). In this sense, informal innovation work can protect fragile ideas from premature rejection.

Championing highlights another important aspect of informal innovation work. Ideas rarely move forward on their own. They often depend on individuals who take responsibility for promoting them, building support, and navigating resistance. Innovation champions may help ideas gain attention, connect them to relevant stakeholders, and keep them alive during uncertain phases (Howell & Higgins, 1990). This means that the progression of an idea may depend not only on its technical or commercial potential, but also on whether someone is willing and able to mobilize support around it. For this study, this also means that champions can be understood as carriers of translation work. They do not only promote ideas, but help move them between informal development and formal decision structures by building support, adapting how the idea is framed, and connecting it to relevant stakeholders.

Issue selling adds a further dimension by showing how actors frame and present ideas to decision-makers. Ideas often need to be connected to organizational concerns, such as strategic priorities, risks, customer needs, efficiency, or future opportunities, in order to gain managerial attention (Dutton & Ashford, 1993; Dutton et al., 2001). This suggests that informal innovation work is not only about developing ideas technically. It is also about making them understandable, relevant, and convincing to others in the organization.

Taken together, these perspectives show that informal practices can play an important role in early innovation development. Actors may test ideas, protect them from early rejection, build social support, and frame them in ways that increase their chances of being noticed. However, this literature says less about how informal work prepares ideas for formal evaluation and selection.

5.2.3 Formal Selection, Legitimacy and Resource Allocation

While informal practices may help ideas emerge, they do not by themselves explain innovation realization. In established organizations, ideas must usually pass through formal structures before they can become implemented. Formal processes define how ideas are evaluated, prioritized, funded, and connected to organizational responsibilities. This means that ideas are not realized simply because they are creative, promising, or informally supported. They must also fit the organization's decision-making logic.

Formal innovation processes, such as stage-based development models, can be understood as selection mechanisms. They help organizations reduce uncertainty by evaluating ideas through criteria such as feasibility, strategic fit, business value, technical risk, and resource requirements (Cooper, 1990). These processes can create discipline and accountability, but they may also filter out ideas that do not yet fit existing categories or expectations. This is important because early innovation ideas are often incomplete, ambiguous, or difficult to compare with established projects.

Resource allocation is central to this selection process. Strategy research suggests that organizational strategy is shaped not only by formal plans, but also by how resources are allocated over time (Bower, 1970; Noda & Bower, 1996; Bower & Gilbert, 2005). In practice,

an idea becomes more than an idea when people, time, funding, technical capacity, or managerial attention are committed to it. Resource allocation therefore works as a practical test of organizational commitment. If an idea cannot be connected to available resources or justified against competing priorities, it may struggle to progress even if it is viewed positively.

Legitimacy is also central. An idea must be seen as appropriate, credible, and meaningful within the organizational context (Suchman, 1995). This can be particularly difficult for innovation ideas, since they may challenge existing routines, categories, or understandings of what the organization normally does. Research on product innovation in established firms shows that even potentially successful innovations can appear illegitimate when they do not fit existing structures or interpretive frames (Dougherty & Heller, 1994). This means that formal selection is not only about the quality of the idea itself, but also about whether the idea can be represented in a way that the organization can understand and justify.

This stream of literature therefore highlights a key tension. Informal emergence can create flexibility and experimentation, but formal selection determines which ideas receive mandate, legitimacy, and resources. Formal structures may enable implementation, but they may also narrow what counts as a valid innovation. What remains less clear is how actors prepare and translate ideas so that they can move from informal emergence into formal selection.

5.2.4 Translation Work as the Analytical Link

To address this gap, this study uses translation work as the central analytical concept. Translation work refers to the practical work through which actors adapt, frame, materialize, and represent ideas so that they can move from informal emergence into formal selection. The concept builds on translation perspectives in organizational theory, where ideas are not seen as moving unchanged between contexts. Instead, ideas are edited, adapted, and reshaped as they travel across organizational settings (Czarniawska & Joerges, 1996; Røvik, 2016). Translation also involves building connections between actors, interests, objects, and decision structures so that an idea can become actionable in a specific context (Callon, 1986; Latour, 1986).

In this study, translation work is understood specifically as pre-formal translation work. This refers to the activities through which actors develop, align, legitimize and adapt ideas before they are formally evaluated or selected. The concept captures how actors prepare ideas in anticipation of what formal innovation processes are likely to require, before the ideas become formally visible.

More specifically, this work captures how actors make ideas materially credible, socially legitimate, and formally representable so that they can move from informal emergence into formal selection. Material credibility means that an idea is supported by something concrete, such as prototypes, tests, data, user input, technical evidence, or resource estimates. Social legitimacy means that the idea gains support from relevant actors, such as managers, experts, sponsors, or internal stakeholders. Formal representability means that the idea can be expressed

in the language and formats required by the organization, such as business cases, project plans, budgets, risk assessments, strategic rationales, or decision documents.

These three dimensions are pre-formal because they often take shape before formal evaluation begins. Actors may build evidence, support and representational fit in advance because they anticipate the questions, criteria and concerns that formal decision forums will later raise. This also suggests a double effect of translation work. Translation may help ideas survive formal selection by making them understandable and acceptable to the organization. However, it may also narrow ideas as they are adapted to existing categories, evaluation criteria and expectations. Translation can therefore be enabling, but also filtering.

This concept links the previous theoretical streams. Emergent strategy explains how ideas may develop through action and adaptation. Informal innovation work explains how actors may test, protect, champion, and sell ideas before they are formally recognized. Formal selection theory explains why ideas must gain legitimacy, resources, and organizational fit. Translation work connects these perspectives by focusing on the work actors do to move ideas across the boundary between informal development and formal evaluation.

The theoretical argument is therefore not that informal practices replace formal processes, or that formal processes simply block innovation. Rather, the literature suggests that innovation realization may depend on the connection between the two. Informal work may help ideas develop, but formal processes provide the mandate and resources needed for implementation. Translation work is the mechanism through which actors attempt to connect these domains. It helps explain how an idea that begins as informal, uncertain, or weakly recognized can become credible enough to be evaluated, selected, and supported by the organization.

Taken together, the theoretical framework suggests that innovation realization should be understood as a process of emergence, selection, and translation. Ideas may emerge informally through action and experimentation, but they become realized only when they are translated into forms that formal structures can recognize and support. This study therefore focuses on how actors perform translation work between informal idea development and formal organizational selection.

5.3 Methodology

5.3.1 Research Design

This study adopted a qualitative, action-based, multiple-case research design. A qualitative approach was suitable because the study aimed to understand how innovation processes are described, interpreted, and enacted by organizational actors, rather than to measure innovation outcomes through predefined variables. As Denzin and Lincoln (2018) explain in *The Sage Handbook of Qualitative Research*, qualitative research is especially relevant when the researcher seeks to understand meaning, interpretation, and social processes in context. Similarly, Bryman and Bell (2015) emphasize in *Business Research Methods* that qualitative

research is useful for studying how organizational actors understand and make sense of their own practices. This made a qualitative design appropriate for studying how innovation work unfolded in practice.

The study was conducted in parallel with ongoing innovation-related projects across ten organizations in Sweden. This action-based orientation made it possible to study innovation work as it developed, rather than relying only on retrospective accounts or formal process descriptions. As Reason and Bradbury (2008) describe in *The Sage Handbook of Action Research*, action research is concerned with producing knowledge through engagement with practical situations. Coghlan and Brannick (2014) similarly argue in *Doing Action Research in Your Own Organization* that action-based research can be valuable when researchers are close to the organizational setting and seek to understand change processes from within. This was relevant for the present study, since the aim was to understand how innovation ideas moved through both formal and informal parts of the organization.

The design also had characteristics of a multiple-case study, since the analysis compared innovation processes across ten organizations. As Yin (2018) explains in *Case Study Research and Applications*, case study research is suitable when the researcher seeks to understand a phenomenon in its real-life context. Eisenhardt (1989) further argues that multiple-case research can be used to identify patterns across cases while still preserving the contextual richness of each individual case. In this study, the purpose was therefore not statistical generalization, but analytical generalization. The aim was to develop theoretically informed insights into how innovation realization may occur across different organizational contexts.

The aim of the research design was to understand how formal innovation processes and informal practices interact in the realization of innovation. This required a method that could capture both formal structures and the way these structures were actually used, adapted, or bypassed by actors in practice. For this reason, the study combined semi-structured interviews, observations, workshop material, and cross-case comparison. As Patton (1999) argues in his work on credibility in qualitative analysis, using multiple sources of empirical material can strengthen the quality of qualitative research by allowing the researcher to compare different perspectives. Yin (2018) also describes the use of multiple sources of evidence as an important way to strengthen case study research.

Since the researchers were partly embedded in the broader research setting, reflexivity was important. As Alvesson and Sköldberg (2018) argue in *Reflexive Methodology*, qualitative researchers need to be aware of how their own assumptions, access, and interpretive position influence the research process. To reduce the risk of relying on individual impressions, the material was therefore structured systematically by organization and theme before broader cross-case findings were developed.

5.3.2 Empirical Setting and Data Collection

The empirical material was collected over a period of approximately ten months. The study included ten organizations operating in different sectors and organizational contexts. This variation made it possible to compare how similar innovation dynamics appeared across different types of organizations. As Eisenhardt and Graebner (2007) argue, multiple-case research can create stronger theoretical insight when patterns are observed across several cases rather than in one isolated setting. The variation between organizations was therefore used to explore whether similar process patterns appeared across different organizational contexts.

The primary data source was semi-structured interviews. A total of 30 interviews were included in the analysis. The interviewees were individuals with insight into innovation, project development, business development, technical development, research, operational improvement, innovation hubs, or decision-making around new initiatives. The exact roles varied between organizations, but the interviewees were selected because they could describe how innovation ideas moved through formal and informal processes. As Patton (2015) explains in *Qualitative Research & Evaluation Methods*, purposive sampling is appropriate when participants are selected because they can provide rich and relevant information about the phenomenon being studied.

The semi-structured interview format was appropriate because it allowed the researchers to ask comparable questions across organizations while still giving interviewees room to describe case-specific examples in depth. As Kvale and Brinkmann (2015) describe in *InterViews*, semi-structured interviews are useful when the researcher wants to understand participants' experiences while still maintaining a clear thematic focus. Bryman and Bell (2015) also emphasize that semi-structured interviews provide flexibility, since they allow follow-up questions when unexpected but relevant themes emerge. In this study, the interviews focused on how innovation ideas emerged, what formal process they were expected to follow, how the process worked in practice, how decisions were made, what informal mechanisms influenced progress, which actors shaped the process, and what barriers or enablers affected realization.

Observational data were also collected throughout the research process. These observations included reflections on how innovation work developed over time, how actors described formal and informal practices, and how ideas were shaped through meetings, discussions, and project activities. As Langley (1999) argues in her work on process data, process research is useful when the aim is to understand how phenomena develop over time. Observations were therefore valuable because they helped capture ongoing developments and interactions that may not have been fully visible through interviews alone. The observations were documented through continuous notes and reflection logs, which were later used to contextualize and compare the interview material.

A cross-organizational workshop was also used as a data source. The workshop was structured around the research question and focused on comparing formal innovation processes with how projects actually moved in practice. Activities included ranking emerging findings, discussing

whether preliminary conclusions matched participants' experiences, mapping the gap between official process descriptions and actual project movement, and generating additional observations through group discussion and written reflections. As Lincoln and Guba (1985) argue in *Naturalistic Inquiry*, credibility in qualitative research can be strengthened when interpretations are tested against participants' experiences and the broader empirical material. The workshop therefore contributed both additional empirical examples and a way to refine the emerging analysis.

5.3.3 Data Structuring and Preparation

Before the analysis, the empirical material was organized by organization and by recurring analytical themes. These themes included the formal innovation process, how the process worked in practice, decision-making logic, informal mechanisms, observed practices, influential actors, and barriers and enablers. As Miles, Huberman and Saldaña (2014) explain in *Qualitative Data Analysis*, systematic data condensation and display are important for moving from large amounts of empirical material to more transparent and interpretable patterns. This structuring helped make the analytical process more traceable.

Each interview and observation was first treated as a separate empirical source. The material was then summarized at the organizational level in order to identify the overall pattern within each case. This step was important because the analysis did not rely on isolated quotes or individual examples. Instead, statements and observations were interpreted in relation to the broader organizational context. As Yin (2018) notes, within-case analysis is important because each case must first be understood in its own context before broader comparisons are made across cases.

The purpose of this structuring was to increase transparency and reduce the risk of cherry-picking. By comparing all organizations in relation to the same themes, the researchers could identify recurring patterns, weaker tendencies, and cases where the pattern was absent or appeared differently. As Miles et al. (2014) argue, systematic comparison strengthens qualitative analysis by making it clearer how findings are developed from the material. This was important in the present study because the analysis aimed to identify process patterns across organizations, not only strong examples from individual cases.

5.3.4 Data Analysis

The analysis followed an iterative abductive logic, moving between the empirical material and relevant theoretical concepts. The findings were therefore not developed through a purely inductive process, where themes only emerge from the data, nor through a purely deductive process, where the material is fitted into a predefined framework. As Dubois and Gadde (2002) explain in their article on systematic combining, abductive case research involves continuous movement between empirical observations, theory, and the evolving analytical framework. Timmermans and Tavory (2012) similarly argue that abductive analysis is useful when researchers seek to develop theoretical explanations from empirical material that does not fully

fit existing concepts. This made abductive analysis suitable for the present study, since the relationship between informal innovation work and formal decision-making developed gradually through the analysis.

The analysis was conducted in several steps. First, the material from interviews, observations, and workshop activities was reviewed to identify concrete examples related to the innovation process. These included examples of informal idea development, early prototyping, pre-alignment before formal meetings, formal evaluation, funding decisions, process adaptation, individual championing, and cross-functional coordination. As Gioia, Corley and Hamilton (2013) argue in their work on qualitative rigor, qualitative analysis becomes more credible when the researcher can show how empirical observations are gradually developed into more abstract concepts. This first step therefore helped keep the analysis close to the empirical material before moving toward broader interpretation.

Second, the material was compared within each organization. This made it possible to identify how innovation appeared to work in each case, including the relationship between the official process and what actors actually did in practice. Third, the organizational patterns were compared across cases. The researchers examined whether similar phenomena appeared across several organizations, such as ideas being developed before formal visibility, formal processes acting as selection mechanisms, informal networks helping ideas gain support, or projects being reformulated to fit formal templates. As Eisenhardt (1989) argues, cross-case comparison helps researchers identify patterns that are not only tied to one case. Yin (2018) similarly describes cross-case synthesis as a way to develop stronger analytical conclusions in multiple-case research.

Fourth, the cross-case findings were grouped according to their function in the innovation process. The analysis focused not only on what practices existed, but also on what they appeared to do. The main analytical functions included generating momentum, preparing ideas before formal visibility, building social legitimacy, representing ideas within formal systems, and securing formal mandate and resources. As Langley (1999) argues, process research is useful for understanding how actions, events, and sequences contribute to the development of organizational phenomena over time. This functional interpretation was therefore important because the study aimed to understand innovation realization as a process, rather than as a fixed sequence of formal steps.

Finally, these functions were connected to the theoretical framework. This helped develop the central analytical argument that innovation realization can be understood as translation between informal emergence and formal selection. In this study, translation refers to the work through which actors make ideas materially credible, socially legitimate, and formally representable so that they can move from informal development into formal organizational decision-making.

Where pattern frequencies are used in the findings, such as 6/9 or 5/9, they are used only to make the strength of qualitative patterns more transparent. They are not intended as statistical measurements. As Maxwell (2010) argues in his article on using numbers in qualitative

research, numbers can sometimes be useful in qualitative studies when they clarify the scope or strength of a pattern, but they do not replace interpretation. In this study, frequencies are therefore used only to support transparency, while the meaning of each pattern is explained through qualitative analysis.

5.3.5 Cross-Case Comparison and Negative Cases

To reduce the risk of selecting only examples that supported the emerging argument, the researchers compared all organizations in relation to the same questions and phenomena. Each pattern was assessed across the full available material, rather than only through the most illustrative cases. As Lincoln and Guba (1985) argue, credibility in qualitative research depends on showing that interpretations are grounded in the empirical material. Similarly, Patton (1999) emphasizes that qualitative credibility is strengthened when researchers actively examine the quality, consistency, and variation of their evidence.

The analysis also included attention to negative cases. Negative cases refer to organizations or examples where a pattern was absent, weaker, or appeared differently than expected. These cases were not excluded from the analysis. Instead, they were used to nuance the mechanisms and clarify their boundaries. As Miles et al. (2014) argue, examining rival explanations and disconfirming evidence is important for strengthening qualitative conclusions. In this study, negative cases helped avoid presenting informal innovation work, personal networks, or formal selection as mechanisms that appeared in the same way across all organizations.

For example, informal innovation work appeared strongly in several organizations, but not in the same way everywhere. In some cases, ideas were developed before entering the formal process. In others, formal structures were followed more closely from the beginning. Similarly, personal networks appeared important in many organizations, but they did not replace formal decision-making. These differences helped refine the analysis by showing that the mechanisms are not equally present in all organizations. Rather, they appear differently depending on organizational context.

The cross-case comparison therefore did not aim to claim that all organizations behave in the same way. Instead, it was used to identify recurring process patterns and to understand how those patterns varied across organizational settings. This supports analytical generalization rather than statistical generalization, which Yin (2018) describes as the appropriate form of generalization in case study research.

5.3.6 Methodological Limitations

The methodology provides insight into how innovation processes unfold in practice, but several limitations should be acknowledged.

First, the data are based on qualitative interpretation. Even though the material was structured systematically, the coding and analysis still involved researcher judgment. Different

researchers may interpret the same situation differently, especially when analyzing informal practices, organizational politics, and decision-making dynamics. As Alvesson and Sköldberg (2018) argue, qualitative research is always interpretive, meaning that researchers must be reflexive about how their own assumptions shape the analysis.

Second, the researchers had an active role in the broader research setting. This provided access to ongoing innovation work and practical observations, but it also means that the researchers' presence and perspective may have influenced how some situations were understood. As Coghlan and Brannick (2014) explain, closeness to the field is both a strength and a challenge in action-based research. It provides access to practical knowledge, but it also requires reflection on how the researcher's role may affect interpretation. To address this, the analysis relied on systematic comparison across interviews, observations, workshop material, and organizational summaries.

Third, the organizations operate in different industries and contexts. This variation strengthens the study by showing patterns across diverse settings, but it also makes direct comparison more complex. The findings should therefore be understood as process patterns, not as claims that all organizations behave in the same way. As Eisenhardt and Graebner (2007) argue, multiple-case research is valuable for theoretical development, but it does not produce statistical generalization in the same way as large-sample quantitative research.

Despite these limitations, the combination of interviews, observations, workshop material, and cross-case comparison provides a credible basis for analyzing how formal innovation processes and informal practices interact in the realization of innovation. The methodological approach makes it possible to trace how the study moved from empirical material to broader findings about informal emergence, formal selection, and translation work. By combining empirical closeness with systematic comparison and abductive theoretical interpretation, the study provides a structured basis for understanding how innovation ideas may move from informal development toward formal organizational decision-making.

5.4 Empirical Findings

5.4.1 Informal Idea Development

Across the studied organizations, a recurring pattern is that innovation ideas are often developed before entering formal selection, sometimes outside formal structures and sometimes in more semi-structured early phases such as pre-studies or exploratory work. Six of the ten organizations described that ideas are, at least to some extent, developed informally before entering formal processes. This includes activities such as early experimentation, prototyping, or internal alignment conducted without full visibility in the organization.

For example, Company 8 described how ideas are intentionally kept within a small group during the pre-study phase until they are mature enough to be presented to the board. Similarly, Company 2 highlighted cases where employees developed prototypes "under the radar" in

order to demonstrate value before formal approval. Company 4 also reflected this pattern, although in a more structured way, where early-stage exploration is supported through designated resources.

At the same time, this pattern is not universal. Two organizations explicitly rejected the presence of such informal development, emphasizing instead that innovation is expected to follow formal channels from the beginning.

Overall, the findings indicate that informal idea development is commonly observed, but primarily limited to early phases. Once ideas approach formal decision points, they are typically required to enter structured processes and align with organizational criteria.

5.4.2 Informal Practices and Formal Decision-Making

The findings show that informal practices are present in many organizations, but they coexist with, rather than replace, formal decision-making structures. In particular, behaviors such as "asking for forgiveness rather than permission" and informal pre-alignment before meetings appear to vary across organizations, but remain constrained by formal rules and expectations.

Several organizations described rule-breaking behaviors as either limited or highly context-dependent. For example, Companies 8, 10, 7 and 5 emphasized that employees are generally expected to follow formal procedures, and that deviations are uncommon. In contrast, Company 2 provides a clear example of employees developing proof-of-concept prototypes despite initial rejection, demonstrating that such behavior can occur in practice. Companies 4 and 9 presented more mixed views, acknowledging that bypassing formal structures may happen, but also highlighting associated risks such as duplication of work, lack of coordination, and potential personal consequences.

Five of the ten organizations indicated that informal discussions and alignment often take place before formal meetings. In these cases, ideas are shaped and supported through conversations with key stakeholders prior to official decision forums. For instance, Companies 8 and 4 described how intrapreneurs engaged with decision-makers in advance to anticipate objections and build support. However, these informal processes do not replace formal meetings, which remain necessary to legitimize and finalize decisions.

At the same time, four organizations emphasized that decisions are primarily made within formal structures, where meetings serve as the central arena for evaluation and approval. This highlights that while informal practices may influence the direction of decisions, formal processes still define whether decisions become legitimate and final.

Overall, the findings suggest that informal practices play a role in shaping innovation processes, particularly in preparing and influencing decisions. However, they operate within the boundaries set by formal structures, meaning that both informal and formal elements are required for decisions to be realized within organizations.

5.4.3 Formal Selection Mechanisms

Another clear pattern across the organizations is that formal innovation processes act as important selection mechanisms, particularly when ideas transition from early exploration to formal projects. Five of the ten organizations explicitly describe that moving an idea into the formal system is difficult and requires significant alignment with predefined criteria.

Several organizations highlighted this transition as a key challenge. For example, Company 10 described the shift from pre-study to formal projects as “very hard”, emphasizing that ideas had to meet the same standards as established projects in terms of feasibility and expected outcomes. Similarly, Company 8 explained how ideas had to pass multiple board approvals before progressing, while Company 9 stressed the need for alignment across organizational, technical, financial, and security requirements. Company 5 also pointed out that ideas developed outside the core process must eventually be reintegrated and justified within formal structures to receive funding and support.

This indicates that while early-stage exploration may be relatively flexible, formal processes impose stricter evaluation criteria that shape which ideas are able to progress. As a result, ideas often need to be adapted, reframed, or strengthened to fit within existing structures.

At the same time, not all organizations described this as equally restrictive. However, even in cases where early exploration is supported, the transition into formal processes remains a critical point where many initiatives face challenges.

Overall, the findings suggest that formal innovation processes function less as early idea-generation mechanisms and more as mechanisms for filtering, structuring and legitimizing ideas as they move toward formal support.

5.4.4 Resource Allocation

The findings show that formal selection is closely connected to resource allocation. Several organizations described innovation funding as dependent on existing budgets, reallocation from other projects, or formal funding mechanisms. In organizations where dedicated innovation budgets were limited, moving one initiative forward often required trade-offs with other ongoing activities. For example, Company 8 explained that funding from the parent organization could require other initiatives to be deprioritized, while Companies 4, 5 and 7 described more structured approaches where projects were evaluated and funded through formal systems.

This suggests that progressing an idea depends not only on whether it is viewed positively, but also on whether resources can be allocated to it. Formal selection therefore functions as a point where ideas become linked to organizational commitment, since progressing an idea typically requires time, funding, people or managerial attention. In this sense, resource allocation helps explain why formal processes remain important even when ideas have been developed informally beforehand.

5.4.5 Process Adaptation

Across the organizations, a recurring pattern is that formal innovation processes are not always followed as strict sequences, but are adapted in practice to fit specific situations, projects and actors. Six of the ten organizations described that processes are used more as guiding frameworks than as fixed rules.

For example, Company 8 explained how intrapreneurs actively anticipate future decision criteria and shape their projects accordingly, effectively navigating the process rather than following it step-by-step. Similarly, Company 10 noted that processes are often adjusted depending on the individual and context, while Company 9 described how projects can move back and forth between phases. Company 2 also highlighted that employees sometimes prioritize product development and customer needs over strict adherence to documentation and formal timelines.

Companies 1 and 5 presented similar patterns, where processes were followed to some extent but are also reshaped to allow projects to move forward. In the case of Company 5, projects that did not initially fit the formal structure could be reformulated to align with existing processes, enabling them to progress within the system. In contrast, Companies 3, 7 and 4 described more rigid adherence to formal processes, where deviations or shortcuts were limited or not observed.

The findings also indicated that innovation processes were rarely strictly linear. Most organizations described repeated back-and-forth movement, validation loops or adjustments during development, even when formal models appeared sequential. For example, Company 9 described repeated validation loops, while Company 2 highlighted continuous interaction between functions that led to ongoing adjustments. This suggests that ideas often evolve through action, learning and adaptation over time, rather than moving directly from idea generation to formal implementation.

Overall, the findings show that formal processes provide structure and coordination, but are frequently interpreted and adjusted in practice. This suggests that actors do not only follow formal processes; they also adapt ideas and process steps in order to make innovation initiatives progress.

5.4.6 Individuals and Networks

The findings show that innovation is shaped by individuals and their relationships, rather than being solely driven by formal organizational structures and incentives. Across nearly all organizations, there is evidence that the progression of ideas depends on individual initiative, personal networks, and the ability to build support.

Six of the ten organizations indicated that personal networks affected how quickly ideas move forward. For example, Companies 3 and 8 highlighted that having access to relevant internal networks was important for gaining traction and advancing initiatives. Similarly, Company 4

described how innovation projects often gain support through informal relationships before entering formal processes. Even in organizations where formal structures were emphasized, such as Companies 5 and 10, networks were still described as influencing the speed with which ideas moved forward, although they did not replace formal requirements.

In addition, there is a broader pattern across the data that idea progression depended on individuals acting as champions for their ideas. This was observed across almost all organizations, where ideas only progressed when someone took responsibility for driving them forward, building support, and navigating the organization. For example, Company 2 described cases where individuals developed and pushed ideas independently, while Companies 9 and 7 highlighted how innovation required navigating multiple stakeholders through personal interaction.

At the same time, some organizations, such as Companies 7, 9 and 2, emphasized that formal processes and structures limited the extent to which networks alone can determine outcomes. In these contexts, personal networks could influence speed and access, but not replace competence, alignment or adherence to formal requirements.

Overall, the findings suggest that while formal processes define how innovation should progress, individuals and networks play a central role in how it actually progresses in practice.

5.5 Discussion

The study contributes by showing that formal innovation processes shape ideas before they formally enter the process. This occurs because actors anticipate what formal processes will later require. They develop, align, legitimize and adapt ideas in expectation of future evaluation, meaning that formal requirements influence informal work before ideas become formally visible. Building on emergent strategy, the findings show that ideas may develop through action, learning and informal initiative. However, emergence alone does not explain innovation realization. Ideas move toward realization when actors prepare them for formal evaluation by building support, demonstrating value and translating them into forms that formal structures can recognize, evaluate and connect to resources. Formal selection is therefore treated as a key step toward realization, since it is where ideas can gain access to mandate, resources and organizational support.

5.5.1 Ideas are prepared before formal evaluation

Before ideas enter formal evaluation, they are often prepared through both informal alignment and early development. Pre-formal does not necessarily mean hidden or unauthorized; rather, it refers to work that occurs before ideas are formally evaluated or selected. The findings show that actors in several organizations engaged stakeholders and decision-makers before ideas were presented in formal meetings or decision forums. This was done to test arguments, anticipate objections and build support. Rather than treating the formal meeting as the first point of evaluation, actors used informal conversations to understand how the idea was likely

to be received and what it might need in order to gain acceptance. This suggests that formal decision-making is partly prepared through informal alignment work before the official decision point.

This specifies the role of issue selling and legitimacy in innovation realization. While existing theory explains that ideas must be framed, promoted and legitimized in order to gain support, the findings show that this work may begin before formal evaluation. This was reflected in organizations such as Company 4 and Company 8, where actors engaged decision-makers before formal meetings not only to inform them, but also to anticipate objections and build support. Pre-alignment can therefore be understood as a social form of pre-formal translation work: actors adapt how ideas are framed and supported in anticipation of what future decision forums are likely to require.

Ideas are also prepared materially before formal evaluation. In Company 2, prototypes were developed informally to demonstrate value before formal approval, while Company 8 described how ideas could be kept within a smaller group during the pre-study phase until they were mature enough to be presented to the board. This partly reflects bootlegging in cases where development occurred under the radar, but it also includes more tolerated forms of early exploration. Across these examples, early work made uncertain ideas easier to evaluate before they were formally assessed.

This matters for innovation realization because formal selection is where ideas gain access to mandate, resources and organizational support. Ideas are therefore not evaluated only through formal criteria once they enter the process; their reception is also shaped by prior support, framing, stakeholder alignment and evidence of value. Pre-formal preparation can help ideas move toward formal selection by making them more credible before formal exposure. At the same time, this suggests that formal processes may be better suited to evaluating ideas after informal work has made them more concrete and supportable. Thus, formal processes shape innovation before formal evaluation begins, not by directly selecting ideas, but by influencing how actors prepare them in anticipation of what the process will later accept.

5.5.2 Translation makes ideas selectable, but may also domesticate them

As ideas move closer to formal selection, preparation becomes a matter of translation. The findings show that ideas do not move into formal selection simply because they have been developed or supported informally. They also need to be made compatible with the criteria through which the organization evaluates them. This was visible in cases where ideas had to align with organizational, technical, financial and security requirements, or where ideas developed outside the core process later needed to be reintegrated and justified within formal structures. In this sense, actors prepare not only the idea itself, but also how the idea can be made understandable and acceptable to the formal process.

This connects directly to translation work. Existing theory explains that ideas do not travel unchanged across organizational settings, but are adapted and reshaped as they move between

contexts. The findings specify how this translation occurs in relation to formal innovation processes. Company 9 emphasized the need for alignment across multiple organizational requirements, while Company 10 described the transition from pre-study to formal project as difficult. Company 5 similarly showed that ideas developed outside the core process eventually needed to be brought back into formal structures to receive support. These examples suggest that translation work is not only about communicating an idea more clearly; it is also about making the idea fit the evaluative categories of the organization.

Translation work is therefore both enabling and filtering. On the one hand, it helps ideas survive by making them easier to evaluate, prioritize and connect to resources. In this way, translation can support innovation realization by making ideas understandable in terms of the organization's criteria for feasibility, value and fit. On the other hand, the same process may also domesticate ideas. Domestication here refers to the narrowing or reformulation of ideas so that they fit existing categories of what counts as feasible, valuable or appropriate. In order to fit these categories, actors may emphasize aspects that align with current structures while downplaying elements that are more ambiguous, exploratory or difficult to measure.

The findings do not allow for a strong claim that formal processes reject more radical ideas. However, they suggest that ambiguous, exploratory or difficult-to-measure ideas may require more extensive translation before they can become formally selectable. What becomes formally selectable is therefore not simply the idea as it first emerged, but the idea as it has been adapted to fit the organization's formal logic. This means that formal innovation processes shape ideas before formal selection not only by deciding which ideas receive support, but by influencing how actors formulate ideas in anticipation of that decision.

5.5.3 Pre-formal translation depends on champions and networks

Pre-formal translation work does not occur automatically through process design. It depends on actors who carry ideas across informal and formal arenas. The findings show that idea progression often depended on individuals who took responsibility for driving initiatives, building support and navigating stakeholders. This connects to championing theory, which explains how individuals promote ideas and help them gain support. However, the findings suggest that champions are not only promoters of ideas. They also perform much of the pre-formal translation work that makes ideas ready for formal selection.

This was visible in the role of individual initiative and personal networks. Several organizations described that access to relevant internal networks affected how quickly ideas gained traction. Company 3 and Company 8 highlighted the importance of personal networks, while Company 4 showed how informal relationships could support innovation projects before they entered formal processes. Even in organizations where formal procedures remained important, such as Company 5 and Company 10, networks were still described as influencing the speed and ease with which ideas moved forward. The pattern across these cases is that networks did not replace formal processes, but affected how easily ideas could move toward them.

This creates both flexibility and vulnerability. Champions can create momentum by connecting ideas to relevant stakeholders, translating them into organizationally acceptable terms and keeping them alive during uncertain phases. At the same time, this means that innovation realization becomes partly person-dependent. Ideas may move forward not only because they are formally promising, but because someone is able to build support and carry them through the organization. Conversely, ideas may struggle if no one takes responsibility for building support around them. Pre-formal translation work therefore depends not only on formal process design, but also on individual agency and access to informal networks. This makes informal practices productive, but also uneven, because ideas may depend on whether actors have access to the right relationships, decision-makers and organizational knowledge.

5.5.4 Innovation realization as pre-formal translation

The preceding sections show that formal selection often operates on ideas that have already been shaped through informal work. Formal innovation processes remain important because they provide mandate, resources, prioritization and legitimacy. However, ideas often need to be prepared before they can benefit from those processes. This reframes the relationship between formal and informal innovation work. Informal practices do not replace formal processes, but shape the conditions under which ideas can enter them.

This also refines the emergent strategy perspective. Emergent strategy explains how ideas may arise through action, learning and informal initiative, but the findings show that emergence becomes consequential only when ideas are translated into forms that formal structures can legitimate, evaluate and connect to resources. Innovation realization therefore depends on whether ideas become mature, credible and translatable enough to gain formal commitment. In this sense, formal processes do not only shape innovation at the point of decision; they also influence how actors prepare ideas before those ideas become formally visible.

5.5.5 Theoretical Contribution

This study contributes to theory by showing how informal innovation ideas become formally selectable in established organizations. Emergent strategy explains that innovation may develop through action, learning and informal initiative, this study further explains how such initiatives become connected to formal decision-making. The study addresses this by showing that emergence of ideas alone is insufficient. Ideas move toward realization when actors perform pre-formal translation work, meaning that they make ideas materially credible, socially legitimate and formally representable before formal evaluation begins.

This contributes to literature on informal innovation work by showing that bootlegging, championing and issue selling are not only ways of developing and promoting ideas outside formal structures. They can also function as preparation for formal selection. For example, Company 2 showed how prototypes developed under the radar made an idea easier to evaluate,

while Company 4 and Company 8 showed how pre-alignment with decision-makers helped actors anticipate objections and build support before formal meetings.

The study also contributes to research on formal innovation processes by showing that formal processes shape ideas before they formally enter the process. Because actors anticipate decision criteria, resource requirements and legitimacy expectations, they adapts ideas in advance. Formal processes therefore do not only evaluate ideas at official decision points; they also influence how ideas are developed, framed and represented before they become formally visible.

5.6 Conclusion

This study examined how formal innovation processes and informal practices together shape innovation realization. The findings suggest that innovation realization is not simply a linear movement from idea generation to formal commitment and implementation. Informal practices create space for ideas to emerge, develop and gain support, while formal processes provide the mandate, legitimacy and resources needed for realization. However, the study shows that formal processes also shape ideas before they formally enter the process, because actors anticipate what those processes will later require.

The main contribution of the study is the concept of pre-formal translation work. This refers to the informal and pre-formal activities through which actors develop, align, legitimize and adapt ideas before they become formally selectable. Translation connects informal emergence with formal realization by making ideas mature, credible and understandable enough to gain formal commitment.

In relation to emergent strategy, the study suggests that emergence alone is insufficient. Ideas may develop through action, learning and informal initiative, but they become part of realized innovation only when they are made legitimate, actionable and connected to resources through formal structures. For organizations, this suggests that supporting innovation requires attention not only to formal process design, but also to the informal spaces where ideas are prepared for those processes. What becomes realized is therefore not simply the original idea, but the idea that has been prepared, translated and supported well enough to gain formal commitment.

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6. Entrepreneurial Finance

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6.1 Introduction

How established firms sustain investment in long-term innovation while meeting short-term performance demands is a persistent challenge in both strategy and corporate finance. As technological change accelerates and competitive pressures intensify, the ability to allocate resources effectively across activities with fundamentally different time horizons and risk profiles has become central to organisational survival. Yet despite its practical importance, this challenge remains incompletely understood. Research and development, internal venturing, and exploratory capability building all require sustained financial commitment under conditions of uncertainty and that commitment is precisely what standard financial management systems tend to erode.

The existing literature addresses different facets of this problem across separate research streams. Strategy scholars have examined how firms organise to pursue both efficiency and innovation simultaneously, a challenge captured by the concept of organisational ambidexterity (Raisch, Birkinshaw, Probst and Tushman, 2009; O'Reilly and Tushman, 2013). Corporate finance researchers have analysed why innovation is difficult to fund, pointing to the intangible nature of exploratory assets and the resulting reliance on internal capital markets (Hall and Lerner, 2010). A further body of work has documented how short-term performance pressures lead managers to underinvest in long-horizon projects, a phenomenon known as managerial myopia (Stein, 1989; Graham, Harvey and Rajgopal, 2005). Each of these perspectives offers genuine explanatory power, but they have largely developed in isolation from one another.

The gap this creates is significant. Ambidexterity research tends to treat resource allocation as a structural or cognitive problem without engaging closely with the financial processes through which allocation decisions are actually made. Finance research establishes that myopic pressures distort investment behaviour but says comparatively little about the organisational mechanisms firms use to resist those pressures. Neither stream has examined in depth how the tension between short-term profitability and long-term innovation is negotiated within the internal capital allocation processes of established firms, the budgeting cycles, performance metrics, and governance arrangements through which financial commitments to exploration are either sustained or withdrawn.

This study addresses that gap. Drawing on organisational ambidexterity, the financing of innovation, and managerial myopia, it examines how established firms make decisions about balancing short-term performance demands with long-term internal entrepreneurship and innovation initiatives. While the study initially approaches this issue through the lens of resource allocation and financial pressure, it pays broader attention to the organisational processes through which such trade-offs are actually managed in practice.

The aim is therefore not only to understand how financial considerations shape these decisions, but also to identify the wider organisational conditions, such as governance structures, legitimacy-building, ownership, and protected resources, that influence whether long-term initiatives are sustained, delayed, narrowed, or abandoned. In this way, the study contributes

to a more practice-near understanding of how firms manage the tension between present-day demands and future-oriented development.

This study is delimited in several important respects. The empirical material was collected from ten Swedish organisations, and the findings should be understood as contextually situated within a Swedish institutional and business environment. While the theoretical frameworks drawn upon are broadly applicable across national contexts, the extent to which the identified patterns generalise beyond Sweden remains an open empirical question. The study includes a varied set of companies spanning medium-sized firms, large corporations, and both private and public enterprises across multiple sectors. This diversity allows for the identification of cross-case patterns that are not sector-specific, but means the findings do not speak to any single industry or organisational type in depth. Rather than pursuing statistical generalisability, the study aims to identify recurring organisational patterns across a qualitatively diverse set of cases. The focus is specifically on internal resource allocation processes and the organisational conditions surrounding long-term entrepreneurship initiatives, external financing, investor relations, and capital market dynamics fall outside its scope, as does the context of early-stage startups, given that the study is explicitly concerned with established firms.

6.2 Aim and Research Question

The aim of this thesis is to investigate how established firms make decisions between short-term organisational demands and long-term internal entrepreneurship or innovation initiatives. More specifically, the study examines how such trade-offs are shaped through organisational resource allocation, governance, justification, and ownership processes in practice.

While the study initially draws on literature related to innovation financing and resource allocation, its broader purpose is to understand how firms actually manage the tension between present-day performance requirements and future-oriented development efforts. The study therefore seeks to identify the organisational factors that influence whether long-term initiatives receive support, remain limited to early exploration, or struggle to move into implementation and scaling.

Research Question: How do established firms make decisions between short-term organisational demands and long-term internal entrepreneurship or innovation initiatives?

6.3 Theoretical framework

The theoretical foundation of this study draws on three bodies of literature, organisational ambidexterity, the financing of innovation, and managerial myopia in capital allocation and treats their intersection as the analytical object rather than examining any one in isolation. Each stream of literature illuminates a different dimension of the same underlying problem: how established firms allocate financial resources across activities that differ fundamentally in their time horizons, risk profiles, and measurability. Read together, they provide the conceptual

architecture needed to understand how financial decision-making shapes the balance between exploitation and exploration and why that balance so frequently tilts in the wrong direction.

6.3.1 Organisational ambidexterity. The strategic demand for balanced allocation

Organisational ambidexterity refers to a firm's capacity to pursue efficiency in its current operations while simultaneously investing in new opportunities that may only generate value at some future point (Raisch, Birkinshaw, Probst and Tushman, 2009). The theoretical case for ambidexterity rests on the observation that exploitation and exploration are not simply different activities but activities governed by different logics. Exploitation rewards incremental refinement, predictable returns, and efficiency metrics. Exploration rewards experimentation, tolerance for failure, and patience with uncertain outcomes. Managing both within a single organisation requires more than strategic intent; it demands governance structures, incentive systems, and resource allocation processes that do not systematically privilege one activity at the expense of the other.

O'Reilly and Tushman (2013) argue that firms which successfully manage this balance typically do so through structural separation, housing exploratory initiatives in units sufficiently insulated from the operational pressures and performance metrics of the core business, combined with senior leadership integration that ensures both activities are recognised as legitimate organisational priorities. This structural dimension is necessary but not sufficient. Andriopoulos and Lewis (2009) reframe the ambidexterity challenge as an organisational paradox rather than a design problem. The tension between exploration and exploitation cannot be permanently resolved through any particular structural arrangement but must be continuously managed through managerial practices and organisational routines. This reframing matters analytically because it redirects attention from the question of what structure ambidextrous firms adopt toward the question of how their decision-making processes handle competing demands in practice. That is, at its core, a question about resource allocation.

What the ambidexterity literature does not fully address, however, is the financial mechanism through which balanced allocation is achieved or prevented. Describing the strategic need for balanced investment between exploration and exploitation is different from explaining how that balance is operationally produced or why it so reliably fails to materialise in established firms. For that explanation, the corporate finance literature is essential.

6.3.2 The financing of innovation

The corporate finance literature specifies why achieving balanced investment between exploration and exploitation is structurally difficult, even for firms that are strategically committed to it. Innovation investments, research and development projects, internal ventures, capability-building initiatives share a set of financial characteristics that make them poorly suited to conventional capital budgeting processes. They generate largely intangible assets that cannot be easily collateralised. Their outcomes are uncertain and resistant to reliable

forecasting and their payoff horizons extend well beyond the periods over which managerial performance is typically assessed (Hall and Lerner, 2010).

Because of these features, external capital markets are poorly positioned to finance most corporate exploration. Information asymmetries between managers and outside investors are severe for innovation-intensive activities, adverse selection problems are acute, and the cost of external finance rises accordingly. The practical consequence is that internal capital allocation, the budgetary and investment processes through which firms distribute internally generated funds across competing projects, is the primary mechanism through which exploratory activity is financed or defunded (Hall and Lerner, 2010). This point deserves emphasis because exploration cannot readily access external capital on acceptable terms, the decisions made within corporate budgeting processes carry consequences that extend well beyond their immediate financial significance. They determine, at an operational level, whether a firm's strategic commitment to ambidexterity translates into actual resource flows, or remains a statement of intent with no financial backing.

Research on internal capital markets reinforces why this translation is so often incomplete. Bardolet, Fox and Lovallo (2011) demonstrate that corporate capital allocation is substantially shaped by cognitive biases, organisational politics, and managerial heuristics, rather than by dispassionate financial optimisation. Projects compete not only on economic merit but on visibility, organisational sponsorship, and alignment with prevailing performance metrics all of which tend to favour exploitation over exploration. Burgelman's (1983) analysis of internal corporate venturing shows that exploratory initiatives frequently emerge through bottom-up processes, and that their survival depends less on initial financial projections than on their ability to attract senior support and survive successive budgetary reviews. Together, these findings establish that internal capital allocation is not a neutral mechanism through which strategic priorities are faithfully executed, it is a contested organisational process that actively shapes which innovation initiatives receive support, and which do not.

6.3.3 Managerial myopia. The systematic bias towards long-term investment

If the financing of innovation literature explains why internal allocation is the decisive mechanism, the concept of managerial myopia explains why that mechanism may be systematically biased against exploration. Stein (1989) models the conditions under which rational, self-interested managers will sacrifice long-term firm value in order to support near-term reported performance. The mechanism operates as follows: if capital markets cannot readily distinguish between firms that are genuinely performing well and firms that are inflating current earnings at the expense of future value, managers who prioritise near-term results will be rewarded by the market while those who invest in long-horizon projects will be penalised. In equilibrium, even managers who understand the long-term value of exploratory investment may rationally reduce such spending if they believe the market will punish short-term earnings weakness.

The empirical evidence supports this theoretical prediction at multiple levels. Graham, Harvey and Rajgopal (2005) find that a majority of the senior executives they surveyed would reduce discretionary expenditure, including research and development, to meet a near-term earnings target, even where doing so would destroy net present value. Bushee (1998) shows that the composition of a firm's investor base is a significant determinant of this behaviour: firms with higher proportions of transient institutional investors, those characterised by short holding periods and high portfolio turnover, exhibit lower research and development spending, consistent with investor-driven short-term pressure transmitting into corporate investment decisions. What these findings establish collectively is not merely that myopia exists as a theoretical possibility but that it operates through identifiable market and institutional channels to shape the actual investment behaviour of established firms.

The implications for exploration are direct and follow logically from the earlier discussion of how innovation is financed. Because exploratory investments combine precisely the characteristics that myopic evaluation penalises long payoff horizons, uncertain outcomes, limited near-term earnings contributions, and high intangibility. They are structurally exposed to underinvestment in firms where short-term performance pressure is acute. Ambidexterity theory calls for sustained investment in exploration, myopia theory explains why the financial environment inside which that investment must be authorised systematically resists it. The gap between what ambidexterity requires and what myopic internal allocation delivers is the central problem that the organisational mechanisms examined in the next section attempt to address.

6.3.3.1 Organisational mechanisms. Counteracting myopia through design

Recognising that myopic pressure is a predictable feature of the environment in which internal allocation decisions are made, research in both strategic management and finance has examined the mechanisms through which firms can partly offset this bias. The most theoretically developed account concerns incentive design. Manso (2011) demonstrates that the incentive structures best suited to motivating genuine exploration differ fundamentally from those designed for exploitation. Effective innovation incentives combine tolerance for early-stage failure with meaningful rewards for long-run success. Standard performance evaluation schemes, by contrast, typically penalise failure regardless of when it occurs and reward near-term output. Firms that apply conventional incentive structures uniformly across exploitative and exploratory activities therefore create conditions in which managers have a financial interest in avoiding the kinds of risky, long-horizon commitments that exploration requires. The implication is that firms wishing to sustain investment in exploration must deliberately design their evaluation and compensation systems to diverge from the financial norms that govern their core operations.

Structural mechanisms serve a related function. O'Reilly and Tushman (2013) argue that separating exploratory units from core business operations reduces the degree to which exploration must compete directly against exploitation for the same resources and against the same performance criteria. This separation is not merely physical but evaluative, exploratory initiatives require different metrics, different time horizons, and different tolerance thresholds

than core business activities. Where these distinctions are not maintained, where exploration is assessed by the same financial benchmarks applied to exploitation, the marginalisation of exploratory investment under resource constraint is a predictable outcome. Structural separation, in this sense, is not simply an organisational design choice but a financial protection mechanism that buffers exploration from the short-term pressures documented in the myopia literature.

6.3.4 Theoretical integration. How the three perspectives connect to the research question

The three streams of literature reviewed above are typically treated as distinct research programmes, but their relevance to the problem examined in this study is substantially greater when they are read in conjunction. Ambidexterity theory identifies the strategic requirement for firms to sustain balanced investment across exploitation and exploration and provides the vocabulary for distinguishing between those two forms of activity. The financing of innovation literature establishes that internal capital allocation is the primary mechanism through which this balance is operationally enacted or undermined, and that the financial characteristics of exploratory investment make it structurally vulnerable within standard budgeting processes. Myopia theory specifies the behavioural and institutional mechanisms through which short-term performance pressure translates into systematic underinvestment in long-horizon activities, precisely the class of activities that exploration comprises. Together, these three perspectives converge on a common question: how do the decision-making processes of established firms, including their funding arrangements, governance structures, evaluation logics, and organisational priorities, determine whether long-term exploratory initiatives are supported in practice?

6.4 Methodology

6.4.1 Method approach

This study applies a deductive qualitative approach. The theoretical framing was established before the empirical material was collected, and the empirical work was designed to examine how these theoretical issues appeared in practice across the studied companies. In Bell and Bryman (2022), a deductive approach is described as one where theory guides the empirical inquiry. A qualitative approach was considered suitable since the study aims to understand organizational processes, interpretations, and decision-related experiences in context. Semi-structured interviews were used as the main method of data collection, as this method combines a common structure with flexibility in the interview situation.

6.4.2 Research design

The study is based on a comparative multiple-case design including ten Swedish companies. The empirical material was collected within the CORP-setting in the Master’s programme

Entrepreneurship and Business Design at Chalmers University of Technology, where student pairs conducted project work in one host organization each. Within this setting, each student pair also contributed empirical material to the present study.

To ensure consistency across cases, a common interview guide was developed and distributed to all student pairs. This guide was used as the primary tool for conducting the semi-structured interviews and ensured that the same core themes were covered across all companies. At the same time, some flexibility was allowed in how questions were asked and followed up, depending on the specific organizational context. This approach created a comparable basis for analysis while still capturing context-specific insights. All companies remained anonymous throughout the study.

6.4.3 Data collection

The primary empirical material consists of semi-structured interviews conducted according to a common interview guide. Bell and Bryman (2022) describe semi-structured interviews as interviews based on an interview guide covering specific themes, while still allowing flexibility in wording, order, and follow-up questions. This was suitable for the present study, since the ambition was to create comparability across companies without making the interview situation overly rigid.

In total, 18 interviews were conducted across the ten companies. One company contributed three interviews, six companies contributed two interviews each, and three companies contributed one interview each. The interviewees were selected by the student pairs in relation to their respective organizational contexts and the focus of the study. The intention was not to produce a statistically representative sample, but to gather relevant qualitative material from each participating company through a shared structure.

Although all student pairs worked from the same interview guide, the exact data collection process likely differed somewhat across cases. This variation may have concerned how interviews were arranged, how follow-up questions were asked, how much contextual access the student pairs had within their host organizations, and how detailed the resulting documentation became. Such differences are important to acknowledge, since the organizational setting also shaped what kind of information could realistically be accessed in each case.

The interview material was documented in different forms. Some interviews were recorded and transcribed, while others were summarized in a structured way according to the interview guide. This is consistent with Bell and Bryman's (2022) discussion of qualitative interviewing, where recording and transcription are common, but detailed notes may also be used when needed.

After the interviews had been conducted and an initial analysis had been carried out, additional observational material was collected for nine of the ten companies through a structured form.

The observations were provided by the student pairs based on their day-to-day experiences and interactions within their respective host organizations. The observational material was collected after the initial interview findings had been identified and was intended to complement the interview data. More specifically, it was used to assess whether these observations supported the interview findings, added further nuance, or contradicted them in meaningful ways.

6.4.4 Data analysis

The analysis was carried out in several stages. First, each interview was processed using the interview guide as the main analytical structure. More specifically, each interview was organized into five categories derived from the guide. Second, the interview material within each company was aggregated into company-level summaries, still structured according to the same five categories. Third, the company-level summaries were compared and synthesized into a final cross-case analysis covering all ten companies. This stepwise approach enabled a consistent structuring of the material across cases, while also allowing for the identification of patterns, similarities, and differences between companies.

This analytical process is in line with Bell and Bryman's (2022) description of thematic analysis. They describe thematic analysis as an approach where the researcher identifies recurring patterns and themes in qualitative material and then groups related data into higher-level categories. In this study, the five categories from the interview guide provided the initial analytical structure, after which recurring patterns within and across companies were identified.

After the company-level summaries based on the interviews had been developed, the observational material was integrated into the same structure. At this stage, the observations were assessed in relation to the interview-based findings, specifically with regard to whether they supported, extended, or challenged the patterns already identified. The final findings therefore reflect an aggregated interpretation of both interviews and observations, while the interviews remained the primary empirical foundation. This use of more than one empirical source also aligns with Bryman and Bell's discussion of using multiple sources to strengthen qualitative interpretation.

6.4.5 Methodological considerations

A strength of the study is that all student pairs worked from a common interview guide and that the material was later structured according to the same five analytical categories. This increased comparability across the ten companies, even though the empirical material was collected by different student pairs in different organizational settings. At the same time, the empirical depth varied somewhat across cases, since some companies contributed more interviews than others and observations were collected for nine rather than all ten companies.

The material also varied in format, since some interviews were fully transcribed while others were summarized according to the interview guide. This may have affected the level of detail

available in some cases. Furthermore, the types of issues that became visible may have depended partly on the organizational context itself, since some firms may have had more formalized processes, clearer innovation structures, or more transparent decision-making than others. However, because all material was processed through the same analytical structure and all companies remained anonymous, the study still maintained a coherent basis for cross-case comparison.

These limitations should be considered when interpreting the findings. The study does not claim to show exactly how all established firms make such decisions, but rather to identify recurring cross-case patterns that can help explain how short-term and long-term trade-offs are managed in practice across different organizational settings.

6.5 Empirical Findings

This chapter presents the empirical findings from the cross-case analysis. The findings are based primarily on the interview material and are complemented by the observation responses collected after the initial interview analysis. As described in the method chapter, the observations were not treated as a separate dataset with its own thematic structure. Instead, they were used to assess whether they supported, nuanced, or challenged the patterns identified in the interviews.

Across the ten companies, six recurring patterns were identified. Together, these patterns describe how organizations handle the tension between short-term performance demands and longer-term internal entrepreneurship or innovation initiatives. While the exact context differed between the cases, the empirical material showed clear similarities in how decisions were framed, justified, and constrained in practice.

6.5.1 Short-term pressure exists in all cases, but takes different forms

A first clear finding is that short-term pressure was present across all cases, but that its form varied depending on organizational context. In some organizations, the main pressure came from profitability expectations, reporting demands, or annual budget constraints. In others, it was more strongly tied to liquidity, customer delivery commitments, staffing shortages, legal requirements, or day-to-day operational obligations.

The interviews showed that these short-term pressures repeatedly influenced how long-term initiatives were evaluated and prioritized. In several cases, long-term projects were not rejected in principle, but were instead delayed, narrowed, or temporarily paused because more immediate needs were considered more pressing. This pattern appeared in both private and public organizations, although the source of the pressure differed.

The observations also showed that short-term pressure was not only visible in formal decision-making, but also in everyday discussions and practical work. In some cases, it appeared as a strong focus on current operations, customer commitments, or core business priorities. In

others, it appeared as limited employee time, lack of staffing, or pressure to remain within budget. The observations therefore added practical depth to the interview finding by showing how short-term pressure shaped day-to-day prioritization, not only formal investment decisions.

Taken together, this shows that short-term pressure was a recurring feature in all cases. However, it should not be understood as one single type of pressure. Instead, it took different forms across organizations, which means that firms were balancing different present-day constraints when making decisions about longer-term initiatives.

6.5.2 Long-term initiatives are easier to approve when framed as necessity

A second pattern was that long-term initiatives were easier to justify when they were presented as necessary rather than optional. Across the interviews, projects were more likely to gain support when they could be linked to compliance, operational continuity, technical renewal, strategic transition, or a clearly identifiable customer or societal problem. In contrast, initiatives framed mainly as broad innovation or experimentation appeared harder to legitimize.

The interviews showed that this necessity framing could take several forms. In some organizations, it was tied to safety, compliance, or formal requirements. In others, it was linked to the risk of doing nothing, such as technical obsolescence, increasing maintenance costs, or the loss of future competitiveness. In several cases, interviewees described how long-term initiatives had to be translated into a more immediate and defensible language in order to secure support.

The observations supported this pattern. They showed that managers often communicated the importance of long-term initiatives through cost avoidance, strategic fit, roadmap alignment, future operational needs, or preventive investment rather than through a direct innovation narrative. In some cases, long-term investments were described as necessary to avoid higher costs later. In others, they were justified through formal planning documents or by linking them to already accepted strategic priorities.

The observations also added an important nuance in this case where framing often seems to be indirect. Managers do not always argue openly for innovation as such. Instead, they make long-term initiatives legitimate by connecting them to safety, continuity, efficiency, or strategic relevance. This indicates that necessity is not only an objective feature of the initiative, but also a way of communicating and legitimizing it inside the organization.

6.5.3 Early exploration is easier to support than later scaling

A third finding is that many organizations had some form of support for early exploration, but that later scaling was much harder to secure. The interviews showed that several firms had mechanisms that made it possible to test new ideas in a limited way, for example through R&D budgets, portfolio funding, co-funding structures, pre-studies, exploratory units, or informal

experimentation. However, once the initiative required broader ownership, larger funding, or integration into the core business, support often became more difficult.

This pattern was especially visible in cases where there was a clear distinction between early exploration and later implementation. Initial experiments, pilots, and prototypes could often be carried out within a limited budget, within a specialized unit, or through temporary support. The more difficult step was not starting the idea, but securing the next level of commitment, especially getting resources from the operations.

The observations also showed that small-scale pilots, prototypes, simulations, and pre-studies were relatively common across the cases. In several organizations, such activities appeared to be accepted as long as they remained low-cost, low-risk, or limited in scope. The observation material also indicated that some exploratory work was carried out informally or semi-protected, sometimes before it had full organizational backing.

What the observations added was a clearer picture of how early exploration actually happens in practice. In some cases, early testing was embedded in existing development structures. In others, it seemed to depend on local/individual initiative or small-scale efforts aimed at producing proof before asking for more support. This suggests that organizations may tolerate exploration at an early stage because it can be kept relatively contained. The more difficult question arises when the initiative must be scaled, formally owned, and financed over time.

6.5.4 Formal governance creates structure, but does not guarantee success

Across the interviews, a fourth pattern concerning the role of formal governance arised. Many organizations described the use of models, pre-studies, steering groups, roadmap reviews, staged approvals, or risk reviews. These formal processes created structure, traceability, and a shared basis for decision-making. However, the empirical material also showed that formal governance did not eliminate uncertainty, prevent late misalignment, or guarantee successful implementation.

In several cases, formal processes helped guide projects through clear stages and gave decision-makers a common framework. At the same time, projects could still become delayed, restarted, or stopped late due to changing assumptions, new compliance requirements, technical complexity, or stakeholder disagreement. In other words, formal governance helped organize decision-making, but did not remove the underlying challenges of uncertainty and coordination.

Looking at the observations, they showed that formal processes often helped create direction through strategy documents, legal frameworks, committees, templates, and roadmap alignment. Yet they also suggested that such processes were not always consistently followed, not always well understood by everyone involved, or sometimes adapted in practice. In some contexts, formal governance appeared strong and central. In others, it was described as weak, loosely applied, or more visible when projects became larger or more risky.

The observation material also added that formal governance was often seen as both enabling and constraining. On the one hand, it could create legitimacy, discipline, and internal alignment. On the other hand, it could also slow down progress, create confusion, or lead to workarounds when the formal process felt too rigid or disconnected from the practical reality of development work.

6.5.5 Funding structures shape what kind of innovation can happen

The fifth pattern shows that funding structures had a strong influence on what type of innovation was realistically possible. The interviews showed that the design of funding, whether staged, integrated into ordinary budgets, co-funded, customer-linked, or restricted by public budgeting rules, shaped not only whether initiatives could receive support, but also how much uncertainty the organization was willing to accept.

In some cases, staged funding reduced risk by allowing projects to move forward in smaller steps. In others, ordinary budgeting created pressure to justify initiatives in more immediate business terms. Hybrid funding models linked innovation closely to customer side, while public-budget structures restricted how resources could be used and reallocated. Across the cases, the funding design acted as a filter, shaping the scale, speed, and risk profile of innovation work.

The observations showed that funding structures influenced whether firms could pursue broad exploration or mainly incremental improvement. In several cases, the type of innovation that could realistically be pursued depended on who controlled the funding, how easy it was to motivate the project financially, and whether the project could fit into the current strategy and day to day operations. In some settings, stronger profitability or more informal access to funds seemed to allow broader experimentation. In others, the funding model clearly favored low-risk, well-aligned, and more incremental initiatives. Long lead times, strict justification requirements, or customer-linked funding all reduced room for more uncertain or radical initiatives.

6.5.6 The real bottleneck is often ownership and protected resources, not lack of ideas

The final pattern is that the main bottleneck was often not a lack of ideas, but a lack of ownership and protected resources. Across the interviews, organizations rarely described idea generation as the core problem. Instead, the recurring issue was that no one fully owned the next step, or that time, staff, competence, budget, or mandate could not be protected long enough for the initiative to mature.

This pattern appeared in several forms. In some cases, ownership became unclear after the initial exploratory phase. In others, there was no protected staffing to continue development work once daily operational needs increased. Yet in other cases, initiatives depended too heavily on a few motivated individuals rather than on a broader organizational structure. The

common issue was not the absence of promising ideas, but the absence of sustained support around them.

The observations reinforced this finding clearly. They pointed to limited employee time, staffing shortages, weak handovers between functions, capability gaps, lack of cross-functional alignment, and heavy dependence on individual drive. They also showed that ideas could lose momentum when operational priorities took over or when no actor had both the responsibility and the resources to continue pushing the initiative forward.

An important contribution from the observations is that these bottlenecks often appeared more organizational than purely financial. In some cases, the decisive constraint was lack of staff or specialized competence. In others, it was missing alignment across functions, insufficient implementation capacity, or a cautious culture that made it difficult to move from idea to action. This makes the problem less about generating innovation and more about sustaining it organizationally.

6.5.7 Summary of findings

Across the ten cases, the empirical material showed a recurring tension between present-day demands and future-oriented initiatives. This tension took different forms depending on organizational context, but it was visible in all cases. Long-term initiatives were easier to support when framed as necessary, early exploration was generally easier to allow than later scaling, and formal governance provided structure without eliminating uncertainty. Funding structures strongly shaped which kinds of innovation were possible, and the main bottleneck was often not lack of ideas, but the difficulty of protecting ownership and resources over time.

Together, these findings show that the challenge of balancing short-term performance and long-term internal entrepreneurship is not only a matter of strategic intent or financial prioritization. Rather, it is produced through broader organisational processes concerning justification, governance, ownership, coordination, funding, and the protection of resources over time.

6.6. Discussion

The purpose of this study was to examine how established firms make decisions between short-term organisational demands and long-term internal entrepreneurship or innovation initiatives. The study initially approached this problem through literature on organisational ambidexterity, the financing of innovation, and managerial myopia, with particular attention to resource allocation. However, the empirical findings show that the problem is broader than a purely financial or budgeting-based explanation suggests. While financial structures and short-term pressures clearly mattered, the cross-case pattern indicates that the decisive mechanisms were often organisational in nature. More specifically, the findings suggest that the balance between short-term and long-term priorities is shaped through a combination of legitimacy, governance, ownership, protected resources, and implementation capacity.

This section analyses the findings in relation to the theoretical framework and discusses what the empirical material contributes to the understanding of short-term and long-term trade-offs in established firms.

6.6.1 The findings support ambidexterity theory, but show that the tension is managed through everyday organisational processes

The findings strongly support the basic assumption of organisational ambidexterity theory, namely that established firms face a recurring tension between present-day operational demands and future-oriented development (Raisch et al., 2009; O'Reilly and Tushman, 2013). Across all ten cases, some form of short-term pressure was visible, and long-term initiatives had to compete with more immediate demands. This confirms the broader strategic challenge described in the ambidexterity literature.

At the same time, the empirical material shows that this tension is not only a high-level strategic issue. Rather, it is managed through concrete organisational processes in everyday practice. Long-term initiatives were delayed, narrowed, paused, reframed, or kept at pilot level not only because firms lacked strategic intent, but because such initiatives had to pass through multiple practical filters. These included the need to appear legitimate, the need to fit formal governance structures, the need to find a clear owner, and the need to secure staff, time, and cross-functional support over time. This partly supports O'Reilly and Tushman's (2013) argument that exploratory work requires some form of protection from the operational logic of the core business. However, the empirical findings suggest that "protection" should be understood more broadly than structural separation alone. In the studied firms, the issue was often not whether exploration had its own formally separated unit, but whether an initiative had enough protected attention, ownership, and resources to survive beyond the early phase. In that sense, the findings move the analysis from formal structural ambidexterity toward a more practice-based understanding of how exploration is sustained or weakened within organisations.

The results also align with Andriopoulos and Lewis (2009), who argue that exploitation and exploration should be understood as a persistent organisational paradox rather than a problem that can be solved once and for all through design. The findings suggest exactly this. Formal governance helped in many cases, but did not remove uncertainty or conflict. Long-term initiatives still had to be repeatedly justified and re-legitimized, especially when conditions changed or when broader implementation required resources from operational units. This indicates that the short-term versus long-term tension is continuously managed rather than structurally resolved.

6.6.2 The study broadens the idea of resource allocation from finance to organisational resource allocation

A central insight from the empirical material is that resource allocation should not be understood only as a financial process. The original framing of the study placed considerable

emphasis on capital allocation, budgeting, and financial pressure. These aspects were visible in the findings, especially in relation to staged funding, ordinary budgets, co-funding arrangements, and budget constraints. However, the cases show that the decisive bottlenecks were often not primarily about access to money as such.

Instead, what seemed to matter most was broader organisational resource allocation. This included whether an initiative had access to protected employee time, specialised competence, implementation capacity, cross-functional coordination, and a clear organisational owner. In several cases, ideas existed and early experiments were possible, but initiatives lost momentum because no actor had both the mandate and the resources to carry them forward. This shifts the analysis away from a narrow financial interpretation and toward a wider organisational understanding of what it means to allocate resources.

This is an important refinement of the financing of innovation perspective. Hall and Lerner (2010) are still relevant in showing that innovation is difficult to support through conventional logic because of uncertainty, intangibility, and long time horizons. The findings confirm this general idea. However, the empirical material suggests that internal allocation problems in established firms are not reducible to financial decision-making alone. The practical challenge lies in how financial, human, and organisational resources are bundled and protected over time.

The findings therefore suggest that the relevant unit of analysis is not only internal capital allocation, but organisational resource allocation more broadly. This includes funding design, but also the organisational ability to maintain ownership, legitimacy, and implementation support around an initiative as it develops. In that sense, the study extends the original framing rather than rejecting it. Finance still matters, but mainly as one part of a broader organisational process.

6.6.3 Myopia is present, but it appears in broader organisational forms than the theory initially suggests

The managerial myopia literature argues that short-term performance pressure can produce systematic underinvestment in long-horizon activities (Stein, 1989; Graham et al., 2005; Bushee, 1998). The empirical findings are clearly compatible with the core logic of this perspective. In all cases, more immediate demands shaped decisions about long-term initiatives, and these initiatives often struggled when they lacked immediate defensibility. This supports the idea that firms are often pulled toward the present at the expense of the future.

However, the empirical material suggests that myopia should be understood more broadly than as a reaction to investor pressure or earnings targets alone. In the cases studied here, short-term pressure did not only stem from profitability demands. It also emerged through customer commitments, staffing shortages, legal obligations, operational continuity requirements, and the practical need to solve today’s problems first. In other words, short-termism was not exclusively financial in origin. It was often embedded in the organisation’s day-to-day responsibilities and operating context.

Adding an empirical nuance, the theory led to an expectation that short-term pressure would primarily distort financial allocation decisions. Instead, the study shows that short-termism can be reproduced through several organisational channels. A firm may under-support long-term initiatives not because managers are narrowly chasing quarterly results, but because existing structures, demands, and responsibilities make it difficult to protect uncertain initiatives over time. The result is still a bias toward the short term, but the mechanism is broader and more organisational than the original myopia framing implies.

This helps explain why long-term initiatives were easier to support when framed as necessity. If an initiative could be linked to compliance, continuity, risk reduction, customer value, or future cost avoidance, it became easier to justify within a context otherwise dominated by immediate demands. This suggests that what matters is not only the objective quality of the initiative, but also whether it can be translated into a language that fits the organisation's current evaluative logic.

6.6.4 Early exploration is tolerated more easily than scaling, which reveals where the real organisational challenge lies

One of the clearest findings in the study is that early exploration was often easier to support than later scaling. Many organisations could tolerate pilots, pre-studies, simulations, prototypes, or limited experiments, particularly when these remained low-cost and low-risk. The major difficulty appeared later, when initiatives required stronger ownership, more resources, operational integration, and longer-term commitment.

This pattern connects to Burgelman's (1983) work on internal corporate venturing, where exploratory initiatives may emerge and survive in early phases through local initiative and sponsorship, but later face more demanding organisational tests. The empirical findings show that the challenge was usually not generating ideas or even starting exploration. The challenge was moving from early initatives to broader organisational adoption.

6.6.5 Formal governance matters, but legitimacy and ownership matter just as much

The findings show that formal governance played an important role across many cases. Steering groups, staged approvals, roadmaps, pre-studies, formal reviews, and risk assessments created structure and traceability. This is broadly consistent with the literature's emphasis on governance and evaluation mechanisms as important for balancing exploration and exploitation.

At the same time, the findings make clear that formal governance alone does not secure long-term support. Projects could still be delayed, reframed, or stopped despite existing structures. In some cases, governance created clarity and legitimacy. In others, it slowed progress, created rigidity, or became something actors worked around in practice. This suggests that formal

governance is neither inherently enabling nor inherently constraining. Its effect depends on how it interacts with uncertainty, ownership, and organisational alignment.

A particularly important finding is that ownership often appeared as a more decisive issue than formal process design alone. Even when structures existed, initiatives struggled if no one fully owned the next phase or if the initiative depended too much on individual drive. This supports the idea that exploration requires organisational integration at senior level, as emphasised by O'Reilly and Tushman (2013), but the findings indicates that ownership must also be operational and cross-functional. It is not enough that an initiative is strategically accepted. It must also have someone with sufficient mandate, continuity, and access to resources to carry it forward. This shows that long-term initiatives succeed not only through better formal models, but through the organisational ability to translate those models into sustained action. Governance may provide the route, but ownership and protected resources determine whether anyone actually moves along it.

6.7 Conclusion

This thesis set out to examine how established firms make decisions between short-term organisational demands and long-term internal entrepreneurship or innovation initiatives. Drawing initially on literature on organisational ambidexterity, the financing of innovation, and managerial myopia, the study approached this issue through the lens of resource allocation. However, the empirical findings show that the challenge is broader than a purely financial or budgeting-centred explanation suggests.

Across the ten studied companies, the findings showed that short-term pressure was present in all cases, although it took different forms depending on organisational context. Long-term initiatives were more likely to receive support when they could be framed as necessary, for example in relation to compliance, continuity, customer value, or risk reduction. Early exploration was often easier to support than later scaling, and formal governance created structure without guaranteeing successful implementation. Funding structures shaped what kinds of innovation were realistically possible, but the most persistent bottleneck was often not the lack of ideas. Rather, it was the lack of clear ownership and sufficiently protected resources over time.

The main conclusion of the study is therefore that the tension between short-term and long-term priorities in established firms should be understood as a broader organisational resource allocation problem rather than only as a question of financial allocation. While finance matters, the empirical material indicates that long-term initiatives are often constrained by wider organisational conditions, such as legitimacy, governance, ownership, staffing, cross-functional coordination, and the ability to protect time and resources over time. In this sense, the study shows that the practical challenge is not only funding innovation, but sustaining it organisationally.

This leads to a more nuanced understanding of the theories used in the study. The findings support ambidexterity theory in showing that firms must manage a recurring tension between present performance and future development. They also support the broader logic of managerial myopia, in the sense that short-term demands tend to crowd out long-horizon initiatives. At the same time, the study suggests that these pressures are not only financial in origin. They may also stem from everyday operational demands, legal obligations, staffing constraints, and implementation realities. The financing of innovation literature remains relevant, but the empirical material indicates that the key mechanisms are broader than financial capital allocation alone.

From a practical perspective, the study suggests that firms seeking to support long-term internal entrepreneurship should not focus only on budgets or formal approval models. They should also pay close attention to how initiatives gain legitimacy, who owns them over time, whether implementation resources are protected, and how the transition from early exploration to scaling is organised. In many cases, this appears to be where promising initiatives lose momentum.

The study also has limitations. The empirical material was collected across ten companies through a shared but not fully standardized process, and the depth of material varied across cases. Data collection and documentation differed somewhat between student teams and organisational settings, which means that the findings should be interpreted as recurring cross-case patterns rather than exact representations of each firm's full decision-making system. Furthermore, the study is qualitative and exploratory in nature and does not aim to establish causal relationships in a statistical sense.

A suggestion for future research could build on these findings by examining the transition from early exploration to scaling in more detail, since this appeared to be a particularly important bottleneck. It would also be valuable to study how ownership, legitimacy, and protected resources are created and maintained over time within established firms, and how these processes differ across industries and organisational forms.

In conclusion, this study shows that the problem of balancing short-term demands with long-term internal entrepreneurship in established firms is not simply a matter of strategic intent or access to funding. It is a broader organisational challenge concerning how future-oriented initiatives are justified, owned, protected, and sustained in environments where present-day demands are always strong. That is the central insight of the study.

6.8. References

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