

CENTERS OF EXCELLENCE IN MULTINATIONAL ENTERPRISES: EXPERT INSIGHTS AND A QUALITATIVE CASE STUDY

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ABSTRACT

Introduction: With the increase of multinational enterprises subsequently resulting from globalization, various organizations struggle with change management and the alignment of their business units on a global level. Often, a specialized unit to drive transformation, standardize procedures, and encourage innovation titled Center of Excellence (COE) is initiated to lead global processes.

Objective: This research study identifies main characteristics of a COE and related challenges and success factors based on the case study "WorldTech" and expert insights. Additionally, the study aims to provide research-based guidance for the establishment and management of a COE.

Methods: The qualitative approach of semi-structured interviews was chosen and a sample of 9 employees of WorldTech and 5 leading experts was interviewed. During employees' interviews, topics of COE related knowledge and experience, roles and role alignment, internal and external communication, teamwork, commitment and strategy were questioned. The expert interviews dealt with their background and experience with COEs, characteristics of COEs, positive and negative incidents concerning the COE as well as future recommendations. The outcomes of both groups were separately analyzed with the software Atlas.ti and codes and codegroups were developed through the process. Employee interviews were coded with an inductive approach while experts' interviews were coded deductively.

Findings: The findings show the challenges faced by COE teams such as aligning global processes, overcoming language barriers, and securing top level support. Main challenges inside the case study deal with internal resistance, missing top level support, issues regarding organizational identity and internal communication. Further, critical success factors dealing with effective leadership, strong internal and external communication practices, and strategic resource provision are discovered.

Practical Implications: The outcomes suggest that the need for top-level support, intrinsic and extrinsic motivation of team members, and strategic communication is crucial for the success of a global COE's. The research contributes to the limited literature on COEs in the business contexts, providing practical recommendations for building and managing these units to achieve their goals and standardization in global corporations.

Conclusions: While the establishment and management of a COE in the context of change management is a complex process, the benefits of this global formation are countless. Future research should explore the challenges and success factors further with a focus on external communication and collaboration and COEs in uniform sectors.

Keywords: Center of Excellence, Leadership, Global Alignment, Global Collaboration, External & Internal Communication, Top management Support, Internal Resistance, Strategic Communication, Critical Success Factors

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1.0 INTRODUCTION

During the current time of globalization and rising economy, gradually more companies evolve into multinational enterprises. While the expanding influence of market dynamics means supremacy and growth, it also confronts firms with issues that need to be managed and solved globally. Not all corporations are able to tackle this anticipated transformation. McKinsey, one of the big three global consulting firms, promote their change management service by citing that 70% of all change initiatives in global corporations fail (Ewenstein et al., 2015). While the exact rate is uncertain, it is crucial to understand the challenges and success factors that companies must address to avoid falling into the high failure rate category. Therefore, effective change management requires a focus on key areas: purpose, principles, processes, people and performance (Pryor et al., 2007).

A primary challenge firms encounter is the need for uniform processes to ensure consistency and increase efficiency across their diverse operations (Doval, 2016). One solution to this demand is standardization. Standardization is defined as a sequence of procedures that aim to raise the norms and standards of a company, most often concerning technical measures (Li et al., 2024). Companies that aim to evolve quickly, expect to introduce best practices to all subsidiaries across different nations, submerging into a big, coherent corporation that uses uniform practices. An essential advantage during this process is scalability: Through standard processes, scalability facilitates companies to scale their operations and expand into new markets without compromising on quality or efficiency.

Among consistency and efficiency, the by-products of standardization are cost reduction (Schreiber et al., 2010), innovation facilitation (Fang et al., 2016), improved risk management (Olechowski et al., 2016), and increased competitiveness (Xu et al., 2020). However, implementing standardization presents challenges that can adversely impact corporation's ecosystems and lead to internal uncertainty (Rebelo et al., 2015; Toh & Pyun, 2023).

To provide leadership during such a demanding phase, companies often establish a so-called Center of Excellence (COE). A COE is a sub-formation inside companies that drives transformation and is tasked with supplying leadership for change, assisting the corporation in aligning new adaptions through strategic planning, and offering resources to administer (Mattalah, 2023). The team that is tasked with the responsibility of forming the COE, has to be highly skilled since the establishment depends on their success Additionally, this formation is mostly constructed at foreign owned subsidiaries in order to manage multifaceted global change (Frost et al., 2002). Scientific research about particular COE challenges and success factors is not common, mainly because of the difficulty to access multinational corporations and their sensitive data. Further, companies do not necessary share that they own a COE to external stakeholders which are not involved or the public.

1.1 Research Case and Aim

The current research study is analyzing the formation of a COE of a major player in the industrial automation and technology industry. The American corporation is known for its innovative solutions and global reach and holds over 170 branches across the world that function together. In order to protect their identity, the pseudonym "WorldTech" is used to refer to this corporation. The overall goal of the COE at WorldTech is to standardize processes of the foreign standpoints in Germany after the company grew rapidly over the last years and bought new standpoints in a quick time span. During this growth, it was difficult to align all standpoints with universal systems and practices and most processes are distinct from each other till today. This issue is particularly persistent in the Human Resources area. There are no uniform systems for communications, employee management, or the pay roll management which led to issues such as missing VAT, incomplete documentation of payments, communication barriers, missing data, and errors in the billing. Specifically, the

payroll system issues are prominent and have built up after the company invested more in the continuing education of personnel in Romania in order to save costs, leading to severe issues for employees outside Romania. While Romanian employees are highly skilled in using the pay roll system which is demanded, the employees in the 20 locations across Germany outsource this task or use outdated systems which are known to them.

In order to resolve these HR related problems, WorldTech's top management decided to create a COE aiming to solve these errors for all locations. The goal of this new formation is to offer a contact point where all parties (such as employees, business partners, and customers) can acquire knowledge for the standardization processes that need to happen and to initiate the needed change. Further, the manager of the COE tracks and evaluates the processes and has to solve complications that arise along the way. The manager assembled a team of different specialists located in Romania and Germany to create the COE and introduce guidelines to offer education and assistance to align all standpoints. The team includes thirteen employees and managers, of which all work as payroll managers for different locations and entities of the multinational firm. Additionally, four Romanian employees are in the team and act as experts for the payroll system and SAP.

Since carrying this position, the manager observed that other sites at WorldTech, including their managers and directors, are unsure of how to approach the transition or understand their roles during the change. She suspects this confusion originates from ineffective communication. For instance, during international online team meetings, most of the 400 participants do not pay attention, actively participate, or even turn on their webcams. Further, there is no implementation to verify that the knowledge and information spread is understood. She often needs to repeat goals, clarify task assignments, and explain the roles of individual employees.

A significant challenge is that all WorldTech branches in Germany operate very differently, and communication between these locations and the headquarters is ineffective.

Each branch functions more like an independent medium-sized company with unique processes, rather than as parts of a unified, large company with standardized processes. To ensure a successful and sustainable transition, it is crucial that all parties involved are aligned. Leadership positions and COE employees, in particular, must have clearly defined roles and share a unified view of the upcoming changes to effectively convey them to all stakeholders.

To get an in-depth understanding of the current situation, this research aims to answer the following research question:

"What are the primary challenges faced by the Center of Excellence team of WorldTech, and what strategies can be implemented to address these challenges effectively?"

In order to propose adequate solutions that could be implemented, a selected set of experts who have experience with leading COE formations at diverse global corporations were interviewed. This offers an examination of parallels, success factors, and potential pitfalls. From the organizational side, the goal is to get an extensive overview of managers' and employees' perceptions and knowledge, the challenges they face, and thus the current status of the WorldTech COE project. Examining the status of this project and the alignment during the early stage and further have insights into other corporations' COEs can be significant to support the further establishment and ensure a successful implementation.

Moreover, the expert insights are valuable for the continuous process of the project.

From a scientific viewpoint, this research study offers hardly accessible insights into the establishment of a COE, the challenges that teams and managers need to overcome, and the common ground of different COEs. Further, it contributes to the literature on change management and the difficulties and related concepts that appear during this complex process.

2.0 LITERATURE REVIEW

This literature review will examine the context of change management in which COEs are established, their key characteristics and relevant concepts related towards this division, with a specific focus on aspects related to the concepts of purpose and people.

2.1 Change Management

Change management is a broad and multifaceted term that describes the activities required during organizational transformation. While change is a naturally occurring process, it is likewise difficult to navigate depending on the size of the transition and the extensive impact of new adjustments (Sung & Kim, 2021). Especially for humans, who feel secure with familiarity and rather uncomfortable with new adjustments, handling change in the workplace environment can be difficult due to the dependency and importance of employment (Erwin & Garman, 2010).

Successfully implementing organizational change is complex and relies on numerous interdependent factors. In their literature review, Errida and Lotfi (2021) examined 37 change models and in total 74 factors that contribute to successful change management and conclude that: "...the leadership of the change manager, effective and constant communication during change, engagement of stakeholders, and motivation of employees and change agents are the most relevant factors for change management success..."(p.10). Additionally, their findings point out that the various factors impact each other and heir interplay impacts the overall outcome. Likewise, employees' interest in upcoming change and their willingness to extensively participate and demonstration of innovative behavior, is a crucial factor in this matter (Furxhi & Dollija, 2021). The significance of effective internal communication is emphasized since it positively impacts employees' perception towards change, strengthens their willingness to adopt transformational strategies along with their willingness to innovate

current processes (Giribaldi et al., 2024). Besides, top management support was identified as critical success factor for change management at multinational companies, highlighting the importance of external factors that influence change processes significantly (Idogawa et al., 2023). Likewise, project management and technological competencies are considered as crucial during change procedures. A model aiming to align the various factors is the 5P model, which accentuates the alignment in companies' purpose, principles, processes, people and performance (Pryor et al., 2007).

However, research also identified aspects that decrease the probability of successful adaptations. A common factor that is often highlighted is the absence of a clear vision (Gioia & Chittipeddi, 1991). If the enterprise lacks understanding and a precise concept of the desired outcome, the communication will be vague, and consequently, the process will most likely be ineffective. Moreover, the scarcity of communication during change and low engagement of all involved parties such as external and internal stakeholders is emphasized as a significant issue (Hodges, 2018). In addition to the commonly named challenges, there are several others that depend on the vastness and complexity of aspired changes and the areas and processes in which they occur (Caldwell, 2003).

Overall, the literature shows the complex character of organizational changes and suggests that especially the factors that involve human interaction and behavior can "make or break" a successful change adoption of corporations.

2.2 Center of Excellence

While literature on change management is broadly available and different approaches and challenges related discussed, there are procedures used by companies in the change management process which are less investigated.

One strategy to introduce new adaptations in multinational corporations is the formation of a COE. This approach derives from the areas of medicine and education and was utilized by multinational corporations to introduce change in foreign subsidies (Manyazewal et al., 2022). The COE in the business context has no uniform definition but multiple articles and scholars employ the definition of Frost et al. (2002) who state that the COE is an organizational unit that owns a set of relevant qualifications to be authorized to plan and execute corporate change.

While the term COE is typically used, other titles that describe this unit are for example "Business center", precisely "Business process management center of excellence" (Bitkowska, 2018) or "global activity center" (Malright, 1996). In several articles, literature suggests that the formation is neither a "center" nor includes confirmed "excellence" and therefore terms to describe this unit elevated over time (Frost et al.,2002; Hellström, 2011; Manyazewal et al, 2022).

The purpose of this formation is to provide corporate learning (Nelson, 2015) and leadership (Dombrowski et al., 2019), share best practices (Richardson, 2006), drive transformation (Reichert & Furlong, 2014), support standardization (Coughlan & Bernstein, 2017) and to ensure that the processes are carried out effectively (Elliott et al., 2012). Primarily for COEs in multinational enterprises an important scope is to ensure alignment of processes in foreign subsidies as their supervision is considered as difficult and often subsidies act separately from another despite displaying one corporation (Frost et al., 2002). The collaborative aspect occurring between the enterprise and the COE unit is crucial to unite all subdivisions since otherwise, the units efforts will not be accepted and adapted (Malright, 1996). Nevertheless, the COE is a subdivision that acts and stands alone while collaborating with various divisions, business partners and other stakeholders to reach goals and KPIs set by the top management.

Depending on the goal, there are three different central structures in which a COE can

be presented. Firstly, the *charismatic* center of excellence. This term describes one individual who owns outstanding knowledge and is a world-leading expert that solitary reflects the COE (Moore & Birkinshaw, 1998). Secondly, the most popular form is a *focused* center of excellence, consisting of a team of specialists and experts, who collaboratively work to support the company during multinational projects by means of education and resources such as employee training. Moreover, a third form is called the *virtual* center of excellence. As the name implies, it in fact is a virtual hub in which a large group of experts collaborate to offer knowledge for a certain domain. At WorldTech, the COE is classified as a focused COE.

Regardless of the specific structure, a crucial point is the people who possess outstanding and extensive knowledge to jointly offer solutions and guidance for the company. Towards that, Holm and Peterson (2000) describe that a COE is distinguished from other units or centers through the "high subsidiary competence of the team" and "high use of subsidiary competence of the multinational enterprise" (p 215). Indicating that the team holds the fitting expertise, and the corporation focuses on harnessing these abilities to make significant changes in global operations.

Current studies focus on the COE's role as a unit that bridges strategy and change especially on the overall support provided for the growth and development of enterprises (Hellström, 2018). Particularly the strategic perspective through creating knowledge and competence, also for unusual objectives, and linking diverse teams from different parts of the world to together work on urgent, national matters which is called "cross community transfer". Additionally, the continually utilized definition by Forsgren et al. (2000) highlights the strategic interplay and advantage that emerges from the combination of specialized knowledge from a unit that is part of the multinational corporation and their collaboration with other divisions. Specifically, in hindsight of HR, a recent doctoral thesis examined that adequate human resource processes increase the effectiveness of the formation of a COE for multinational enterprises at foreign subsidiaries (Matthala, 2023). These processes include HR

planning and strategy, performance management, knowledge and organizational learning, among other standard HR practices such as recruitment and selection (Collings et al., 2018).

While the current literature focuses on aspects which a COE contributes to corporations, the challenges and success factors which impact the unit are not explored explicitly. The next sections therefore deal with relevant topics for change management and hence also the COE.

2.3. Role and Task Alignment during Organizational Change

The execution of change at multinational corporations demands alignment at various levels. Particularly, it requires multiple people to adapt to new roles and tasks and align them with their position which is a critical aspect that determines how successful the organizational transformation will be.

This alignment is called task and role alignment. Moreover, task alignment is a method to coordinate and structure duties within an organization along the lines of executive goals and objectives, ensuring prevailing success (Cash et al., 2020). Further, during this process, it is prioritized to match individual objectives with broader strategies to reach efficiency and overall performance. Besides, role alignment refers to the clear definition of roles and responsibilities inside a corporate structure to guarantee consistency with the specified goals and conformity (Kathuria et al., 2007). Also, it implies that collaboration is effectively supported by decreasing role ambiguity and maximizing the overall performance of both, individuals and their team (Rai, 2016). In relation to that, task alignment reinforces the team members' understanding, affecting the product and development-related goals and teamwork positively (Cash et al., 2020). Likewise, goal setting and conformity of the team are crucial tasks executed by the leaders who are responsible for organizational planning (Huang et al., 2017).

Since working in a COE demands multiple people from partially distinct areas to collaborate and adapt to their new roles and tasks, the stated concepts and their interplay are essential during their establishment and management.

2.4. Sensemaking and Sensegiving during Organizational Change

Sensemaking and sensegiving occur during leadership processes and shape how subordinates understand and respond to changes within the firm which is essential for a COE and change processes. On the one hand, sensemaking implies setting an intention and gaining knowledge about the changeover, on the other, sensegiving refers to the action to share and influence others' sensemaking process toward the determined organizational reality (Balogun et al., 2015). Both concepts are applicable at all levels within the organization, from top to bottom, and function in a cyclic manner (Brumana & Delmestri, 2012).

During this process, the capabilities of senior managers, who are in charge of the change, are tested to the utmost while their task is to redirect the employees' and stakeholders' understanding (Hoppmann et al., 2023). Moreover, leader's sense-giving skills are essential during negotiation processes with stakeholders since the outcome relies on their mutual understanding of the operation and goals (Milosevic & Bass, 2014). To influence employees' sensemaking of the new circumstances, managers also engage directly in sensegiving activities such as role modeling or in-depth conversations (Weiser, 2020). Also, the CEO is commonly strategically involved in initiating the change and setting the objectives for the sense-giving procedure (Gioia & Chittipeddi, 1991). As sensegivers, leaders are in a position to support organizational change by equipping members with the right idea about what will happen and how it will be executed (Shin et al., 2015).

Concluding, sensemaking and sensegiving are closely involved in organizational modification processes in which leaders and managers influence how subordinates adapt and

perceive the change. Hence, both practices are fundamental during this transformative period and for the establishment and administration of a COE.

2.5. Clear Mission and Vision during Organizational Change

In order to establish sensemaking and sensegiving for the COE team, a strong social identity is necessary among all members. While there are several ways to align the organizational identity for the employees, corporations chose to provide their mission and vision through statements which mirror the purposes and matters for which the company stands for, serving as a guideline and inspiration for employees, stakeholders, and clients (Bratianu & Balanescu, 2008).

The mission of a corporation is a one-sentence summary of the current purpose and task of a business (Hieu & Vu, 2021). Hence, it expresses the direction and purpose of an establishment and therefore also how decisions and activities are carried out (Kopaneva & Sias, 2015). Besides, it is important to have a goal set for the future which companies display by indicating their vision statement.

To portray a prominent vision statement, the vision statement of the online service provider LinkedIn (2024), is: "Create economic opportunity for every member of the global workforce". Effective vision statements are determined by several factors including transparency, the focus on the future, their definition of success, the challenge they tackle, and their uniqueness (Kirkpatrick, 2017). Additionally, it is best if the message is memorable and "sticks" with the reader or customer. Therefore, the vision and mission statement are considered to be necessary elements used in strategic management and crucial for all kinds of enterprises (Papulova, 2014).

The importance of having the mission and vision set and also pursuing their call is investigated by several studies. Fundamentally, a positive relationship between a strong

mission statement and the performance of a company was uncovered (Salehi-Kordabadi et al., 2020). Further, the findings suggest that a suitable mission statement is significant, especially for strategic executives, since it is directly linked to the improvement of the overall economic performance of organizations. Moreover, the mission statement is an influential strategic planning tool to convey the organization's objective and is necessary to reach sustainable growth (Lin et al., 2019).

In hindsight towards change management, the opportunity to align workers' mindsets and behaviors toward organizational goals by creating a shared understanding is an essential aspect that guides the process (Kopaneva, 2015). Further, both statements can support firms in overcoming inactivity during change management after a phase of not being able to proceed further (Marginson, 2002). Moreover, they are connected to the innovative aspects of a business by maintaining a view of the performance in response to the market demands and providing the management with a basis of control for this process.

Consequently, literature suggest setting a vision and mission leads to alignment and supports growth and success of corporations and their divisions. While a COE is not mirroring the goals of a corporation's vision and mission as a whole, it is important to create a unique, shared understanding of goals and belonging especially for the division for optimal outcomes.

2.6. Communication and Collaboration during Organizational Change

Specially inside the team forming the COE and during change management processes effective communication and collaboration must be cultivated for success.

During this change process, leaders play a crucial role in implementing the right communication and collaboration processes and maintaining the level of expected commitment in the team (Zogjani & Raçi, 2015). Likewise, the timing of communication, the contents shared towards it, and the channels used for communication are critical for the

procedure (Abrantes et al., 2024). Moreover, the significance of precise information is highlighted to manage the various levels at which changes can occur effectively (Clark et al., 2010). Clear and accurate information sharing further reinforces organizational identity through efficient transmission of anticipated approaches (Dick et al., 2018). Also, workplace communication is fundamental to reach tasks and achieve goals while facilitating collaboration between diverse employees (Mikkola, 2019).

When fostering collaboration within the team, several aspects must be acknowledged. Firstly, teams can adapt to changes faster if they engage and cooperate frequently as a team and alongside stakeholders, leading to advantages for the change process and corporation (Offner et al., 2011). Secondly, the open exchange of knowledge and help, leading to supportive contributions between employees and stakeholders is a vital collaboration aspect described in change models (Rico et al., 2019). Thirdly, a key aspect of collaboration models concerning organizational change is adaptability, describing the necessity to adjust to new modifications and processes that occur (Essawi & Tilchin, 2012).

Hence, communication and collaboration processes are essential aspects of organizational change and therefore also for a COE. While leaders need to establish the right strategies to support internal communication and collaboration, employees need to be eager to engage together for effective transformations.

Overall, the reviewed literature showcases the change management process in which a COE is initiated, characteristics of COEs as well as important factors throughout change management processes with an emphasis on teamwork. These concepts are fundamental for the establishment and management during change.

3.0 METHODOLOGY

3.1 Research Design

In order to investigate the different subjects related to the WorldTech case, a qualitative approach was selected. Qualitative research is described as:"...a methodological approach that explores the intricate details of human behavior, attitudes, and experiences." (Ahmed, 2024). According to Silverman (2019, p 19), a central advantage of qualitative research is that naturally appearing data can be used to examine the meaning participants give to it. In this way, qualitative research does not only demonstrate the depths of a phenomenon but also showcases the circumstances in which it arises and offers extensive insights.

Furthermore, this procedure gives participants the chance to decide how significant a concept is to them and openly add information rather than stating how much or less they conform to a statement (Flick, 2014, p 542). Hence, it allows an in-depth exploration that captures also nuances, attitudes, and experiences and offers more in this matter than quantitative research.

While the qualitative approach offers a variety of methods that suit the investigation, it was decided to use the method of semi-structured interviews. Contrary to structured interviews, semi-structured interviews offer the interviewer probing as a technique to gather additional information. The quality of the interview output will increase by rapporting with the participants or spontaneously adding questions like "Can you clarify?" or "What is meant by that?" since interviewees will presumably explain themselves further (Silverman, 2019, p 177). The method of conducting semi-structured interviews is therefore a suitable fit for this research, aiming to gather insights into the process of building the COE at the HR department of WorldTech, specifically their current status, the challenges faced in this division and their global teamwork.

It was decided to triangulate data collection by including two types of data sources.

First, employees of WorldTech, who can share and reflect on their behaviors and experiences

within the COE case. Second, experts on COEs who offer insights into success factors and challenges which they encountered over the years and a base to compare with the WorldTech case.

3.2 Sample Composition

For this study, purposive sampling was applied (Silvermann, 2019, p. 63). Given the fact that this case study deals with the establishment of a COE at the multinational enterprise "WorldTech", specifically their foreign subsidies in the HR department in Germany, the selection of participants for the case study was already determined from the start. The second group of participants, the experts, are directors and heads of distinct COE chosen based on their extensive knowledge and experience.

In total, eight managers and employees from WorldTech's various HR departments across Germany and Romania, who together form the COE team, were sampled. Additionally, one business partner was interviewed, since they are also involved in the establishment of the COE and can provide additional information to achieve a comprehensive outline. The interviewees were determined by the company and received a mail containing information about the study and the consent form after being informed by the operations manager. In total, the sample consists out of 8 female participants in between the ages of 23 till 59 and one male participant who is 34 years old. The sample is involved in the COE for a timeframe between 2 and 6 months and four of the participants had experience with change management in the past. Nevertheless, none were involved in a COE before. Their job functions are payroll manager for one or several locations, operations manager, business stakeholder, payroll system specialists and HCM system specialist.

Table 1 specifics details of the sampled experts, which consist out of four male managers and one female manager, in between the age of 31 till 63, who work in several

sectors and have diverse years of experience. They attended the interviews after an invite over LinkedIn and were chosen based on their resume. Only one expert had already experience with leading a COE before the current leading position.

Table 1Overview of the experts and specific professional backgrounds

Participant	Organizational Nationality	Sector	Profession	Years of Experience
1	German	Logistics	Director Global COE	6
2	Japanese	Chemicals	Global Head of COE Procurement	2,5
3	French	Engine Lubricants	Head of COE Market	6,4
4	German	Technology (Rail)	Global Lead COE Rail	3,5
5	Dutch	Aircraft and Space	Lead Strategic Account Management COE	6,8

3.3 Procedure

A descriptive and interpretative approach was chosen to suit this case study since the aim is to understand the phenomena which is taking place and get extensive knowledge on the COE by comparison to other, already established COEs.

Ethical concerns

Several ethical concerns and considerations were taken into account. The first aspect is anonymity and confidentiality. Protecting the identities of the company and interviewees was of utmost importance given the sensitive information shared. Further informed consent was given to ensure that participants were aware of the full study purpose and outline, the study methods, data recording, storage, anonymization and analyzation. Additionally, the

participants were informed of their right to withdraw their participation at any given time, and the option to skip uncomfortable questions.

After the approval of the ethics committee (Appendix B), case number 240875 given on the 08.05.2024, the interviews took place.

Interview Procedure

Firstly, participants received the informed consent form and room for questions was offered to clarify the interview procedure. Further, they were informed about the researcher's duty of confidentiality and protection of identity. After oral and written consent, the interview and the recording started. The interviewer's priority was to have a neutral and friendly attitude toward the participants to positively reinforce them. An interview guide was used to ensure standard similarities and procedures. In total, only on participant made use of the option to skip a question and none decided to end the interview prematurely. All interviews concluded with an option to give feedback and ask questions. The researcher ended the recording and thanked the participants for their participation.

The scheme of this research was to conduct four interviews, following transcription and coding, and continue after an adjustment of the interview guide. In the adjustment phase, the WorldTech interview guide was slightly adapted, and five questions were removed or fused with existing questions. After the sixth interview, one question was added about employee's perception of how external company members view the COE and their work. The interview guide of the experts was not adapted or changed.

In total, nine interviews were held in English and five in German since some participants preferred to explain their viewpoints in their native language. All interviews were conducted in an online setting. The duration of the interviews was between 21 and 71 minutes with a mean of 38 minutes.

3.4. Interview Guides

WorldTech's Interview guide

The interview guide for the employees at WorldTech was structured in four parts and seven overall topics presented in Table 2.

Part one and two deal with general work questions and knowledge regarding the COE as well as the employees' role during this change process. The following part dealt with the sense-giving function of managers towards their team and role alignment. For the employees that did not had their own team, questions concerning it were left out. The last part dealt with external and internal communication and additionally examined topics such as teamwork and strategy.

To conclude, this interview guide examined topics of involvement and experience with the COE, employees' identity and role during the establishment as well as internal and external communication, teamwork, commitment and strategy.

Experts' interview guide

The interview guide for the expert group consisted out of four different parts which are presented in Table 3.

Firstly, questions regarding their background and experience with COE projects were asked. The second part examined the characteristics of their COE followed by a question to gain insights based on their experience. Lastly, questions considering recommendations for future COE projects were asked.

To conclude, this interview guide examined topics regarding managers experience, their COE structure, the challenges and learnings they encountered as well as recommendations.

 Table 2

 WorldTech's Interview Guide - Topics and Example Questions

Topic	Example Questions
General Work Questions	Could you provide an overview of your role and responsibilities at WorldTech?
Experience, knowledge and expectations regarding change management and the COE	What is your expectation of the outcome of the COE?
Manager's identity and role in building the COE	What are your tasks and responsibilities during this project?
Role alignment (General position & COE position) and sensegiving with own Team	Are there tasks which you perceive as difficult to combine with your other position?
Internal and External Communication of the Center of Excellence Team	How would you rate the communication during the team meetings on a scale of 1 to 10? Explain your choice.
Teamwork	How would you describe the overall dynamics and collaboration within the team?
Commitment and Strategy	What overarching strategy or approach do you believe is most effective for achieving the goals of the COE?

Table 3 *Experts' Interview Guide and Example Questions*

Topic	Example Question
Background & Experience with COE Projects	Could you describe your experience with COE projects?
Characteristics of COEs	Is there a typical composition in terms of actors, skills and their roles and responsibilities?
Incident Question	'When thinking back about the Center of Excellence project you have been involved in so far, can you share with me a noteworthy incident which was either positive or negative in light of the success of the project?'

Recommendations for Future COE Projects

To close, what would be the most important advice you would give to managers currently working on establishing or managing a COE?

3.5 Data Analysis

After the interviews took place, the recordings were transcribed using the software Microsoft Teams and Sonix.ai. Thereafter, the data was cleaned and anonymized to protect the enterprise's and participants' identities.

For the analysis of the participants of WorldTech's COE, an inductive approach was chosen (Thomas, 2006). The analysis was carried out without the involvement of a fixed coding scheme leading to the discovery of patterns, themes, and categories. After the transcripts were read and relevant information and statements were highlighted by open coding, the method of axial coding was used to classify the discovered codes and identify final categories and relationships.

For the interviewed experts, the approach of deductive qualitative analysis was chosen since the intent was to discover specific insights regarding the main characteristics, challenges, and success factors of their COEs (Fife & Gossner, 2024). This process included an alternation of deductive and inductive coding practices to support a nuanced interpretation of the diverse concepts.

Both analyses were carried out in the qualitative data processing software ATLAS.ti. In total, the statements were classified into 8 different main codes which are displayed in Table 4. To ensure reliability of the codebook and data analysis, Cohen's kappa was calculated for the expert interviews based on the coding of 25 randomly selected statements. After the coding by the author and second coder, the results were analyzed and calculated,

resulting in a Kappa of .88. The outcome indicates a strong level of agreement implying that the author's coding is reasonable (McHugh, 2012).

The Cohen's kappa regarding the WorldTech coding was not calculated, since the outcome would have not reflected the depths and quality of the analysis and thus would not reflect the actual reliability (O'Connor & Joffe, 2020). Subsequently the dataset of the case study is quite complex and can hardly be understood entirely by a second coder without the knowledge and coverage of the entire background and circumstances.

Table 4 *Main Codes and Frequencies*

Main Codes	Frequencies
Communication & Collaboration at WorldTech's COE	156
Challenges at WorldTech's COE	155
Establishment and Formation of WorldTech's COE	92
Success Factors named by Experts	87
Employees' Opinion regarding the COE	71
Main Characteristics of COE and Formation of Experts	27
Challenges named by Experts	15
Opinion about COE name (Experts & Employees)	10

4.0 FINDINGS

The findings of this study reveal insights into challenges that surface while building a center of excellence, the different roles of employees and managers, as well as central factors that contribute to the overall success. Further, it offers a glimpse into the diverse COE variations that exist at multinational enterprises and their processes and functions. This section will summarize and compare these findings, starting with the main characteristics of COEs, followed by the challenges people involved in such a formation encounter and lastly, experts' success factors.

4.1 Main Characteristics of COEs

Several experts mentioned that a COE can be applied at every domain. Although it is often implemented to develop standardization practices, create efficient processes, and therefore safe costs, the experts explained that this not necessarily the main goal. For example, they described that their COE have the goals to build better customer experience and relationship, support the whole industry, supply the company with diversification and new business model thinking, or harmonize processes around the various locations and areas. One expert mentioned:

"...the reason why we did it is to make sure that the company is not just looking down, but it's also looking up long term and people who have the time, the capacity I would say almost the luxury to sit down to think, to reflect, to formalize and to give ideas." (Expert 3)

Several COEs start with the goal to standardize and align the different subsidiaries and specialize during the process on further improvements and start follow up projects. The diverse COE types and purposes examined in this study are displayed in table 5.

The reasoning behind choosing a COE to execute tasks vary per organization. Firstly,

experts explained that a dedicated team is useful to reach collaboration between global teams and therefore a COE fits the need to supply as an independent connector. Moreover, forming an internal team of experts dedicated to find solutions on a global level is often more convenient and effective than hiring a consultant and needing to outsource this important task since employees know the organization and have already an established network. However, it was also pointed out that hiring a consultant to support the team can be appropriate if there are challenges which the team is not prepared for to save time and costs.

The team that forms a COE typically consists out of several different parties and employees. Throughout the expert interviews, the number of people involved internally in the COE were between 4 and 20. Towards the team formation, one expert noted that: "You have to have a good mixture of SMEs, subject matter experts and people that are back office and again not always having all the expertise so to say you don't want to just have 10 experts on the team, that won't work either." (Expert 1)

At WorldTech, it consists out of nine payroll managers across Germany and four system experts from Romania for the two information systems used. While all of them are in the COE and per definition experts, not all of them consider themselves educated enough to be excellent and an expert in their position. One employee mentioned:

"So I'm basically just growing. That's also what the manager always says: you'll become experts at some point, you're well on your way there." (Employee 2)

Only one of the employees interviewed considered themselves as experienced enough to hold this position confidently. Towards that, it was also said: "...there's also not someone that has all aspects of it combined where you can trust on." (Employee 5) indicating that the team is missing an expert who has full knowledge on the systems and the German legislation to act as a connector.

In contrast, the experts stated that their team only consists out of specialists that have experience for a long timeframe and often are also high in the hierarchy. For example, one

specialist stated that their colleagues in the COE are all above 40 years old and some have around 30 years of experience and a rank of "Chief technology innovation officer" or "Head of development" in order to be experienced enough and able to talk to the high-stake customers on equal footing. Further, they point out that members need a certain robustness and younger employees with less experience are not aspired. Sometimes, also people outside the organization are invited to the COE to challenge the team and bring external expertise for the formation:

"So I hire people from the outside world, so this gives you first combination of inside versus outside. So the reason is at the same time to benefit from a vision of the outside, and also to benefit from having people who know how to make it happen internally." (Expert 3)

Table 5COE Types and Purposes

Occurrence	Sector	COE Type	COE Purpose
Case Study	Technology	Focused COE	Align and standardize payroll processes for all entities in Germany. Offer solutions, support and training and terminate errors.
Expert 1	Logistics	Focused COE	Central point of the company and offering advice and improvement to solve problems collectively within and across teams. Moreover, ensures customer satisfaction and overall operational efficiency.
Expert 2	Chemicals	Focused COE	Provide best practices and offer consulting and advice for efficiency in operations. Also, improving international communication and cooperation between the diverse, international units of the company.
Expert 3	Engine lubricants	Focused COE	Generate ideas for business opportunities and support market growth. Firstly, the aim was to standardize and share best practices and knowledge, aligning several units and connecting their shared goals

and problems.

Expert 4	Technology (Rail)	Virtual COE at a Non- Profit- Organization	Offer support for internal committees and improve worldwide standards in several sectors across 115 countries. The COE collaborates with multinational corporations around the world.
Expert 5	Aircraft and Space	Focused COE	Being a connector between different entities and experts, provide training, coaching, and offer problem solutions.

4.2 Challenges During the Establishment and Management of COEs

During this research, several challenges concerning the establishment and management of a COE were discovered. While numerous challenges found at WorldTech's COE overlap with the findings in literature and of the expert interviews, there are also findings unique to the case study. The first two segments show the comparable challenges while the following parts focus on detailed challenges found at the COE of WorldTech. The overall challenges are displayed in Table 6.

4.2.1. Global Alignment of different Time Zones, Working Cultures, and Languages

The first and presumably most apparent finding mentioned by the experts and WorldTech employees is that aligning standpoints and departments across the globe is a difficult process due to the fact that each country has different time zones, working cultures, and languages. Thus, the collaboration and standardization procedure on such a global level is not just difficult because of driving transformation but also because of the basic conditions given. Besides, one expert and several employees mentioned that the language barrier can interfere with clear and precise communication and lead to misunderstandings regarding the

goals or processes inside and outside the COE. One employee specified that: "...we also have team meetings where we talk mainly in English and or sometimes in German and for...People who don't speak German have to translate and that's always problematic because information can sometimes get lost in a translation like that." (Employee 1) Moreover, it was stated that: "The minority is always taken into consideration. And then you apologize for switching to German." (Employee 6) and further noted: "There are a lot of terms used here for the same thing since it was not agreed on a wording." (Employee 6)

Even though it is an American corporation, the communication between a few German employees and the Romanian team is challenging since some employees are not able to speak English. Towards that, a Romanian employee said: "I'm supporting a lot of the Germans because they have the same questions like me and I'm receiving the information. I'm going back to them and give them the information because from the German part my colleague doesn't speak English" (Employee 3)

Nevertheless, some Romanian employees speak German, but their language skills are not always sufficient enough for some complex issues to be solved. This leads to misunderstandings and time-consuming task management. Especially towards the HR related vocabulary it was said that: "...of course it's really vocabulary that is actually accounting-related and that you don't actually use in everyday life. And getting that across in English the way you mean it is of course often difficult and then it is sometimes understood differently." (Employee 2)

On the other side, a few Romanian team members stated that the German employees ignored emails written in English in the past and the communication between these departments has been improved since the creation of the COE. However, most employees state that the language barrier is a minor issue, and the team collaborates well together even though misunderstandings can occur, or translations are needed.

4.2.2. COE Launch, Internal Resistance and Top Management Support

With regard to challenges surrounding communication, several employees and all experts mentioned that if the mission and vision are not conveyed to stakeholders and employees, the COE will encounter internal and external issues. Specifically mentioned by one expert and a pressing issue in the analyzed WorldTech COE is that the launch of the formation and expressing the tasks and goals during this time is a challenge of its own. This is due to the fact that the first impressions and expectations count and if there is not enough transparent information, it will launch with concerns. In addition to that, several experts mentioned that this challenge gets more complex if the executives and upper management do not support the unit sufficiently.

As a matter of fact, this was also prominently mentioned by the employees of WorldTech. Several managers and employees explained that the COE was not officially supported and launched with the higher executives' backing. Even the employees in the COE formation were not aware that they were part of a COE because it was not defined to them. They believed that they were in the newly created team of the COE manager, knowing that the goal is to collaboratively standardize and solve issues for HR but not that this is called a COE. When they received the invite for this case study with the title "COE Interview" they were confused about what this term meant, and some noted that they were afraid of not being able to respond sufficiently to the questions. In eight out of nine interviews, the term COE was clarified by the interviewer either during the interrogation or before. Hence, the higher levels did officially launch the COE as an influential unit while giving the leader and their team the authority to lead the change. Moreover, this resulted in the outcome that this formation is not taken seriously by all internal levels and some even express their resistance towards it.

Primarily, no clear definition of the standing and power defined by the higher levels led to undefined obligations and caused issues in the hierarchy levels, such as not knowing if the manager of the formation is a technical or disciplinary superior. Likewise, the COE formation can lead to middle managers losing their power or status in the hierarchy because of the anticipated change. This was specified by one expert and is also a finding at WorldTech's COE. The expert stressed that these types of middle managers can be the "enemy" of the COE formation and even try to block the communication processes between the COE and the executives or sabotage the project. The so-called "Army of Clay" is problematic to deal with since the COE needs to build a relationship with them while trying to circumambulate their fright of losing authority and power. Moreover, three employees specified that managers in the Army of Clay occasionally give their subordinates tasks that do not align with the processes introduced by the COE. This leads to confusion and disrupts the process of change which was stated as: "Certain employees are right in between. Well, ...the COE manager wants something, the other manager wants something and you just can't make any progress because you don't have the capacity. The COE manager says okay, the employee should only do that, but the other person then gives the employee completely different tasks." (Employee 8)

Concerning this, an expert stated that the COE nevertheless needs to collaborate with these middle managers while they attempt to sabotage the progress: "So yeah, it's a tricky because you'll have to build those relationships with the Clay Army and try to get away with it. Sometimes it works, sometimes it doesn't, but these are really people only care about their status so much and you will see it in so many other companies." (Expert 5)

Subsequently, this expert highlighted that another challenge of leading a COE at a multinational corporation is the game of politics you need to be involved in and master.

"You have to be good at the politics game. Honestly, a lot because you're in the center, being in the center has good parts because you have the entire view, but you're also a

place where they can hammer,... it's easy to hammer somewhere central. So the game of politics is a good one. You have to be good at playing." (Expert 5)

Not only does the "Army of Clay" hold concerns about the COE but also employees inside the corporation who do not want to change their way of working, which was mentioned by individuals of the WorldTech sample and two experts. Especially individuals who used the same procedures and systems for multiple years dislike the change since they do not see the need for adjustments. This group expressed that the COE should focus on locations where processes are done incorrectly and not on processes that have been going well for years. Moreover, they state to not been properly involved in the planning of the COE and were not asked about their perspective on it.

Further, even in the team of the COE are employees that do not align completely with the anticipated change and oppose towards it. While they see a need for it in some areas, they do not align with the complete proposal. Hence WorldTech's COE Team consist out of two groups; members that are fully committed to the strategy and members that are not entirely committed towards it.

4.2.3. Team related Challenges faced at WorldTech's COE

The following sections will discuss the finding of two internal opposing groups in WorldTech's COE Team and emphasizes on the different viewpoints.

Fluctuating team composition, distinct collaboration and commitment towards change

Several challenges arise when building the COE team and working together. While it is of utmost importance to find fitting experts and managers to work in the formation, it is a challenge in the WorldTech corporation and also experts' organizations to fill the COE Team in a short timeframe. Finding and recruiting individuals, who have an adequate network inside the company and the needed hard and soft skills, is fundamental but time-consuming. Since

being in the COE Team is a responsibility that is often additional to the positions of employees, their commitment toward it can change after a while which causes fluctuations inside the team. While this was mentioned by experts, it is also a finding at the WorldTech COE which encountered several occasions were the team composition changed. Moreover, the COE Team at WorldTech never had the chance to meet in real life, since their team building event got cancelled. Hence, they collaborate for several months together without the chance to interact outside of the daily teamwork which is weakening their sense of belonging. These fluctuations and missing team events delayed the COEs process, caused chaos, and disturbed the team and their improvement.

After successfully forming a team, the challenge of joining the experts and managers, especially in hindsight of tasks, procedures and communication processes emerged. Matching and aligning tasks to the right individuals based on their repertoire while keeping track of their process and overseeing the formation is a challenge that the leader of the COE has to tackle which was emphasized by experts.

The internal COE team perception about the anticipated change and team composition is diverse. Most employees inside WorldTechs COE are eager to adapt their work to the new techniques, work together in a team to find solutions, and see the COE as necessary and useful. Several participants noted that the COE changes are positive, they experience increased efficiency and the collaboration with Romanian employees is beneficial. One employee stated that "Any change is more than welcomed" (Employee 3). Moreover, combining several payroll managers into one team is viewed as positive because employees do not have to solve issues alone anymore which was beforehand a challenge. Additionally, they conveyed to be well informed about the current plan and new hierarchy and pleased to work in this new constellation under the operations manager. Nevertheless, they pointed out that receiving fixed KPIs with timeframes would be beneficial. This group also viewed the leading position of the COE as competent and qualified as well as supportive and reinforcing.

Regarding this, one COE member stated that: "...she is capable to reply to everything that we ask... I have never felt that I cannot ask something or I will bother her". (Employee 7)

Someone else in the team remarked: "If I have a problem, I contact the COE manager and she always finds a solution." (Employee 8)

Counter to this, a fraction of the sample perceives the COE and the leadership involved differently and is not fully committed to the current processes. Firstly, they state that they like the idea of the operations manager who connects the payroll managers in a formation but dislike how this process and the COE was introduced. The information, that changes will occur was said during meetings and the final information was over mail. Nevertheless, they expected a status inspection of each unit on its own to determine separate standings and also an official launch of the COE, including a clarification of the new hierarchy between the COE manager and the current middle managers. Moreover, they do not completely agree with the changes since they perceive that the focus of the COE should be on the units which struggle and for each location handled differently. Towards that, it was said that: "In our opinion, our data material is great and we have to now deal with really outrageous things that don't work at other locations. And I don't think that's a good thing. It's very time-consuming, there are also a lot of teams meetings, interviews, and a lot of intervention in functioning processes in order to change something. And we all don't think that's a good thing." (Employee 6)

Particularly remarkable is that this group states that many of the introduced changes are impacting their work negatively and they would prefer to work distinctively. While they point out that the Romanian experts are trying their best and are eager to collaborate, their knowledge is asserted as not sufficiently fitting for this collaboration due to missing knowledge of German legislations. Moreover, they dislike that they are not in complete charge of their own data anymore since team members can intervene and the system does not provide an overview that changes are made. Further, they want to be included in the decision-making process regarding their way of working since they are the ones that have to adapt and

do the tasks for their locality.

Besides, they pointed out that they are not pleased with the current leadership since they were not informed about every part of the future planning and received some information about coming changes though coincidence which they expected to receive directly by the leader. The following part will discuss further feedback towards internal and external communication processes and examine the different viewpoints.

Diverse internal communication processes

The communication processes inside the team can be separated in two parts: communication during team meetings and communication during daily collaboration.

Employees rated the overall communication during team meetings between 5 and 9 on a scale of 1 to 10. The reasoning is that the information quality and alignment could be improved through a fixed agenda with relevant discussion points, receiving the agenda information beforehand and setting a shorter duration of meetings. One employee also mentioned that two short meetings in the beginning and end of the week would be useful for the progress. Three employees noted that there is periodically confusion inside the team about tasks or processes and terms have to be defined and explained further. While it is necessary to align the meaning of concepts inside the team, it bothers a small fraction of members who spend a long time in meetings or during teamwork to clarify "common knowledge". Next to that, specific information about relevant KPIs is missing as well as clear guidelines and ways of working procedures. This was stated as important, to read how processes should be done correctly and to integrate new members easily. Additionally, several members emphasized the significance of showing the process of each member and their tasks and how that relates to the work of others.

The rating of communication during daily collaboration differs per individual and location. Returning to the two subgroups, it was indicated that the committed group has established frequent communication patterns among themselves and is satisfied with the

exchange. One member even rated the communication as a 10 out of 10. However, some employees describe the communication between the committed and not committed group as difficult, rating it with a 3 till 4 out of 10.

Towards that, the resistant group stated that the whole collaboration is time-consuming and requires some sort of "ping-pong" of sharing information back and forth in order to solve daily problems. They gave the overall communication a 5 out of 10, stating that it is lengthy and includes several steps till the final solution is found. However, the main concern is that the amount of information shared by the leading position is deficient and they request clearer and uniform communication about the changes planned and a reasoning for it.

Several challenges which interrupt the teamwork and communication processes were mentioned besides and are discussed in the following segment.

Missing resources and organizational identity

During the establishment and collaboration of WorldTech's COE, numerous challenges were disclosed that impact the collaboration.

One employee stated that they and their team did not receive training for a certain system because it will be outsourced to Romania, but they were not informed directly about this change and realized it through a coincidence.

Further, members of the COE do not get any additional bonus for their duties and all of them hold this position while also working in their "normal" payroll or systems-related job. It was mentioned to be stressful, due to the fact that managing the tasks for the COE while reaching their individual job-related monthly goals is demanding.

Lastly, the issue of organizational identity was mentioned since the sites belong to the company WorldTech but kept their old company name and work in their old patterns and ways. This is setting members apart and does not create a feeling of unity.

Concluding this section with an overall matter that WorldTech's COE and the experts COEs had and have to endure: People expect fast outcomes but change and involved

processes are complicated and take time. Discussing this, an expert identified that: "The difficulty with the center of excellence is you don't have immediate wins,..." (Expert 3) and the years without great progress are frustrating.

 Table 6

 Challenges and consequences mentioned by WorldTech's employees and experts

Challenge	Consequence
Different time zones, working cultures, and languages	Scheduling issues, language barrier and followed misunderstandings
No top-level support	Missing support and authority
Fluctuating COE team	Disturbance of processes and difficulties to reach targets
Internal resistance by middle management	Disturbance of overall processes
Internal resistance by employees	Conflict and friction inside the team
Distinct commitment towards change	Ineffective collaboration among the team
Missing definition of KPIs and frameworks	Confusion regarding overall goals and tasks
Lengthy communication processes	Ineffective problem solving
Missing organizational identity	Decreased employee engagement

4.3 Success Factors of COEs

After stating the challenges encountered by WorldTech's employees and experts, it is fundamental to highlight the factors and tips that experts concluded from their profession of directing a successful COE. This study distinguishes between two types of success factors. Firstly, factors that depends on the company and its association with the COE, and secondly, factors which depend on the leadership function of the formation.

4.3.1 External Success Factors

Top level support

Throughout the interviews, several experts stressed the importance of top-level support during the establishment and work of the COE for two different reasons. Firstly, the COE needs the support of the leaders in the company to be respected, taken seriously, and approved as in charge of global change. If the formation is not believed to be in this position, the outcome is that processes can not be adapted and changed due to the opposition of the different stakeholders. In regard to that, one expert said that "...if you do not have the support from the different business groups or the various functions, you can design whatever process you want. So in the end, if you do not have any support, yeah, you cannot do anything." (Expert 2)

Likewise, two experts believed that the company and executive positions must support the COE formation with resources and invest in their procedure. Due to economic instabilities, it is difficult to get authorization for larger projects which was commented by one expert as: "...you also need to have quite high budget, especially now where the economy is not really going well, it's quite hard to get the approval." (Expert 2)

Without fitting funding, the COE holds a small range of options to proceed with the anticipated change and can not advance as strongly as desired. The funding can be used to offer particular training, hire a consultant or additional employees and acquire extra resources to assist or reinforce the COE team by giving a bonus for being part of the center. Hence, top-level support is needed to receive the trust and needed authority to get managers towards collaboration and support the process with funding.

Fitting COE leader

Four essential points in regards of the leader of a COE were mentioned during the

interviews. Firstly, one expert accentuated that a company should not select a manager based on the fact that they have worked for a long time in the corporation but based on their experience, network and skills. Secondly, another expert added that the leader chosen must be highly resistant to stress and cope well with it since this position, of aligning several locations worldwide and dealing with specific stakeholders, demands, needs, and cultures is complex and stressful. Towards that one expert noted: "In addition to stress resistance and stamina, you also have to have a certain amount of life experience in dealing with these very different characters."(Expert 4)

Another useful characteristic pointed out by two experts is to be open-minded to ideas and changes in order to lead the formation well. Also, two professionals consider executives with soft skills regarding human interaction and interpersonal understanding as particularly crucial for success and being in charge of such a unit. Towards the question which skills are required in order to lead a COE it was said: "Honestly, Soft Skills. A lot of good interpersonal skills, which means you have to be good with people pretty much really good with people like you understand them, you know, their challenges."(Expert 5)

Lastly, two experts noted that the leader should be an extrovert who is standing for the COE and has the professional attitude to support the process with his appearance. "It's quite good if you are at least some kind of extrovert and you can present the center of excellence well and are not afraid in contacting new people." (Expert 2) and "...that's something that's important as well that the person leading a team is a good customer facing person."(Expert 1)

External resources and support

To support the COE formation further in their process, three experts mentioned that if the COE is created from scratch, a consultant for that field should be hired to support the management because it would be time- and resource-consuming. Towards that it was

specified: "Don't try to go alone and reinvent the wheel. There's no point to put so much of your energy to reinvent basics like there are industry best practices out there and people where it's their core of expertise.... Most of people in centers of excellence, they're not super expert in that you know because usually they come from different areas in the company, right?" (Expert 5)

Notably, to exchange best practices across all standpoints it is also advised to connect with existing COEs from the company to exchange practice knowledge and receive support.

Moreover, the incorporation of integrated management systems and artificial intelligence tools is advised.

4.3.2 Internal Success Factors

Reaching the factors that can be controlled and maintained by the leader of the COE and are dependent on their leadership, employee selection, engagement, and dedication to the cause. These results can be sorted into five different categories starting with the management of standardization and change, introduction of guidelines and frameworks, the employment of a diverse and skilled team as well as the need to foster effective internal and external communication as well as the introduction of frequent update meetings to deal with resistance.

Management of Standardization and Change

During the alignment and standardization procedure, the leader of the COE must have precise techniques on how to manage the operation. Regarding this, experts mentioned that leaders should visit the different facilities first to get an overview of the real-life situation in order to be able to assess the current status and make decisions on the best practices needed. Following this, two things should be taken into consideration during decision-making. Firstly, decisions should not be rushed and preferably thought through over a longer period because

"...sometimes when you rush it, you don't see the full picture." (Expert 3)

Similarly, it was declared that the determinations should be made based on facts.

Concerning this, the expert commented: "So it means you need to have strong facts backing what you do and what you want to implement to justify also the reason for the decision and to materialize also the scale of the opportunity because now we are a company which is close to €1 billion of turnover" and "So you have to be very careful on the time of decision, the time of implementation on the resources you need to this kind of links to my second learning, which is to have dedicated resources." (Expert 3)

Additionally, this expert advised to change things one by one at a time, since too many changes might overwhelm the processes that need to happen parallel to the change: "You don't go big enough and you stress the organization too much that it becomes counterproductive because everyone is frustrated that they have to tackle both the core business and the new diversification venture." (Expert 3)

Introduce guidelines and frameworks

Several Experts recommended to create guidelines that specify the operation and its goals to answers questions such as: "What is it we want to reach? How do we do it? What are the tools? What are between brackets are deliverables? What do we focus on? The different process tools? Ways of working attitudes?" (Expert 5)

Clear frameworks support the change process and collaboration from the start and provides the needed information to the team and executives which builds a strong base for everyone to work on. Besides, the content of these guidelines should be communicated during the process of development and updates should be regularly discussed.

Employ a diverse and skilled team

During the selection process of the right members for the COE team, all experts to

build the team according to the purposes and prioritization of the COE. Particularly towards the skillset needed in the establishing process it was indicated that: "...I'm somebody who can do back-office project management and the expert portion. So if you get an expert that can do those things, they can carry the team until it can be built up and have the project manager, and the back office people. "(Expert 1)

Moreover, the right constellation of experts and back office managers is a crucial factor which was pointed out as: "..., the team should consist of a good balance of experts, that can focus on making sure the formation is going into the right direction, provide trainings and resources as well as project managers that take care of the back office work." (Expert 1)

Especially since regulations differ per region and extra support in global operations is crucial, one expert acknowledged: "...having people within the region being part in helping to lead that team, whether in a team leader or supervisory role because they can also connect and also know some of the things that are local such as rules and regulations. So somebody needs to understand that and you need a diverse group of people." (Expert 1)

Experts inside the team should spend their time focusing on the issues rather than doing back-office tasks which reinforces the change process. Similarly, mutual trust inside the team is needed in order to succeed since the distinct experts have to join forces which is commented by one expert as: "And so we absolutely have to trust each other, which is also why I tried also to hire people who are already in the organization."(Expert 3)

Associated with the importance of trust, another expert noted that commitment plays a crucial role since COE members have to be committed to the cause.

Foster effective internal and external communication

Considering the importance of communication during this process, many success factors were named in sight of this aspect from an internal and external viewpoint.

Towards the external communication, setting realistic expectations by not overpromising to the top-level or stakeholders is essential and was highlighted during the interviews. Towards that one leader accentuated: "...don't overpromise to management or to the customer. Keep it real. Make sure you don't say: Oh yeah, we'll have everything up and running. We'll have a playbook. We'll have standards across the seven different sites globally. No, it's just not possible quickly unless you just throw a bunch of resources at it, but then it won't have the quality that it would need." (Expert 1)

Likewise, one expert stated that "communication is the key" and necessary for the commitment of stakeholders and optimal progress, stating: "You really need to involve the key stakeholders and when all people are on board be able to execute your initiatives." (Expert 2)

In fact, another expert advised to share the goals for the first 6 months, 12 months, and long-term plans to induce clarification and avoid misunderstandings. Regarding this, sharing updates and advancement with stakeholders is just as important throughout the years of collaboration. Overall, the aspect of communication is pointed out by the whole sample of experts and they indicated several times, that communication measures success. If people and partners across diverse standpoints communicate frequently, it is a prominent sign of going in the right direction.

Introduce frequent update meetings and solutions to deal with resistance

On the subject of communication, experts pointed out that having frequent meetings to discuss updates and coming changes is needed to succeed with a COE. Engaging stakeholders in meetings to discuss and exchange practical implications, problems, or questions forms the basis for aligning standpoints. Moreover, experts recommend implementing robust communication systems and holding biweekly or monthly update meetings with all involved parties.

Including stakeholders and clearly explaining the necessity of certain measures is

emphasized as vital. When stakeholders and employees resist the anticipated changes, it becomes even more important to articulate the intent and demonstrate the rationale behind the decisions. Additionally, three experts advise remaining steadfast in your plans despite non-engaging stakeholders' disagreements, ensuring that their resistance does not disrupts the COE's progress. Towards that, one expert stated: "Don't let people bring you down because then your getting pushed back." (Expert 2)

In conclusion, the factors and facets of the leader of a COE formation are equally important as the factors and facets regarding the team that joins forces from several professions, backgrounds, and cultures. The success of the COE is strongly correlated to both and especially on their communication.

Table 8 *Internal and external success factors for COEs*

Success factor	Implementation or outcome
Top level support	Approval and authority to change processes with resource backing.
Fitting COE leader	Provides fitting decision making and supports transformation. Needs to have experience, a suitable network, appropriate skills, is extroverted and open-minded.
External resources and support	Work with a consultant if COE is created from scratch and connect with existing COEs.
Management of standardization and change	Get first-hand overview of current state, take decisions based on facts, introduce change from time to time.
Introduce guidelines and frameworks	Specify the operation and its goals to build a strong base for change. Communicate and update procedures frequently.
Employ a diverse and skilled team	Employ a good balance of experts and project managers with suitable skills and regional knowledge. Trust and commitment are essential for effective collaboration.

Foster effective internal and external communication	Set realistic expectations for stakeholders, communicate about goals and share advancements.
Introduce frequent update meetings and solutions to deal with resistance	Hold biweekly or weekly update meetings and engage individuals that are resistant to the anticipated change to solve issues.

5.0 DISCUSSION

The purpose of this study was to examine the establishment and management of a COE formation at a large, multinational corporation referred to as "WorldTech", and reveal their status and challenges through data collected within employee interviews. Further, five experts which lead a successful COE for several years were interviewed to gain insights into their challenges and success factors and offer solutions and practical instructions.

The objective is presented by the following research question of this investigation:

"What are the primary challenges faced by the Center of Excellence team of WorldTech, and
what strategies can be implemented to address these challenges effectively?"

5.1. Main Findings

Challenges during the establishment and management of WorldTech's COE

Several challenges were identified during the qualitative research study. Firstly, there are two obstacles regarding the alignment of international divisions and their communication processes. The global differences between several countries impede the procedure of aligning standpoints and departments due to varying time zones, working cultures, and languages. The administration of working together is complicated and misunderstandings can arise if the communication is not clear and precise.

Moreover, the findings show that the initial communication regarding WorldTech's COE's goals and tasks was insufficient, leading to confusion among employees. The lack of a clear, authoritative introduction of the COE resulted in resistance and misunderstanding about its role and objectives.

Furthermore, another significant challenge that stands out is the lack of explicit support from executives and upper management. Without this support, the COE struggles to gain the necessary authority and respect to drive change effectively. As a result of this, internal resistance from middle managers and other employees builds an influential obstacle. The fear of losing power or status led some managers to undermine the COE's efforts. The so-called "army of clay" phenomenon, where middle managers resist change to protect their positions, was particularly problematic.

Likewise, another obstacle is regarding the team composition and commitment of the team. Forming a COE team with the right mix of skills and commitment was problematic. The additional responsibilities of COE roles, combined with existing job functions, led to fluctuating commitment levels and team instability. Further, the team does not purely consist of well-established experts and many of them consider themselves as a team of learning experts that will reach the expert status in a few years.

Lastly, a few practical and technical issues play a role in undermining the COE formation's progress. Specific technical challenges, such as the integration of different payroll systems across locations, added to the complexity. The lack of expertise and training in German legislation among some team members further exacerbated these issues.

Additionally, the formation needs to manually clear datasets at the moment that were not well maintained to be able to start with alignment.

Critical success factors derived from COE experts

The interviewed experts shared several critical success factors which are important during the establishment and management of a COE. First and foremost, enhancing communication is a "key" to success. Implementing suited communication systems and holding regular biweekly or monthly update meetings with all parties is therefore strongly advised. Clear, consistent communication helps ensure that all team members and stakeholders are aligned and informed. Besides, engaging stakeholders by explaining the necessity of certain measures and the overall intent behind the changes is vital. This helps to decrease resistance and fosters a better understanding of the COE's goals.

Subsequently, securing explicit support and endorsement from top-level management is a necessity. This not only provides the COE with the required authority but also signals to all employees the importance and legitimacy of the COE's work. On top of that, the executives offer sufficient resources and funding to support the COE's initiatives. This includes providing training, hiring consultants for specialized tasks, and offering incentives to team members.

Following this, another success factor, and presumably a vital one is to build the right team. COE directors should carefully select team members based on their expertise, network skills, and commitment. Ensure a good balance of experienced experts and capable project managers. Furthermore, another value is addressing internal resistance by building trust and demonstrating the benefits of the COE's initiatives. This means, involving resistant stakeholders in the process to help them see the value and reduce their fear of losing power.

To finish, this study examined some practical solutions for leading a successful COE. Developing detailed guidelines and project plans that outline the COE's goals, processes, and expected outcomes is stated to be effective. This provides clear direction for all team members and helps maintain focus and alignment. In addition, utilizing best practices and lessons learned from other successful COEs can be a powerful strategy. Exchanging

knowledge with other COEs within the organization in order to benefit from their experiences and solutions.

5.2 Practical Implications

The findings of this study offer several practical implications for the WorldTech case study and literature regarding the establishment and management of COEs in multinational enterprises. The following section will reflect on the main recommendations towards the WorldTech case, the scientific and theoretical implications of this study and the research limitations.

5.2.1. Recommendations for WorldTech based on Expert Findings and Scientific Research

Recommendations for resolving internal resistance

The current COE consists of a team that can be divided into a committed group and a not committed group. The outcomes of the WorldTech member's interviews were significantly different which was showcased by their way of perceiving the communication inside the team, their satisfaction with the progress and collaboration, the number of issues named, and their overall stance towards the COE formation and team. Several participants hinted, that the team does not consist purely of members who want to participate and noted that past members left months earlier or showed resistance from the start. The main issue is that part of the team wants to collaborate, identifies with the team, and is eager to work on the goals while the other part does not see the change as necessary at their location and does not see much positive progress, instead, they view the formation as negatively impacting their work.

To solve this issue, experts express that the need for change, the KPIs, the issues and the overall plan have to be written out and discussed in the team, including the stakeholders

and the top management to align all parties and work towards a shared vision, goal alignment, and organizational identity. Further, experts stress the need for involvement of top level management and their open support towards the goals of the unit, communicating with the resistant group about the objectives of the COE and asking specifically what they perceive that results in resistance to try to find collaborative solutions.

Also, scientific research supports these claims and highlights the importance of top management support (Idogawa et al., 2023), the presentation of change and the orientation towards the employees in open discourse as well as the instruction of the benefits of transformation (Hay & Härtel, 2011). Overall, the involvement of employees in the design of change management is known to reduce resistance and is crucial during the process.

Interviewed experts and also literature stress that direct communication and discourse is "key" (Ojukwu, 2020; Pieterse et al., 2012; Simoes & Esposito, 2014).

Recommendations for improved organizational identity

Also, the organizational identity has to be improved since many divisions still act as if they are a middle-managed company and not part of a global multinational. The different locations belonging to WorldTech kept their old name combined with "WorldTech" as an authority name and employees struggle to identify themselves fully with the American corporation's identity. This is demonstrated by employees that requested the Romanian team to speak German and even refused to answer English emails before the COE was introduced while they are part of an American company, which implies English speaking on a global level. Since developing a strong organizational identity and a sense of unity among COE team members is crucial, experts' advice to foster regular team meetings and identify shared goals to strengthen the overall conformity.

Moreover, experts and literature stress the importance of defining core values and the mission and vision of the team to strengthen the improvement (Marginson, 2002; Ravasi,

2016). Across this process, the leader has to further make use of their sensegiving function and actively encourage the envisioned identity (Van Knippenberg, 2016). Also, experts and literature underline employee engagement and consistent internal and external communication as required to build a strong internal corporate relationship (Dhalla, 2007).

Lastly, it is advised to support the sense of community and identity through team building activities (Ravasi, 2016). In addition to that, fostering commitment and motivation in the team are elements that ensure that team members identity with the COE and support the success of the unit. Experts suggest that this can be achieved through recognition, encouragement, and building a positive, collaborative work atmosphere.

5.2.2. Reflection on Scientific Contribution and Theoretical Implications

Overall, the findings contain significant theoretical implications for the understanding of COEs at global corporations. The identified challenges and strategies align with the literature reviewed regarding change management and organizational development while strengthening the necessity that change units, especially COEs, require effective communication, leadership, a clear mission and vision and stakeholder engagement to operate successful change. Precisely the mentioned complexity of change and human reaction towards it (Erwin & Garman, 2010) and the need of effective internal communication (Giribaldi et al., 2024), can be noticed through the findings and related to literature regarding change management. Also, the structures and main characteristics of COEs found align and contribute to existing literature (Hellström, 2018; Moore & Birkinshaw, 1998). The discussed literature regarding the concepts of mission and vision, sensemaking and sensegiving during organizational change, communication and collaboration during organizational change and role and task alignment are traceable in the findings and important factors that impact COE formations.

In addition to that, this study contributes to the limited amount of scientific research regarding COEs in the business context and provides insights into COEs challenges and success factors. The novelty of this research is the approach of combining a case study with expert insights and the examination of specific challenges and critical success factors of COEs at multinational corporations.

5.2.3. Reflection on Methods and Quality of Argumentation

Utilizing the methodological approach of qualitative, semi-structured interviews served to the study's objectives since it allowed an in-depth investigation of participants' backgrounds, knowledge and perspectives. Moreover, purposive sampling ensured that the participants held relevant knowledge and had enough experience with COEs, improving the relevance and richness of the data collected. Additionally, making use of the iterative process to adjust the interview guide based on the first findings helped to refine the focus and improve the quality of the following interviews. Further, using a coding software enabled a methodical analysis of the data, showcasing the key themes and patterns which were then identified and interpreted.

Overall, the study findings are strengthened by the alignment observable between the outcomes of the case study and the expert interviews. The continuity regarding the challenges mentioned and strategies which got recommended across the various sources enhances the credibility and reliability of the conclusions. For further authenticity, different direct quotes from participants and experts provide concrete examples for the identified issues and solutions. Toward credibility, the methodological approach of using purposive sampling, semi-structured interviews, and an in-depth data analysis showcases that the findings are well-grounded and reflect the experiences and insights of the distinct participants. Lastly, the process of conducting, transcribing, and analyzing interview transcriptions reinforces the overall quality of the study and research conducted.

5.3 Research Limitations

When reviewing the findings, several research limitations should be taken into account. Primarily, the sample composition of the experts and employees of WorldTech can be considered as a limitation. The representatives of WorldTech consists mostly of employees who have a positive attitude towards the COE. Employees with a negative perspective towards the unit and the anticipated changes mostly refused to participate in the interviews and jointly gave their feedback to other participants who should speak in their name. A balanced sample for both groups could increase the quality of insights.

Besides, no expert from a COE in the HR area was interviewed since the invited experts declined. This lack of direct comparison may have resulted in less tailored findings. Additionally, one expert leads a COE with an unlike task than standardization, and one works for a non-profit organization that has a different structure than the corporations involved. Maybe the findings would have been more precise if the sample consisted of COE leaders from the same company structures and similar goals.

Moreover, the described findings are less detailed than desired, as some information would have compromised the anonymity of the employees interviewed inside the corporation. To protect the participants' identity, these findings were omitted. Moreover, the time of the research was limited by chaotic circumstances in the team composition of WorldTech's COE. Further, the external communication of managers inside the COE and their own teams could not be investigated, since the sample consisted out of payroll managers which do not lead a team themselves. Lastly, since WorldTech's COE is in its early stages, much of the knowledge shared by experts could not be directly linked to the case and was excluded, despite the findings being interesting.

6.0 CONCLUSIONS

This research study investigated the establishment and management of a Center of Excellence (COE) at a multinational corporation and constructed a comprehensive analysis including expert insights. The focus of the study was to present and compare challenges at the investigated COE and challenges mentioned by experts and additionally gain insights into critical success factors. Moreover, main characteristics regarding the structure of COEs were specified.

The findings identified challenges such as the alignment of processes, language barriers, securing top management support, and internal communication and collaboration. However, these challenges can be effectively addressed through leadership, strategic communication, and resource provision. Throughout the investigation, the essential role of top-level support is underscored to ensure the success of the COE and reduce change resistance. Moreover, internal and external communication is vital to facilitate adequate coordination and alignment of processes across distinct multinational divisions. This includes also the establishment of a clear vision and the need for a diverse team of experts and managers to improve the sense of direction and further the overall efficiency of the team.

Subsequently, this research provides valuable insights and practical recommendations that align with existing literature about change management and COEs. The practical insights gained by the case study and experts' experiences can be applied to similar change initiatives in other multinational corporations. Also, the findings of this study contribute to the limited literature on COEs in the business context and offer approaches for building and managing these units to achieve excellence and standardization in global corporations.

Future research should further develop and confirm these findings by investigating the success factors and challenges of COEs focusing on a balanced sample of COE sectors and

external viewpoints by involving more business stakeholders and external parties to gain added in-depth insights.

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8.0 APPENDIX

Appendix A - Interview questions COE Participants

1. Welcome participant

Hello, thank you for joining the interview today! How are you?

2. Ask for consent verbally

One form describes the purpose of this study and shows that you are voluntarily participating while the other gives me permission to record the session.

3. Ask participants for concerns

Before we start with the interview, do you have any questions or concerns? Additionally, I want to remind you that you can stop the study at any point or skip questions if you do not want to answer them.

Part 1: Exploring the social identity/organizational identity of the COE, trying to map participants' perceptions of: Who are we as a COE? Who do we think we should be? What are our goals? What is our shared vision? To which extent is there a sense of unity? etc.

General work questions

- 1. Could you provide an overview of your role and responsibilities at (Company)?
 - a. Where located?
 - b. How long in this position?
 - c. And before this?
- 2. Could you describe how a typical workday looks like for you?

Experience, knowledge and expectations regarding change management & COE

- 1. Do you have prior experience working in projects that involve change management? If so, could you provide details about your involvement?
- 2. Have you been involved in establishing or developing a COE in your previous roles? If yes, could you share insights into your role and responsibilities?
- 3. How would you describe the COE at (Company)?
 - a) How would you describe the goal of building the center of excellence at (Company)?
 - b) What are the main tasks of the center of excellence at "WorldTech"?
- 4. Do you feel well informed about the KPIs that are set?
- 5. What is your expectation of the outcome of the COE?
- 6. How do you typically address any questions or uncertainties you may have regarding the COE?
- 7. What do you think about the name "Center of Excellence?" Is it fitting?

Part 2: Exploring the manager's identity in the context of the COE, mapping: Their roles, responsibilities, tasks, what do they find important, etc.

Manager's identity and role in building the COE

- 1. What is your role in building the COE?
- 2. What are your tasks and responsibilities during this project?
- 3. What do you perceive as important for building the COE?
- 4. What do you think why you got positioned in this role?
- 5. Do you feel well prepared for this project?

Part 3: Manager's sensegiving function (to their own team) How aligned is their new role & main position? Is their Team involved in the COE? If yes, what is the team's role, mission and vision? What are their tasks? How do they receive support? How much is the COE thematized?

Role alignment (general position & COE position) & sensegiving with own Team

- 1. How does your new position during the creation of the COE align with your general position at "WorldTech"?
- 2. Which tasks specifically align well?
- 3. How many employees are you responsible for in your team?
- 4. Is your Team involved in the COE?

If yes:

- a. Which roles do they take on? What are their tasks?
- b. How do you provide information about the COE to your team?
- c. How do you support your team during their tasks?
- d. What are resources (financial, human, technological) which are available for your team?
- e. How does the COE project align with the mission and vision of your team?
- f. How will success be measured for this project?
- g. What are the next steps in the timeline for your team?

If not:

- a) Do you communicate with your team about the COE?
- b) If yes, what and why?

Part 4: (External & Internal) Communication in COE management Team, Teamwork and Commitment/Strategy. How do they perceive working together on this project?

Internal and External Communication of the Center of Excellence Team

- 1. How do you view the current communication? /How would you rate the current communication inside the team?
- 2. How would you rate the communication during the team meetings on a scale of 1 to 10? Explain your choice.
- 3. From your perspective, what opportunities do you see for enhancing the communication within the team?

4. In your view, how effective is the communication with external stakeholders currently? Are there any areas where you see potential for improvement in communication with external parties?

Teamwork

- 1. How would you describe the overall dynamics and collaboration within the team? What aspects are functioning effectively?
- 2. How is the COE working? + Reasons
- 3. Could you identify any specific challenges or obstacles the team has encountered while working together?
- 4. Have team members openly discussed these challenges, either in formal meetings or informal conversations? How was the communication about these issues facilitated?
- 5. From your perspective, how significant are these challenges in terms of their impact on team performance and project outcomes?

Commitment / Strategy

1. What overarching strategy or approach do you believe is most effective for achieving the goals of the COE?

We are now at the end of my questions. Is there anything you would like to add or ask?

We are now at the end of the interview, I would stop now the recording.



Thank you so much for your insights!

Appendix – A1 Interview questions Experts

1. Welcome participant

Hello, thank you for joining the interview today! How are you?

2. Ask for consent verbally

One form describes the purpose of this study and shows that you are voluntarily participating while the other gives me permission to record the session.

3. Ask participants for concerns

Before we start with the interview, do you have any questions or concerns?

Additionally, I want to remind you that you can stop the study at any point or skip questions if you do not want to answer them.

START: Expert interviews regarding successful establishments of COE's

Part 1: Background & Experience with COE Projects

- 1. Could you provide an overview of your professional background?
 - Previous jobs
 - Work experience
 - Current job
- 2. Could you describe your experience with COE projects?
 - Roles and responsibilities (How did you got this role?)
 - How many COE projects involved so far?

Part 2: Characteristics of COEs

- 1. What would you say are the typical reasons for organizations to establish a Center of Excellence?
- 2. What do you think about the name "Center of Excellence?" Is it fitting?
- 3. Is there a typical composition in terms of actors, skills and their roles and responsibilities?
- 4. What qualities and skills do you believe are crucial for a manager leading a COE initiative?
- 5. What aspects do you find crucial for effective teamwork in the COE?
- 6. What are the do's and don'ts in the beginning stage of the COE?
- 7. How do you measure the success of a COE?

Critical Incident Technique

'When thinking back about the Center of Excellence project you have been involved in so far, can you share with me a noteworthy incident which was either positive or negative in light of the success of the project?'

- What happened?
- Who (which roles) were involved? What did the actors do?
- What were the consequences?

Could you describe a critical moment when strategic changes were necessary for the COE's success?

- What changes did you implement?
- How did these changes impact the project?

Part 3: Recommendations for Future COE Projects

- 1. Based on your experience, what are the key lessons learned from past COE projects that could be beneficial for future initiatives?
- 2. Are there any tools, methodologies, or frameworks that you have found particularly effective in COE projects?
- 3. What key performance indicators (KPIs) would you recommend tracking?
- 4. To close, what would be the most important advice you would give to managers currently working on establishing or managing a COE?

We are now at the end of my questions. Is there anything you would like to add or ask?

We are now at the end of the interview, I would stop now the recording.



Thank you so much for your insights!

Appendix B – Ethical request

240875

Klocke, L. Janssen, S.

Galetzka, M.

Request nr: Researcher:

Supervisor: Reviewer:

Version:

1. START

240875 REQUEST FOR ETHICAL REVIEW Approved by commission

UNIVERSITY OF TWENTE.

1/8

A. TITLE AND CONTEXT OF THE RESEARCH PROJECT

1. What is the title of the research project? (max. 100 characters)

Leadership roles during the establishment of a Center of Excellence for HR at a MNC: A case study

2. In which context will you conduct this research?

Bachelor's Thesis

3. Date of the application

06-05-2024

5. Is this research project closely connected to a research project previously assessed by the BMS Ethics Committee?

B. CONTACT INFORMATION

6. Contact information for the lead researcher

6a. Initials:

6b. Surname:

6c. Education/Department (if applicable):

6d. Staff or Student number:

6e. Email address:

l.klocke@student.utwente.nl

6f. Telephone number (during the research project):

2024-05-08 16:42:59

Appendix C – Consent Form COE WorldTech

Informed Consent Form Please tick the appropriate boxes Taking part in the study No I have read and understood the study information or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction. I consent to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason. I understand that taking part in the study involves responding a few interview questions to give insights on research questions that focus on the creation and leading of a center of excellence and my role during such a project. I understand that an audio recording will be made for the purpose of transcribing the interview. The recordings and transcripts will be anonymous and deleted after the study. The researcher will only share summarized, overall findings of the study outcome without mentioning my name or any information that can lead to my identity. Use of the information in the study No I understand that information I provide will be used for the bachelor thesis "Perspectives on Establishing a Change Management Center of Excellence for HR at a Multinational Enterprise: A Case study." I understand that personal information collected about me, that can identify me, such as name, age, and working institution will not be shared beyond the researcher. I agree that my information can be quoted in research outputs but I will get asked in advance for consent. Consent to be Audio/video Recorded I agree to be audio recorded I understand that if for I do not want to continue I can leave at any time. Signatures Name of participant Signature Date I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting. Signature & Date Study contact details for further information: l.klocke@student.utwente.nl Luisa Klocke Study supervisor Dr. Suzanne Janssen S.janssen@utwente.nl

Appendix C1 – Consent Form Experts

Informed Consent Form		
Please tick the appropriate boxes		
Taking part in the study	Yes	No
I have read and understood the study information dated 28/05/2024, or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.		
I consent to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.		
I understand that taking part in the study involves responding a few interview questions to give insights on research questions that focus on the creation and leading a center of excellence and my role during such a project.	of	
I understand that an audio recording will be made for the purpose of transcribing the interview. The recordings and transcripts will be anonymous and deleted after the study. The researcher will only share summarized, overall findings of the study outcome without mentioning my name or any information that can lead to my identity.		
Use of the information in the study	Yes	No
I understand that information I provide will be used for the bachelor thesis 'Perspectives on Establishing a Center of Excellence at a Multinational Enterprise: A case study."		
I understand that personal information collected about me that can identify me, such as name, age, and working institution will not be shared beyond the researcher.		
I agree that my information can be quoted in research outputs but I will get asked in advance for consent.		
Consent to be Audio/video Recorded		
agree to be audio recorded		
understand that if for I do not want to continue I can leave at ny time.		[
Signatures		
Name of participant Signature Date		
I have accurately read out the information sheet to the potential participant and, to ability, ensured that the participant understands to what they are freely consenting.		f my
Signature & Date		
Study contact details for further information:		
l.klocke@student.utwente.nl		
Luisa Klocke		
Study supervisor Dr. Suzanne Janssen S.janssen@utwente.nl		

Appendix D Concepts/Words & Search log

Key concept	Related terms	Broader terms	Narrower terms
Center of excellence	Innovation Center Excellence Hub Knowledge Center Competency Center Resource Center	Training institute	Change management center of excellence
Engagement of managers	Managerial Involvement Leadership Participation Managerial Alignment	Managerial communication Performance management	Stakeholder Engagement
Change management	Organizational Change Change Leadership Change Process	Organizational Development Transformational change Change strategy Change implementation	Change planning and execution
Roles and Responsibilities	Commitment Job Descriptions Position Responsibilities Role expectations Task allocation Accountabilities Duties and Obligations	Organizational structure Workforce Management HR Management Talent Management	Role Specialization Individual responsibilities Project roles Functional responsibilities

Date (2024)	Database	Search string	Total hits	Remarks
05.03.	Google Scholar	"Multinational corporations" AND "Centers of excellence"	2960	2 relevant sources
05.03.	Google Scholar	("Multinational enterprises" OR "corporations" OR "global companies") AND "centers of excellence"	10200	8 relevant sources
08.03.	Wiley online library	"Multinational enterprises" AND "centers of excellence"	56	6 relevant sources

08.03	JSTOR	("Multinational enterprises" OR "corporations" OR "global companies") AND "centers of excellence"	718	5 relevant sources
31.03.	Google Scholar	"Organizational Change" AND "Employee resistance"	8190	5 relevant sources
31.03.	Google Scholar	"Benefits" AND "Standardization" AND "business"	904.000	>10 relevant sources
31.03.	JSTOR	"Organizational Change" AND "Employee resistance"	183	2 relevant sources
01.04.	Google Scholar	"Center of excellence" AND "employee resistance"	100	3 relevant sources
01.04.	Google Scholar	"Mission and Vision" AND "Change Management"	12600	1 relevant source
01.04.	Wiley Online	"Mission and Vision" AND "Change Management"	165	0 relevant sources
02.04.	JSTOR	"Mission and Vision" AND "Change Management"	81	1 relevant source
06.04.	Google Scholar	"Mission and Vision" AND "organizational impact"	721	3 relevant sources
06.04.	Google Scholar	("organizational change" OR "Center of Excellence") and "teamwork"	12800	6 relevant sources
08.04.	Google Scholar	"Center of excellence" AND "teamwork"	7810	(includes all kinds of COEs with educational and medical fields so not useful)

08.04.	Google Scholar	"Center of excellence" AND "communication"	115000	(includes all kinds of COEs with educational and medical fields so not useful)
08.04.	Google Scholar	"Center of excellence" AND "Multinational corporation" AND "communication"	487	3 useful articles but repetitive articles than in the other searches
08.04.	Google Scholar	"Center of excellence" AND ("global corporation" OR "multinational") AND "leadership"	5710	5 useful sources but again repetitive sources
12.04.	Google Scholar	"Center of excellence" AND ("global corporation" OR "multinational") AND "teamwork"	952	10 useful sources (some repetitive)
12.04.	Wiley online	"Center of excellence" AND ("global corporation" OR "multinational") AND "teamwork"	99	1 useful source
12.04.	JSTOR	"Center of excellence" AND ("global corporation" OR "multinational") AND "teamwork"	62	1 useful source
12.04.	Journal of	Center of	0	Why is there
12.04.	business Science Direct	excellence "Center of excellence" AND ("global corporation" OR "multinational") AND "teamwork"	91	nothing? No useful source

12.04	Caiana Dina	II Cantan of	1742	4 G.1
12.04.	Science Direct	"Center of excellence" AND "multinational"	1742	4 useful sources, many case studies but also many medical research papers
12.04.	Science Direct	"Center of excellence" AND ("multinational" OR "Global") AND "teamwork"	433	1 useful source, the rest about medical field
12.04.	Science Direct	"Center of excellence" AND "mission and vision"	82	All medical
13.04.	Scopus	"Center of Excellence"	6939	Only 372 in the business field filter, the rest is in medicine, engineering, biochemics and 780 in social science
13.04.	Scopus	"Center of Excellence" (with business filter)	372	All completely irrelevant and have nothing to do with global corporations
14.04.	Scopus	"Center of Excellence" AND "multinational corporation"	9	4 relevant sources
14.04.	Scopus	"Center of Excellence" AND "company"	92	0 relevant sources
14.04.	Scopus	"Change management" AND "teamwork"	60	6 relevant sources, highlight that communication is key
14.04.	Scopus	"Change management" AND "roles"	982	2 relevant sources
14.04.	Scopus	"Change management" AND "leadership"	935	>10 relevant articles
14.04	Google Scholar	"Center of Excellence" AND	16900	>10 relevant articles & many case studies

14.04.	Google Scholar	"Establishment" AND ("Company" OR "Multinational corporation") "Center of Excellence" AND "Establishment" AND ("Company" OR "Multinational corporation") AND "Challenges"	12700	The same articles than above (case studies)
14.04.	Google Scholar	"Center of Excellence" AND "Establishment" AND ("Company" OR "Multinational corporation") AND "Challenges" AND "Success factors"	941	No study that investigated success factors and challenges of a COE, only case studies which mention the words somewhere in the text
14.04.	Google Scholar	"Center of Excellence" AND "Establishment" AND ("Company" OR "Multinational corporation") AND "teamwork"	1790	3 relevant articles but all in the context of manufacturing
25.04.	Research gate	"Qualitative research" AND "Interviews"	Over 1700 pages (Does not show exact amount of articles)	> 10 relevant articles
26.04.	Google Scholar	"Organizational identity" AND "employee"	4300	>3 relevant sources
26.04.	Google Scholar	"Resistance" AND "Organizational Change"	223,000	>5 relevant sources