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Examining onboarding and employee engagement in field service teams

A case study of Europe and Africa area energy projects.

ABSTRACT:

This master thesis aims to provide novel theoretical knowledge in HR and people management processes in a high resource variability environment of highly skilled workers. Furthermore, the thesis aims to provide practical implications for managing and developing people resourcing practices in the above-mentioned context.

The theoretical framework of this study is built around three different constructs: human resourcing in projects, onboarding, and employee engagement. Study presents various kinds of approaches and models for all constructs in more detail. Research follows a qualitative research design. The data were collected via interviews with eight different persons from three different field service units located in Europe and Africa. From each field service unit, a manager and 1-2 employees were interviewed.

The case study makes visible the importance of the onboarding process for successful onboarding and work engagement. The lack of a proper onboarding process can lower the productivity, job satisfaction, and engagement of the employee. It also plays a crucial role in connecting new or new-to-role employees with their new work community. To train employees for new jobs, both managers and employees emphasized the on-the-job training method. It was seen as a valuable investment for future talent development. Communication and socialization were the key elements in successful projects, and they were examined to potentially improve employee engagement. Furthermore, the findings of this study highlight the importance of resource management strategies, employee experience initiatives, and feedback mechanisms in fostering a conducive work environment for field service engineers on energy projects. By addressing these key areas, companies can enhance employee satisfaction, productivity, and overall project outcomes.

KEYWORDS: Onboarding, employee engagement, training

TIIVISTELMÄ:

Tämän opinnäytetyön tavoitteena on tarjota uutta teoreettista tietoa HR- ja henkilöstöjohtamisprosesseista korkeasti koulutettujen työntekijöiden työympäristössä jossa on leimallista korkea henkilöstötarpeen vaihtelu. Lisäksi tavoitteena on tarjota käytännön johtopäätöksiä henkilöstöresurssien hallintaan sekä niiden kehittämiseen tässä kontekstissa.

Teoreettinen viitekehys koostuu kolmesta teoreettisesta osa-alueesta: Henkilöstöresurssoinnista työmaaprojekteissa, työhön perehdyttämisestä sekä työntekijöiden sitouttamisesta. Tutkimuksessa esitellään yksityiskohtaisemmin erilaisia lähestymistapoja ja malleja kaikille tutkittaville osa-alueille. Tämä tutkimus noudattaa laadullista tutkimus strategiaa. Tutkimusdata kerättiin haastattelemalla kahdeksaa eri henkilöä kolmesta eri kenttähuoltoyksiköstä. Jokaisesta kenttähuoltoyksiköstä haastateltiin esimies ja 1-2 työntekijää.

Tutkimus tekee näkyväksi perehdyttämisprosessin merkityksen onnistuneessa perehdyttämisessä ja työhön sitouttamisessa. Asianmukaisen perehdytysprosessin puute voi heikentää työntekijän tuottavuutta, työtyytyväisyyttä ja sitoutumista. Sillä on myös keskeinen rooli yhdistää uusi työntekijä uuteen työyhteisöönsä. Molemmat, esimiehet ja työntekijät, korostivat työssäoppimismenetelmää tilanteessa kun työntekijöitä koulutetaan uusiin työtehtäviin. Tämä toimintatapa nähtiin arvokkaana investointina tulevaisuuden osaamisen kehittämisen kannalta. Viestintä ja sosiaalinen kanssakäyminen ovat keskeisiä elementtejä onnistuneissa projekteissa, ja sen tutkittiin parantavan työntekijöiden sitoutumista. Näiden lisäksi, tämän tutkimuksen havainnot korostavat resurssienhallintastrategioiden, työntekijäkokemusten ja palautemekanismien merkitystä suotuisan työympäristön edistämisessä huoltopalveluinsinööreille energiaprojekteissa. Näillä avainalueilla yritykset voivat parantaa työntekijöiden tyytyväisyyttä, tuottavuutta ja projektien kokonaistuloksia.

AVAINSANAT: Perehdyttäminen, työntekijän sitouttaminen, koulutus

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Abbreviations

HRM: Human Resource Management
SQAD: Site Quality Assurance Documentation
DCM: Document Control Module
LogWis: Logistical Wisdom
OJT: On-the-job training
C&CS: Construction and Commissioning Services

1   Introduction

1.1   Background of the Reserch

The completion times of projects are commonly significantly late (Love et al. 2013). There are multiple different factors that can cause late delivery of the project, and one is under resourcing the project with too low level of resources at the beginning. On the other hand, often when approaching project's handover date, there is a substantial increase in the resources employed. In case project is completed in a shorter time, it usually involves higher costs. Higher costs can come from overtime, multiple shifts, hiring more equipment and overcrowded workspaces. This commonly known problem is the time-cost trade off problem, which is related to the Project Management Triangle trade off (Palit, N. & Brint, A., 2020).

Forecasting project's resource needs can be challenging and, especially for sudden project resource needs, it can be difficult to respond in a timely manner. Predicting how many employees are required and with what kind of skillset are depending on many factors. First is the timescale which the forecast is intended to cover. In many companies it is possible to forecast staffing with reasonable assumptions for next one or two years. The second major variable in forecasting the demand for human resources is the nature of the activities done by the organisation. Organisations in a stable environment, such as government departments, can forecast their needs with greater confidence. On the other hand, a company having a somewhat small market share of an international market can be difficult to forecast how many employees are needed even for the next one year (Taylor, S., 2006).

Successful onboarding of personnel for new positions or task is important since nowadays, even half of all hourly workers are leaving new jobs during their first four months in the company, and half of the employees hired to senior positions fail within 18 months. For leaders building and maintaining the team, it is important to have a comprehensive

onboarding program. Onboarding is helping newly recruited people to adjust to the company's social and performance aspects of the job and thus become more productive quickly (Talya N. Bauer, 2010). Even the high importance of successful onboarding, it can be neglected by both, the employee, and the employer too often. Some organisations see onboarding as a checklist to verify that formalities and trainings for new employees have been made (Karambelkar, M. and Bhattacharya, S., 2017).

There is a need for an inspired and motivated workforce who are able to go "the extra mile" in today's modern organisations (Consiglio, C., Borgogni, L., Di Tecco, C., & Schaufeli, W. B., 2016). Sustaining high employee work engagement should be one of the top prioritized matters in companies. It has been widely agreed by practitioners and researchers. In order to reach such an important target, many companies are relying on their line managers to build a creative work environment to foster employee work engagement. Work engagement builds a positive and fulfilling work-related state of mind in workplaces (Nikolova, I., Schaufeli, W., & Notelaers, G., 2019). The workforce is affected by digital transformation. According to Randstad Sourcelight's 2021 TalentTrends Report, one of the most leading learning and development trend is reskilling or repurposing talents in order to build a sustainable workforce. Repurposing the talent in this case is understood as refreshing talent's existing skills to match and support the transition to another profession or job industry. Based on the Randstad Sourcelight's 2021 Talent Trends Report, 92% of the leaders agreed that companies should themselves be responsible for reskilling their workforce (Thompson, D., 2021).

1.2 Case Company

The case company in the research is Wärtsilä. Wärtsilä is recognised as a worldwide leader in innovative technologies and lifecycle solutions both in the marine and energy industries. Wärtsilä's strategy, The Wärtsilä Way, defines the purpose, target position, strategic priorities, and values to shape decarbonisation through its innovative and sustainable technologies and services. The Wärtsilä was is explained more in detail in Figure

1. Wärtsilä has 17,500 professionals in over 240 different locations in 79 countries. Wärtsilä's net sales during the year of 2022 was total EUR 5.8 billion. The company is listed on Nasdaq Helsinki. Wärtsilä is committed to carry out the business by following strictly the Code of conduct and ethical stance, (Wärtsilä, 2024a, 2024b)

Figure 1. The Wärtsilä Way (Wärtsilä, 2024b)

Wärtsilä Marine has a broad portfolio of products and services to offer to their customers. It includes, for example, engines, digital technologies, propulsion systems, hybrid technology, and integrated powertrain systems delivers efficiency, reliability, safety, and environmental performance. Wärtsilä Marine lifecycle services also supports their customers in exhaust treatment, shaft line, and underwater repair (Wärtsilä, 2024b). Service network in Italy examined in this research belongs to Marine Business.

Wärtsilä Energy, where this research is focusing on, assists its customers in decarbonisation by developing market-leading technologies. These technologies cover, for example, future-fuel enabled balancing power plants, hybrid solutions, energy storage and optimisation technology, including the GEMS energy management platform (Wärtsilä, 2024b). Construction and Commissioning Services (C&CS) is part of Wärtsilä Energy Business which is responsible for project resourcing in energy new build projects. C&CS can order field service resources from Wärtsilä Marine and Energy Business, Field Service

Operations Teams. Service networks in Nigeria and Senegal examined in this research belong to Energy Business.

1.3   Research Objective and Research Questions

The aim of this study is to examine the onboarding process and employee engagement in a high-resourcing variable environment. The study draws on a case study of a MNC field service team operations which temporary employ personnel from another business unit to execute a job with different competence requirements. Onboarding processes have traditionally been structured for new employees and predominantly neglecting situations when employees are employed to another business unit within the company which require new skills and competences. The study aims to provide novel theoretical knowledge in HR and people management processes in a high resource variability environment of highly skilled workers and provide practical implications for managing and developing people resourcing practises in high resourcing variability environment. Collected data will be compared with previous studies and based on it, find suggestions for improving the onboarding and engagement of employees when they are employed from one business unit with different competence set to a new business unit with different competence requirements.

The main research question is: *how to engage professionals from different business function to a new one*? This question is approached via the following sub-research questions:
- *What are the best methods and practises for a successful onboarding when employee is temporary employed to another business function?*
- *How do managers and employees view differ the onboarding process when employee is temporary employed to another business function?*
- *What kind of procedures and practices are to improve the onboarding process in case company?*

1.4   Structure of Research

This chapter presents the structure of the study. It consists of five main chapters which aim to explain to the reader the thesis in an organised and systematic way.

The first chapter of the study provides an introduction, explaining the relevance of the topic and the study. Introduction also defines the purpose of the research and identifies the research problem. The second chapter covers the theoretical framework. Theoretical framework includes three main subchapters: human resourcing in projects, onboarding, and employee engagement. Concepts are thoroughly examined based on previous research and existing literature. The literature review aims to offer a comprehensive understanding of selected concepts.

The third chapter covers the research methodology by outlining the procedures and research methods used in the study. It offers a detailed description of the qualitative study methodology as a research approach.

The fourth chapter presents the main empirical findings of the research. The fifth chapter provides the discussion, conclusion, and limitations of the study. It answers the research problem and links it to the existing theory.

2 Theoretical framework

This chapter contains a definition of human resourcing in projects, onboarding and employee engagement and the background of previous research in the field.

2.1 Human Resourcing in Projects

Delays in the construction phase of a project occur frequently, especially on large projects and the main blame is usually pointed towards low performance in construction. This delay results in clients receiving their project completed later but, also it may have a considerable impact on quality, duration, and cost of the project. Delays can cause a negative impact on the relationship between all parties. It also increases distrust between parties. If potential delays can be identified, it gives a better opportunity to manage these during the project's lifetime. The project success rate is commonly measured by the time, cost, and quality when the project has been completed. Projects have their own quality standards, but time and cost cannot be compromised (Lessing et al., 2017). Problems causing the delays in construction projects are universal and are occurring often. Lessing et al. (2017) collected data for their research from the previous 30 years to summarize the most significant factors in nine different groups. Factors explaining the main causes of construction delays in Table 1 below.

Table 1. Factors Causing Construction Delays (Lessing et al., 2017).

Researchers	Country	Major factors causing construction delays
Ahmed et al., (2003)	USA	Building permits approval
		Change orders
		Changes in drawings
		Incomplete documents
		Inspections
		Changes in specifications
		Decisions during development stage
		Shop drawing approval
		Design development
Aibinu and Odeyinka (2006)	Nigeria	Contractor's financial difficulties
		Client's cash flow problems

		Designer's incomplete drawings Slow mobilization Equipment breakdown and maintenance problems Late delivery of ordered material Incomplete structural drawings
Doloi et al., (2011)	India	Unrealistic time schedule imposed Slow decisions from owner Unforeseen ground conditions Delay in approval of shop drawings Poor labour productivity Delay in material procurement by contractor Poor coordination among parties
Faridi and El-Sayegh, (2006)	UAE	Approval of drawings Slowness of the owners Shortage of manpower Productivity of manpower Skill shortages Material shortages Building permits approval Financing by contractor during construction
Frimpong and Olywoye (2003)	Ghana	Monthly payment delays Poor contract management Financial difficulties by contractor Planning and scheduling difficulties Cash flow during construction Inflation
Mohammed and Isah (2012)	Nigeria	Improper planning Lack of effective communication Shortage of supply like steel, concrete Design factors Slow decision making Financial issues Lack of information on design drawings Cash flow problems during construction Shortage of material
Sambasivan and Soon (2007)	Malaysia	Poor planning by contractor Inadequate client's finance and payments Problems with subcontractors Shortage in material Labour supply Equipment availability and failure Lack of communication between parties Mistakes during construction stage

Aibinu and Odeyinka (2006) argued that slow mobilisation of resources and labour from subcontractors is one of the main factors causing delays in Nigerian construction projects. Faridi and El-Sayegh (2006) listed three most important resources for construction projects. The resources were machines, materials, and manpower. The contractor's great priority throughout the project is to ensure that all these three resources are available at any time. In the same research, it was noted that poor site supervision and poor site management were evaluated much higher by site construction professionals who had experience from this field between 5 and 10 years compared to construction professionals experience of more than 10 years. Lessing et al. (2017) continues with a similar view by explaining that construction employees' low skill level and poor productivity of resources are about to become worse in the future.

Employee resourcing is one of the most important and key strategic human resource management (HRM) functions. Its focus is to match the resources to the needs within the organisation and to ensure appropriate utilisation of these resources. This includes both strategical and operational sides (Armstrong & Baron, 2002). Employee resourcing includes core HRM functions such as recruitment, selection, and deployment of employees within the company. These should be organised and handled in a way that it supports the company's strategic goals (Taylor, 2008). Resourcing strategy, which aim is to secure that the company has identified its personnel needs for now and also for the future. Once employee resourcing is managed efficiently, it enables organizations to achieve flexibility by having access to needed skills that can be used for strategic planning in the long term as well as to support unplanned challenges or opportunities. Even the high importance of effective resource selection and team formation to support organisational performance, the resourcing in many project-based companies remains reactive. Reactive resourcing is relatively common in construction projects. These projects are usually won at short notice, which thus requires fast mobilisation of teams to the field. Projects can also be located in distant locations with difficult access and mobilisation (Loosemore

et al., 2003). Loosemore et al. (2003) has visualized the pressure affecting the project resourcing in figure 2.
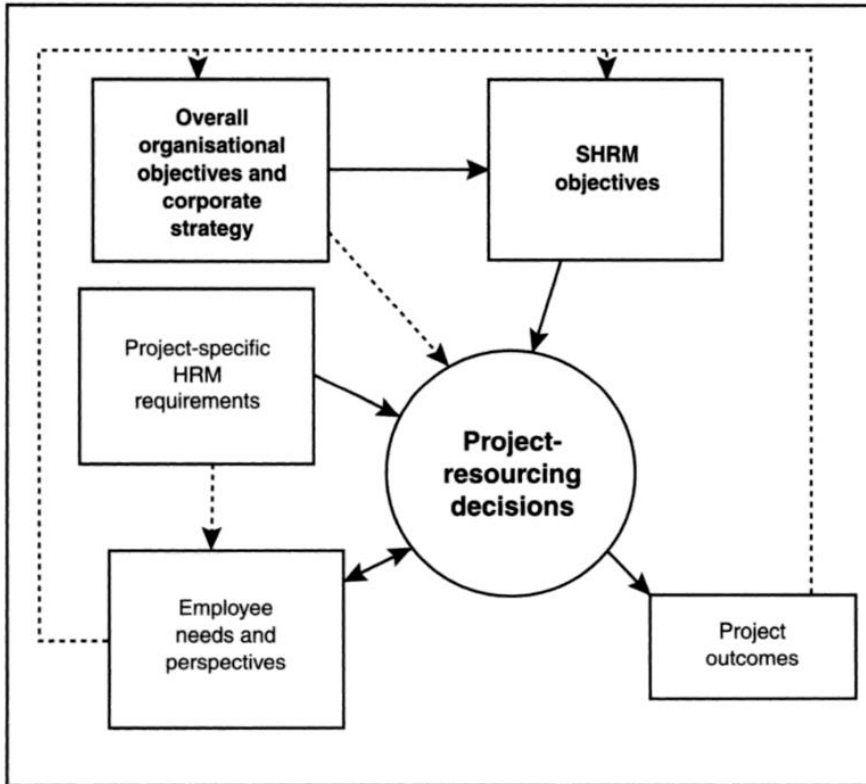
Figure 2. Model demonstrating the pressures affecting for project resourcing (Loosemore et al., 2003).

Dainty, A et al. (2009) argued in their research that by managing deployment of human resources to the teams operating, it requires concurrent and systematic employee data to be in order to support the decision for correct resource allocation. The cornerstone of a successful resourcing strategy in the project is to capture the skills and personal needs of the employees. This information can be difficult to take into consideration in the re-sourcing strategy since it is commonly tacit. Effective utilisation of tacit knowledge could be achieved by having a culture of trust in the company, which promotes openness and enables employees to disclose their abilities, aspirations, and limitations.

2.2 Onboarding

Onboarding can be explained to be the business driver, which is ensuring the company's new or new-to-role employees are the right fit for the position. When employees are hired to the company or employee is allocated into a new role, the critical step to connect employees with the organizational culture and their new roles is called onboarding (Norma Davila & Wanda Pina-Ramirez, 2018). According to Talya N. Bauer, Ph.D. (2010), onboarding is "the process of helping new hires adjust to social and performance aspects of their new jobs quickly and smoothly". The onboarding process is designed to make the movement through the organisational threshold easier for employees to become productive team members in the shortest possible time. Onboarding's influence on employee goes throughout the company, and therefore it is connected to business outcomes (Norma Davila & Wanda Pina-Ramirez, 2018).

According to Norma Davila and Wanda Pina-Ramirez (2018) onboarding can be divided into two distinct components. Those components are *general onboarding* and *role-specific onboarding*. General onboarding is more ruling in the companies than the role specific onboarding.

- *General onboarding* is introducing company's culture for the employee. This includes, for example, company's mission, history, vision, values and overall policies and procedures. There are also very practical trainings organised, such as how to fill out a timesheet. General onboarding establishes the basis to engage new employees within the company.
- *Role-specific onboarding* is a unique process tailored for each position in the company. The unique process is for the reason that it is seeking assimilation of the new employee or employee new in the role to fit more easily into the department's culture. Role-specific onboarding is helping employees to obtain needed skills and knowledge to master the role in the most efficient way. Behavioural expectations are also part of this component. Line manager is responsible to lead this process with input from learning and development function.

In *general onboarding* there is the target to have employees emotionally connected to the company's purpose. It can be obtained by discussing the values, mission and vision of the company and, most importantly, trying to bring them alive for the new employee. Once company's mission is understood and employee can relate into it, the relationship towards the company is more personal. By relating to company's vision, employees can see the future together with it. Once employees can relate to company's values, it brings stability and decreases the motivation to seek opportunities outside the company (Norma Davila & Wanda Pina-Ramirez, 2018).

The organizational structure in the company explains how it is functioning internally by showing the reporting lines, relationships, and the number of subordinates of a superior. Organizational structure in its graphic form describes the complexity and formality of the business within the company. It also explains the possibilities for career mobility. Organizational structure is linking the names and positions with faces with whom they are interacting more frequently (Norma Davila & Wanda Pina-Ramirez, 2018).

While general onboarding focuses mainly on general matters within the company, the *role-specific onboarding* focuses on providing tailored trainings for specific technical skills and competences which are unique to this role. This will assist new or new-to-role employees to assimilate into the department's culture and get them to master the new role in the most efficient way. Role-specific onboarding can be done in multiple ways, such as on the job training, trainings in classrooms, online courses, simulations, and professional conferences. Mentoring and coaching are also good ways to lead employees into their new role (Norma Davila & Wanda Pina-Ramirez, 2018).

Attending company events, joining meetings, being present at the office, participating in customer meetings and socializing informally with other colleagues helps new employees to expand their network in the company. These activities are supporting while building relationships with employee's manager, colleagues, and direct reports if any. By being present in the work community, it provides a lot of tacit information regarding how their

managers, colleagues and clients are interacting with each other. It guides employees to learn the dos and don'ts in the work community, which is crucial for smooth role transition (Norma Davila & Wanda Pina-Ramirez, 2018).

Norma Davila and Wanda Pina-Ramirez (2018) listed the factors to be considered once defining organization's onboarding program. The factors were company industry, company culture, reporting relationships, employee background, employee experience, role complexity and multiple players. Reporting relationships, employee background, employee experience and role complexity are explained below in more detail:

- *Reporting relationships* determine the way employees interact with their line manager and direct reports. Reporting relationships are easier to manage when employee and manager are physically in the same place and at the same time. If employee and manager are in different locations, the contact is electronic most of the time. In remote relationships, it is important to define the way of working for interaction and how to address work-related issues since it affects greatly on employee engagement, retention, and success in the role.

- *Employee background* guides employee's line manager to make sure that employee can be fitted into the work community on the best possible way. For example, employee's educational background may have an impact while interacting with colleagues. In such cases, it is needed to determine the complexity of language and formality level in communication.

- *Employee experience* is one component which defines the content in role-specific onboarding where previous experience of the industry, tenure, role, and location has to be considered.

- *Role complexity* guides how extensive the role-specific onboarding has to be. For instance, in many manufacturing operations it requires less time to learn the role compared to roles requiring independent judgment such as, is business planning.

2.2.1 New-to-Role Onboarding

Onboarding is not meant only for new employees joining the company for the first time, but as well for employees changing the roles or positions within the company. Onboarding can be used as one method to facilitate such role transitions. The level of onboarding should be tailored for new-to-role employees, for example, based on their tenure in the company. As an example, employees who have been in the company between three and five years may not need to go through new employee orientation unless the company has made major changes. On the other hand, employees who have been working in the same position more than five years and are changing the position, may require to go through new employee orientation since the circumstances they assume in their new role may vary noticeably (Norma Davila and Wanda Pina-Ramirez, 2018).

Norma Davila and Wanda Pina-Ramirez (2018) explained in their research that new-to-role employees experiencing a role change in the company may come, for example, from *promotions*, *demotions*, or *lateral changes*. Program components are summarised in table 2.

- In *promotion,* employee is offered a position with more responsibilities, which may include a line manager role, supervising their own direct reports or in demanding technical positions where career development can be achieved while maintaining the position as an individual contributor. A freshly graduated engineer can follow, for example, technical career path by starting as an engineer and developing his position into senior engineer, superintendent, or senior superintendent. On the other hand, a freshly graduated engineer may start to follow a managerial career path by starting as an engineer and developing his position to senior engineer and then to manager, senior manager, director and other highly ranked manager positions.
- Demotion may occur when employee is not performing in the position as required, or because of business reasons, for example, re-organisations within the company, or individual development reasons, for example, if employee changes the position to a less demanding role with less responsibilities. Demotion can

also open an opportunity to learn about different departments within the company and thus prepare for another role.

- Lateral change is done when employee starts to work in different department with similar role and tasks. In this role change, the employee brings earlier understanding of the role and the required skills and competencies. Employee still need to get familiar with the new department, its culture and way of working, since it may vary from the earlier one. It is also noted that performance and behaviour expectations may have to be refreshed.

Table 2. Program Components for Onboarding New-to-Role Employees (Norma Davila & Wanda Pina-Ramirez, 2018).

New-to-Role Situation	Program Component	
	New Employee Orientation	Role-Specific Onboarding
Promotion	Depends on Tenure and Executive Status	Yes
Demotion	Depends on Tenure and Executive Status	Yes
Lateral Change	Depends on Tenure and Executive Status	Yes
Relocation	Yes	Yes
Perform Work at a Location Different From Where They Report	Yes	Yes
Change in Reporting Location	Yes	Yes
Background in Comparable Role	Depends on Tenure and Executive Status	Yes
New Career Path	Depends on Tenure and Executive Status	Yes

Norma Davila and Wanda Pina-Ramirez (2018) continue by stating that employee's previous experience in a similar role from another company should be appreciated, but it should not be taken as self-evident that the role employee is going to do in a new company is similar as in previous company. Experience and way of working was with another company, in different time and with different requirements. These differences should always be considered and discussed with new employee without disregarding the value of previous experience.

2.2.2   The Four C's

According to Talya N. Bauer, Ph.D. (2010) onboarding is built on four distinct levels, which are called the Four C's. The Four C's are referred to be the building blocks of successful onboarding, as described in figure 3.

- *Compliance* is the lowest level in onboarding, and it involves learning the basic policies, rules, and regulations of the company.
- *Clarification* ensures that a new employee understands their role and related responsibilities. It can, for example, help to describe the projects in detail they are about to start to work with.
- *Culture* explains the company's norms, both formal and informal.
- *Connection* is the highest level in onboarding and refers to interpersonal relationships and networks a new employee has to establish with other members of the company.
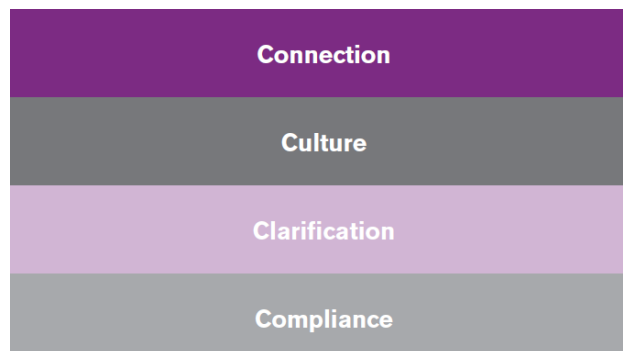

Figure 3. The building blocks, Four C's of successful onboarding (Talya N. Bauer, Ph.D., 2010)

The utilisation of the Four C's building blocks which each company uses determines its overall strategy in onboarding. Most of the companies are on one of three levels, which are explained in Talya N. Bauer, Ph.D. (2010) research below.

- *Level 1* is called passive onboarding, where almost all companies cover compliance as part of the formal onboarding process. Companies which are engaged in passive onboarding may provide some role clarification, but culture or connection is not addressed. There can be some informal ways to develop a culture and connection for new employees over the time, but it is no way coordinated, even by the HR function, to maximize the onboarding process. Companies at level 1, the onboarding can be seen as a checklist of unconnected tasks to be completed. According to Aberdeen research by Martin, Kevin and Saba, Jayson (2008) 30 percent of companies work at level 1.

- *Level 2* is called high potential onboarding where compliance and clarification are covered well and in a systematic way and mechanism for culture and connection are in place. Covering these areas, company can reach level 2. According to Aberdeen research by Martin, Kevin and Saba, Jayson (2008) approximately 50 percent of companies work at level 2.

- *Level 3* is called proactive onboarding. Once company has addressed all four building blocks (connection, culture, clarification, and compliance), it has reached level 4. Only 20 percent of companies are working on level 3 (Martin, Kevin and Saba, Jayson, 2008).

Talya N. Bauer, Ph.D. (2010) summarizes in the research that once the onboarding for new employees is done correctly it leads to higher job satisfaction, better organisational commitment, lower turnover of employees, higher performing employees, effectiveness in career and lower stress. Successful onboarding is seen as one of the key processes in any of the talent management strategies. Business leaders have to understand that better the integration of new employees into the work community is done, it helps to ensure their success. Key part in successful onboarding is to engage new employees with important stakeholders to help them understand each other and how they co-operate over time.

2.2.3   Digital Onboarding

HR tools and processes are under digital transformation, where for example, digital onboarding is inspired by it. This is guiding companies to reinforce their need of technology to gain competitive advantage, re-aligning business processes and creating value to increase revenue (Bajer, J., 2017). The aim of digital onboarding is to create a virtual experience for employees to be integrated into the work community more quickly and thus start to be productive earlier. Using digital technologies for onboarding can assist to execute the process in difficult or remote situations (Bharadwaj et al., 2013). Social distancing reasons such as increased remote working possibilities are guiding companies to adopt digital onboarding as part of their options in HR tools. Sani, K. et al. (2023) argued in the research that while using the digital onboarding process, there were positive and negative impacts. On the positive side, it was noted that reduction in hostility such as bullying, harassment and intimidation can be achieved with digital onboarding. This was noted especially with introvert personalities rather than extraverted ones. On the negative side, social disconnection at the workplace, lack of transparency and mistrust was noted. Zidena et al. (2020) explained in their research that technology such as online onboarding can make onboarding more meaningful experience for employees joining the company for the first time compared to traditional onboarding, which can be seen in some cases as one-way communication. Online onboarding also allows the onboarding to start as soon as the job offer is signed. Online onboarding has many advantages, but it is important to note that one onboarding solution does not fit for all and should be tailored as well as possible to have the best efficiency of it.

2.3   Employee Engagement

Employee engagement has become a popular research topic among researchers working on human resource- and management topics. Despite extensive studies lately, employee engagement is still lacking consistency in how it is defined and measured (Sun, Li & Bunchapattanasakda, Chanchai., 2019).

Sugandha, J. (2022) noted in the research different definitions by different researchers:

- According to Kahn (1990) employees are able to engage in one dimension but not in the other. The higher the level of employee engagement is, it affects positively engagement level in other dimensions as well. In the same research, it was noted that if employee is to be emotionally involved, it requires purposeful connections with colleagues.

- Schaufeli et al. (2004) defined employee engagement to be as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption ". Vigor is characterized by one having a high level of energy and mental resilience when at work and persistence to face difficulties. Dedication is understood by being enthusiastic, inspired and take pride of the work. Vigor and dedication are understood as a positive opposite of exhaustion. Absorption is characterized by being fully focused on work where time goes quickly.

- Robinson et al. (2004) defined engaged employees as having belief in organisation, being motivated to make things better, understanding company's big picture and business context, being helpful for colleagues and taking the extra mile to reach the targets. It was also noted that engagement is to be "a positive attitude held by the employee towards the organisation and its values". Robinson et al. (2004) describes the characteristics of engaged employee in figure 4.

Figure 4. Characteristics of engaged employee (Robinson et al., 2004).

2.3.1 Employee Engagement with Newcomers

Work engagement has taken important place in management, but still relatively little thought has been given to work engagement in the socialisation literature on employees just starting in the company. It has been argued that socialisation within the organisation has the potential to effect positively on newcomer's work engagement (Saks, A.M. and Gruman, J.A., 2018). Saks and Gruman (2011) tried to find if there are direct relationships between newly hired employees and socialisation tactics. They failed to find one, but instead they found that indirectly the socialisation tactics were related to a newly hired employee's engagement via positive emotions, self-efficacy and perceptions of person-job fit. Cooper-Thomas et al., (2014) found in their study that if a newcomer proactively seeks feedback (proactive behaviours) and receives feedback (proactive outcomes) it has a positive relation to work engagement. It can be argued that the proactive outcomes, in this case feedback, were the main reason for proactive behaviours to have positive effect on newcomer's work engagement.

To understand the many different forms and patterns that a newly recruited employee's work engagement might take and how it may vary during the socialisation process, it is to use the work engagement maintenance curves of newcomers. The maintenance

curves of newcomers can visually demonstrate how temporary changes in work engagement can happen during the first year within the company and socialisation (Saks, A.M. and Gruman, J.A., 2018).

2.3.2 Importance of Employee Engagement

Employees should be seen as an asset to the company. This should be recognised, since companies can achieve competitive advantage when using its intellectual capital, employees. Companies seeking to develop and utilise their intellectual capital are to focus on employee engagement. It was noted by Sugandha, J. (2022) that engaged employees are often energised in their work, which makes them feel enthusiastic about whatever they do in their job. Enthusiasm together with excitement and productivity are the building blocks for passion. It should be self-evident for any company to develop wealth within the work community rapidly, since unsatisfied and unhappy employees can destroy it.

Engaged employees can be recognised to be devoted, self-driven, energetic, and problem solvers with high enthusiasm. They are involved deeply in their work and caring about their work as they would do it for themselves with heart in their tasks. They are also recognised to be enthusiastic about doing great job and sharing their personal energy in their work. This brings a competitive advantage for the company. Employees with high motivation are not settling for same performance targets every year, but on the other hand, they continue to outperform and setting new targets for themselves continuously (Sugandha, J., 2022).

Sun, Li et al. (2019) summarized in their research that employee engagement is mainly focused on two different characteristics, which are individual performance and organisational performance. Employees who are dedicated to their work are more often active in their work and have better health, which supports them to perform better in their tasks (Susana et al., 2007). Employees who are not dedicated are not getting satisfaction

of their work, are not having so high organisational commitment as the dedicated employees are having and are also leaving company earlier than dedicated employees (Yang, 2005). Altogether, it can be recognised that dedicated employees are having more active behaviour in organisations and organisations are willing to pay more for this. Active organisational behaviour was examined in a study with Dutch employees where it was noted that employees with high engagement were doing more overtime than employees with lower engagement (Sonnentag, 2003). Outcome of employee engagement is summarized into table 3.

Employee engagement and positive organisational performance correlation was researched by Harter et al. (2002) stating that the correlation between employee turnover and employee engagement is -0.30, which indicates that employees stay longer with their current employers. Correlation with customer satisfaction was 0.33, which explains engaged employees to deliver good customer service. Level of employee engagement also has an affect on the organisation's service climate which can be seen in employee's performance and thus, as well, in customer loyalty (Salanova et al., 2005). Harter et al. (2002) examined employee engagement in their research and found that it has an effect on organisational performance on all five major indicators: security, customer loyalty, employee retention, profitability, and productivity.

Table 3.Outcome of employee engagement (Sun, Li et al., 2019).

Authors	Outcomes	Categories
Xanthopoulou (2009)	financial performance of the organization	organizational performance
Harter et al. (2002)	employee profit, employee turnover	individual performance
Sonnentag (2002)	customer satisfaction, organization's service climate	organizational performance
Salanova et al. (2005)	more overtime	individual performance
Yang (2005)	employee performance	individual performance
Wilmar & Arnold (2006)	more satisfaction from work, higher organizational commitment, less willingness to leave	individual performance
Saks (2006)	organizational citizenship behaviour	individual performance
Susana et al. (2007)	more active in work, better health, better performance	individual performance

Bakker & Demerouti (2008)	employees' out-of-role performance	individual performance
Zhao & Sun (2010)	return to shareholders	organizational perfor-mance

2.3.3   On-the-Job Training

Gary Becker (1964) noted the important role of on-the-job training (OJT) in his study by noting that: "Theories of firm behaviour, no matter how they differ in other respects, almost invariably ignore the effect of the productive process itself on worker productivity. This is not to say that no one recognizes that productivity is affected by the job itself; but the recognition has not been formalized, incorporated into economic analysis, and its implications worked out. Many workers increase their productivity by learning new skills and perfecting old ones while on the job. Presumably, future productivity can be improved only at a cost, for otherwise there would be an unlimited demand for training. "

Researchers widely agree that in training there are two key aspects. The first aspect is the recognition that on-the-job training is a good example of an investment in human capital. As with any investment, there are initial costs. The costs of on-the-job training include time allocated by the worker and co-workers to learn the required skills, which are increasing productivity as well as the costs of equipment and material to teach these skills. Return of this investment expenditure will occur in future periods. On-the-job training future returns are measured, for example, by better productivity during subsequent periods of employment (Barron, J. et al., 1997).

The second aspect is the distinction between general and specific on-the-job training. Training increases the productivity of the employee in the company providing the training when general training also increases employees' productivity in other companies than the one providing the training. However, specific on-the-job training increases employee's productivity only in the company providing the training. Teaching employee's

company's unique assembly process is an example of specific training (Barron, J. et al., 1997).

Fresh knowledge, ideas, and competencies inspire and motivate employees to enhance their productivity. On-the-job training is commonly seen as a strategy to retain employees as it strengthens long-term commitment to the employer-employee relationship and this way decreases the probability of employees' turnover to alternative companies (Leuven et al., 2005). On-the-job training makes working conditions better for employees and raises wages for young workers. Investing in on-the-job training for employees, it would help employees to develop their skills and knowledge and thus improve company's efficiency and provide better benefits, especially for young employees (Nguyen, T. et al., 2021).

3   Research Method

This chapter covers the research methodology and design of the research. It also explains the research process, how empirical data was collected in the study, and how the empirical findings were analyzed.

3.1   Research Approach

This research follows a qualitative research strategy, focusing on a case analysis of specific phenomena. Hence, qualitative case study methodology was chosen as the appropriate research method. The case under investigation focuses to a company, encompassing both managers and employees of field service teams. This approach facilitates meaningful comparisons between employees and managers. Based on the case study outcome, theory is built by following Eisenhardt, K. M., & Graebner, M. E. (2007) study: "Theory building from cases: opportunities and challenges".

Qualitative research method is typically used once examining a complex phenomenon or subject with little information available. Qualitative research method requires a high level of enthusiasm and determination to go deep into the subject to understand the subject. It also often requires longer time to get a better understanding of the subject through interviews and observations (Njie, B. et al., 2014). Mason (2002) explained Qualitative research as follows: "Through qualitative research we can explore a wide array of dimensions of the social world, including the texture and weave of everyday life, the understandings, experiences and imaginings of our research participants, the ways that social processes, institutions, discourses or relationships work, and the significance of the meanings that they generate." Qualitative research requires direction which is decided by aim and type of the research selected to achieve the result. Case study is one of the options for such direction (Njie, B. et al., 2014).

Case study method is commonly used to conduct qualitative research (Stake, 2000). In the field of research which is mainly empirical, the case study method enables extensive

and detailed study of this specific case which can be an issue, problem, or a phenomenon (Stewart, 2012).

Developing theory from case studies requires one or more cases to build theoretical constructs from empirical evidence. Replication logic is central when building theory from case studies (Eisenhardt, 1989). It means that every single case stands on its own as a separate experiment and analytical unit. It can be understood as a laboratory experiment which are related to each other. Multiple cases are similar experiments as laboratory experiments and can be replicated and serve as an extension to the emerging theory (Yin, 1994). The process of theory building takes place when cycling the case data, emerging theory, and extant literature recursively. The popularity of theory building from case studies is said to be one of the best ways to connect qualitative evidence full of detailed and rich information to deductive research (Eisenhardt et al., 2007).

3.2 Data Collection and Sample

Data for the research can come in many ways but mainly from two sources: primary and secondary data (Saunders, M. et al., 2009).

Primary data is an original data source which is collected by the researcher for a specific research purpose or project. Primary data can be collected in different ways. The common techniques are surveys, interviews, observations, and experiments (Clarke, N., 2012). In this research, the primary data was collected via interviews. Interviews were done via Microsoft Teams software since meeting in person was unfortunately not possible due to long distances between the interviewer and interviewees. Some interviewees could not join the interview session, so they filled out questionnaire and sent it back via email. Secondary data, on the other hand, includes both raw data and published summaries. It can be, for example, documents from organizations' databases, communications such as emails, letters, and memos (Saunders, M et al., 2009).

Secondary data in this research are meeting minutes from resource planning meetings and email exchanges during project execution regarding field service resources' planning and feedback collection. Researcher's observations are also used as secondary data. Since the aim of the study is to collect in-depth understanding of the current onboarding process and engagement of employees, rich qualitative data is required. In this research, both data, primary and secondary were used to answer research questions of the study. Previous academic literature covered secondary data. Semi-structured interviews were selected to collect primary data.

Semi-structured and in-depth (unstructured) interviews are non-standardized. These can be commonly referred to as "qualitative research interviews". List of themes, mainly focusing on onboarding, engagement and employee satisfaction in current processes, and questions to be covered are explored in semi-structured interviews. This can vary from interview to interview. It means some questions may be left out in particular interviews, given a specific organizational context that is encountered in relation to the research topic. The order of questions can also vary depending on the flow of the conversation. Additional questions may be needed to explore the research question (Saunders, M. et al., 2009). Two different questionnaires for the interviews were made, one for the managers and one for the employees, in this case field service engineers. Each answer was written down in a notebook and interviews were also recorded with a recorder for better analysis.

Observation can bring richness to the research data. Observation helps to discover what people do. Observation involves systematic observation, recording, analysis, and interpretation of people's behavior. Observation in this research can be divided into two different categories: Participant observation and structured observation. The objective of participant observation is to discover those delicate nuances of meaning and in structured observation it is systematic and has high level of predetermined structure (Saunders, M et al., 2009). The researcher of this study has been working for Wärtsilä Energy Business since 2010. Researcher has extensive knowledge from field regarding energy

new build projects in multiple roles, such as Mechanical Supervisor, Mechanical Commissioning Engineer, and Commissioning Manager. Researcher has been responsible for energy new build project field resourcing in Europe and Africa area since 2019. That covers around 200-250 resource coordination in a year.

The purpose of this research is to develop theory instead of testing it. That supports the idea that theoretical sampling is appropriate. In theoretical sampling, cases are selected based on their particular suitability, illuminating and extending relationships among constructs. Multiple case selection creates more robust theory since proposals are more tied in varied empirical evidence (Eisenhardt et al., 2007).

Research focused on Europe and Africa area Field Service networks which Wärtsilä Energy Business is commonly utilizing when resourcing energy new build projects. Field Service networks in question were Italy, Nigeria, and Senegal. From every location, a Field Service Manager/coordinator was selected to be interviewed. Field Service Manager is the responsible person to allocate the resources for the energy new build projects. It is also very common that they are same time working as a line manager for these resources. Second sample to be interviewed was the Field Service engineers from these three different locations. Field Service engineers were selected based on their earlier experience working in energy new build projects and seniority. Seniority in this case means that the person has worked for Wärtsilä for more than three years. Interviewed persons are listed in table 4.

Table 4. Overview of interviews

Participant	Position	Interview Date	Duration (min)	Interview method and location
M1	Manager	24.01.2024	49:14	MS Teams
M2	Manager	26.01.2024	35:03	MS Teams
M3	Manager	26.01.2024	55:57	MS Teams
E4	Employee	22.01.2024	40:50	MS Teams

E5	Employee	23.01.2024	48:43	MS Teams
E6	Employee	24.01.2024	40:41	MS Teams
E7	Employee	24.01.2024	26:08	MS Teams
E8	Employee	25.01.2024	-	Participant filled questionnaire and sent it via email.

3.3   Reliability of the Study

For the reliability of the study, it is critical to present the evidence from which the theory was built and inducted. Large scale deductive studies can be presented in compact numerical tables summarizing statistical analyses of large amounts of data. Case studies, mainly due to large amount of rich empirical data, cannot be so tightly summarized (Eisenhardt et al., 2007).

Many of the interviewees travel frequently due to the nature of their role in the company, so interviews were planned based on the interviewee's availability in order to minimize participant error by having a difficult time and/or location. Interviews were made anonymous in order to avoid participant bias and that was explained to them before the interview started. Interviews were recorded and transcribed to secure the reliability of the study. Recordings also assisted accurate citation in the results section to keep the results as transparent as possible.

4 Emperical Findings

This chapter presents the main findings of the study how onboarding and engagement is currently seen when employees from field service teams are temporarily employed to energy new build projects by Field Service Managers, - coordinators and field service engineers. Questionnaires have two main themes: *Onboarding of a new-to-role employee* and *Engagement.*

4.1.1 Current Situation in Project Site Personnel Resourcing

Currently, site personnel resourcing for energy new build projects are planned by three planning managers, which all belong to Construction and Commissioning Services department under Wärtsilä Energy Business organisation. Site resources for energy new build projects are planned based on the project type, project's scope of supply, location, contractual requirements and -obligations. Site resources are mainly planned from three different sources:

- *Internal resources,* which include C&CS own resources from Finland and network hubs located in Portugal, India, and Pakistan.
- *Field Service resources,* which include Marine and Energy Business field service hubs around the world. Most common field service hubs used are Finland, Italy, Nigeria, Senegal, USA, Mexico, Panama, Brazil, India, Dubai, Pakistan, and Indonesia.
- *External resources,* which include resources from different consultant companies in Finland and around the world.

The prioritization for resource selection typically begins with allocating C&CS internal resources as the first priority. Second priority, if there is availability, field service resources are assigned. Lastly, external resources are considered if internal resources are not sufficient or unavailable.

Field Service resources primarily concentrate on maintaining and servicing existing in-stallations, rather than overseeing and executing the installation and commissioning of new energy power plants within the C&CS organization. However, in energy new build projects, Field Service resources have often been integrated into the site execution team together with team members from the energy organization.

4.2   Onboarding

The first theme is onboarding of a new-to-role employee, and especially, how it is cur-rently done in the organization both from manager's and employee's perspective. To un-derstand this, respondents were asked to explain how onboarding for a new job in en-ergy project is done today and what are the main challenges.

4.2.1   Onboarding Process

In the onboarding process for an energy project, various different elements were high-lighted by managers and employees when asked about their approach how onboarding is currently executed.

Based on the manager's responses, there is no specific onboarding process made when a field service engineer is assigned to energy project. One respondent explained that there is onboarding process when employee is going to field service activities, but it might not be tailored for new build projects.

M1: "-- *I would probably say that there is no onboarding process for the field service engineers assigned to new build. There is an onboarding process for field service engi-neers in field service.*"

Other managers highlighted the importance of face-to-face discussions, role clarification, and collaboration with internal stakeholders to ensure that project preparation is done properly.

M2: "-- Basically we do some face-to-face discussion to give briefing of project interven-
tion and explain to them roles and responsibilities and maybe all the expectations, be-
havioural and also on the technical expectation from site."

Employees explained that the onboarding process for a new job very often begins with a phone call from the line manager. That part covers the main details of the project and introduces the key people involved in the project.

E7: "-- Firstly we discuss with office people, I mean my line manager and coordinator, then they explain about what is going on in the project and then if I'm interesting to join, this was the first things. Then after this step we have a quick kick-off meeting with this project team who go deeper."

 Onboarding involves a kick-off meeting with the project team for a deeper understanding about the project. Meetings with the project team are emphasized, and if known, contact team members from the project site for more details, such as site manager. Site manager's engagement is considered valuable, and it can provide firsthand information directly from the project site. Different project material or service suppliers can provide additional support during the briefing. It can include, for example, insights and tips for the installation and commissioning periods.

Managers emphasised the necessity of skilled individuals, importance of covering project scope, responsibilities, requirements, and logistics in the onboarding process. The need of practical support for engineers during commissioning, including tools and arrangements for local resources like electricity and water was noted during the interviews as well.

Employees brought up similar items as managers. Clarification of job roles, collaboration methods during the project, information accessibility (e.g. company's documentation

system and drawings) were noted to be discussed during the onboarding process. One respondent explained to have a comprehensive project overview with descriptions, contracts, schedules, work scopes, documentation, commissioning requirements, safety protocols, and accommodation arrangements.

Who have been included in the onboarding process today, seems to vary between different employees and locations. Skilled employees who have been assigned to energy projects earlier know who to contact for briefing purposes. They are also proactively contacting the project- and/or site manager for assignment information gathering. Manager explains how skilled employees are briefed for energy projects:

M1: " -- *When it is like skilled people, I'm not going too deep into the briefing. I just call the site manager or the project manager, so they get in touch with the engineer.*"

Based on the employees, there have been several different people sharing input while onboarding to energy project. Chief Project Engineers hold the primary role since they can provide more technical information for every discipline separately. Project manager was also noted as one of the key persons to provide input. One employee comment was that initial engagement to the project begins by contacting site manager and after that a meeting with project manager and chief project engineers is organised. Line manager's participation in project discussions was noted by two employees. Some occasions require involvement from technical service and sales representatives.

In the onboarding process for energy projects, the duration varied depending on the project's scope and specific needs. Typically, onboarding meetings last between one and two hours. Sometimes it requires multiple calls to cover all necessary topics thoroughly. In some cases, it could be as short as one hour focusing on quick overview of essential information. In some projects, the onboarding lasts over the whole project duration. It included daily briefings discussing around project specific topics with project team members and line manager.

Considering energy new build projects, making sure field engineers do their tasks well has a strong focus in onboarding from the managers. Engineer's high competence is emphasized. Safety considerations are thoroughly reviewed before any travel takes place. Technical information sharing within the team members starting in the project is crucial. Also, local field service hubs have a strong focus on supporting current energy projects under execution and taking care of existing customers and developing team members:

M2: *"First we are enhancing our support capability towards our sister organizations which is project. Number two is that we are going to have opportunity to enhance their skills, technical and non-technical of our engineers, meaning at the end of the day they are sure going to come back more knowledgeable than before."*

Certain priorities stick out from the employees when it was asked about the onboarding phase to energy projects. First thing was to understand the project's scope. It sets the direction for the team for effective planning and execution. Second thing is to ensure clear communication within the team and integrating new team members to it. Socialization among team members increases collaboration and improves teamwork. Providing the team with the right tools, like engineering and quality software, is essential. Proper training for the tools ensures that everyone can utilize these tools effectively. Safety discussions were seen as an important topic in the onboarding agenda as well. Establishing safety procedures and aligning project targets help to create a secure working environment. Understanding job role requirements within the project and knowing whom to contact for support are important for effective site work. Aligning with customer expectations is key. Studying project details and agreements ensures that the team delivers according to customer requirements. Employee summarizes the priorities for onboarding:

E5: *"-- I will say first communication, proper communication as one of the high priority. Two: Proper tools, like the normal tools we need for working, how to navigate, how to*

use them like the Navis work. When we have good tools like the Navis work that will help you, you have your drawings up to date, and you have your how to fill this SQAD documentation, how to write your daily report or weekly report and you get if you have all these tools in your in, in your you know disposal I think for me these are very high priority."

Field Service Managers explained that experienced field service engineers were satisfied with the current onboarding process and way of working. Working with C&CS team was considered good. Areas for improvement from the field service manager's perspective were that middle-experienced field service engineers were not taken to the projects actively, and it may cause competence gap in the future:

M1: *"Where we could improve is the middle-experience people or the people that need to be somehow, as you said, onboarded from my eyes is like the new, very fresh engineers like a one or two years in the company that we want to develop also. There I feel that there is still a gap because you don't probably need those people, but I still need to put them in some jobs for hands on or for other stuff."*

It was suggested to involve employees' line managers more in project communication and -briefings. Short notice periods for additional resource requests are causing challenges for network hubs and should be avoided with proactive resource planning. Energy project's long assignments were highlighted during the interviews and that is causing challenges for field service operations with existing customers.

Several ideas came up from employees when discussing improvement possibilities how new team members should join energy projects. One person talked about using their experience from the project management training to make scheduling and administrative tasks more efficient. Employees also mentioned not to focus only on technical skills, but also on administrative skills. Another person shared that they have learned from past projects. The need for good team management and keeping good records were noted to be important. Communication could be improved in order for everyone to express their

views and opinions freely. Many of the employees agreed that if you can work with the same team, it makes work more efficient and saves time. One suggestion was to focus more on technical matters during onboarding, making sure everyone understands the technical side of things better.

E5: *"-- The improvement to come with umm, good, real working relationship, good communication. I think because if I most times on this onboarding program, we have this break in communication and I would also like us to improve and encouraging people to speak out, not for not to be afraid, because sometimes you find out that some people make mistakes, and they are afraid to speak out because they feel they'll be punished."*

Overall, employees felt that having more time to prepare would be helpful, but they also understood that it depends on how much work there is before starting the new project. Based on the employees, the satisfaction with the current onboarding process varies slightly but is still found relatively good.

4.2.2 Job Requirements and Performance

The Job Requirements and Performance section focuses to see the field service engineer's familiarity with job requirements when assigned to energy project. Additionally, it aims to evaluate how field service engineer's performance is followed when working in the project.

Job requirements for energy projects are not always known in detail by the managers. Typically, field service engineers are requested based on the competence, e.g. plant automation, engine automation, mechanical. Job requirements could be more specific and emphasize the importance of detailed scope of supply, skills required, competence level and behavioural expectations. Manager explains lack of information regarding job requirements:

M1: "-- *To be honest, not in details (knowing the job requirements). They would typically come up with their request like we need an automation engineer to commission the PLC. Also, we need a mechanical engineer to do the pre-commissioning and help us to start the engine and secure installation. That's basically the need they will express.*"

Employees also had mixed views regarding the clarity of job requirements for new roles in energy projects. One person explained the challenge when transiting from a service-oriented role to new build projects. They noted the shift from service oriented problem-solving scope to building and commissioning new power plant. The importance of understanding how systems should function in new power plant was emphasized. Difficulties in the first projects are understandable, and they expressed confidence that experience would improve this transition. Another respondent highlighted the practicality of understanding requirements. Requirements may not always be entirely clear when employee starts the project. The importance of adaptability and flexibility was highlighted since observations at project site sometimes reveal new requirements. The variability in requirements due to theoretical scopes and potential changes communicated by the customer on-site was noted during the interviews. They emphasized the need for discussions with the site manager to understand contract limitations. One respondent mentioned that during the initial project discussions with the project team, it is necessary to have deeper discussions with the project management team also afterwards.

It was suggested by the employees that while job requirements are somewhat known, there's room for improvement in providing more detailed and clearer information. They mentioned the importance of making sure everyone understands project requirements during briefings and highlighted the benefits of networking for getting troubleshooting support. One mentioned that sometimes kick-off meetings happen early, and it allows for better preparation.

Employee's performance monitoring by the managers is mainly based on email requests and calls with site- and/or project manager. Question and feedback sessions with project

team were seen as a useful method to follow the team's performance. On some occasions, the performance follow-up has been challenging after the field service engineer was assigned to the project. Feedback comes only in case there has been an issue. In the case by under performance has been noticed with employee, manager's responses were quite similar. All managers stated that the first priority is to have a call with employee to understand the reasons and consider if it is a personal, customer or environmental issue. In one instance, the suggestion was to hold a team meeting and intervention with project manager, customer and employee involved. Another proposal involved reallocating on-the-job training, pairing the employee with a more senior colleague for similar tasks.

4.2.3   Policies and Guidelines

The operational practicalities for field service engineers in energy projects differ from general field service work. Energy projects utilise, for example, software which are tailored especially for their purposes, like quality control, logistics, and reporting. Basic practicalities are also varying, such as working time and rotation sequence compared to field service practicalities. The policies and Guidelines section seeks to clarify how these unique operational aspects are understood within field service teams.

Policies on working time and rotation sequence in energy projects are generally known but not in detail by the managers. While the local understanding of working time is well-known, there is still a lack of familiarity with energy-specific policies. Long rotations were identified as challenging since they involve committing a person to a single assignment for an extended period, taking them away from other urgent field service activities.

Different views were noted by the employees when understanding policies for working on energy projects. One person relies on information from the site manager but mentions that policies might change based on the project and its location. Employees admit to being unsure about written policies. Another respondent knows the working time and rotation sequence based on project requirements but isn't sure where to find this information. It was common to gather information from the contract. One person agrees the

policies with the site manager, highlighting that policies are still usually clarified during the project briefing.

Energy specific guidelines and tools were known in general level by the managers. Some managers had prior experience using these tools earlier in their careers but were not so familiar with them anymore. One participant mentioned to highlight the importance of the tool for their team members and follow that training for the tools are maintained. Another participant who had not worked on energy projects before, expressed unfamiliarity with the tools.

Employees' familiarity with guidelines and instructions for working on energy projects varied between employees. Particularly, the use of tools like SQAD, DCM, and Logwis was varying. Some respondents expressed that they have no issues using SQAD and DCM if training is available. However, employees noted a lack of knowledge if and when energy's software are updated. Generally, employees felt they had a good understanding of using the tools. However, they noted the need for continuous learning, especially as systems develop over time.

4.2.4 Employee Support and Training

This part aims to explore what kind of human support network field service engineers have to support them during field activities. A strong support network is valuable during projects, especially when troubleshooting is needed. Understanding training possibilities and limitations within different field service hubs can offer essential insights for planning personnel development.

New employees typically undergo on-the-job training with more experienced colleagues before assigning them alone to a new task. When employees are assigned to energy projects, they are expected to have a strong background in commissioning. When field service engineers are assigned to a job which they have not done previously, managers noted that emotional support was regularly needed. It was noted that employees also

require empowerment, confidence-building and regular follow-up calls to make sure employees can manage the job. Regular communication was seen crucial in these kinds of cases. Urgent requests from employees are to be addressed promptly. Empowerment explained by the manager:

M1: *"-- My first support is giving them the confidence empowering, making sure they understand what is expected. I talk a lot with them before they engage and when they engage, I also support for about a week so that they get confident and if I feel they are confident enough to fly from their own, then I will just reduce the communication, have one week reviews."*

During the interviews, managers shared different views on the support in their field service teams. One manager mentioned there is limited support from Technical Service due to their high workload. Expanding the support network is under planning to be developed better in the future. Another comment was that their employees have a good support system with colleagues and help from the back office, especially for technical problems. It was emphasised how important it is to have a strong support network in the organisation. Managers play a key role to support their employees if they are facing challenges at work. The support can be connecting employees with the right people with the help of a better support network or availability. Managers can also guide messages to the correct decision makers and require support from higher positions in the organisation. Practical support for logistics and safety matters is also organised.

Employees also emphasised the need of different types of support when starting a new job at energy site. Some employees require technical assistance, especially on automation setup. Others are looking for support in areas outside of job-related tasks. They want more training to lead people and help them if they face any difficulties. They emphasise open discussions between colleagues during and outside of the work. They rely on support from site- and section managers at the project site. Many respondents noted that they mainly need technical support, especially when they are working with new products

or components. Availability of technical assistance, leadership guidance, problem-solving support and open communication channels help employees to start to work efficiently at the energy project site. When it was asked from employees what kind of support their line managers can provide, different aspects were highlighted. Some of the line managers focus on competence development and career advancement. They offer on-the-job training, online courses, and maintain balance between work and personal life with their team members. Line manager support explained by the employee:

E4: "-- It's most of the time (Line Manager support), competence and career development, so competence with on-the-job trainings, online- and classroom trainings, and also empathy for work life balance."

Other employees emphasised the importance of listening skills, encourage team members to share their ideas, and provide emotional support. Emotional support was seen important especially during challenging situations with customers or negative feedback. Simple gestures like saying thank you are also valued to increase employee morale and team spirit. Some line managers primarily offer support for general and social matters and handling HR issues. Line managers are limited to provide technical support. Line managers play a crucial role supporting employees in career development. Emotional support, logistical and administrative assistance, depending on the needs and preferences of their team members are supported by line managers as well.

Employees working on energy projects have been able to build connections within the company. Some have an extensive network, including technical service teams in Finland and West Africa. Others have built quite a large network including technical service personnel, energy professionals, colleagues, and supplier's support facilitating problem-solving and support in energy projects.

When it comes to planning of employee training, all managers emphasised the importance of on-the-job training along the company's designated training path. Trainings

are discussed during yearly development discussions and monthly team meetings are conducted for the allocation of On-the-Job Training sessions. One comment was to systematically review training with company's training provider taking a proactive approach in preparing plans as explained below:

M3: *"-- For me it's a key topic, training and development skills for our team. We are seeing the technology running very quickly for the future decarbonization and the alternative fuels and other solution. We must be aligned with the new solution and new technology."*

Assessing training effectiveness had different views from managers. One is facing challenges when measuring the effectiveness of training but is in the process to be developed. Random tests were proposed to verify the impact of training. Another statement was that there is no structured way to measure the effectiveness of the training. It was noted that good practical training has been when employees worked on energy projects. Debriefing sessions after the assignment provide valuable suggestions for further process development and boost confidence for future assignments.

Employees mentioned several approaches as well as how planning of trainings are currently done. One employee mentioned that trainings are agreed by line manager if there's a clear business case and a need for training. It was noted that organising trainings can be challenging and planning of training is more reactive than proactive. On-the-job training and self-study are common methods used today in field service teams. Another respondent agreed that detailed explanations are usually required when signing up for the trainings. Organising trainings for field service personnel can be difficult. In case if there are new products involved, it is commonly discussed by line managers during project meetings to determine the need for trainings. However, it has been seen that busy schedules can make it difficult to organise trainings effectively. Trainings are typically planned based on business cases or specific requirements. Approvals for trainings are needed from line managers. Challenges such as visibility, coordination, and busy

schedules may impact the planning process. Employee explained the approval process for the training:

E4: "—Basically, the line manager will approve for classroom or online trainings once there's a business case for such requirement."

Employees shared their vision for future trainings. Some are interested to go deeper into discipline specific technical matters. Others express a strong interest and motivation towards project management. The importance of communication, leadership, scheduling skills, and leading the discussions on technical matters was highlighted. These different training request between respondents highlights the varied training needs among employees. It ranges from technical skills to project management and communication competencies.

4.3 Engagement

The second theme discussed is engagement, and especially, how managers and employees see it in the organisation. To understand this, respondents talked about four parts of the questionnaire: resource management, employee experience, training, feedback and organizational impact.

4.3.1 Resource Management

Ensuring that employees have the necessary materials and equipment to do their job, several approaches were noted by the managers. These included encouraging employees to request a tool list from the project team or project manager, implementing a standard toolset based on the job requirements and emphasising comprehensive briefing during the onboarding process to prevent and minimise unforeseen challenges. Manager explained the efficient way for tool management:

M2: *"We keep some sort of standard requirement (tool list) and also keep the open loop interaction in case materials are needed, to get them working in top gear ahead of time. So from our side it's some standard requirement, also communicating with relevant stakeholders, those who are more knowledgeable in the field and also the engineers as well."*

Employees ensure they have necessary materials and equipment by personally studying the project and its scope. It can be done through group discussions and utilising company's various technical knowledge bases and field service mobility platform. Understanding the job at hand is crucial and is explained by the employee:

E7: *"--First things I go to site documentation, sometime there used to be this commissioning package. So, when I went inside through, I access all items there and from there I define: OK, I'll be needing this tool. I'd be needing this thing, this one I don't need etcetera. So, I prepare one package and I bring these with me. I like to avoid after going to site and then you discover missing this thing. If I'm duty I contact technical service to clarify."*

One employee noted that communication with the chief project engineers from the project side is essential to manage the scope of work efficiently. They provide details of the project to enable employees to prepare the required tools based on the scope of work and upgrades. It includes licenses and software as well. In some cases, a technical service is contacted for clarification.

4.3.2 Employee Experience, Training, Development and Feedback

Company ensures employee's proficiency through its own training system by selecting competent individuals with valid certificates. Employees have many different training possibilities, such as on-the-job-, virtual- and classroom trainings. Training possibilities vary between the field service network hubs. One is targeting of 100 training days per year. Another is promoting virtual and on-the-job training possibilities. Self-paced training options are also available. Trainings are discussed during development discussions

and employees have the autonomy to attend but requires approval from line manager. Trainings are aligned with the training system's catalogue, including on-the-job trainings. Employees are confirmed only after their data in the training system is verified.

M1: *"--We have a kind of structured way to train our people to be exposed to different aspects of the power plant, auxiliaries, engines, turbochargers and so on. If the product is new, he would probably need one classroom training that we can offer in the Land and Sea Academy and then some exposure like on-the-job training on specific comfort component or specific engine type and then they are ready to go wherever you send them."*

Employees explained situations where they have been allocated to an assignment where they have not had training before, or it wasn't directly fit for this specific task. In one case respondent faced challenges during field service when he was working offshore during the COVID-19 pandemic. They had to handle commissioning tasks with specific software without having prior training for it. This experience supported the business case for training planning. Another respondent mentioned facing different situations, such as energy projects, where they lacked prior background before their first assignment. Existing people support network supported during project preparation by having earlier experiences for example, with commissioning instructions. It was also noted that their people support network expanded during the project. One respondent highlighted the importance of creating guidelines before going to a site. Same respondent emphasised the value of on-the-job training for learning and growth. While facing assignments without prior training presented challenges, respondents found ways to adapt and learn. It was often achieved through on-the-job experiences and seeking support from colleagues and technical services.

Feedback shared by the manager and other colleagues is shared through various channels, such as continuous discussions, calls, and emails. Customer requirements are shared before travel, and feedback from different stakeholders is collected to be discussed after the assignment has ended. The frequency of feedback sharing may vary

based on the activities at the site. On some occasions, feedback is shared immediately but, in some cases, it is discussed after returning from the assignment. Safety and technical meetings also facilitate feedback sharing. Receiving feedback from employees varies. Feedback is received particularly on technical issues. WhatsApp forums were used frequently. Feedback is actively requested, especially when work deviates from the planned course.

When it was asked from employees if their opinions are heard at work and how they share feedback from their assignments, employees felt that their opinions are generally heard at work. They utilise a variety of methods to share feedback from their assignments. One respondent indicated that their opinions are heard especially during the development discussions. It is common to utilise HR tools to request feedback. Another respondent mentioned that their opinions are heard about 70-80% of the time. They share feedback through field service tools, utilising the company's various platforms, as well as through discussions with colleagues and sharing lessons learnt.

Information sharing between colleagues and different departments are crucial for efficient project work. It was asked from employees if they have forums to discuss common challenges from the field, and it was noted that they have various different platforms in use. One respondent mentioned that they have a country-specific forum on WhatsApp which allows for networking and sharing challenges among colleagues and sites. Another respondent continues by having different WhatsApp groups as well and company specific Microsoft Teams forum to share technical issues faced at various sites. Generally, employees utilise various platforms such as WhatsApp groups, Field Service Teams channels, personal discussions, and company-specific technical forums to discuss common challenges from the field and seek solutions collaboratively.

Development discussions set targets based on company level targets, customer feedback, experiences, and communication with a focus on zero injuries and re-works. Targets for employees in development discussions are formed from many different perspectives.

This includes setting group and individual targets. Quality, customer satisfaction and customer care are actively measured. Targets are also based on received feedback and prior experiences. The focus is on systematic team development achieving zero injuries and reworks.

4.3.3 Organizational Impact

Employees' perceptions of the company's current strategy vary, with some feeling positively influenced, particularly in relation to environmental practices, while others feel less impacted in their daily tasks. Commitment to high-quality work among colleagues is generally viewed positively, with ongoing efforts noted especially with new employees. Feedback on personal development progress varies, with some receiving it through informal channels like colleagues' comments at project sites. Some receive feedback through structured sessions with their line manager. Regular discussions with line managers are seen as valuable for personal development. Opportunities for learning and growth in the past year range from project management trainings to leadership programs.

Employees shared their experiences of receiving recognition for their good work. In some cases, recognition comes from line managers during group meetings. Line managers may also propose bonuses, and customers may provide positive feedback, for example, in timesheets. Recognition through gestures like handshakes and positive recommendations from customers are highly appreciated in field service teams. Many of the employees felt a sense of care and support from their line managers or colleagues through empathy, support for work-related issues, or personal gestures highlighting team member's wellbeing.

When it was asked from field service engineers if they have the opportunity to do what they do best every day at work, respondents generally expressed positive thoughts. Some answered with a straightforward "Yes," indicating that they feel they are able to utilise their strengths regularly. Others also answered affirmatively, though they

acknowledged that there are occasional challenges. Nevertheless, they still enjoy their work.

E5: *"-- I do what I do best every day. I enjoy doing what I am doing, but just like we know some days comes with their own difficulties."*

Several employees mentioned that they view each new site as an opportunity for personal growth and find the dynamic nature of their job exciting. As a conclusion, respondents generally feel that they are able to utilise their strengths in their daily work, with many expressing satisfaction in their roles.

4.4   Comparison between Managers and Employees

Comparing the responses between managers and employees regarding the onboarding process and engagement in energy projects, differences can be found. What managers emphasise is important is to ensure correct competence, safety, and access to internal contacts for commissioning and technical support. Employees prioritise during their onboarding process the project briefing, effective communication with the team, and understanding the scope of work and safety procedures. However, it was noted from both respondents that onboarding for new build projects is not formally conducted. Face-to-face discussions are emphasised and adherence to internal rules. Managers highlighted the need for more training and development for middle-experienced employees and notes the logistical challenges such as travel and mobilisation to site. Employees were overall rather satisfied with the current onboarding process, but suggested as an improvement to have more project management training, enhancing communication within the team and relevant stakeholders, and ensuring continuity within the team. Ensuring that employees are sufficiently trained for their job roles, managers highlighted to rely on company's own training system. This system works as a key tool for selecting competent individuals from the database. Selection is based on their possession of valid certificates. Moreover, on-the-job training is highlighted as a practical learning method to support formal certifications. However, employees highlighted many cases where

they were assigned to energy projects without prior background knowledge. In such case, it was necessary to increase the networking effort to prepare for new tasks effectively. Despite these challenges, employees emphasised the importance of proactively creating guidelines to navigate unfamiliar assignments and leveraging on-the-job training opportunities to enhance their skills.

Overall, managers focus more on addressing the competence gaps and practical logistical challenges, while employees emphasise effective communication, role clarity and technical preparation for energy projects.

5   Discussion and Conclusion

The purpose of this study was to offer theory and examine how the onboarding process and employee engagement in high resourcing variability environment is currently managed. The project locations of the case company are distributed worldwide, each with its own entry and work requirements. In the present resourcing environment, it has been observed that having more trained local resources, it could facilitate energy new build projects by effectively addressing sudden resource demands and fostering strong customer relations throughout the project's life cycle phase. Interviews showed that there isn't a formal onboarding process for energy new build projects. This was one of the major discoveries in the study. To train employees for new jobs, both managers and employees, emphasised the on-the-job training method. It was seen as a valuable investment for future talent development. Communication and socialisation are the key elements in successful projects. It has the potential to improve engagement in employees (Saks, A.M. and Gruman, J.A., 2018). The study focused on identifying optimal tools and practices for onboarding, engaging, and training field service resources from the extensive global network to support energy new build projects. Interviews revealed relevant suggestions for developing the onboarding process further.

The researcher conducting this study has been involved in energy new build projects since 2010, initially in the field and since 2019 managing project resourcing in Europe and Africa. Through this experience, the author has observed that despite proactive planning and execution of resourcing, unexpected challenges can still arise. These challenges include situations where the project start is preponed by the customer, requiring mobilisation earlier than planned, allocated resources are changing position in the company or leaving the company during the project execution, as well as sudden personal or health-related issues that necessitate individuals leaving the project site. Aibinu and Odeyinka (2006) examined in their study that slow mobilisation of project site resources is one of the main factors causing delays in construction projects for example, in Nigeria. Faridi and El-Sayegh (2006) continues listing down three most important resources for

construction projects and one of them is manpower. Contractor's great priority throughout the project is to ensure that resources are available at any time. This supports the idea that delaying the mobilization of resources can cause delays during the construction phase. Lessing et al. (2017) argued that construction employee's low skill level and poor productivity of resources are about to become worse in the future. Managers mentioned in interviews that middle-experienced field service engineers were not planned to projects actively, potentially leading to a competence gap in the future. This suggests that systematic competence development will be necessary to prevent such a gap down the line. Company's resourcing strategy is to secure that company has identified its personnel needs for now and for the future. Once strategy and resourcing are managed efficiently, it brings flexibility for resourcing and can support even unplanned challenges (Loosemore et al., 2003).

It was noted by both respondents, managers, and employees, that onboarding for energy new build projects is not formally conducted. Based on the responses, managers were executing the onboarding as a normal project briefing for their personnel and focusing mainly on human resourcing management and line managerial tasks. As Talya N. Bauer, Ph.D. (2010) explained, onboarding is: "the process of helping new hires adjust to social and performance aspects of their new jobs quickly and smoothly". It is evident that, since the formal onboarding process for such employee transfer is missing, it may affect for employee's productivity when assigned to the project.

According to Norma Davila and Wanda Pina-Ramirez (2018) onboarding can be divided into two distinct components, which are general onboarding and role-specific onboarding. In general onboarding company's culture, including its mission, vision, values, policies, and procedures are introduced to employees. Based on the interviews, energy's general guidelines such as process understanding and energy-specific tool knowledge are understood at a basic level, but not thoroughly. There is room for improvement to understand these areas better, both in manager and employee positions.

Role-specific onboarding is a unique process tailored for each position in the company. It is helping employees to obtain needed skills and knowledge to master the role in the most efficient way by providing tailored trainings for specific technical skills and competences which are unique to this role. This will assist new or new-to-role employees to assimilate into the department's culture and get them to master the new role in the most efficient way (Norma Davila & Wanda Pina-Ramirez, 2018). By implementing a tailored role-specific onboarding process, it could minimise the challenges emphasised by employees and managers during the interviews, such as training for energy-specific tools and software, discipline-specific technical requirements, job roles, and responsibilities. Norma Davila and Wanda Pina-Ramirez (2018) mentioned that role-specific onboarding can be done, for example, via online courses and on-the-job training, which could be useful in frequently travelling positions.

During the interviews, managers consistently emphasised the importance of on-the-job training in various scenarios, including addressing potential underperformance in their employees' field performance, when introducing employees to new jobs, and outlining training development plans. On-the-job training was also emphasised by employees, highlighting its importance in their personal development plans by learning role-specific tasks with a more senior employee. Managers stated that on-the-job training builds confidence among their employees and prepares them for independent work for their next assignment. Leuven et al. (2005) explained in their study that fresh knowledge, such as learning new skills, inspires and motivates employees to enhance their productivity. It has also been noted to strengthen long-term commitment to the employer-employee relationship and decrease the probability of employees' turnover to alternative companies.

Employees prioritised communication and socialisation one of the most important topics during the onboarding phase. Communication and socialisation within the team was said to foster collaboration and enhance teamwork in their work community. Saks, A.M and Gruman, J.A. (2018) argued that socialisation within the organisation has the potential

to affect positively on newcomer's work engagement. Saks and Gruman (2011) continues by stating that socialisation tactics are related to a newly hired employee's engagement via positive emotions, self-efficacy and perceptions of person-job fit. Employees in field service teams have various platforms, such as WhatsApp groups, Field Service Teams channels and company-specific technical forums to discuss common challenges and other topics collaboratively. Such forum in energy related work could potentially increase employee's engagement. It was also noted that the line managers are working as a link between employees and needed stakeholders such as project managers, logistical officers, and technical support to ensure employees are taken into the project in an efficient way.

Cooper-Thomas et al. (2014) explained in their study that if a newcomer is proactively looking for feedback and receives one, it has a positive relation to work engagement. Employees mentioned during the interviews to receive feedback through informal channels such as collecting input from colleagues on site and in a more structured way from the line manager. It is important to note that line manager is based in the office, and not at the work site with their employees. Thus, collecting and sharing feedback can be challenging, and it is not done on time. By improving feedback sharing within the team, it could improve to engage employees better.

5.1 Practical implications

According to the research findings, it's possible to suggest tailored development plans for enhancing the onboarding process not only for the case company but also for other organisations.

Implement a formal onboarding process. A structured onboarding program specifically tailored for energy new build projects could be developed. This should include both general onboarding, covering company culture, policies, and procedures, and role-specific onboarding, focusing on technical skills and competencies required for each position.

Improve communication and collaboration. Face-to-face discussions and kick-off meetings with project teams to be improved to understand project requirements better and to increase team collaboration. Clear communication channels between project team members are crucial and proactive engagement with project managers and coordinators to be emphasized.

Provide comprehensive training. Comprehensive training programs covering technical skills, project-specific tools and software, safety protocols, and job roles and responsibilities to be offered to employees. Utilise on-the-job training method with more experienced colleagues in order to build competence and confidence with newly hired employees.

Establish strong support networks. Develop robust support networks within the organisation to provide emotional support, technical assistance, and career development opportunities for field service engineers. Open communication and collaboration with team members to be encouraged.

Facilitate feedback mechanisms. Improve feedback sharing within teams by establishing clear channels to collect and share feedback. Make sure that feedback is provided on time and systematically to help employees improve and stay engaged.

Recognise and appreciate employees. Recognise good work via gestures such as bonuses, positive customer feedback, positive colleague feedback, and recommendations. Encourage managers to share employees' contributions during group meetings.

Promote supportive leadership and team environment. Ensure that line managers and colleagues provide support for employees. Support should be provided, both personally and professionally, by helping if they have challenges at work and by showing empathy. A supportive team environment where employees feel valued, supported, and encouraged to excel in their roles is to be emphasised in the work community.

Provide opportunities for personal growth and utilisation of strengths. Provide opportunities for employees to use their competence and skills on a daily basis. It can be obtained by assigning tasks that align with their capabilities and interests. New assignments to be seen as an opportunity for personal growth and allows employees to stay engaged and motivated in their roles.

5.2   Limitations and future research

This research investigates the onboarding process for employees who have previously undergone temporary employment from field service jobs to energy new build jobs, along with their direct line managers. Additionally, the study assesses the level of engagement of this same group of employees in the current onboarding process when transitioning to another business unit. Due to the limited prior experience with this process, the sample size is restricted to 7 to 9 employees within the company. Empirically, the study focusses on a single company and industry sector. The interviewed employees are located in Italy, Nigeria, and Senegal.

In the field of employee engagement and field service management, the area of long-term effects of training programs could be examined further. It could consist, for example, evaluating the long-term impact of different training programs on employee retention, skill development, and job satisfaction in the field service teams. The effectiveness of different training programs, such as on-the-job training, virtual training, and classroom training among field service engineers could be examined further. By examining this research area further, there is potential for the development of evidence-based strategies to enhance employee performance, engagement, and satisfaction in field service business.

5.3   Conclusion

As a conclusion, the onboarding process for field service engineers who are assigned to energy new build projects reveals a selection of structured procedures and informal practices. Managers highlight the absence of onboarding process that is tailored for energy new build projects. Today, managers are relying more on face-to-face discussions, role clarification, and collaboration with internal stakeholders to ensure project preparation. Employees, on the other hand, highlight the importance of initial discussions with line managers regarding the project and kick-off meetings with project teams to understand project requirements more in detail.

The different experiences in the onboarding process justify the need for a more standardised approach. It should include the key elements such as project scope, responsibilities, technical expectations, and safety aspects. Some of the managers emphasise the necessity of skilled employees and detailed briefings. Employees emphasise the importance of clear communication, methods for team collaboration, and access to project documentation.

Effective resource management is a critical factor to support field service engineers' effectiveness on-site. Proactive communication during the project preparation and execution phases and extensive briefings during the onboarding process were highlighted to ensure that field service engineers can perform their tasks properly.

The study also shows how important employee experience, training, and feedback mechanisms are when building a good work environment. Company is providing many different training programs to develop employees' skills, such as on-the-job training, virtual, and classroom training. These training programs also support employees' professional growth. Feedback mechanisms are important in facilitating continuous improvement. It can include regular discussions, calls, and emails to share project insights and addressing challenges.

This study shows that a strong onboarding process, effective resource management strategies, a good work-life balance for employees and feedback mechanisms are important areas when building a good work environment. Companies can improve employee satisfaction, productivity, and overall project results by focusing on these points.

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Appendices

Appendix 1. Interview Questions for Managers

FIELD SERVICE MANAGERS

Background questions

1. How many years you have been working in your current position?
2. How many years you have been working for Wärtsilä?
3. What is your current position?

Onboarding of a new-to-role employee

Onboarding Process

4. How do you execute onboarding for field engineer assigned to energy project?
5. What are included in onboarding process when assigning field engineer to energy project?
6. Who are included to the onboarding process?
7. How long onboarding typically lasts?
8. What do you see as high priority in onboarding?
9. How satisfied you are for current onboarding process? Please explain.
10. What kind of challenges you see in current onboarding process?
11. What kind of improvements you have for onboarding into energy project?

Job requirements and Performance

12. Do you have as a line manager job requirements known for a new job in energy new build project?
13. How do you follow your employee's performance at field?
14. How do you react to underperformance?

Policies and Guidelines

15. How well you know the policies when working for energy projects such as working time, rotation sequence?

16. How well you know the guidelines when working for energy projects such as use of SQAD, DCM or Logwis?

Employee Support and Training

17. What kind of support your employees usually require in a new job?

18. What kind of support network your employees are usually having?

19. What kind of support you can provide in case employee is having challenges at work?

20. How do you plan trainings for your employees? (e.g. for new products, preparing for new requirements)

21. How do you measure the effectiveness of training?

Engagement

Job understanding

22. How do you make sure new employee understands the requirements of a new job?

Resource management

23. How do you make sure your field engineer has needed materials and equipment to do the work right?

Employee experience, Training, Development and Feedback

24. How do you ensure your field engineer is trained for the job?

25. How do you share feedback for your field engineers?

26. How often you share feedback for your field engineers?

27. How often you are in contact with your filed engineers during their assignment?

28. Do you receive feedback from field engineers regarding their assignment?

30. What kind of possibilities your field engineers are having to participate for trainings?

32. How do you form targets for your employee in development discussions?

Organizational Impact

29. How is company's strategy shared for field engineers?

31. Are your engineers having a forum to discuss common challenges from field?

Appendix 2. Interview Questions for Employees

FIELD SERVICE ENGINEERS

Background questions

1. How many years you have been working in your current position?
2. How many years you have been working for Wärtsilä?
3. What is your current position?

Onboarding of a new-to-role employee

Onboarding Process

4. How your onboarding for a new job has been done?

5. What are included in onboarding process when assigned to energy project?

6. Who have been participating while onboarding to energy project?

7. How long onboarding typically lasts?

8. What do you see as high priority in onboarding?

10. How satisfied you are for current onboarding process?

11. What kind of improvements you have for onboarding into energy project?

Job requirements and Performance

9. Do you have as a FS engineer requirement known for a new job in energy new build project?

12. Is job requirement for a new job easily available and known? Please give an example.

Policies and Guidelines

13. How well you know the policies when working for energy projects such as working time, rotation sequence?

14. How well you know the guidelines and instructions when working for energy projects such as use of SQAD, DCM or Logwis?

Employee Support and Training

15. What kind of support you are usually requiring in a new job to energy site?

16. What kind of support people network you have?

17. What kind of support your line manager can provide?

18. How are trainings planned for you? (e.g. for new products, preparing for new requirements)

19. What kind of training you would like to have next?

Engagement

Resource management

20. How do you make sure you have needed materials and equipment to do your work right?

Employee experience, Training, Development and Feedback

21. Do you have opportunity at work to do what you do best every day?

22. Have you faced assignments which you have not been trained for (give an example)?

23. Have you received recognition for doing good work? If yes, how do receive the recognition?

24. Do you feel that your line manager or someone at work cares about you as a person?

25. Are your opinions heard at work? How are you sharing your feedback from your assignment?

30. Do you have a forum to discuss common challenges from field?

Organizational Impact

26. How is company's current strategy influencing you in your job?

27. Do you think your colleagues are committed doing high quality work?

28. Have you received feedback about your personal development progress in your job in last six months?

29. What kind of opportunities in the last year at work you have had to learn and grow?