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Storage and Upkeep of Training Material

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Abstract

The thesis has been done on behalf of the company Wärtsilä, under the Department of Maintenance Planning. The maintenance planners work together with different teams of the company to support their customers with 4-stroke long-term marine agreements and the upcoming maintenance of the engines. The Maintenance team is now seeking a better way of storing their training materials to better train their new employees.

This thesis aims to examine how training materials are stored and managed in the department in order to propose improvements for accessibility, usability, and longevity. A qualitative case study was designed that focused on three internal platforms (Microsoft Teams, M-Files, and WeLearn) and we examined them in terms of accessibility, version control, user permissions, and compatibility with day-to-day workflows. The study also considers proposed interventions using AI-generated videos to enhance or supplement training.

The findings show that each platform has strengths and weaknesses, but the platform choice itself is less important. The most important factor in ensuring relevance is taking ownership and maintaining the currency of the material. Even the best platform fails because ownership is not established. The thesis recommends establishing content ownership, implementing a basic tracking system, and exploring the use of AI tools to assist with updates and scalability.

Language: English

Key Words: platform, training, storage

EXAMENSARBETE

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Abstrakt

Examensarbetet har gjorts på uppdrag av företaget Wärtsilä, under avdelningen Maintenance Planning. Maintenance Planners arbetar tillsammans med olika grupper inom bolaget för att stödja deras kunder med 4-takt långtidskontrakt och uppkommande service på motorerna. Maintenance Gruppen söker nu efter ett bättre ställe att lagra sina tränings material för att bättre kunna träna sina nyanställda.

Detta examensarbete fokuserar på hur tränings material är lagrade och hålls uppdaterat i avdelningen för att kunna ge förbättrings alternativ till tillgänglighet, versionskontroll och användarbehörighet. En fallstudie gjordes på de tre huvud använda plattformarna på Wärtsilä (Microsoft Teams, M-Files, and WeLearn) vilka blev granskade för deras tillgänglighet, versionskontroll och kompatibilitet med dagligt arbetsbruk. Arbetet kollar även tillgängligheten för att använda AI-genererade videos som förstärkning till vanlig träning.

Slutresultatet visar att varje plattform har styrkor och svagheter, men det är inte själva plattformvalet som är det viktigaste utan det viktigaste är att utse någon som tar hand om uppdateringen och sorteringen av träningsmaterialet. Även den bästa plattformen är dålig om den inte sköts korrekt. Arbetet rekommenderar att det etableras en ansvarsroll och utforska möjligheten med att använda AI verktyg som hjälpmedel.

Språk: Engelska

Nyckelord: plattform, träning, lagring

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1 Introduction

This thesis only focuses on Wärtsilä's Maintenance Planning department and does not consider other departments or business units. The only internal platforms being evaluated with the company's current approval are Microsoft Teams, M-Files, and WeLearn. External or commercial learning platforms are excluded from this thesis. Although I will reference AI-supported training tools, no practical implementation or testing of those tools was performed as part of this study. Rather, I am focusing on recognizing opportunities and making recommendations that take into account current tools and workflows.

In this chapter, the background and context of the thesis were covered including the study's purpose, research questions, and topic-related organizational context at Wärtsilä. The chapter also set forth the general structure of the thesis and noted that Maintenance Planning had a potential problem with how training materials were stored and maintained. The next chapter will present the theoretical framework that underpins the study.

1.1 Background

The maintenance Planning department at Wärtsilä is a vital part of the company's stewardship role in maintaining 4-stroke marine engines, this is especially true in the area of long-term service agreements. The department has steadily increased in size, funding, and responsibility, and this has provided impetus for the development of an efficient and structured training method.

While onboarding processes and role-specific handovers are in place, one of the main issues concerns how training material is captured, stored, maintained, and accessed. Currently, training materials are dispersed across multiple platforms, such as Microsoft Teams, M-Files, and Wärtsilä's intranet learning management system WeLearn. The distribution of relevant material provides inefficiencies, inconsistencies, and confusion to the new and existing team members. Revision of training materials is done officially only through Microsoft Teams, typically when a new training session is carried out.

This being said, employing a strategy ensures that some relevant training material has a dating, generally done on an informal basis, and the absence of a consistent practice or ownership leads to variation and a lack of version control over time. Additionally, in instances where no clearly defined owners for the content, determining the validity and relevance of any training material, if it can be located at all, becomes increasingly difficult. This not only impacts

onboarding but also everyday use when an employee is trying to find updated guidance or share information with their coworkers.

This thesis paper is focused on searching for a better way to organize, maintain, and deliver the training materials within the Maintenance Planning department. This thesis will also explore what different platforms might work for an effective repository, as well as checking whether recorded training material could either enhance or replace current workflows.

1.2 Purpose and Research Questions

The goal of this thesis is to take a closer look at how training material is handled within Wärtsilä's Maintenance Planning department. More specifically, it aims to compare the different platforms that are currently used for storing and managing this material and to find out which one works best for the team's real needs. It also looks at whether written documents could be turned into recorded training videos, and if those videos or even AI-based solutions might be able to reduce or, in some cases, replace traditional classroom-based sessions. Another important part of this study is figuring out who should be responsible for keeping the training content up to date. Right now that responsibility is not clearly defined, and that can easily lead to outdated or duplicated information.

The purpose is to recommend a structure that works in practice, not just on paper. This study expands on earlier work undertaken by Koski (2024) that focused specifically on improving the onboarding process in the same department. That project focused on how new employees would be guided into their roles; this study has a specific focus on the tools and processes, and the systems that take place behind the scenes, outlining how training materials were stored, updated, and made available to the people attending to them.

Because Wärtsilä works with sensitive technical and customer-related data, only internal platforms that meet strict security standards can be considered. That means the study will focus on Microsoft Teams, M-Files, and WeLearn, systems that are already approved and in use within the company. In the future, artificial intelligence (AI) supported tools will be used in training and development to help offer automation for update notices, smart search modes, or personalize training recommendations for content appearance. That said, newer tools within Wärtsilä's own Microsoft environment, like Microsoft Stream or Viva Learning, could be worth exploring as part of the long-term solution, especially when it comes to video-based training. Questions this thesis project is interested in answering are:

1) What platform, either Microsoft Teams, M-Files, or WeLearn, is ideally best to store (maintain), training material in a way that is scalable, understandable, and easily accessible for users?

2) Can recorded training content, including video, and other AI-based technologies be an excellent enhancement of or replacement for written documents or classroom-based training content?

3. What role in your team would be responsible for keeping the training materials current?

1.3 Wärtsilä

Wärtsilä is a global frontrunner in innovative technologies and lifecycle solutions for the marine and energy sectors. The company goes back to its origins as a sawmill in eastern Finland, Tohmajärvi in 1834. Years passed, and Wärtsilä evolved as an industrial group, leading to the company becoming focused on engines and energy solutions.

Today, Wärtsilä operates in over 200 sites in over 70 countries with around 17,500 employees with the aim of enabling society to be sustainable through technology and service innovation. Wärtsilä operates with advanced energy systems and marine power solutions to lead the transition towards a decarbonised future.

The work done at Wärtsilä can generally be answered in two segments, namely Marine Power and Energy. The work done by the Maintenance Planning department, which this study investigates, is located in the Marine Power segment and contributes to the establishment of long-term service agreements and technically ensures operational reliability of marine engines worldwide (Wärtsilä, 2024).

1.4 Disposition

This thesis is organized in a way that progresses clearly from background, context, and introduction to the subject matter, company, and research questions, to meaningful theories examining digital learning and training content management. After documenting the methodology of addressing the inquiry and how the platforms were evaluated, a separate chapter outlines the current situation and comparisons of applications and platforms that the team has used. The first discussion provides a standard exploratory reflection of the discoveries about the objectives of the study. The conclusion summarizes the case study and includes recommendations and future projects.

2 Theoretical framework

In this chapter, the theoretical background for the thesis is provided. It introduces some of the relevant ideas to consider when discussing how training is delivered in today's organizations, including digital learning and platform structure, and how training materials are developed and updated. The chapter will also examine who usually owns and updates training material, and different and contextual ways that formal or informal training may work better where teams are of different sizes, vary in location, and have different aims.

2.1 Digital Learning in Organizations

Recently, digital learning and digital solutions are now commonplace to support workplace learning activities. An expanding workforce with distributed teams across Countries and time zones has driven the need for flexible and accessible training. Many companies are still using classroom training for parts of their workforce, but it is frequently being used in conjunction with digital solutions as an efficient training option that can ease educator planning and training delivery. Many organizations are adopting a blended learning technique, which includes a classroom session supported by digital materials, a slide deck, video content, and online tools. This practice allows the workforce the convenience and flexibility to work at their pace, while still having support (Gupta, 2022).

Research suggests blended learning has been proven to support retention, employee engagement, and flexibility, especially in diverse workforces that work different schedules, learning to support all learning and training styles (Gupta, 2022). Some organizations are removing the classroom altogether and offering self-paced, video training as the sole training option. Video-based learning is particularly effective in technical environments; these workflows and products can be demonstrated step by step (Hashemi-Pour & Lutkevich, 2023).

Other relevant considerations, as talent competition increasingly grows, Artificial Intelligence (AI) is increasingly playing a role in workplace learning. AI tools are now used to build learning pathways, provide feedback when learning content is used, and even perform real-time problem-solving that proposes adaptive scenarios. Simulations in support of learning allow content development to be realized with existing documentation; some systems can automate the transfer of written training material into spoken narration, interactive segments, or narration based on existing text and save cost, which lowers the

barrier for labor to write presentation slides to create quality content (Baker & Smith, 2023).

In large corporations, AI as a system is also able to begin to track knowledge gaps identified in a team or team member, based on highlighting activity, but also language found in support tickets or professional e-mails and quiz results. This tracking facilitates a process to adjust training proactively and focus on training resources and where resources need to be located. In rapidly evolving environments marine and energy technology have competing sources of learning requiring support e.g. a change in regulations/requirements or a change in the technical workflows), having the knowledge to reference with a high degree of accuracy, recorded, and with documents that need to be constantly maintained could be instrumental in achieving operational efficiency. As Artificial Intelligence develops it might even move to the point where it is no longer just supporting the program, and becomes part of the system as a tool for integrating new knowledge when available to provide process for deliberation and dependent on the software or software integrators for scale at locations/countries or to participants in the learning activity to provide consistent experiences with reduced manual/admin burden (Baker & Smith, 2023).

2.1.1 The Forgetting Curve

To facilitate retention, employees can return as often to review training as necessary. This concept connects well with Ebbinghaus' forgetting curve, where we understand that without repeating knowledge over time, we forget our learning rate, which declines rapidly. Giving people, the option to come back and learn at their leisure helps with retention in practice and on the job.

This notion has important implications for workplace learning. It suggests that we must provide our employees with repeated views and reminders of training content. When learners have repeated opportunities to revisit any key material (for instance, recorded training videos or a handbook that is stored somewhere obvious), the result is that they retain that material better over time. Spaced practice can combat the forgetting curve and enable the potential for more learning for learning over time.

The forgetting curve in relation to digital learning strategies also suggests that on-demand platforms, micro-learning modules, and reminders that can serve as learning reinforcement are relatively effective. Instead of offering learning as one-and-done classroom events, organizations should deliver learning to the moment of need (Ebbinghaus, 1885).

2.2 AI-generated training videos as a method for digital learning

The process of creating AI-generated training videos has been made easier with the availability of tools that contain a voice synthesizer tool, an automated editor, and templates. Consequently, the composition of these tools has made it possible for organizations to take onboarding documents or training manuals and produce them into high-quality videos without a full production team. Tools used for this development include Fliki, VEED, Canva Magic Media, and Synthesia. For example, with Fliki, a user can enter a training script and choose from over 2000 AI-generated voice features in 70 languages. The final product is a video that includes narration, screen visualizations, subtitles, and branding. Similarly, VEED and Canva provide similar educational videos whereby the user can enter the text, select a format, and output an educational video with inherent voiceovers and animations. Synthesia then uses the text to synthesize a video with the synthesized avatar appearing on screen, presenting the text, thus simulating a human presenter. These AI harness tools incentivize iterative delivery to apply as many times in number as desired, multiple language delivery, and continuous updates (Fliki, 2024; VEED.io, 2024; Canva, 2024; Synthesia, 2024). From the perspective of theoretical learning evidence, the technology can arguably cater to key principles of learning by applying Kolb's experiential learning cycle and Ebbinghaus's forgetting curve. The learner experience arguably benefitted from ordering and reviewing the video presentations, processing its visual cues from the video, and receiving the information in short amounts of time, deliverable pieces. Videos can be stored in existing platforms like Microsoft Teams or WeLearn and accessed repeatedly for reinforcement. They also reduce the burden on mentors and team leaders, who would otherwise need to deliver the same training sessions multiple times (Kolb, 1984; Ebbinghaus 1885).

2.3 Platform Evaluation Criteria

The platform selected for training materials should never be limited to a site to upload files. Your system should continually consider people and how they consume information daily, manageability for you, and people working on all sorts of teams with many different types of content. An effective platform should account for how users access and consume information daily, ensuring manageability for both individual users and content maintainers across teams.

Access to information by your employees is a key factor. The aim is to provide information that allows your employees the freedom to find the material they need without having them navigate excess steps or seek support to access the material.

Closely linked to that is searchability – whether users can easily search for training materials by name, topic, or keyword, especially when the volume of content grows over time. Version control is another imperative concern. The training material needs to be accurate and up-to-date, as well as clarity around who made updates, along with the time frame. There needs to be an updated management system to maintain an organized structure so that teams have a point of reference to prevent using old or invalid content. There is also control of permissions, especially when you consider some materials will only be pertinent to a job role or region (Dirksen, 2012).

A good platform should provide permissions without resulting in a complex approval process in the system. Usability is also an important concern, both from the authoring/developing and learner/consumer side. If a platform is too technical or has too much navigation, users will default to not including it in their regular training activities. The platform should serve them in terms of either structured training courses or more semi-structured content, so users can quickly access something like a reference guide or a short video. Lastly, the platform must allow collaboration and updating of content. In a department, the responsibility for documents may change from one person to another in the course of their work, depending on teams adding the content into training materials. Having an easy way to share, review, and update documents or video(s) increases the efficiency of this process (Dirksen, 2012).

In summary, there is a lot of support in the learning theories supporting these types of principles concerning design and usability. For example, Dirksen (2012) indicates that training is effective when learners can find the right material, at the right time, with little to no obstruction or block. Making obvious the importance of intuitive structure, good ownership, and solidly organized content in any platform selected to utilize for learning.

2.4 Training Methods

Having the right platform in place is only part of the solution. Even the best system won't be effective if no one is responsible for keeping the training content up to date. In many organizations, this is a common issue: training materials are created once but then slowly become outdated because no specific person or role is assigned to maintain them. Although team members have some primary responsibility for updating materials through the introduction of some tools or processes, these updates remain very informal and rely on a culture of blind compliance not found in the course-guided learning experience. This can lead to inconsistencies, duplicated content, or gaps in what is available for new employees. Assigning ownership is an important step toward solving this. It does not necessarily mean that one person needs to write everything, but someone should be responsible for making sure the content is reviewed regularly, kept organized, and clearly marked when changes are made (Koski, 2024; Dirksen 2012).

This role needs to either form part of an existing position such as Team Lead or Planner, or be an assigned function in a contributing role by advocation of the team. Previous research has shown that lack of content ownership is one of the main reasons why onboarding programs and internal training libraries lose value over time. For example, Koski (2024) stated in her thesis that a designed induction process will not work for a user if no one is updating the content when processes change. An induction process that will benefit from a design must include some combination of clear ownership and an easy way to maintain, monitor and provide feedback on materials to be useful. If the materials are maintained regularly a maintenance strategy to develop and employ, could include some regular means of maintenance like clearly defined review schedule or version history or maintenance checklists. One example is; if it has a capable platform with the tools and the ownership is staged in a meaningful way, this could help training materials remain useful or relevant, for longer periods (Koski, 2024; Dirksen 2012).

2.5 The 70-20-10 Model and Recorded Learning

The model of 70-20-10 is one of the most known models for learning in the workplace. The 70-20-10 model explains that a person learns approximately 70 percent of the time through doing the job and learning to solve real problems. 20 percent is social learning; for example - coaching, feedback, collaborating, etc. And finally, the last 10 percent is formal learning; for example - courses, manuals, training videos, etc. (Cloke, 2022). The formal piece is the smallest section, but certainly one of the most important as it provides a common baseline of knowledge, and walks employees through the tools, procedures, and safety requirements that are necessary.

Without a formal piece, it is much more difficult to support on-the-job learning and follow-on knowledge sharing consistently. The recorded training content is useful for the 10 percent piece, but it can also support the other items. The short videos can provide recognition for the mentors who are working with new colleagues or refreshers when someone has not performed the work for any amount of time. The videos have also allowed employees to reduce the number of times they have to keep repeating the same explanation, which frees them to take on different work or an advanced coaching opportunity. In global teams, recorded content would help be able to share the same information consistently with new hires, regardless of the location. There are also associated benefits to varied paces and styles of learning, which provide value within a diverse employee group. As confirmation for employees, using the 70-20-10 model as a reference point stands to demonstrate that recorded content is not really an add-on or separate piece, but rather a component of a holistic approach to learning (Cloke, 2022).

3 Methodology

This chapter describes the research approach of this dissertation. First, the problem formulation will be outlined, as well as data collection methods, and evaluation approaches for the points on the selected platforms. The research approach is qualitative in nature and involves the researcher administering in one department using observations coupled with informal conversations and analysis of the platforms. At the end of the chapter, limitations of the study will also be presented.

3.1 Problem formulation

This thesis is based on a qualitative study with the case study as a method in Wärtsilä's Maintenance Planning department. The focus of the study is to see how training materials are stored and tracked at present, and how the storage and tracking could be improved, not only by using existing tools but also by using new media such as recorded content. The benefits of exploring one department, allow the researcher to investigate the depth of the real work of the workplace, and the user's experience, all occurring in the future of workplace real-time situational and evidential contexts.

The study intended to be relevant, useful, and specific to the Maintenance Planning team. It was never intended to provide universal conclusions for all of Wärtsilä, although some findings may be of interest to other teams with similar needs. Therefore, the research was exploratory, not statistical, in nature. Its general purpose was multi-faceted: firstly to note, what is useful to keep; secondly, what is unused; and thirdly, what kind of pragmatic improvements could be made with the tools already in place. The literature for this research, both informal conversations with team members and direct extractive analysis of the performance of platforms in place, served an important function as it provided the opportunity to document not only how systems are made to work, but how they work in practice. There will be a significant difference between use and function, and that is an important distinction to make when considering realistic and effective changes.

3.2 Data Collection

Information for this thesis was collected from a combination of internal systems, existing documentation, and exploratory analysis of tools available within Wärtsilä's IT environment. The first part involved a review of the three platforms currently used by the Maintenance

Planning team – Microsoft Teams, M-Files, and WeLearn. Each system was explored from a user's perspective, with a focus on how training materials are uploaded, organized, accessed, and updated. Attention was specifically paid to features such as versioning, permissions, availability for video, and how well the platforms integrated into real work. As a compliment to the technical/functional evaluation of the platforms, a representative from Wärtsilä's Learn and Grow team provided insights with respect to additional comments she had received. Her input helped me understand the high-level role of each platform in the overall learning architecture of the company and how they were typically being used for training of all kinds, even those that were compliance or role specific. The mix of platform review, the forward-looking mitigation of AI tools, and expert-based input is useful for unpacking how training content is currently hosted and how it might be used moving forward, referencing either existing technologies or those that are still being developed.

3.3 Evaluation Criteria

The evaluation criteria were derived based on a combination of learning theory, prior research on digital training environments, and practical needs observed in the Maintenance Planning department. Sources such as Dirksen (2012) emphasize that training is most effective when materials are easily accessible, up-to-date, and intuitively structured. Moreover, informal feedback from team members and contributions from Wärtsilä's internal training specialists emphasized the value of low-friction workflows for revisiting and accessing materials.

In this sense, "practical" updating is a low-threshold mechanism where the user can edit or overwrite without needing administrator permission or technical capability. As well, it also involves a visible history of prior versions, and astute document ownership with no more than three clicks to upload or review material.

When assessing the various platforms for training materials, a set of evaluation criteria was established, from theoretical learning principles and user needs in Wärtsilä's Maintenance Planning department. For each of the 3 platforms, the evaluation considered how responsive their capacity (i.e., uploading, saving, linking), user access (i.e., retrieving, finding), and updating or maintaining the material practically. A major part of this is user access, or ease of accessibility, or access, meaning how easy it is for users to reach the learning material without

excessive clicks or overly technical restrictions. A further noted aspect is searchability. The ease a user can analytically identify the materials by keyword, title, or tags meant to encapsulate the content representation.

All these features are very relevant in environments where training content is shared among teams in different locations or teams. Version control, e.g., ensuring that training material remains current and that users have confidence they are accessing current material, is also a large consideration. A platform that provides visibility of the updated version and a format that allows a user to find the most current version helps to mitigate potential confusion and outdated content access for the user. Permissions and user access and control are significant as well - in large companies, some learning material may be relevant, or not applicable, to certain teams, roles, and/or regions.

Therefore, the ability to easily restrict or provide access improves the relevance and security of material. The platforms were also evaluated with respect to their ability to provide access to recorded material, such as video-based training, which is becoming increasingly relevant for remote and self-paced learning.

In addition, the considerations of the feasibility of incorporating AI support features like transcribing video or producing learning objectives were also considered if relevant. We also considered ease of use and other tool integration; if the platform or systems are too far removed or overhead, users are unlikely to use the platform effectively. If the platform can be integrated naturally with existing Microsoft tools already in use in the work environment, particularly teams, there is a greater likelihood that the opportunity will be accepted and used over the long term.

Finally, the cost of AI support features and resources for implementation was considered. There are a lot of benefits that from use of AI tools can provide for training delivery like controlling complexity in the delivery format for training content, automating processes to delivery, and/or the ability to scale the training delivery for training purposes. However, many of the AI tools can also add additional complexity to requirements for licensing, similar to tool uses, build-out of infrastructure, expertise, and training support/reference. In several departments, the cost of

maintaining and training the AI model(s) structure or customizing the AI output from provides a limitation for the use of the AI support features from the models.

3.4 Limitations

There are a few key limitations that should be noted when thinking about the scope of this thesis. First, the thesis considers only one department of Wärtsilä: Maintenance Planning. The outcomes are based on a review of the organization of training materials from just this one department and may or may not reflect the practices or requirements of any other team, or teams within the whole of the organization. One limitation of the study is that it only indicates tools or platforms that are currently being adopted or used within Wärtsilä, since it is in no way concerned with any outside systems, commercial learning platforms, or any other sources, which may have similar, or possibly better, capabilities. The remit of the study was to try to keep it in a relevant context by looking at what might be applied in the current IT landscape.

The AI Tools, like OpenAI Service, Cognitive Services, or Video Indexer; were looked at on an abstract conceptual level - they were not trialed in any real training contexts and no technical front-end implementation was done; their perceived value was assessed based on the reviewing of available relevant background documentation, and some minimal use cases, but it meant their exploration did not fully establish their real-life impact on a daily in-training workflow. Finally, the study does not look at how hard or time-consuming it may be to move all the training materials onto one platform. The effort involved in coordinating file migration, assessing the reasonableness of structures, and ensuring links between systems are current, will no doubt engage significant effort, organization, and resource allocation on your part. This project posed further opportunities, and comparative to the tools that are currently in place.

4 Results and Analysis

The next chapter outlines the results of the research about the current management, storage, and maintenance of training materials in the Maintenance Planning department, based on platform evaluations, observations of users, and informal conversations, so as to highlight what works well, what creates friction, and where improvements can be made. These results are specific to the local team's situation with no assumption that they are reflective of the broader conditions at Wärtsilä.

4.1 Overview of Current Practices

In the Maintenance Planning department at Wärtsilä, there are three functional spaces for training material distribution: Microsoft Teams; M-Files; and WeLearn. Each space serves a specific purpose based on content type, how formal the material is, and how often it gets updated. Microsoft Teams is the most frequently accessed space for everyday training material activities. Guides, process descriptions, and templates are primarily uploaded and shared in Teams. Teams are quickly becoming the adopted space for onboarding documentation and other informal uses. The issue is that the library of training content in Teams has not been maintained or organized to date because no one is currently responsible for maintaining any structure and implementing regular content reviews. The training library in Teams continues to become more disorganized, and even some files are out-of-date, which contributes to confusion and less trust in the material provided.

M-Files is used to store finalized and official documents. These are uploaded into specific vaults and organized using metadata. While M-Files offers strong structure and access control, it is not used as a training platform. The system is mainly accessed through direct links provided in other tools, rather than being browsed manually.

WeLearn is Wärtsilä's corporate learning platform and is used globally for mandatory and formal training. All employees are required to complete courses such as Code of Conduct, Cybersecurity Awareness, and Anti-Corruption. The platform also includes more technical modules relevant to specific roles. Content is delivered in the form of video lectures or written segments with quizzes at the end. WeLearn is used primarily for structured learning and is managed centrally, which means that department-level updates require external support. Consolidating the function of these tools reflects a decentralized training reality. Each was productive in their function; however, without ownership, structure, and clear navigation, they led to overlap, possibly obsolete content, and duplication. This presented challenges for people who are new to the organization and new people accessing it.

4.2 Platform Analysis

To determine what platform was better for the generation, storage, management, and delivery of training materials we reviewed three main platforms currently in use in Maintenance Planning based on the previous set of criteria for evaluating supportability; that is, accessibility, searchability, version control, permissions, video hosting ability, usability, and long-term maintainability. Microsoft Teams is one of the most used tools on a day-to-day basis by staff in Maintenance Planning. Not only does it serve as the primary tool for the sharing of training materials (i.e. training files, guides, processes, and templates), it also gives the greatest exposure to new and potential staff. Information is uploaded to a shared folder in a specific channel that allows others to access and make changes when necessary; thus, for all practical reasons, the bulk of training materials by the Department exist in Teams. As an informal group, Teams has unwittingly become the default repository for orientation content as well as informal documentation.

There is no individual who has ownership of the overall structure or checks the content regularly, so the training library in Teams has become unstructured. This situation is not helping matters, because there are files in Teams that are no longer relevant, and it can be difficult for new employees to determine what information can be considered reliable, and what it takes other more experienced colleagues to find files promptly. This could also stem from the fact that there is no one person responsible for maintaining the relevance of Teams.

M-Files has an ordered place to store final documents and is well structured for version control, metadata tagging, and access control to documents. Every file is stored in a vault and retrieved according to its metadata. That makes it a reliable platform to find very specific, static content. Within Maintenance Planning, M-Files is commonly used to store documents that have valuable information, in permanent form. These files are not searched often but only accessed when required. One of M-File's main strengths is that it offers a direct history of the changes made to documents, and allows users to have detailed control over who has access to or can edit a document.

WeLearn is Wärtsilä’s centralized learning management system (LMS) and is used globally by the company. It is created for the delivery of formal training, in particular compliance and

company-level courses that every employee must complete annually. In addition to these, WeLearn also hosts technical trainings that relate to Wärtsilä's operations and products. From a functionality perspective, WeLearn supports structured learning through pre-recorded video presentations, written content, and quizzes that appear at the end of each section. It also includes progress tracking, deadlines, and completion certificates, which makes it useful for HR and compliance monitoring. However, WeLearn is less suited for dynamic, department-specific training material. Uploading or modifying content usually requires admin access or involvement from the central learning team, which slows down the update process. This creates a challenge for teams that are relying on WeLearn for training, which will need to adapt quickly or will need to adapt to the tools or processes of a specific team. Another issue to consider is that WeLearn itself is constantly evolving and therefore learning content will be subject to regular reviews and revisions to remain comparable with changes to the layout, formatting, or platform updates, and even material may be automatically removed due to age or inactivity. That means a constant maintenance requirement, and that requires someone to maintain engagement, and difficulty keeping up-to-date and relevant, if there is not a dedicated person for training in a team.

4.3 Cost Estimation for AI-generated Training Videos

With the development of AI training videos, there is now a cost-effective way of doing video production activities in terms of time and money. With the advancement of AI-driven tools, platforms such as Fliki, VEED, and Synthesia now allow users to convert written scripts into fully produced videos, complete with synthetic voiceovers, animations, and branding — all without the need for a professional video crew.

The cost of producing a 5-minute video using these platforms is relatively low. For example, Fliki offers a standard subscription plan for approximately €20 per month, which includes access to over 2,000 AI voices in more than 70 languages and up to 180 minutes of video creation monthly. This equates to a cost of less than €0.12 per minute of generated content (Fliki, 2024).

VEED and Canva provide similar functionality, with free tiers available and additional features unlocked through premium subscriptions (VEED.io, 2024; Canva, 2024). In addition to

licensing costs, some labor is involved in preparing the script and managing the production. Writing a 1,000-word training script and generating the video typically requires 2 to 4 hours of work, including editing, choosing voiceovers, and customizing visuals. Assuming an average labor cost of €50 per hour (based on internal training or instructional roles), the total labor cost amounts to €100–200. Combined with platform licensing, this brings the total estimated cost of a 5-minute AI-generated training video to approximately €120–220.

By contrast, traditional video production costs are substantially higher. According to Synthesia, professional video agencies may charge around €950 per minute, which would result in a cost of approximately €4,750 for a 5-minute clip (Synthesia, 2024). Other industry sources place the range between €750 and €9,500 per minute, depending on complexity, visual effects, and voice talent (Vidpros, 2024). This gap in cost between AI training videos and traditional video production methods makes it especially appealing for businesses with continual training needs and teams that are distributed over vast distances. The ability to localize content, update it rapidly, and scale its distribution across languages and markets all while maintaining consistency adds further strategic value to this method.

5 Discussion

The analysis from the previous chapter highlights some of the institutional and logistical issues that accompany storing and managing information on training in the Maintenance Planning team at Wärtsilä. The intention of the practice has inadvertently led to distinct, discrete practices, inconsistency of process among the group members, and additional inefficiencies in regard to access and maintenance of the training itself. One of the main issues with the activity is there needs to be structure. The platform analysis showed that Microsoft Teams allows people to share content quickly with little commitment, while M-Files has state-of-the-art version control, but requires more work. WeLearn is also useful for what it is intended to provide for formal training, but it was never intended to be the most flexible for continuously evolving team-based content.

As determined, there is currently no platform that meets all of these concerns, and as Koski (2024) noted in his onboarding study of documents, the situation is further complicated by the availability of inconsistent information on designated responsibilities for individuals in the induction process. Much of the internal dialogue reiterated that it does not matter what training platform is used - it truly is the referral and the maintenance of the platform that leads to success. As the representative from Wärtsilä's Learn and Grow team mentioned: "Sustainability of training content is dependent upon, first and foremost, having an understandable process and a clear responsibility for keeping it current—regardless of the tool you use." This puts the Maintenance Planning team in a quandary: while we know a content owner role must exist, the Maintenance Planning team solely has roles (i.e., team manager, technical analyst, and maintenance planner). All the existing roles are at full capacity, let alone making time to take on the extra capacity if one of those roles were responsible for all the training maintenance. Are there possibilities now to simply reshape people's current jobs to find the capacity, to allow for one person to take the responsibility for maintaining the training material, or to possibly hire the resource? Of course, if the function was to hire a resource, there would need to be a fairly in-depth operational understanding before they could be expected to realistically maintain that content, which would be a barrier to quickly implementing this change.

On a more technical note, Microsoft Teams is still the most functional option. It integrates into the team-oriented approach that the team works. While e-learning strategies outline ways to

encourage and incorporate training, including time-saving, flexibility, and repeatability, these training guides have not been adopted or customized on a consistent basis. Using Kolb's experiential learning cycle of learning is the most successful when structured time for reflection and experimentation is provided with input, recorded training is clearly the most supportive, and provides reliable storage, and regularly updated information, otherwise, it fails to achieve potential. Finally, in the context of the 70-20-10 learning model, the amount of learning and training currently being conducted is currently under-delivering on the 10% of formal training. Without consistent, up-to-date, and accessible resources, it becomes harder to support both onboarding and long-term knowledge transfer. AI-generated videos, already discussed in Chapter 4.3, propose an efficient, scalable, and cost-effective supplement to existing formats and could be made use of broadly, subject to strategic introduction.

6 Conclusions and Recommendations

The last chapter reviews the findings of the case study and anticipates practice recommendations that relate to the Maintenance Planning division. Conclusions are contextualized by the time, place, tools, and environment of the study, and are intended to drive internal improvements, and not intended to provide solutions valid for each and every organizational context. The recommendations detail the shortcomings in ownership, structure, and maintenance of training content as observed, and their potential benefits, or other use cases, of digital and AI-assisted tools.

6.1 Summary of Findings

This thesis set out to evaluate how training materials are managed within Wärtsilä's Maintenance Planning department, with a focus on platform usage, content maintenance, and the potential role of recorded and AI-supported training formats. The findings show that training material is located mainly on the platform Teams, however - Teams, M-Files, and WeLearn - all three have different specific functionality. Of the three platforms, Teams was the most common and permitted access to material as part of the daily work practice. M-Files has the highest level of control, but it requires considerable time and effort to collect, organize, and maintain the material. WeLearn is suitable for formal company-wide training, but it would not allow for the kind of flexibility to produce training or updates per team. One of the greatest concerns found was the challenge of not having ownership, which means that no one is "responsible" for routinely reviewing and updating training material. This is the rationale to support documents being lost or stale, links are broken, and a disjointed learning experience is created. Without someone taking ownership and regularly maintaining the materials, even the best training material will become outdated and no longer relevant in the context of the training. New and emerging AI tools and platforms that are being launched into the marketplace are exciting and may automate (or at least minimize the effort in creating) the training material, but as with any of the comments in the previous sections, the sustainability in the training content depends on ownership in the organization, and processes for maintaining the materials.

6.2 Final Recommendations

Based on the above findings, the following steps are recommended:

1. Identify a Content Owner in the Team

You need to identify the role or person who will be responsible for regularly reviewing and updating training materials. If no one person can take this on fully, redistribute the workload to create capacity for this task.

2. Implement a Simple Tracking System

Create a shareable overview including the last update date and responsibility. This could be as rudimentary as an Excel list or a dashboard in SharePoint.

3. Explore AI-supported Content Creation

Start with easy AI tools like text-to-video or text-to-speech. Fliki and VEED might provide examples of what is technically capable, even if a version is produced internally using Microsoft tools (not only from WeLearn)

4. Assess the need for resources that may be required for ongoing maintenance

If there is no internal capacity, hiring a training coordinator may be an option. However, note that this task requires a good understanding of planner duties. So if you hire someone to do this, they must be trained on the particulars of the department to be effective.

5. Do not migrate unnecessarily

For better structure and maintenance, do not migrate to a different platform or program, instead keep monitoring improvement on the current platform (mostly Teams).

6.3 Suggestions for Future Development

There seems to be a potential opportunity for Wärtsilä to develop internal standards for long-term training content management across departments, which might include standards for ownership models, minimum metadata, or platform conventions, to name a few. The second potential opportunity is to build AI functionality that integrates with what Microsoft provides. Possible functionalities could include the training automation features offered by Stream, Viva Learning, or Copilot. The overall ability to create video-based training, and/or keep up-to-date

regardless of effort, will enable extensibility across departments. Finally, continuous feedback from new employees would be a great way to develop training content for relevance and usefulness over time and provide "alerts" when something needs to be updated.

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