

Louvain School of Management

**A study of C-level office, a new
governance method: what can we
learn from LinkedIn job
descriptions?**

Author: Léopold Francart

Supervisor: Professor Loïc Decaux

Academic year 2024-2025

Dissertation for the Master (120) in Management (GEST2MS/GE)

Master subject and focus: Leadership, Project Management, C-level
office

Daytime schedule

Declaration Regarding AI Tool Usage

During the preparation of this master's thesis, the author utilized digital and artificial intelligence tools for the mentioned purposes.

1. **ChatGPT**: For language translation, data analysis, Python code generation, and academic article research.
2. **Elicit**: For academic article research.
3. **DeepL**: For language translation.

After using these tools, the author diligently reviewed and edited the content produced by the tool. We take full responsibility for the final content presented in this thesis.

By signing this declaration, we affirm that the content of this master's thesis reflects our original work, augmented by the responsible use of AI.

Tuesday, 7 January 2025.

A handwritten signature in black ink, appearing to read 'Francart', written in a cursive style with a large initial 'F' and a long horizontal stroke extending to the right.

Léopold Francart

Acknowledge

First of all, I would like to express my gratitude to everyone who, directly or indirectly, contributed to the realization of this thesis, which marks the conclusion of a little over five years of university studies.

I would like to begin by thanking my supervisor, Professor Decaux, for his support, motivation, and guidance, which have been invaluable throughout the writing of this thesis.

I extend my thanks to all those who dedicated their time and energy to reviewing and editing my work.

Finally, I wish to thank and acknowledge my family, friends, and everyone I have met during these years of study, with whom I have shared a significant stage of my journey.

This thesis represents the end of one chapter and the beginning of a new one.

1. Table of Contents

INTRODUCTION	1
1. LITERATURE REVIEW	3
1.1 C-LEVEL OFFICE	3
1.1.1 <i>Project Management Office (PMO)</i>	4
1.1.2 <i>Chief of the Staff</i>	6
1.1.3 <i>Relationship between the C-suite</i>	7
1.2 IN WHICH CONTEXT OF C-SUITE EVOLUTION DID THE CONCEPT OF C-LEVEL OFFICE EMERGE?	8
1.3 WHAT PERSPECTIVES DO C-LEVEL OFFICES IMPROVE?.....	10
1.3.1 <i>Breaking down silos</i>	11
1.3.2 <i>Employees motivation and communication</i>	12
1.3.3 <i>The IT perspective</i>	13
1.4 WHAT IS THE CURRENT TREND IN LEADERSHIP?	15
1.4.1 <i>How is the concept of leadership evolving?</i>	17
1.4.2 <i>What are consequences of leadership on an organization?</i>	18
1.5 WHAT ARE THE CHALLENGES ASSOCIATED WITH THE INTEGRATION OF NEW MODES OF GOVERNANCE?	19
1.5.1 <i>Importance of collaboration</i>	19
1.5.2 <i>Challenge of communication</i>	19
2. RESEARCH QUESTION	20
3. METHODOLOGY	21
3.1 RESEARCH DESIGN	21
3.1.1 <i>Data sample</i>	22
3.1.2 <i>Data Cleaning</i>	24
3.2 ANALYSIS METHOD	25
3.2.1 <i>Method and Tool</i>	25
4. FINDINGS	26
4.1 FIRST OBSERVATIONS FROM LINKEDIN RESEARCH.....	26
4.2 DATABASE EXPLORATION	26
4.2.1 <i>Keyword Occurrence</i>	27
4.2.2 <i>The roles of C-level Office members</i>	28
4.2.3 <i>Business Sectors</i>	29
4.2.4 <i>Languages level</i>	30
4.2.5 <i>Certifications</i>	32
4.2.6 <i>Soft skills</i>	33
5. DISCUSSIONS	35

5.1 LESSONS ABOUT C-LEVEL OFFICES	35
5.2 LIMITATIONS AND CHALLENGE	36
5.2.1 <i>The Literature Review Challenge</i>	36
5.2.2 <i>LinkedIn Profiles</i>	37
5.2.3 <i>Artificial Intelligence</i>	37
5.3 CONTRIBUTIONS AND IMPLICATION FOR DEFINING C-LEVEL OFFICES STRUCTURE.	38
5.4 FUTURE RESEARCH DIRECTIONS	39
6. CONCLUSION	39
7. REFERENCES	41

2. List of Tables

TABLE 1. THEMES THAT EMERGE FROM RESEARCH ABOUT C-LEVEL OFFICE.....	4
TABLE 2. OCCURRENCE OF KEYWORDS IN THE PROFILES.....	27
TABLE 3. OCCURRENCE OF COMPANIES IN THE PROFILES.	30
TABLE 4. BUSINESS SECTOR OF COMPANIES.	30

3. List of Figures

FIGURE 1. DISTRIBUTION OF DIFFERENT C-LEVEL OFFICES.	23
FIGURE 2. EXAMPLE OF CLEANED PROFILE (1/2).....	25
FIGURE 3. EXAMPLE OF CLEANED PROFILE (2/2).....	25
FIGURE 4. ENGLISH LEVEL.....	31
FIGURE 5. DUTCH LEVEL.....	32
FIGURE 6. FRENCH LEVEL.	32
FIGURE 8. DISTRIBUTION OF MASTER'S FIELDS.....	33
FIGURE 9. MANAGEMENT'S SPECIALISATION.	33
FIGURE 10. DISTRIBUTION OF SOFT SKILLS.	34
FIGURE 11. DISTRIBUTION OF SOFT SKILLS.	35

Introduction

After conducting research on LinkedIn to learn more and better understand the governance structures of Belgian companies in the financial sector where a young graduate might potentially begin their career, we realize that certain entities seem to operate behind the main members of the C-suite, such as the CEO, CFO, CTO, etc.

These entities are referred to as C-level offices, Project Management Offices, or Chiefs of Staff. It is quite evident that these governance practices and structures share numerous similarities. Specifically, their common role is to support leaders in their increasingly demanding responsibilities, which require a broad and cross-functional vision of the company's strategy. The concept of Chief of Staff is notably the subject of Ciampa's (2020) article, which describes the role as encompassing several key functions, all centered on improving time management, information flow, and decision-making processes.

The Project Management Office, a concept that has existed for some time, has been extensively studied. For example, in Philbin's (2016) article, this structure is defined as an organizational entity that upholds project standards and provides resources to support project management across the organization.

What concerns us when reviewing the research on Project Management Offices and Chiefs of Staff is the complete lack of studies directly related to C-level offices.

We suggest that the emergence of new governance methods and structures is linked to several interconnected factors. Overall, the main factor appears to be a general awareness of the need to change governance practices.

A recent example demonstrates this, when in 2024, during the World Economic Forum, also known as the Davos Forum, PwC revealed through a survey that 60% of French business leaders believe they must rethink their business model within the next 10 years to ensure the viability of their companies.

In an already challenging environment shaped by economic, geopolitical, and societal changes, the findings of this study highlight the delicate balancing act leaders must perform to ensure the sustainability of their businesses with agility, all while addressing numerous risks and uncertainties (PwC, 2024).

This realization resonates like a shockwave in an era of increasing change and competition. It has become urgent for leaders to rethink their business models to meet societal and environmental expectations, as well as regulatory requirements.

Then, the need for change, the evolution of management methods, and governance structures within organizations have also driven the emergence of these frameworks. As noted by Casciaro et al. (2019), breaking down silos is essential to enabling individuals to collaborate across barriers. The authors argue that the demand for leaders capable of managing projects across multiple interfaces is steadily increasing. However, the main challenge of this transformation lies in the difficulty of fostering collaboration among individuals from different organizational groups, as they often perceive strategic objectives differently.

The role within the C-suite has been undergoing significant evolution for some time, as illustrated by Groysberg et al. (2011). Their research highlights the transformation of C-level executive roles, which are no longer limited to managing their own silos but increasingly involve being active participants within the entire organization. They are also expected to advise the CEO on matters that extend well beyond their individual domains.

While this information helps us understand the reasons behind the emergence of these new structures, given the evolving expectations placed on the C-suite, several questions remain unanswered. Organizations and governance methods have evolved so rapidly that numerous changes and new structures have emerged. Certain sectors, in particular, have developed new frameworks to meet these expectations. However, it is easy to acknowledge that navigating these changes can often feel overwhelming.

Indeed, while research exists on concepts such as the Project Management Office and Chief of Staff, there is a complete lack of studies and a universal definition concerning C-level offices. Based on the research conducted on LinkedIn, we can draw some minor conclusions, such as the fact that these methods predominantly exist in the banking and financial sectors and operate to assist a C-suite in its governance missions. Nevertheless, key questions, such as how these structures function and what types of profiles make up these teams, remain unanswered.

In such a tense and volatile managerial context, it becomes essential to establish a clear framework for the concept of C-level offices. The aim is to provide a defined structure for this emerging model, helping businesses understand the potential it holds in assisting them to meet market expectations. To achieve this, the research identifies relevant literature on topics related to C-level offices. The results of this study stem from an analysis of job descriptions on

LinkedIn profiles of individuals working within C-level offices. This involves a thematic and semantic analysis aimed at constructing a framework and identifying patterns to define the concept. Finally, this work is exploratory and adopts an inductive and speculative approach through thematic analysis, exploratory research is used in 77% of cases to investigate new methods and research systems, making it perfectly suited to our study (Medlar, Kotkov, and Głowacka, 2024).

1. Literature Review

The research question focuses on a highly emerging concept. There are relatively few literatures directly related to this because the concept is in its infancy and there has not been much research into it.

The purpose of this literature review is to provide an understanding of the context surrounding C-level office structures.

We begin by outlining the limited knowledge that currently exists about C-level offices. Since no research is directly related to this topic, we first examine elements pertaining to Project Management Offices and Chiefs of Staff. Next, we analyze the dynamics within C-suites to better understand the work environment and development of C-level offices.

Once these aspects are established, we propose an initial definition.

Given that this approach is speculative, it is based on exploration and intuition. The purpose of our study is to explore the methodology of C-level offices, as it has never been done before.

In this way, we attempt to demonstrate the tension that exists among these interconnected challenges. This literature base allows us to draw connections and understand how leaders can navigate these issues to meet increasingly high expectations.

1.1 C-level Office

When conducting an initial search on the concept and entering the keywords “C-level office” into an academic search engine for the first time, several observations can be made about the topic.

Firstly, the term “C-level office” does not appear frequently in academic literature. The articles presented are generally related to corporate structures and governance. A few relevant themes emerge, and the table 1 provides an overview of these topics. Therefore, we begin by studying comparable structures for which prior research exists.

Theme	% of articles
Corporate Governance	30%
Leadership	25%
Project Management	15%
Innovation and Technology	20%
Diversity and Inclusion	10%

Data collected by the author from Google Scholar (2024).

Table 1. Themes that emerge from research about C-level office.

1.1.1 Project Management Office (PMO)

We start by looking at the definition given in the article of Philbin (2016): “The Project Management Office (PMO) is an organizational entity that maintains the standard of projects and may also provide resourcing to support the project management process across an organisation. The PMO can be involved in portfolio or program management as well as strategic project development and management. Traditionally associated with IT (Information Technology) projects, the PMO approach has now been adopted in other applications and industries.” In other words, the aim is to develop common approach systems with tools and technologies to improve performance, within established constraints of budget, time and quality.

Many companies have already set up PMOs, at different levels and in different sectors, originally mainly in the IT sector. Today, PMOs exist in various areas of project management, although mainly in those linked to technology and engineering.

We look now at the strengths of PMOs. They are ideally placed to improve the level of alignment between projects and organisational strategy. They provide technical knowledge and uncertainty management.

To implement a PMO, you need to have a good understanding of the elements that need to be developed, so you need to be able to understand and visualise the plan.

Despite this information, which provides a good starting point for understanding what a Project Management Office is, there remains a lack of a clear framework defining how PMOs operate and their specific characteristics.

PMOs are not a recent development, as explained by Monteiro et al. (2016), they emerged in the 1950s in aerospace and defense engineering projects as a response to increasing complexity. It was during the 1990s that the concept evolved into a form more comparable to what we know today. It emerged from the desire to gain better control of project risks, standardize the use of

project management methodologies, tools, and techniques, improve the monitoring of project performance, and manage and disseminate knowledge of sound project management practice, especially in Information Technology.

One of the interesting findings of this research is that the author has identified a theme that emerges from the analysis of PMOs: the need for standardisation. PMOs lead to the use of standardised mechanisms for project management, with certifications, performance measures and so on. This standardisation has to be balanced with a certain need for flexibility and customisation, and we need to develop the ability to create creative solutions based on the problems being addressed.

Another interesting observation is that we need to consider the level of complexity of projects. The less complex a project is, the less likely it is that the PMO has a positive impact. We therefore believe that PMOs are best suited to complex, multi-disciplinary projects.

To sum up this introduction to the PMO concept, all these observations are of interest in our research into C-level Offices, because PMOs are the most widespread and developed C-level offices today. Like C-level Offices, PMOs are relevant to the management of large-scale projects. Both modes of operation are based on innovation and creation, and on multidisciplinary and complementary teams.

When studying a topic, it is interesting to identify its weaknesses. In the case of PMOs, the Project Management Institute report (2014) reveals that successfully implementing a PMO structure requires obtaining the support and buy-in of senior management. It is crucial for the PMO to be involved in strategic planning, which is not always evident. For example: when the decision to implement a PMO is made by an external consulting firm, and internal members of the organization are resistant, or the implementation is poorly managed. In such cases, the PMO team must first secure the support of organizational members on their own before their work can yield results for the company.

The article also concludes that not all organizations need a PMO and, more importantly, that creating one is not an immediate and fail-proof solution to all company issues. A report cited in the article reveals that among existing PMOs, only 33% have reached their full potential and therefore significantly contribute to the company's functioning. For a PMO to be fully effective, the entire organization must embrace and support the projects and strategies implemented by the PMO.

To support this statement, Too and Weaver (2014) conclude in their research that the foundation of effective project management lies in achieving a balance between governance and management, and the importance of key elements. Notably, project sponsorship provides a direct link between the executive and the project manager, offering an overview of the project lifecycle and ensuring the delivery of value creation. It is also mentioned among the four key elements that PMOs must provide strategic oversight.

These observations on the challenges of fully developing the potential of PMOs are interesting because they shed light on potential issues to consider regarding C-level offices.

We can already hypothesize that these challenges apply similarly to C-level offices. To fully realize the potential of such structures, it is necessary for both management and the rest of the organization to adopt the projects and strategies put in place.

If we consider that C-level offices are primarily internal structures within a company, then the issue of integration across the organization is likely significantly reduced. However, working with internal structures also has its disadvantages, such as being influenced by the company's culture and facing resistance to change.

1.1.2 Chief of the Staff

The role of Chief of the Staff is defined as follows: “ Although each leader should tailor the position to his or her own needs, the Chief of the Staff should handle several principal duties, all focused on making time, information, and decision processes more effective”(Ciampa, 2020).

Like C-level offices, Krause et al. (2022) highlight that very little academic research within companies addresses the Chief of Staff role. This gap is partly attributed to the fact that this emerging role does not appear in traditional definitions of the Top Management Team, which researchers typically use to study management and strategy topics.

This lack of focus is further corroborated by Zhou et al. (2024), who recently conducted a study on the Chief of Staff role. The authors analyzed LinkedIn profiles of individuals occupying Chief of the Staff positions. Their research motivations aligned precisely with ours: to define the role and expectations of a Chief of Staff and to establish the characteristics and profiles of individuals working in this position.

To further elaborate on the definition of the Chief of Staff, Niebauer (2018) describes the role as not having specific tasks but rather serving as a direct support to the CEO. This includes responsibilities such as preparing meetings, managing projects with a broad perspective,

strategizing and ensuring strategic alignment, as well as recruitment and partnership with human resources. Marcus (2018) characterizes the role as the CEO's right-hand person, assisting in their functions, ensuring smooth operations, optimizing time management, and representing the CEO in their absence. Based on interviews conducted by the author with individuals in the role, it is emphasized that a Chief of Staff must be highly organized and efficient, with strong communication and personnel management skills. Barnes et al. (2023) highlight the importance for a leader to be challenged and encouraged to consider diverse perspectives, viewing the Chief of Staff position as instrumental in achieving this goal.

1.1.3 Relationship between the C-suite

The C-level offices, as a structure operating at the C-suite level, warrant an understanding of their dynamics and functioning. It is well established that C-suites are comprised of multiple C-level executives, each with specific assigned tasks and responsibilities. Wright et al. (2017) worked to decode the relationships between C-suite positions to understand the influence this has on company performance. To grasp how C-level executives collaborate within the C-suite, the article reveals that the most common roles in the C-suite are: Chief Financial Officer (CFO), Chief Operating Officer (COO), Chief Human Resource Officer (CHRO).

Additionally, they looked into the sizes of C-suites, and most teams (including the CEO) consist of 7 to 12 executive members.

With this information, it becomes easier to visualize a typical C-suite in most companies, and the rest of the article sheds light on internal relationships.

Notably, it was found that the CHRO is most often trusted by the CEO, followed by the CFO and COO. Furthermore, nearly half (49%) of C-suites hold a monthly meeting, while more than a third (37%) meet bi-weekly.

The authors then asked participants for suggestions on how to improve collaboration within the C-level group. The top area for improvement (30%) was "strategy formulation and alignment," followed by "teamwork/camaraderie" (24%), "collaboration" (19%), and "decision making" (17%). There is a clear demand for increased collaboration and harmony within the C-suite. This is further confirmed by a final survey on methods for improving effectiveness, where "building team culture" ranked first (28%), significantly ahead of the second place "fostering open communication" (19%).

This article gives us a better idea of the classic composition of a C-suite, with the most common positions and the average number of members.

But what interests us most is the opinion of C-suite members on how to improve collaboration. It is a mix between strategic importance and the relational and human side, with teamwork and collaboration in particular.

This shows that, once again, one cannot go without the other, and that there is a need for joint development in team management and strategy development.

The suggestions for improvement put forward within the C-level group are operating methods advocated by C-level office structures.

The authors Whysall and Bruce (2023) express in their research that when there is change within the C-suite, a certain dependence on past experience persists rather than focusing on the true potential and capabilities of candidates. This results in favouring the retention of existing leaders in most cases, even when there is an initial desire for change. Even when their abilities and competencies are questioned, the bias related to their seniority dominates the discussions. This has negative consequences on the desire for diversity and perpetuates inequalities.

This study was conducted in a context where private equity firms are increasingly acquiring companies, leading to changes in the executive committees of these organizations. It has been observed that in these large structures, there is a psychological bias that has a direct economic impact.

In such situations, we hypothesize that the main issue is the lack of cross-functionality and horizontality within these massive structures. C-level offices present themselves as a solution to reinvent leadership, aiming to enhance the quality and efficiency of communication. In this way, frequent changes in the executive committee could be facilitated, as skills and knowledge would be shared, and silos would be dismantled.

This issue is triangular, encompassing an outdated leadership approach, a lack of horizontality, and resulting inefficiencies in project management.

1.2 In which context of C-suite Evolution did the concept of C-level office emerge?

This initial question lays the foundation and provides the context in which C-level offices have emerged. We have clarified that new structures and methods are arising due to an ever-evolving managerial context. Our primary focus is on observing the evolution of roles, responsibilities, and expectations regarding C-level positions, as we hypothesize that these factors are among the main drivers behind the emergence of these new structures.

In the Harvard Business Review article by Groysberg et al. (2011), the idea of the evolving role of C-level officers is already apparent: “In examining hundreds of profiles developed over the

past decade or so by the executive search firm Heidrick & Struggles and interviewing numerous top managers about the requirements for senior leaders past, present, and future, we have seen some clear signals about how C-level jobs are evolving.”

The authors traced the evolution of roles since 1980, but what interests us the most is the current situation. After the 2008 crisis, companies had to ration costs, and C-suite members had to handle a greater number of tasks within their companies, especially across a broader scope than the skills initially defined for their function. This marked the beginning of cross-silo collaboration within companies, originally born out of the necessity to ration.

Then, the authors analysed the evolution of various roles within the C-suite, and one striking commonality across all positions emerges: “One strikingly consistent finding: Once people reach the C-suite, technical and functional expertise matters less than leadership skills and a strong grasp of business fundamentals.(...) the skills that help you climb to the top will not suffice once you get there. We are beginning to see C-level executives who have more in common with their executive peers than they do with the people in the functions they run. And today members of senior management are expected not only to support the CEO on business strategies but also to offer their own insights and contribute to key decisions.”

The positions outlined in this article are unanimous in acknowledging that the role of the C-suite has been evolving, as early as 2011, and that its evolution primarily involves expanding its scope.

The author concludes their research with the following statement: “one theme that ran consistently through our findings was that requirements for all the C-level jobs have shifted toward business acumen and ‘softer’ leadership skills”. In other words, technical skills are a starting point, a foundation for reaching a high level of expertise. To achieve a C-suite position, an individual must also be a strong leader, an effective communicator, and a skilled strategist with a broad vision of the company and the direction the business should take.

This growing demand for skills among C-suite members leads to a greater need for collaboration between them, thus developing cross-silo collaboration. This increase in inter-silo collaboration is a general upheaval in the way we manage. It changes all our ways of doing things, especially leadership, which needs to be completely overhauled.

C-level offices are a clear reflection of this evolution in the role of the C-suite. It is increasingly challenging to be an effective C-suite executive, as the required skill set is vast, and the leadership role must meet extensive expectations.

C-level offices were established to provide support and expand the skill set of the team responsible for decision-making within the company.

Hood et al. (2024) also address the theme of the evolving roles within the C-suite, approaching the subject from a more modern perspective. The authors discuss the emergence of artificial intelligence, which has transformed organizational work models. Leaders argue that change was necessary at all levels of the organization, not just among leaders. However, it is the responsibility of leaders to unlock the full potential of their workforce by enabling the complete utilization of their employees' capacities and preparing them to take on active roles in transformation and change.

The authors highlight that, following the rapid evolution of organizations, new roles have emerged. Examples such as "chief transformation officer" and "chief experience officer" are cited. While the article does not explicitly mention the structures of C-level offices, the challenges it discusses are precisely those that C-level offices aim to address.

Alicia Pittman, chair of the global people team at Boston Consulting Group, discusses the evolution of the concept of learning, which was previously structured and step-by-step.

Now, leaders are teaching younger generations to work with digital transformation and artificial intelligence, while also guiding them on how to lead inclusive teams and support employees in their well-being and mental health. Organizations are becoming less hierarchical, less formal, and increasingly cross-connected.

This recent research demonstrates a recent observation of corporate transformation, be it changes in leadership or cross-connectivity between corporate silos.

All these recent studies on the evolution within the C-suite and the changing approaches to governance provide an overview of the current managerial context. It becomes clear that expectations for leaders are increasing and that their skillsets must be increasingly broad and diverse. We intuitively sense that the purpose behind a C-level office is to expand the C-level team, enabling it to meet the demands of its roles, as it is becoming nearly impossible for a single individual to address them alone.

1.3 What perspectives do C-level offices improve?

To look at the purpose of C-level offices, firstly we understand that C-level offices are a response to the need for additional staff within the C-suite to meet growing expectations. But concretely, in what types of domains and for what tasks can a C-level office improve the situation?

1.3.1 Breaking down silos

Nowadays, the majority of business leaders recognize the importance of breaking down silo organizations within companies to help people collaborate across barriers.

These leaders attempt to achieve this, although it is considerably difficult. Yet, when employees from different functions in various countries around the world are asked, “What relationships are prioritized in your daily work?”

The answer is almost always: vertical relationships.

But when the question is: “What relationships are the most important for creating value for customers?” The answer suddenly changes and becomes: horizontal relationships.

The value of horizontal teamwork is unanimously recognized. Casciaro et al. (2019) teach us that employees who are able to work across their silo boundaries, complementing their expertise with that of colleagues who possess complementary skills, learn faster, sell more, and gain skills more quickly.

Thus, high-quality teamwork must be horizontal, and to achieve this, it is necessary to break down the rigid and opaque silo structure.

While this may seem obvious to some leaders, particularly younger ones, it is not certain that it is evident to all business leaders, especially older ones.

But how can tomorrow’s leaders attempt to establish this principle of horizontal relationships within their companies?

The issue is, in fact, much broader than simply fostering horizontal relationships, it is the entire management system of companies that needs to be reconsidered.

Since everything is interconnected, it is not enough for a leader to merely apply a new theoretical management model; leadership must be adapted so that the leader’s actions align with the way work is conducted within the organization.

This is likely why the problem of cross-functionality within companies is so well-known and acknowledged, yet the solutions to address it seem so complex to implement.

We have defined the complex context of horizontal relationships within organizations and the importance of the leadership role, as we hypothesize that C-level offices are a potential solution to address these challenges.

Then, Gangloff and Ziegler (2009) discusses in their article about collaborative work as a form of collective intelligence that drives the co-creation of value.

The author then identifies the barriers to collaborative work.

Beginning with the barrier of not feeling legitimate, some individuals may hesitate to present their contributions and knowledge out of fear of being judged. Conversely, the opposite effect can also occur: if interactions are weak, a contributor might fear being associated with less competent individuals and, as a result, might choose not to contribute to the project to their full potential.

Another constraint of collective work is that the less individual the work is, the harder it is to measure. This can lead some individuals to behave as free riders, minimizing their contributions.

These insights into the constraints of collective work are highly valuable because they provide a critical perspective on cross-functionality.

Since the beginning of our research on the relevance of C-level offices, we demonstrate that cross-functionality is one of their three pillars, alongside leadership and project management. However, as with all scientific research, it is necessary to adopt a critical mindset, especially in the case of cross-functionality, as it increasingly appears to be an obvious mode of governance today. Understanding the constraints associated with it allows for better implementation of new operational models.

C-level offices offer a collective, cross-functional, and horizontal vision of work, but their role does not stop there. Due to their managerial responsibilities, they do not merely establish transformation systems. Ensuring proper functioning and well-being within the company is achievable through a focus on people, flexibility, and communication among teams.

1.3.2 Employees motivation and communication

We review an article from the Harvard Business Review in which the author Spreitzer (2012) discusses about employee motivation to contribute to the success of their tasks, he expands on his research to explain how to establish sustainable performance within an organization.

In his research, he details what employees need to feel confident and thrive, which boosts sustainably the results of the company.

His conclusion is that helping employees prosper is fundamentally not very difficult. What they need is a leader who is open to empowering them.

This knowledge on the sustainability of organizational members' performance is valuable for seeking to understand the role and potential usefulness of C-level offices.

It is understood that a leader who encourages their employees to develop themselves indirectly improves the performance of their company.

Once again, the quality of leadership combined with cross-functional working methods that involve employees translates into effective project management and positive outcomes for the company.

Argenti's (2017) article, which aims to better understand how leaders perceive communication within their companies, emphasizes the importance of preparing leaders to become better communicators. Through his research, the author seeks to contribute in this regard and presents three main findings.

First, companies with a large geographical separation must deliberately encourage their employees to act as one, both strategically and culturally.

Second, employees are highly sensitive to the feeling of trust within their company. They feel more engaged when they sense that they are part of the conversation.

Finally, today's best organizations have leaders who are omnipresent and hyper-communicators. These leaders are physically present and understand the executive role played by communication strategy.

The final conclusion from Argenti's article is the one that interests us. We learn how leaders of top organizations communicate.

They must be hyper-communicators and understand their organization at all levels so that the directives they communicate are relevant and employees feel a genuine sense of involvement.

The author also discusses the physical presence of leaders, which poses a significant challenge for large organizations.

C-level offices are a solution to this need for representation. There comes a point where a single individual can no longer fulfill the role of representative in a company with global representation.

The solution is to distribute this power among a group of people within the C-level office itself, rather than assigning it to a single individual.

1.3.3 The IT perspective

The next issue related to the C-suite that we decided to explore is the one studied by Cochran (2010), who seeks to understand how small organizations can manage their IT systems without having a CIO (Chief Information Officer) specifically dedicated to the task. The author explains that small structures often lack the necessary resources to apply effective IT governance practices, making it difficult to align the IT strategy with the company's overall strategy. The solution proposed by the authors to address this problem is an alternative model, the "Operations Department Model." This model allows a centralized department to handle

administrative tasks, including IT management, so that functional departments can focus on their core business, while ensuring horizontal and effective IT governance throughout the organization.

Still on the topic of IT in companies, Gendron et al. (2009) work on the efficiency and alignment of the CIO's role as a member of the C-suite. They explain that IT systems do not always meet expectations in terms of costs, timelines, and functionalities, even though significant resources are allocated to them. The authors stress the importance of focusing on the main objective of a company, which is value creation. The main hypothesis confirmed in this research is that CIOs must be fully integrated into the C-suite. The role of the CIO must evolve from simply implementing and managing IT to a full-fledged role within the C-suite. This requires adopting certain values and competencies specific to these roles, with the aim of maximizing the efficiency and synergy of the C-suite members when working together.

The authors also emphasize the importance of effective communication through the harmonization of management tools used within the C-suite. It is essential to ensure that information-related technologies are aligned with the company's strategic objectives, so that each decision has a maximum impact on the company.

On the subject of digital transformation and governance, Jewer et al. (2022) highlight that there is a lack of comprehensive understanding of digital transformation. The authors note that digital transformation is recognized as a topic of global interest, but there is still no precise framework to help and guide companies and the members working on this transformation. Once again, the authors advocate for horizontal collaboration among stakeholders. IT governance must be based on cross-silo collaboration, taking into account the views of all parties involved in the decision, not just the authority responsible for the IT component.

These observations highlight a general shortfall in the IT domain within companies, which is understandable given the prominence of digital transformation. The level of IT expertise required is increasingly high. To address this, the solution of C-level offices seems relevant expanding the CIO's team to enhance capabilities. Furthermore, this is also a matter of cross-functionality, as digital development applies to the entire structure of the company.

1.4 What is the current trend in leadership?

Based on our research, we conclude that leadership is a crucial theme in the role of C-level offices. This is primarily due to changes in leadership approaches and the fact that structures are becoming increasingly less hierarchical.

It is essential for leaders to rethink their approaches. We find it relevant to address the theme of leadership by starting with its definition to ensure a clear understanding, followed by a discussion of theoretical models and questions surrounding the concept.

Let us briefly revisit the origin of the concept of a leader. The etymology of the word “leadership” stems from the Old English term “loeden”, which means “to travel”. The first recorded traces of this term appear in the 13th century in the Oxford English Dictionary, defining the act of guiding an individual’s actions or opinions. Later, the term expanded to include the notion of “persuading someone’s actions” incorporating ideas of influence and collective domination. Today, the term “leadership” applies to a much broader scope, including political, cultural, economic, media, and sports spheres (Saint-Michel, 2023).

As for the definition of leadership, Stogdill (1974) stated, “There are as many definitions of leadership as there are individuals who have attempted to define it.” However, there are some common terms and perspectives shared among these definitions: (1) Leadership is a democratic process; (2) It involves influence; (3) It occurs within a group of individuals; (4) It requires the achievement of common goals; (5) It emerges in a particular context.

We also note the definition proposed by Saint-Michel (2023), which defines it as follows: Leadership: A process through which an individual inspires, motivates, and unites a group by conveying an inspiring and positive vision of the future to achieve a shared goal that serves the common good.

Thus, leadership notably involves a process of influence to motivate individuals to engage in a shared objective, coupled with an ethical and moral dimension of leadership.

According to De Neve et al. (2013), in their article published in *The Leadership Quarterly*, they conducted a longitudinal study on twins to identify the determinants of an individual’s ability to assume a leadership role. Their results suggest that 24% of leadership ability is attributed to genetics, while 76% stems from environmental factors, including the successes and failures experienced by the individual.

The conclusion is that some individuals have predispositions for leadership roles, but the majority of this capacity comes from personal experience. It is important to add that the

development of leadership abilities must be accompanied by a desire on the part of the individual. The first condition for being an effective leader is simply the willingness to lead. In the context of our study on the utility of C-level offices in today's managerial landscape, we learn an important perspective: when seeking to train a future leader, it is worthwhile to assess their predispositions for leadership. However, it must be kept in mind that the majority of their ability comes with experience, and the most crucial factor remains the individual's desire to lead.

After establishing the foundations and defining leadership, we explore the perspectives of this skill in a multidisciplinary environment. In his article, "The Challenge of Strategic Leadership in Organizations" O'Shannassy (2021) addresses the central role of strategic leadership and the importance of human and relational skills.

Leaders play a key role in decision-making, and each of these decisions has a significant impact on the functioning and results of the organization. Furthermore, the author highlights a triple responsibility: economic, human, and environmental.

The article teaches us three key practices related to strategic leadership. First, mastering intangible resources such as the relational skills of the organization's members and innovation. Second, finding a balance between innovation and efficiency to improve the company's performance. Finally, managing uncertainty and problems effectively.

These insights demonstrate that leadership plays a vital role in a company's well-being. They also reveal that, indirectly, a leader holds almost all the keys to mastering a given situation. This is precisely why it is essential to consider certain lessons from the authors on the role of leaders.

In some competitive work environments, the resulting stress can lead to abusive behaviors, directly affecting employee performance and, consequently, the organization's results. Conversely, positive leadership has a direct and beneficial impact, improving work outcomes and reducing turnover.

In an increasingly competitive context, a good leader cannot simply issue instructions, they must have a human and cross-functional role wherever their decisions impact the organization. The leader also assumes the role of project manager, as they must be attentive and available to employees.

Good leadership integrates all stakeholders into a long-term vision, including employees, communities, and the environment.

1.4.1 How is the concept of leadership evolving?

Regarding the future development of leadership, we learn from Moldoveanu and Narayandas (2019) that it has undergone significant changes in recent years. Indeed, companies place less importance on traditional training provided by business schools and universities. They favor and even demand concrete measures both before and after training sessions to assess how skills have been acquired. These requirements are challenging to meet with traditional, theoretical training programs.

In addition to combining practical and theoretical learning, there is a noticeable emphasis on cross-functionality in the training programs offered by companies. For instance, this is evident in graduate programs or internships in C-level offices provided by some organizations.

Through these training opportunities, young workers quickly acquire practical and cross-functional skills, leading to enhanced expertise in project management.

And then, we see the emergence of learning methods that are not only digital but also much more personalized.

In addition to being personalized, this training is also socialized, meaning that progress stems largely from practical application with others in real-life situations. “As the experiences of Harvard’s HBX and McKinsey’s Academy series have shown, learning happens best when learners collaborate and help one another.”

Furthermore, this training is contextualized, as recent data from LinkedIn Learning illustrates that the majority of executives prefer professional development that is directly relevant to and integrated into their work. These types of learning experiences are more valuable because recruiters can be confident that candidates have assimilated the skills and can implement them effectively.

All this evidence underscores the increasing necessity for leadership to be continuously and adaptively learned. This trend is growing steadily, making it increasingly essential for organizations to precisely target their leadership needs and for leaders to refine their skills to meet these demands effectively.

Greater emphasis is being placed on behaviors and measurable outcomes, further confirming the growing prominence of leadership.

This need for leadership evolution primarily involves expanding leaders’ skill sets so that they can be proficient in areas beyond their original assignments. Once again, it is demonstrated that effective leadership must operate within a cross-silo and cross-functional context. Whether in

leadership diversity or strategy, everything consistently points back to the necessity of breaking down boundaries.

1.4.2 What are consequences of leadership on an organization?

The Blue Ocean Strategy in leadership, developed by W. Chan Kim and Renée Mauborgne, highlights the significant influence decision-makers can have on the overall strategic direction of a company.

This strategy encourages leaders to move beyond traditional competitive frameworks, referred to as Red Oceans, to innovate in their strategies and create spaces where competition is nearly non-existent.

C-level offices can prove highly relevant in this pursuit of strategic innovation, particularly due to their cross-functional nature. They can orchestrate change management and ensure that the company moves in the desired direction, all thanks to their threefold competencies that combine project management with cross-functional leadership.

We learn more about this approach through Kim and Mauborgne (2017), which outlines the four stages of implementing this strategy.

These stages begin with assessing the reality of leadership, as one of the main pitfalls is attempting to make changes without addressing existing differences in opinions among current leaders.

Once the organizational situation is thoroughly established and understood, alternative leadership profiles must be developed at all levels of the company.

Following the development of new profiles, the most relevant ones should be selected based on established objectives. Finally, these profiles must be applied by introducing new leadership practices.

What is particularly significant in studying this strategy is recognizing the critical role of leadership in organizations. The *Blue Ocean Strategy* emphasizes creating value beyond traditional paradigms, requiring a departure from classical management methods, which are often focused solely on internal competition or performance.

A good leader must innovate and move beyond traditional methods to foster autonomy and inspiration within their teams.

This strategy also highlights the usefulness of multidisciplinary profiles within a team. C-level offices promote alternative profiles within teams through their cross-functional nature.

1.5 What are the challenges associated with the integration of new modes of governance?

1.5.1 Importance of collaboration

The first topic is the collaboration, that is described as something challenging. Gardner (2020) explains that real multidisciplinary collaboration requires each member to combine their perspectives and expertise and then tailor them to meet the client's needs. It is not just about adding up the team members' knowledge.

Through his research, the author demonstrates that the benefits of collaboration between individuals are positive and measurable. He claims that colleagues who contribute to their other colleagues' client missions achieve better sales of their own services to their clients.

The explanation is as follows: when you team up with colleagues, they better understand what you have to offer, and this knowledge makes them more likely to recommend you for work that suits your skills.

1.5.2 Challenge of communication

Then we learn more about communication as an organizational strategy tool in companies thanks to the article by Steyn (2004), he teaches us through his research that in corporate communication strategies, a practitioner is appointed to play a managerial role.

The contribution to the organizational strategy of this practitioner is optimized when he also plays a role in communication at the executive level.

This strategist collects, interprets, and disseminates strategic information concerning stakeholders and issues, and helps formulate the company's strategy.

The conclusion of this work is particularly relevant to our research, as it states that communication is so important that it contributes to the overall effectiveness of the organization: "Focusing the efforts of the corporate communication function within a functional strategy, linked to the enterprise strategy, assists in proving its contribution to organisational effectiveness."

This research shows that communication is not just a skill but a true pillar in the execution of a business strategy.

Leaders must be strong communicators, which once again adds another dimension that C-suite executives must master.

In this context, where the pressure and responsibilities for executives are increasing, the emergence of C-level offices makes sense and stands out as a solution to bring multidisciplinary expertise to decision-making teams.

2. Research Question

After reviewing the concepts of Project Management Office and Chief of Staff to establish comparisons with the dynamics and functioning of C-level offices, we have utilized the literature to answer questions and formulate hypotheses. These observations stem from our intuitions regarding the context of emergence, themes, perspectives, and challenges related to C-level offices.

Now that we have established a solid foundation on the subject and its surrounding context, we draw some conclusions before formulating the research question.

The first conclusion we can draw from this literature review is that the concept of the C-level office is a relatively unknown method, lacking any formal definition or academic research. However, it is not the first of its kind to emerge, and comparable structures such as the Project Management Office and the Chief of Staff have been the subject of studies that help establish a framework.

The second conclusion we can draw is that there exists a context of significant tension and rapid evolution in the world of leaders and businesses. The expectations placed on leaders regarding project management are increasingly broad. They require a complete rethinking of traditional leadership, particularly the ability to design the company's strategy as a whole and across all silos.

This tension demands substantial upheaval, and we hypothesize that the expectations placed on leaders no longer allow for these roles to be fulfilled by a single individual.

As a result, companies are being driven to establish teams dedicated to supporting the C-suite, providing them with access to broader skills and perspectives, as well as assisting them in their communication, which now impacts a larger number of individuals.

These conclusions could already have been derived from the analysis of Project Management Offices or Chiefs of Staff. However, what draws our attention and motivates us to conduct our research is the complete lack of studies on C-level offices.

Now that we have established the context, here is our own definition of the structure: *“A C-level office is a group of individuals with diverse skills, attached to a member of the C-suite (C-level). The mission of this group is to assist and support the C-level in their tasks, whether*

during strategic reflections, strategy formulation, or implementation. These structures address the increasing performance demands that can no longer be met by a single C-level individual.”

Finally, the research question for this work is: “*C-level office, a new governance method: what can we learn from LinkedIn job descriptions?*”

As these structures are still uncommon, our research represents one of the first analyses and definitions of this concept.

This research is important and relevant as it addresses a gap in understanding the current organizational transformation. Furthermore, by providing an analytical framework, the concept of the C-level office gains legitimacy through its definition and conceptualization. It also aims to guide decision-makers within organizations, thereby contributing to research and managerial innovation by filling a gap in knowledge.

3. Methodology

3.1 Research Design

The research we are conducting is an exploratory study as it addresses an unexplored topic with the aim of generating hypotheses, as well as illustrating and understanding the dynamics and context. This study on a black box subject arises from the lack of existing research and positions itself as exploratory regarding the emerging concept of C-level offices. A qualitative and inductive approach is also utilised in the work of Kruyen and Van Genugten (2020), who similarly address a black box case by collecting data through an open research process to identify essential concepts without prior hypotheses. Furthermore, the research conducted in their article analyzes significant and common clusters from survey results to explore their subject and build conclusions, similar to the methodology employed in our study.

Our research, focusing on a subject classified as a black box, is also comparable to the topic addressed by Ayache, Eyraud, and Goudian (2019), which explores non-visible dynamics, necessitating an exploratory approach. The authors do not begin with rigid hypotheses but instead employ an inductive analysis to identify and understand the overarching themes related to the subject. This is the same method applied to the same type of research that we utilize in this study.

This type of study is frequently used when the subject is uncharted, requiring creativity in selecting sources to investigate for context establishment. The results are flexible, and the outcome of the research cannot be precisely anticipated (Manerikar and Manerikar, 2014).

The approach itself is mixed, as it combines the qualitative aspect of hypothesis generation with the quantitative aspect of analyzing recurring themes in LinkedIn profiles. The combination of both approaches enhances the validity of the results and is well-suited to an exploratory study (Anadón, 2019).

The qualitative approach began with a literature review exploring structures comparable to C-level offices, establishing their context of emergence and their shared objectives.

The quantitative approach stems from the thematic analysis of LinkedIn profiles. The choice to analyze profiles on this platform is due to several reasons. Firstly, it was from this source that the necessity to conduct research on C-level offices arose. Secondly, it aligns with the methodology used in one of the first studies on the Chief of Staff role, a concept that emerged under similar conditions (Zhou et al., 2024). Other articles have employed the same research method, with some even dedicated to examining the relevance of this approach, such as Garg, Rani, and Miglani, (2015), which details the data extraction and clustering methods we utilized. This article, focusing on the use of data from LinkedIn, legitimizes the relevance of our research and subsequently serves to detail the methods applied.

3.1.1 Data sample

The composition of the database is derived from the job descriptions available on the LinkedIn profiles of individuals identifying themselves as working within C-level offices.

The research begins with data collection on the LinkedIn platform. We utilized the *Recruiter Lite* tool, which allows for in-depth searches with a variety of criteria, as well as the selection and organization of relevant profiles into “projects.”

This data collection helps to determine whether sufficient data is available and also provides initial insights into emerging patterns.

The search criteria were established as follows:

1. The profile had to be based in Brussels.
2. The mentions of “CEO/CFO/etc. office” had to be strictly present either in the profile description or in the experience section. Profiles that included both words (the name of

the C-level (CEO, CFO, etc.) and “office”) but separately or in a different order were not selected.

Notes: Profiles of interns or former interns (primarily at BNP Paribas Fortis) were not selected.

All profiles that met the two previously mentioned criteria were selected, for a total of 108 profiles.

Once the data collection was completed, it was determined that the number of data points was sufficient to attempt to draw conclusions. We deemed the data sufficient as we had reached semantic saturation, as explained by Jacquemin (2017), since the addition of new profiles no longer provided new information but rather repeated the existing data we intended to analyze based on our hypotheses (Roussel and Wacheux, 2005). Garg, Rani, and Miglani, (2015) argue in their article that data normalization can influence results. In our case, each selected profile was carefully chosen and met the defined criteria.

Additionally, the diversity of the offices is interesting and allows us to compare them with one another (see figure 1).

Once a profile meets the criteria and is selected, it is then classified into a project based on the C-level to which the office in which the individual works is related. A separate project is dedicated specifically to profiles of individuals who previously held a position in a C-level office but currently occupy a different role, regardless of the C-level their former office was associated with. The purpose of this category is to study the career progression of individuals after working in a C-level office.

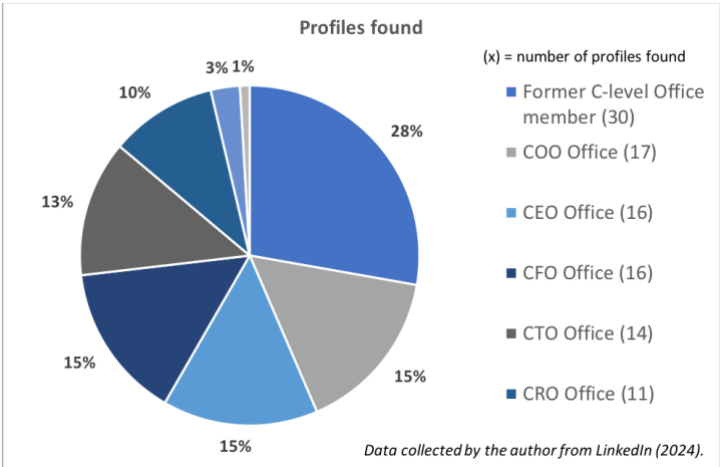


Figure 1. Distribution of different C-level offices.

3.1.2 Data Cleaning

Once all the profiles meeting the criteria were selected and categorised, they had to be exported for processing.

The profiles were downloaded in PDF format using LinkedIn's provided option. They were then converted into TXT format.

Once all the files were in the correct format, they needed to be cleaned to remove unnecessary information that could bias the analyses.

Finally, they were formatted into JSON, which is a format (derived from the JavaScript language) for simple and standardized data exchange, designed to facilitate both programming language processing and human readability (Munro, 2021).

The elements that were retained are as follow:

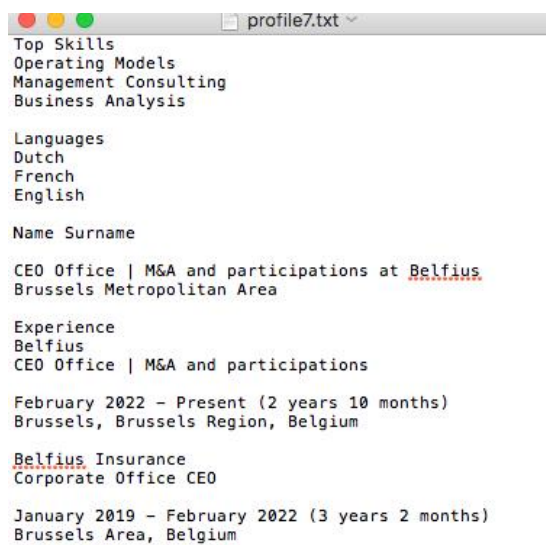
- Summary
- Top Skills
- Languages
- Certifications
- Experience
 - Job title
 - Company name
 - Period
 - Description of the role and responsibilities
- Education
 - Degree title
 - School name
 - Period
 - Additional description (if available)
- Honours-Awards

The elements that were removed are as follows:

- LinkedIn URL
- The "Activity" section (which corresponds to activity on LinkedIn using *Recruiter Lite* mode and not the profile itself)
- Page numbers

The retained elements represent comparable data and are relevant for a basic identification of C-level office member profiles. The excluded elements are either irrelevant to the identification of profiles or pertain to information derived from profile selection activities.

The TXT files were cleaned and structured into JSON format (see figure 2 and figure 3) using the Python programming language and the IDLE editor, as well as with the help of ChatGPT, an artificial intelligence language model developed by OpenAI (GPT-4 version). Test results on the ChatGPT tool demonstrate that this artificial intelligence is a capable assistant for addressing programming challenges. It serves as an excellent tool for correcting, explaining, and even generating code (Tian and al, 2023).



```

Top Skills
Operating Models
Management Consulting
Business Analysis

Languages
Dutch
French
English

Name Surname

CEO Office | M&A and participations at Belfius
Brussels Metropolitan Area

Experience
Belfius
CEO Office | M&A and participations
February 2022 - Present (2 years 10 months)
Brussels, Brussels Region, Belgium

Belfius Insurance
Corporate Office CEO
January 2019 - February 2022 (3 years 2 months)
Brussels Area, Belgium

```

Figure 2. Example of cleaned profile (1/2)



```

Deloitte Belgium
Manager
December 2015 - December 2018 (3 years 1 month)
Brussels Area, Belgium

Accenture
5 years 5 months
Manager
December 2014 - November 2015 (1 year)
Consultant
July 2010 - December 2014 (4 years 6 months)

ING
Financial Markets support
November 2007 - July 2010 (2 years 9 months)

Education
Ichecc Brussels Management School
(2003 - 2007)

```

Figure 3. Example of cleaned profile (2/2)

3.2 Analysis Method

3.2.1 Method and Tool

The data analysis was conducted with the assistance of ChatGPT (GPT-4 version developed by OpenAI). Artificial intelligence tools are commonly used for data extraction and the analysis of large databases, particularly through techniques based on the sciBERT linguistic model (Tang et al., 2023). This research method is inspired by previous studies on the advancements brought by artificial intelligence tools to research (Krause and David, 2023).

The analysis is an inductive semantic analysis, which is a qualitative method consisting of reading the data to search for meanings and identify themes. This is followed by our subjective interpretation. The inductive approach focuses on developing a theory without prior knowledge of the subject.

The analyses primarily consist of keyword analysis, with the aim of identifying major trends and themes and then analyzing them within the context to gain a better understanding (Pojanapunya, 2018).

There are countless ways to conduct qualitative research. Additionally, it is well known that inductive research is a method in which the researcher uncovers phenomena and draws conclusions as the study progresses, identifying patterns in recurring relationships. These patterns then evolve into hypotheses that are refined and adjusted throughout the exploration process (Miles & Huberman, 2003).

4. Findings

4.1 First Observations from LinkedIn Research

Before using the analytical methods mentioned earlier, we were already able to draw some conclusions worth reporting.

These conclusions can be considered preliminary hypotheses that are examined later through quantitative analysis using artificial intelligence.

1. The vast majority of C-level offices are in the banking and financial sectors.
2. Most former members of C-level offices were part of a CTO office.
3. The only profile with the exact designation “C-level office” appears to be more akin to a high-ranking assistant to a C-suite member or an executive assistant.
4. Internship positions within CFO offices are found, particularly in the BNP Paribas Fortis bank. This seems to support the hypothesis highlighting the training and multidisciplinary nature of C-level offices.
5. PMO offices are scarcely represented, even though research on PMOs exists. Is there a distinction between PMOs and PMO offices?
6. Structures are internal to the company. All the profiles work within the company, there are no external consultants occupying this role.

4.2 Database exploration

To draw relevant and easily interpretable conclusions about C-level offices based on the analysis of LinkedIn profiles, we begin by compiling all the results of our analyses, starting from the most general to the most specific. Following these results, we establish connections between them to draw conclusions about the functioning of C-level offices.

4.2.1 Keyword Occurrence

We began by trying to understand the overall trends in the descriptions of the roles.

The results of the most frequently occurring keywords are presented in table 2.

Keyword	Occurrences
transformation	93
digital	34
change management	32
innovation	32
agile	27
program management	11
restructuring	10
strategic projects	9
business transformation	9
digital transformation	7
reorganization	1

Data collected by the author from LinkedIn (2024).

Table 2. Occurrence of keywords in the profiles.

The most frequently occurring word in the profiles is “transformation” with 93 occurrences. It is by far the dominant theme, emphasizing the crucial role of C-level offices in companies’ transformational processes.

This theory of change is reinforced by the next most frequent words: “innovation” and “change management” as they similarly associate C-level offices with this mission of transformation. Other words such as “business transformation”; “reorganization”; “restructuring” and “reorganization” also relate to change.

The notable occurrence of the word “agile” is interesting as it sheds light on the methodology of C-level offices. Members of these structures are considered agile because they possess broad skills that extend beyond their initial silos.

Additionally, the occurrence of the words “program management” and “strategic projects” illustrates the involvement of C-level offices in long-term strategies. Once change projects are implemented, their work continues. In other words, a C-level office differs from a simple change management structure because it remains involved in organizational management afterward.

Finally, it is worth highlighting the particular presence of the digital theme. One might expect this theme to be predominant among the keywords, and in some ways, it is with the word “digital” appearing 34 times whereas the term “digital transformation” is less represented, with 7 occurrences. We conducted the analysis to understand whether C-level offices are generally involved in the digital transformation of their companies, distinguishing them from other C-level offices.

The results are clear: the digital theme is not limited to CTO offices. To illustrate with numbers, the term “digital transformation” appears in 25% of CTO offices and 75% in other C-level offices. The term “digital” appears in 15% of CTO offices.

The conclusion drawn from these results reflects one of the core principles of C-level offices: cross-functionality. While the digital theme as a whole might seem primarily related to those with technological and IT functions namely, CTO offices the analysis demonstrates that digital tasks are not centralized and are present in other C-level offices.

But what is the purpose of a CTO office if it does not centralize digital and IT tasks? The question is valid. The distinction lies in the fact that CTO offices focus on the technical execution of IT and digital systems, whereas other C-level offices use digital tools to achieve their missions.

4.2.2 The roles of C-level Office members

It was previously explained that during data collection, when selecting a relevant profile, we carefully categorized it according to the C-suite role it was associated with. This was done to study and understand the differences between these functions and also to clearly identify the commonalities among C-level offices on a global scale.

We therefore begin by establishing the differences derived from the profile analyses by separating each office according to the C-level role it is associated with.

CEO Office

The dominant themes are “strategic” and “management.” We also observe strategic support from the office, as well as support for leadership, as demonstrated by these excerpts from profile descriptions: “Directly support the CEO [...] in the areas of senior leadership team effectiveness and strategic communication.” or “Designing and leading key strategic initiatives.”

CFO Office

The main theme identified is financial management and strategic collaboration. Keywords such as “collaboration” and “organisation” are present. While the focus on budget management is as expected, there are also keywords related to collaboration between the company’s departments.

COO Office

Themes related to risk management and organizational transformation are identified, as well as themes of leadership and team management, due to their operational role.

CRO Office

The analysis extracted themes related to climate risk management, sustainability, and climate, which are linked to regulatory management. A job description highlights both involvement in sustainability-related missions and a transversal role for C-level activities: “Coordinating transversal activities for the CRO. Strong focus on Climate and Sustainability Risks.”

CTO Office

As expected, the analysis of CTO office profiles highlights primarily technical expertise. This description provides a good summary: “Expert in projects related to Cloud services, IT audits, Security reviews, Data protection directives, Business Process IT reviews, and ITIL Service delivery audits.”

IT audits, information security in all its aspects, and compliance management are also prominent.

PMO Office

The data for this position is the least abundant; however, we were still able to observe some interesting points during the analysis. The themes are a mix of project management, skills and interdisciplinary collaboration, as well as team management and human resources.

4.2.3 Business Sectors

During the initial analyses conducted from LinkedIn profile research, we were able to draw a preliminary conclusion: the business sectors in which C-level offices are present appear to primarily be the banking and financial sectors.

We conduct a broader analysis to quantify the business sectors in which C-level offices exist.

To proceed, we begin by manually identifying the companies associated with each profile and compiling a list. Then we ask artificial intelligence to perform a targeted frequency analysis.

Out of 108 profiles analysed, here are the 10 most frequently occurring company names (see table 3).

We then categorize the business sectors of these 10 most represented companies (see table 4).

Company	Occurrences
BNP Paribas Fortis	39
Belfius	35
Euroclear	33
AXA	32
Deloitte	20
AG Insurance	19
Barco	18
SWIFT	16
Telenet Group	15
Infrabel	14

Data collected by the author from LinkedIn (2024).

Table 3. Occurrence of companies in the profiles.

Business Sector	Companies
Banking and Financial Services	3
Insurance and Asset Management	2
Audit and Consulting	1
Technology and Visualization	1
Telecommunications	1
Railway Infrastructure	1
Technology for Financial Services	1

Data collected by the author from LinkedIn (2024).

Table 4. Business sector of companies.

As concluded from our LinkedIn research, the most represented business sector is banking and financial services.

From this research, we also learn that the insurance sector is highly represented, with AXA and AG Insurance accounting for 51 occurrences.

C-level offices are also present in the auditing and consulting sector, with Deloitte being the only one of the Big Four to implement this structure.

An interesting finding is their presence in the technology and digital sectors, notably with companies such as Barco, SWIFT, and Telenet Group.

In general, these sectors are very complex and technical, likely requiring large-scale and highly strategic actions. This supports the hypothesis that C-level offices address the need for enhanced strategic support and governance.

While these sectors are diverse, they share common characteristics, such as their large scale and the fact that they are subject to very strict and complex regulations.

4.2.4 Languages level

This section addresses the language proficiency levels of C-level office members. As a reminder, the selected profiles are exclusively based in Brussels. The analysis primarily focuses on the three main languages spoken: French and Dutch as local languages, and English as the language of business. Additionally, a brief discussion is provided on foreign languages.

The language proficiency levels were standardized according to the LinkedIn model, which follows this ascending order: Elementary proficiency, Limited working proficiency,

Professional working proficiency, Full professional proficiency, and Native or bilingual proficiency.

English Level

A quarter of C-level office members have full professional proficiency in English (see figure 4). This result highlights the importance of English proficiency in professional interactions.

Twenty percent of the members are native or bilingual speakers, which suggests an international composition of the offices. Large organizations are often internationally oriented and collaborate with individuals who are likely to be native English speakers.

Regarding lower proficiency levels, they are very rare, with 4% for professional working proficiency and 3% for limited working proficiency. Very few members of C-level offices have a limited level of English, illustrating how essential this proficiency is at the decision-making levels of organizations. We also suggest that the necessity for English proficiency stems from the significant international presence of companies that implement C-level offices.

Finally, 41% of profiles do not mention their level of English proficiency. We propose that English is generally considered a fundamental skill, and some individuals may not find it relevant to include, either because they are proficient enough or because they wish to emphasize other skills they consider more important.

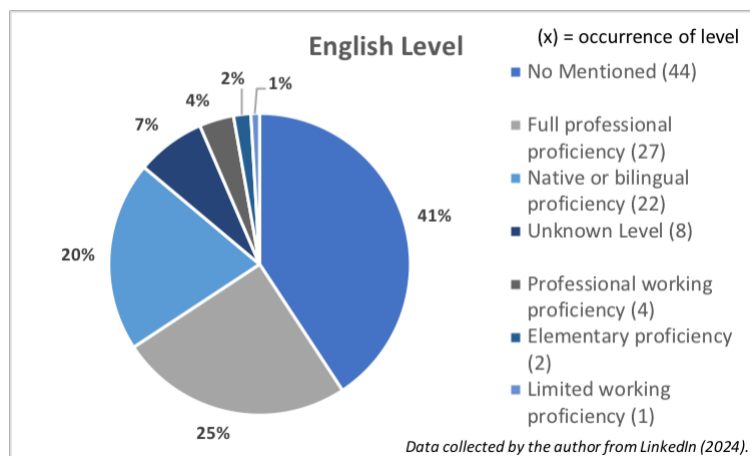


Figure 4. English level.

Dutch and French Levels

The proficiency levels in French and Dutch are similar (see figure figure 5 and figure 6). We suggest that the proportion of Belgians who are native speakers of either French or Dutch is nearly equal. This aligns with our hypothesis that the primary language spoken within C-level offices is English. The knowledge of French and Dutch is attributed to the multilingual nature of Brussels, which serves as a selection criterion for the profiles analyzed.

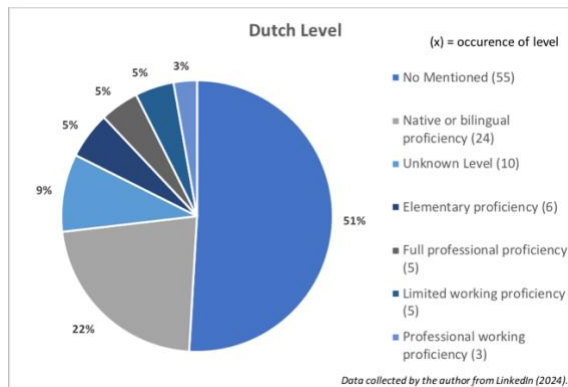


Figure 5. Dutch level.

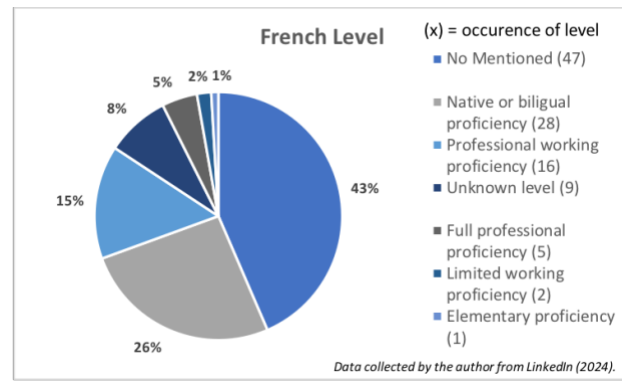


Figure 6. French level.

Other Minority Languages

We observe proficiency in languages other than the three previously analyzed, with German standing out with 20 mentions in the profiles. We suggest this is due to proximity of Germany as well as the presence of the German-speaking community in Belgium. Spanish is mentioned 13 times in the profiles, which we attribute to the widespread use of this language internationally, particularly in business contexts in South America.

4.2.5 Certifications

We examine here the fields of study of C-level office members, focusing exclusively on master's degrees to standardize the results. We find that the primary field of study is management, which is logical given that these roles are primarily related to management, strategy, digitalization, and other similar areas (see figure 7), which are typically covered in management science curricula.

It is noteworthy, however, to observe the relative diversity of fields of study. Given the hypothesis of the cross-functionality of tasks performed by C-level offices, we might expect a variety of educational backgrounds among team members. This is indeed the case, with more technical fields such as engineering and technology, more theoretical disciplines like law and auditing, as well as profiles focused on human resource management being represented.

We also test for the presence of dual technical and managerial training, examining profiles with both an engineering and a managerial education. The result, with only two occurrences, falls slightly below our expectations.

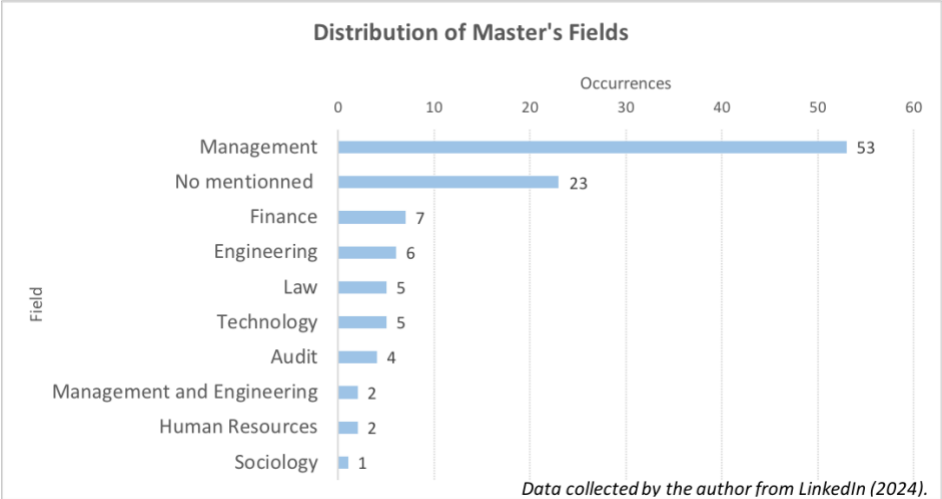


Figure 7. Distribution of master's fields.

To deepen the analysis, we examine the specializations within the field of management more thoroughly (see figure 8). Here, we observe a relatively balanced diversity among the subfields of management, including marketing, strategic management, business administration, and even leadership, albeit in smaller proportions.

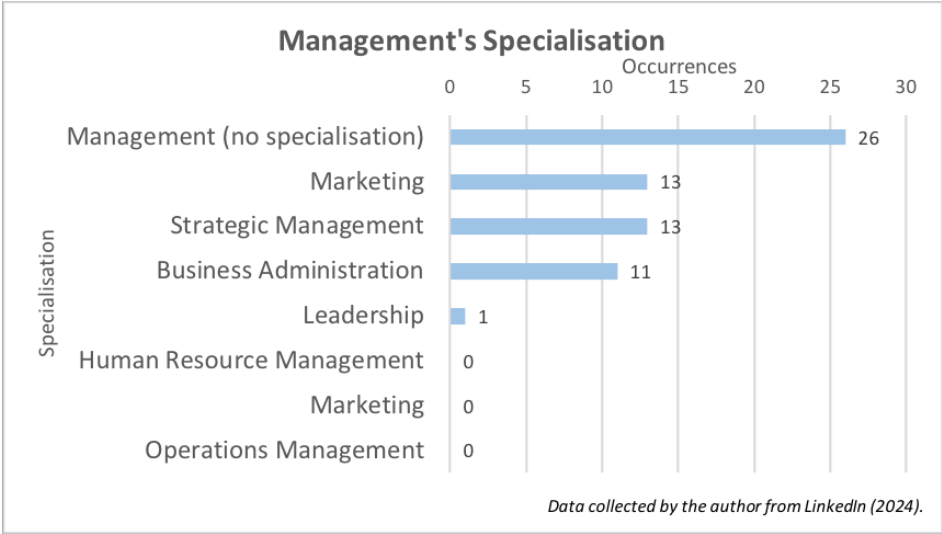


Figure 8. Management's specialisation.

4.2.6 Soft skills

In this section, we analyze the results from the profiles concerning soft skills (see figure 9). We observe a predominance of communication and leadership, followed by innovation and coaching.

These findings highlight the prominent roles of coordinator and communicator between teams, as well as the leadership responsibilities held by members of C-level offices. Innovation appears 19 times across the profiles, which we suggest aligns with the hypothesis that C-level offices are engaged to implement change within organizations and take initiatives to energize and

improve operational processes. As highlighted in the literature review, the emergence of structures like C-level offices stems from the need for change in governance, leadership, and management practices. The distribution of soft skills in these profiles provides evidence of this, with communication, leadership, and innovation being the most prevalent.

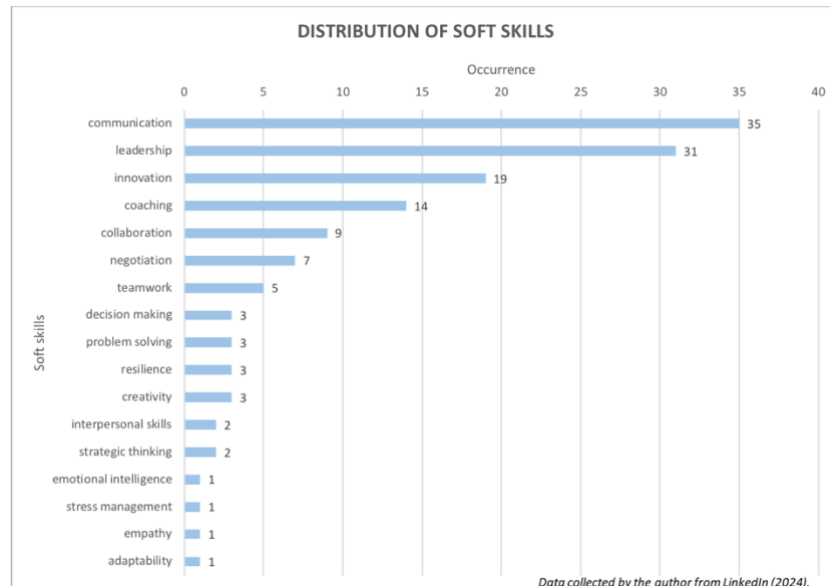


Figure 9. Distribution of soft skills.

Then we group soft skills into categories according to the following arrangement: the “Communication and Collaboration” category comprising skills such as teamwork, collaboration, negotiation, and interpersonal skills; the “Leadership and Management” category comprising leadership, coaching, decision-making, and delegation; the “Problem Solving and Creativity” category comprising problem-solving, creativity, innovation, and strategic thinking; and finally, the “Adaptability and Resilience” category comprising adaptability, resilience, flexibility, stress management, emotional intelligence, and empathy.

This analysis of skill categories provides a more nuanced perspective (see figure 10) compared to previous results, which seemed to suggest that only communication, leadership, and innovation hold significant importance. Here, we observe a balance in the skills highlighted. Less represented skills appear as sub-domains of communication and leadership skills. The importance of skills within the “Problem Solving and Creativity” category illustrates that leaders must demonstrate a strategic level of innovation to address increasingly complex problems, thus explaining the emergence of C-level offices to bolster the C-suite in terms of personnel and provide support.

The interpersonal skills in the “Adaptability and Resilience” category suggest that interpersonal competencies still hold a place in leadership criteria. However, they are weakly represented in written descriptions. We suggest that these skills, though understated in writing, remain critical during the final selection of candidates.

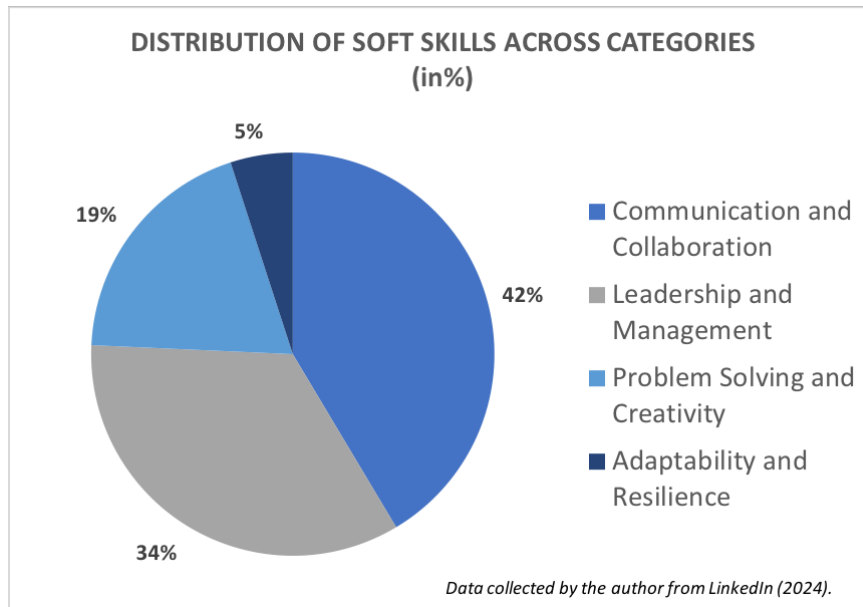


Figure 10. Distribution of soft skills.

5. Discussions

5.1 Lessons about C-level Offices

I. C-level offices are involved in organizational transformation processes.

The primary task assigned to C-level offices is transformation. This conclusion is drawn from the analysis of keyword occurrences and reflects a certain formalization of the C-level office role, as the aspect of transformation is present in the majority of job descriptions, regardless of the specific C-level to which the profile is linked.

II. C-level offices are multidisciplinary teams capable of addressing missions that require cross-functional collaboration across silos.

This insight stems, on the one hand, from the literature establishing the emergence of C-level offices, where cross-silo collaboration is considered essential, and on the other hand, from analyses highlighting a diversity of educational backgrounds, primarily in *management* but also encompassing *engineering, law, finance, and human resources*.

III. Each office has missions tied to its domain, but their overall objective is shared.

The analysis of profiles grouped by the specific C-level they are associated with highlight their differences and, more importantly, their unique specialties. The

findings show that *transformation*, *strategy*, and *innovation* are common trends, even though each office has its own primary missions.

- IV. *The banking and insurance sectors are the two primary industries, collectively representing only seven sectors, which are mainly technical and technological. Each sector is represented by 1 to 3 companies, reflecting a limited sample of organizations.*

This conclusion arises from the analysis of companies and their sectors of activity. It appears that the structure is primarily developed in niche sectors. When the C-level office method is implemented within a company, it is widely adopted, resulting in numerous mentions of the company's name. However, the number of such companies remains limited.

- V. *Nearly all members of C-level offices in Brussels have at least a professional proficiency in English. Knowledge of French and Dutch is equivalent. German and Spanish are the most commonly spoken foreign languages, with more than eight other minority languages also represented.*

This conclusion arises from the analysis of language proficiency levels. The predominant knowledge of English and the significant diversity of other languages highlight the substantial international representation and diverse backgrounds of the members.

- VI. *The soft skills of C-level office members are multidisciplinary, with a predominance in communication and collaboration, followed by leadership and management.*

This conclusion arises from the analysis of soft skills and confirms the strong communicator and leadership role within the company. What distinguishes C-level offices is their dual function: they simultaneously assume an authoritative role as leaders and managers, as well as a role as communicators, collaborators, and facilitators.

5.2 Limitations and Challenge

5.2.1 The Literature Review Challenge

The literature review is the main challenge of this research. Its goal is to understand the managerial tension arising from increasing expectations toward companies and their leaders, which leads to the necessity of expanding the number of individuals working on missions, thereby resulting in the creation of support structures such as C-level offices.

The absence of prior research on the topic alters the traditional process of drafting a literature review. One must conceptualize the problem holistically and, using intuition, explore topics deemed relevant to understanding the research subject.

This is undoubtedly the most thought-provoking and time-consuming part of the research, which is not typically the case for studies on well-established subjects.

5.2.2 LinkedIn Profiles

The lack of information in certain LinkedIn profiles is one of the primary limitations of this research. When studying specific patterns, it sometimes happens that some profiles do not include the information we aim to analyze. For instance, in the study of language proficiency, between 41% and 51% of profiles did not indicate their level of proficiency in English, French, or Dutch. This weakens the reliability of the results and leaves room for a more subjective interpretation of why these details are missing.

The lack of formatting, despite certain shared criteria like language proficiency levels, is another limitation we encountered. There are often many different ways to describe similar qualifications, even for educational levels. The solution to this limitation is to adopt a qualitative rather than a quantitative approach. This involves emphasizing recurring themes and interpreting them subjectively rather than focusing on the number of occurrences, which tends to be low due to the limited amount of data available.

Conducting an exploratory study and working on a black box type subject often involves limitations related to technical constraints and representation. It requires accepting a certain degree of scope and imprecision in the results, even though the insights gained are crucial and highly enriching for an unexplored topic (Ayache, Eyraud, and Goudian, 2019).

5.2.3 Artificial Intelligence

Using AI as an analytical tool is both a limitation and an advantage. Artificial intelligence does not replace human beings; in fact, it is still far from being capable of doing so.

It is an incredibly valuable tool that enables in-depth quantitative analyses through simple written commands, saving a significant amount of time in the coding phase. However, the interpretation of the results must come from oneself, as artificial intelligence cannot reason like a human being.

It is essential to maintain a critical mindset toward the results it provides, even when dealing with quantitative analysis. Throughout this research, critical thinking about the obtained results was paramount, and whenever any doubt arose, the analysis was thoroughly verified

Artificial intelligence is a remarkable tool for scientific research, offering substantial time savings. However, it should never become the sole driver of the research process. For optimal results, research must be a collaboration between the human mind and the quantitative analytical capabilities of artificial intelligence.

5.3 Contributions and Implication for Defining C-level Offices Structure.

This study represents an initial step in defining the structure of C-level offices. It addresses a clear gap in research on a governance method that, as evidenced by numerous job descriptions of C-level office members, is already prevalent in major organizations in Belgium.

From a theoretical perspective, only the definitions of similar concepts, such as Project Management Offices (Philbin, 2016) and Chiefs of Staff (Ciampa, 2020), currently exist.

Our first contribution of this study is the literature review, which effectively highlights the necessity of establishing C-level offices. This section alone serves as a significant tool for understanding the importance of recognizing the need for change and implementing it effectively with proper support structures.

The theoretical contribution lies in defining the governance method referred to as the C-level office, as well as its related context.

Regarding the use of artificial intelligence, Krause and David (2023) argue that advancements in analytical processes such as ChatGPT now allow the automation of complex data analysis. Meanwhile, Chen et al. (2023) examine the use of AI in the finance sector, concluding that AI facilitates the diversification of financial capabilities and that its usage is increasingly prevalent across all domains of financial research and practice. While these findings highlight AI's significant role in quantitative data analysis, there is limited evidence of its potential role in qualitative analyses, such as those involving LinkedIn profiles.

Our research on the analysis of LinkedIn profiles using the AI tool ChatGPT in qualitative studies not only underscores the relevance of LinkedIn data but also demonstrates the potential of AI as an analytical tool. This is a key theoretical contribution of our study: exploring an unconventional data source and analytical method to address an emerging and underexplored topic.

From a practical and managerial perspective, our work addresses the challenges of cross-functionality within organizational silos, as highlighted by Casciaro et al. (2019), as well as the issues of change and evolution within C-suites, which require multidisciplinary leadership competencies, as described by Groysberg et al. (2011). By defining and contextualizing the C-level office method, managers and executives gain concrete and precise insights into the purpose of these structures and how they might benefit their organizations.

As a pioneering effort on this subject, as well as on the data and methods employed, this research provides a foundation and explores significant insights. It serves both as an introduction to the subject and method, and as a robust basis for future studies.

5.4 Future Research Directions

Our research constitutes a foundational basis, leaving numerous avenues for further exploration. One potential research direction would be to study the internal dynamics of these structures. In this study, the data stems from external elements, but it would be valuable to gather insights from within, through interviews with members or reports on completed missions.

Our research has focused on Belgium, but it could be extended to a broader geographical area by investigating whether C-level offices exist abroad or exploring comparable structures in other regions.

Finally, if this structure becomes a widespread method and institutionalizes in certain sectors, research on much more specific issues could be conducted.

6. Conclusion

This thesis raises questions about an emerging topic that seems well-established in certain companies but has not yet been the subject of any research. The literature review provides insight into the surrounding context of C-level offices and identifies a significant managerial tension that has led to the emergence of new governance methods as potential solutions.

The formulation of the research question is preceded by a definition of the C-level office context, which builds upon observations made in the literature review. This is an exploratory study that adopts an inductive and speculative approach through thematic analyses. The dataset is sourced from LinkedIn and is publicly accessible, with thematic analysis of this data conducted using artificial intelligence.

The research findings offer initial insights into the concept of C-level offices. This study contributes not only to the establishment of a research foundation on an emerging topic but also

enhances the credibility of research on this subject by demonstrating its relevance through the contributions it makes to the existing body of literature.

The exploratory methodology, combined with the use of a LinkedIn-derived database and AI as an analytical tool, served as both a key component of this research and a limitation, as demonstrating the validity of these methods remains challenging.

The conclusion of this study is that there are still numerous promising avenues to explore regarding C-level offices. This thesis has demonstrated that investigating this topic is worthwhile, as it adds value to the current literature.

7. References

- Anadón, M. (2019). Les méthodes mixtes: implications pour la recherche «dite» qualitative. *Recherches qualitatives*, 38(1), 105-123.
- Argenti, P. A. (2017). Strategic communication in the c-suite. *International Journal of Business Communication*, 54(2), 146-160.
- Ayache, S., Eyraud, R., & Goudian, N. (2019, February). Explaining black boxes on sequential data using weighted automata. In *International conference on grammatical inference* (pp. 81-103). PMLR.
- Barnes, L. Y., Lacerenza, C. N., & Volpone, S. D. (2023). Becoming a right-hand partner: How lower-power employees heedfully challenge organizational leaders. *Academy of Management Journal*, 67(3), 704-736. <https://doi.org/10.5465/amj.2021.1390>
- Casciaro, T., Edmondson, A. C., & Jang, S. (2019). Cross-silo leadership. *Harvard Business Review*, 97(3), 130-139.
- Chen, X., Ma, C., Ren, Y., Lei, Y., Huynh, N.Q., & Narayan, S.W. (2023). Explainable artificial intelligence in finance: A bibliometric review. *Finance Research Letters*.
- Ciampa, D. (2020). The case for a chief of staff. *Harvard Business Review*, 98(3), 105-111.
- Cochran, M. (2010, January). Proposal of an operations department model to provide IT governance in organizations that don't have IT C-level executives. In *2010 43rd Hawaii International Conference on System Sciences* (pp. 1-10). IEEE.
- De Neve, J. E., Mikhaylov, S., Dawes, C. T., Christakis, N. A., & Fowler, J. H. (2013). Born to lead? A twin design and genetic association study of leadership role occupancy. *The Leadership Quarterly*, 24(1), 45-60.

Gangloff-Ziegler, C. (2009). Les freins au travail collaboratif. *Marché et organisations*, 10(3), 95-112.

Gardner, H. K. (2020, 1 septembre). When senior managers won't collaborate. *Harvard Business Review*. <https://hbr.org/2015/03/when-senior-managers-wont-collaborate>

Garg, P., Rani, R., & Miglani, S. (2015, September). Mining Professional's Data from LinkedIn. In *2015 Fifth International Conference on Advances in Computing and Communications (ICACC)* (pp. 98-101). IEEE.

Gendron, M. S., Banks, D. A., & Miller, D. J. (2009). Effective Strategic Alignment of IT: Implications for the CIO as a Member of the C-Suite. *Asia Pacific Management Review*, 14(4).

Groysberg, B., Kelly, L. K., & MacDonald, B. (2011). The new path to the C-suite. *Harvard Business Review*, 89(3), 60-68.

Hood, J., Paradis, T., & Paik, J. (2024, 4 novembre). The C-suite is evolving and new roles may join to drive innovation, say execs from IBM, JLL, Clear Capital, and more. *Business Insider*.

Jacquemin, A. (2017). Focus sur la méthodologie qualitative de recherche [Diapositives]. <https://moodle.uclouvain.be/course/view.php?id=5995>.

https://moodle.uclouvain.be/pluginfile.php/392266/mod_resource/content/10/Focus%20sur%20la%20m%C3%A9thodologie%20qualitative%20de%20recherche.pdf

Jewer, J., & Van Der Meulen, N. (2022, January). Governance of Digital Transformation: A Review of the Literature. In *HICSS* (pp. 1-10).

Kim, W. C., & Mauborgne, R. A. (2017). *Blue ocean leadership* (Harvard business review classics). Harvard Business Review Press.

Krause, R., Roh, J., & Whitley, K. A. (2022). The top management team: Conceptualization, operationalization, and a roadmap for scholarship. *Journal of Management*, 48(6), 1548-1601.

Krause, David. (2023). Large Language Models and Generative AI in Finance: An Analysis of ChatGPT, Bard, and Bing AI. SSRN Electronic Journal. 10.2139/ssrn.4511540.

Kruyen, P. M., & Van Genugten, M. (2020). Opening up the black box of civil servants' competencies. *Public Management Review*, 22(1), 118-140.

Manerikar, V., & Manerikar, S. (2014). A Note on Exploratory Research.

Marcus, B. (2018, January 4). Are you ready to become chief of staff? *Forbes*. <https://www.forbes.com/sites/bonniemarcus/2018/01/04/are-you-ready-to-become-chief-of-staff>

Medlar, A., Kotkov, D., & Głowacka, D. (2024, August). Unexplored Frontiers: A Review of Empirical Studies of Exploratory Search. In *ACM SIGIR Forum* (Vol. 58, No. 1, pp. 1-19). New York, NY, USA: ACM.

Miles, M. B., & Huberman, A. M. (2003). *Analyse des données qualitatives*. De Boeck Supérieur.

Moldoveanu, M., & Narayandas, D. (2019). The future of leadership development. *Harvard Business Review*, 97(2), 40-48.

Monteiro, A., Santos, V., & Varajão, J. (2016). Project management office models—a review. *Procedia Computer Science*, 100, 1085-1094.

Munro, M.C. (2021). Using JSON. In: *Learn FileMaker Pro 19*. Apress, Berkeley, CA. https://doi.org/10.1007/978-1-4842-6680-9_14

Niebauer, M. (2018, September 26). What is a chief of staff and when do you need one? The Bridgespan Group. <https://www.bridgespan.org/insights/library/careers/chief-of-staff-role>

O'Shannassy, T. (2021). The Challenges of Strategic Leadership in Organizations. *Journal of Management & Organization*, 27(2), 235-238. doi:10.1017/jmo.2021.36.

- Philbin, S. P. (2016, October). Exploring the project management office (PMO)—Role, structure and processes. In Proceedings of the International Annual Conference of the American Society for Engineering Management. (pp. 1-11).
- Pojanapunya, P. (2018). Clustering Keywords to Identify Concepts in Texts: An Analysis of Research Articles in Applied Linguistics. *rEFLECTIONS*.
- Project Management Institute. (2014). The project management office: Aligning strategy & implementation. Project Management Institute. Retrieved from PMI.org.
- PwC. (2024). 27e édition de la Global CEO Survey: Le point de vue des dirigeants français et internationaux [Rapport d'étude]. PwC France et Maghreb. <https://www.pwc.fr>
- Roussel, P., & Wacheux, F. (2005). Management des ressources humaines. De Boeck Supérieur.
- Saint-Michel, S. (2023). Théories du leadership. <https://hal.science/hal-04125810>
- Spreitzer, G., & Porath, C. (2012). Creating sustainable performance. *Harvard Business Review*, 90(1), 92-99.
- Steyn, B. (2004). From strategy to corporate communication strategy: A conceptualisation. *Journal of Communication Management*, 8(2), 168-183.
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of theory and research*. Free Press.
- Tian, H., Lu, W., Li, T. O., Tang, X., Cheung, S. C., Klein, J., & Bissyandé, T. F. (2023). Is ChatGPT the ultimate programming assistant--how far is it?. arXiv preprint arXiv:2304.11938.
- Too, E. G., & Weaver, P. (2014). The management of project management: A conceptual framework for project governance. *International Journal of Project Management*, 32(8), 1382-1394.

Vrije Universiteit Amsterdam. (2023). Master thesis manual: HRM, IM, LCM, MC, and S&O (2023–2024). Vrije Universiteit Amsterdam, School of Business and Economics.

Whysall, Z., & Bruce, A. (2023). Changing the C-suite: opportunities and threats for leadership diversity and equality. *Management Decision*, 61(4), 975-995.

Wright, P. M., Nyberg, A. J., Schepker, D. J., Cragun, O., & Hymer, C. (2017). Inside the C-Suite: The CEO, the Board, and the ELT.

Zhou, S., Hiller, N. J., Zaccaro, S. J., Campbell, L. N., McCauley, R., Parris, T., & Klimoski, R. J. (2024). The Corporate Chief of Staff: Strategic Leadership Influence From Outside the Spotlight. *Journal of Leadership & Organizational Studies*, 31(3), 289-303.