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# UTILISATION OF DOCUMENT MANAGEMENT SOFTWARE IN FILE MANAGEMENT FOR CLIENT PROJECTS

Etteplan Oyj

BACHELOR'S THESIS | ABSTRACT

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The thesis was commissioned by Etteplan Oyj, an engineering company providing engineering solutions, technical documentation services, and embedded and IoT solutions. The main purpose of the thesis was to study technical documentation and document management software, and find solutions to how to make customers choose a specific document management software to make file management in client projects easier. The thesis was conducted in spring 2019.

The thesis is primarily focused on Therefore, a document management software by Canon. Therefore was acquired by Etteplan to make file management in client projects easier but customers were not very interested in starting to use the software. During the writing process of this thesis, Etteplan decided to abandon Therefore and focus on operating with the same document management software as its customers. Due to the shutdown of the software at Etteplan, the focus of the thesis was moved to a more general level to find out what are the views of different operators in client projects and document management software, and what makes a document management software a profitable choice. Despite the change of the strategy of Etteplan, the previous basis of the thesis was preserved.

The theoretical part of the thesis deals with technical documentation and what a document management software should be able to be capable of. This is followed by a study about document management software and client projects, and what are the views of the companies on both sides. Therefore and two other widely known document management software were compared by their technical features. A document management software usage experiences survey was conducted to find out how the employees experience using different document management software. The results of the survey were analysed and made proportional to the theoretical study. The final conclusion of the thesis is that a document management software should be chosen not only for the company itself but also for the employees who use the chosen software. It is also important to consider the perspective of customers and be prepared to sell the idea with facts such as technical specs and usage experiences.

## KEYWORDS:

technical documentation, documentation, document management, file management, client projects

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# DOKUMENTINHALLINTAOHJELMISTON HYÖDYNTÄMINEN ASIAKASPROJEKTIN TIEDOSTONHALLINNASSA

Opinnäytetyön toimeksiantajana toimi insinööritoimisto Etteplan Oyj, joka tarjoaa laite- ja laitosuunnittelun ratkaisuja, teknisen dokumentoinnin palveluja sekä sulautettujen järjestelmien ja IoT:n ratkaisuja. Opinnäytetyön tarkoituksena oli tutkia teknistä dokumentointia ja dokumentinhallintaohjelmistoja, ja löytää keinoja saada Etteplanin asiakkaat valitsemaan tietty dokumentinhallintaohjelmisto, jotta asiakasprojektien tiedostonhallinta olisi sujuvampaa ja helpompaa. Työn suoritusajaksi oli keuhät 2019.

Opinnäytetyön keskiössä on Canonin Therefore-dokumentinhallintaohjelmisto, jonka Etteplan hankki käyttöönsä joitain vuosia sitten, mutta josta asiakkaat eivät ole olleet erityisen kiinnostuneita. Kevään 2019 aikana Etteplan päätti muuttaa strategiaansa, mikä tässä tapauksessa tarkoitti Thereforen alasajoa ja jatkossa keskittymistä toimimaan kunkin asiakkaan itse valitseman dokumentinhallintaohjelmiston kanssa. Opinnäytetyön painopiste siirtyi tämän myötä yleistasoisemmaksi siten, että päämääräksi tuli tutkia eri osapuolien tarpeita ja näkökulmia liittyen asiakasprojekteihin, ja sitä mikä tekee dokumentinhallintaohjelmistosta kannattavan valinnan. Huolimatta strategian muutoksesta, opinnäytetyön alkuperäiset lähtökohdat sisällytettiin silti työhön.

Työn teoriaosuus käsittelee teknisen dokumentoinnin perusasioita ja sitä mihin dokumentinhallintaohjelmistojen pitäisi ominaisuuksiltaan kyetä. Tämän jälkeen käsitellään dokumentinhallintaohjelmistojen ja teknisen dokumentoinnin asiakasprojektien suhdetta, ja sitä mitkä useimmiten ovat projektissa mukana olevien tahojen tarpeet ja näkökulmat asioihin. Thereforea ja kahta muuta yleisesti tunnettua dokumentinhallintaohjelmistoa vertailtiin toisiinsa niiden teknisten ominaisuuksien kautta. Dokumentinhallintaohjelmistojen käyttäjäkokemuksiin liittyvä tutkimus toteutettiin sen selvittämiseksi, mitä mieltä itse työntekijät ovat eri dokumentinhallintaohjelmistojen käytöstä. Kyselyn tulokset suhteutettiin teoriaosuuden päätelmiin. Johtopäätökseksi saatiin, että dokumentinhallintaohjelmisto tulisi valita yrityksen suorien tarpeiden lisäksi myös työntekijöitä ajatellen ja heitä kuunnellen, sillä he tulevat käyttämään ohjelmistoa käytännössä. Olennaista on myös huomioida asiakkaiden näkökulma.

ASIASANAT:

tekninen dokumentointi, dokumentointi, dokumentinhallinta, tiedostonhallinta, asiakasprojektit

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# 1 INTRODUCTION

The aim of this thesis was to investigate the utilisation of document management software used in file management for client projects, where exchanging and forwarding various of documents between two or more companies is highly necessary. Exchanging and forwarding documents allows companies to conduct business together. When the service provider is able to access the specifications and other information regarding the service buyer's request, it is then able to provide what the service buyer is asking for. To make the exchanging of documents possible, there must be a working link - a software - between the buyer and the provider.

The thesis was commissioned by Etteplan Oyj and has a document management software Canon Therefore in a significant role as it is the main document management software that Etteplan has been offering for its clients to make file management between the company and its clients easier and more effective. Consequently, the main problem of the thesis was how to convince the clients to choose Therefore instead of another document management software.

Despite the original assignment, during the writing process of this thesis in spring 2019 Etteplan decided to change its strategy, which meant abandoning Therefore as a document management software in client projects and starting to operate with the clients' choices of software. As a result of the announcement the focus of this thesis was shifted to a more general level however still retaining its original premises.

## 2 WHAT IS TECHNICAL DOCUMENTATION?

According to “Technical Documentation and Process”, technical documentation is a subject area that is broad in scope and includes at least writing, organization, people management, project management and problem-solving. To summarise effective technical documentation, it consists of documentation strategies, developing style guides, meetings, systems engineering, concurrent engineering, disaster planning and recovery, and standards and references. (Whitaker & Mancini 2013.)

Technical documentation is a broad field of engineering and there is not just one way to define it. Simplified, it covers everything that has been completed from the designer’s desk to the store shelves and the end users. Even though certain people and businesses consider it expensive and waste of time and money, technical documentation is a valuable support function, which enables companies to develop their products, conduct business with each other and sell the final products to other companies and consumers.

### 2.1 The main areas of technical documentation

A documentation strategy is chosen according to the needs of a project, product or facility, and it depends on the desired end result and who the end user is. This means that you cannot document identically for internal needs, for a business partner and for end users as you have to choose the level of information the document recipient needs. For example, an end user of a smartphone or a lawnmower usually needs only the user manual of the product and not the complete design information, assembly instructions and other specifications, which the producing company and its possible business partners need. However, a business partner might need information regarding the product structure, parts, materials and development to fulfill its own part of business partnership.

Developing style guides is as important as choosing a documentation strategy, since a style guide helps the company to create coherent and logical documentation effectively and promptly. Without a style guide there would be no uniform concept and guidelines for how to create different documents, and a result of that would be a complete time-wasting turmoil where nobody finds the correct information they are looking for. However,

the main purpose of a style guide is to standardise all documentation of the company, so the company could focus on its core business more effectively.

Meetings are a crucial part of business these days because without them businesses would not be able to develop, share ideas and inform stakeholders about the project (Whitaker & Mancini 2013). Meetings have to be documented immediately to ensure that everybody will be aware of what was informed, brainstormed and decided in every meeting.

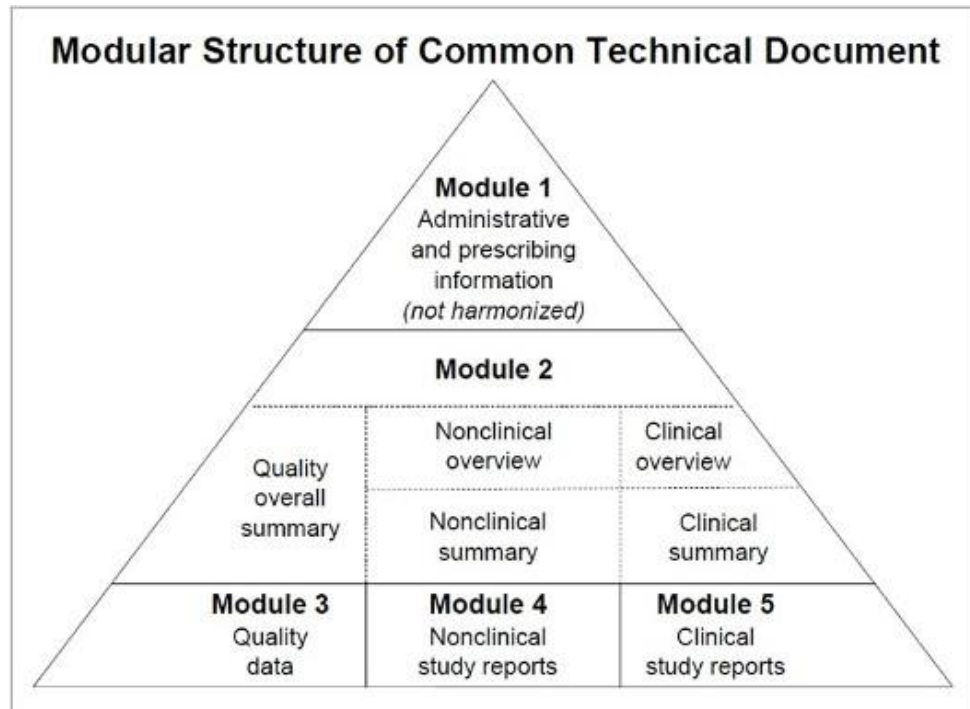
Systems engineering and concurrent engineering focus on planning for the unexpected and to be able to take the right steps in a changing, competitive environment. Systems engineering focuses on ensuring that a long-lasting project is completed according to schedule and the unexpected situations are taken into account. Concurrent engineering focuses on increasing a company's ability to react effectively to market changes and technological development because otherwise it would be fatal and a disadvantage to not react quickly.

Disaster planning and recovery also focuses on the unexpected, which may occur not tomorrow but potentially somewhere in the future. For example, it is important to have a plan for a fire at a factory and a natural disaster such as tornado if the factory is in an area where tornadoes are known to occur. Disaster planning must be documented in the same way as everything else because if not, it can lead to huge problems in the worst case.

Standards and references are needed to ensure that components, procedures and protocols are consistent not only within the company but also between business partners and across the industry (Whitaker & Mancini 2013). Without standards, even the smallest of things such as nuts and bolts would differ in sizes and threads, and they would not be compatible universally. Standardization saves time and money when basic components such as nuts and screws are universally the same.

A number of industries also have their own standards regarding materials and specifications. In addition to universal and industrial standards, a company also needs internal standards so it can work as one effective unit. Without standards, working would be slow, many expensive mistakes would be made and numerous compatibility problems would occur. Standards and references need documenting that is available when in doubt and when needed. Even technical documentation has its own standards, which must be followed to create coherent technical documentation.





Picture 1. Example of the modular structure of a common technical document (Creative Commons CC0 2019).

## 2.2 Technical documentation and business

While companies conduct their business, it is necessary to document everything from the start until the hands of the end user. It does not matter if the end product is a physical product, a facility or services, it will still need valid documentation. Without documentation, it would be impossible to know how a product was invented, designed, developed and what all the steps were along the way from the designer's desk to the end user. Even after that, technical documentation is needed to be able to help and advise the end users if they face problems and questions. Documentation is also needed when tracking down a product development process and what were the most important turning points during its development.

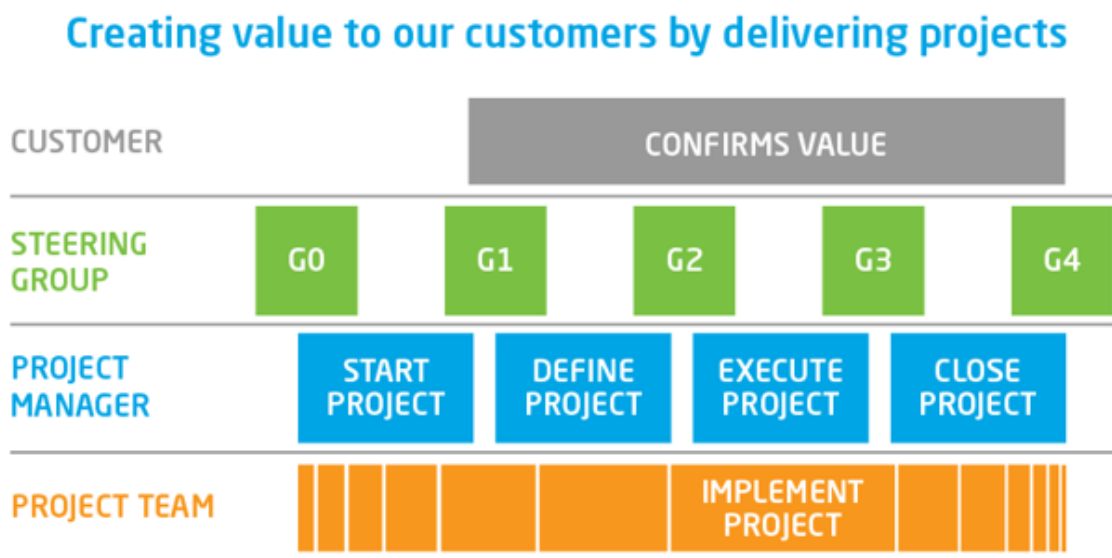
Sometimes businesses need to transfer documentation to each other when they are conducting business with each other. In that case, direct and indirect end products of technical documentation are created. Indirect end products are documents that are needed between two or more different companies while they are conducting business with each other. In technical documentation, direct end products are documents and other content that are produced and possibly managed by the selling company whose

products and services the ordering company buys. In this case, a company specialising in technical documentation is conducting business by offering documentation services.

### 2.3 Technical documentation at Etteplan

Etteplan is an engineering company, which specialises in design, embedded systems, and technical documentation. The company promises to maintain the customers' needs for technical documentation, which lets them focus on their own core businesses. (Etteplan Oyj 2019.) Etteplan's services include technical writing, simplified technical English, content management, visualization, dynamic publishing, assembly, operator and service manuals, patent documentation, assembly reviews, working instructions, training materials, spare parts lists, product guides, quick guides and many more – everything that comes under technical documentation.

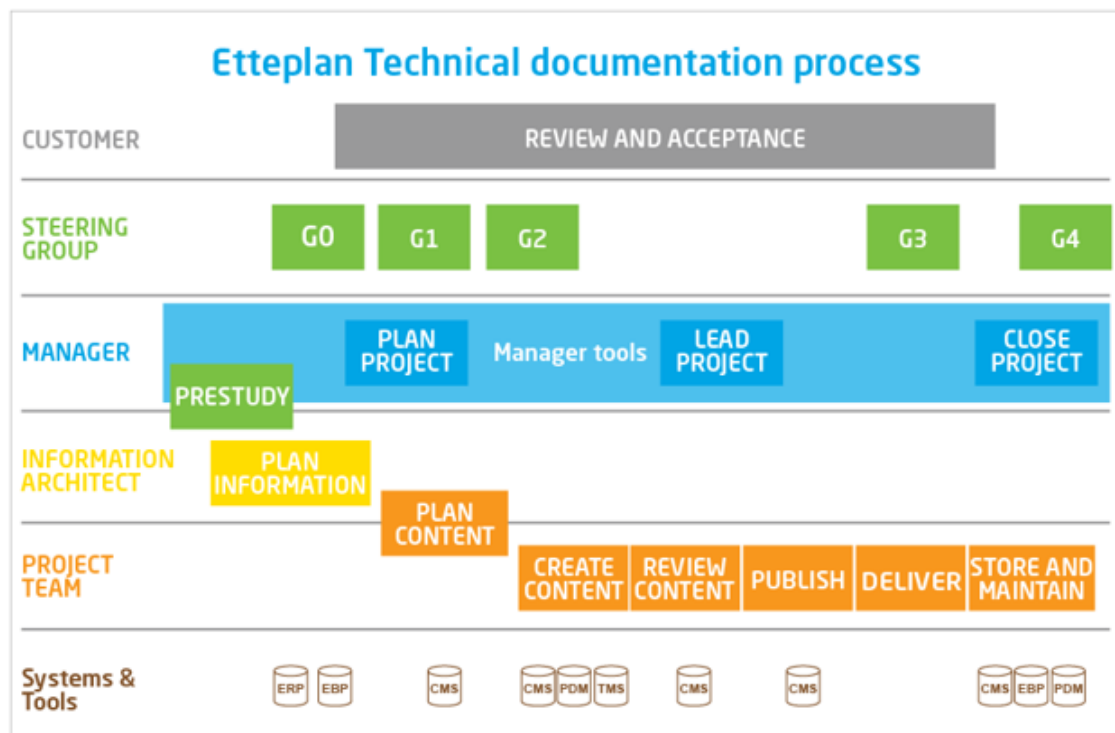
Etteplan has over 500 documentation specialists who are willing to fulfill a customer's technical documentation needs (Etteplan Oyj 2019). Thus, Etteplan has but many customers, also high standards when it comes to its business and how it is conducted. Regardless of all the services it is offering, even a company specialising in technical documentation has to create value for its customers. Etteplan fulfills this task by delivering projects which create value for its customers.



Picture 2. Etteplan's model for creating value for its customers (Etteplan Oyj 2019).

### 3 TECHNICAL DOCUMENTATION AND CLIENT PROJECTS

The main goal of Etteplan as a service provider of technical documentation is to support the client throughout the product's lifecycle by ensuring that all the technical documentation needs are fulfilled (Etteplan Oyj 2019). Client projects in technical documentation vary depending on the client and what the client's needs are. Etteplan as a leading technical documentation service provider in Europe has numerous clients in many different fields of industry, which makes it vital to be able to operate within varying needs and specifications effectively, and to be able to customise solutions.



Picture 3. Etteplan Technical documentation process (Etteplan Oyj 2019).

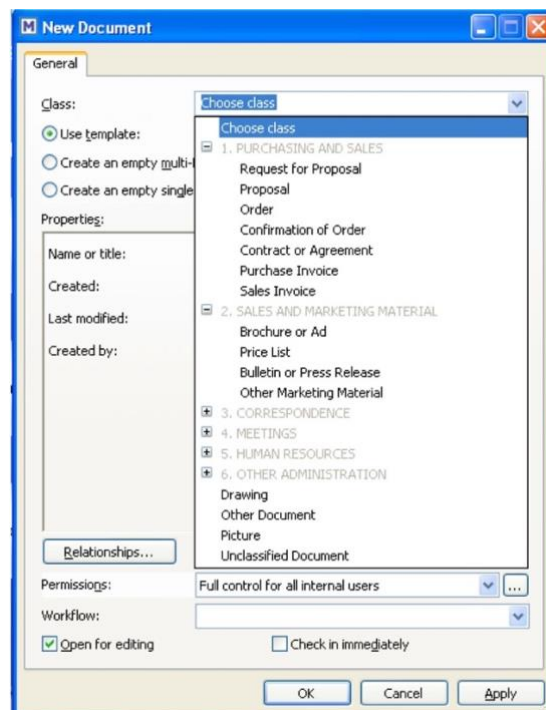
#### 3.1 Document management software

In the current world, document management software are an important and vital part of advanced technical documentation. The software are needed to create documentation, manage documentation and to transfer information between companies. To manage documents, the document management software must be able to handle metadata

which identifies and describes a document. Metadata has to be attached to documents not only for management purposes but also because of exchanging them with business partners (Suomen Standardisoimisliitto SFS 2006).

The purpose of metadata is to enable management, search, and tracking functions regarding documents (Suomen Standardisoimisliitto SFS 2006). Metadata makes it easier to find the right documents among millions of documents that may be located in many different systems. To handle metadata, a document management software is needed. The document management software has to be able to dig up metadata extensively from other systems and gather all the necessary information for the user of the software.

A document may be a single document but also a combination of different documents created in different systems, while all the different parts of it form the actual document. However, a group of individual documents with unique metadatas can be found under a group metadata while still being single documents. A set of documents differs from this by being a series, which compiles individual documents with individual metadatas that are related to each other more strictly. (Suomen Standardisoimisliitto SFS 2006.) To make document management possible, a document management software must be able to find all the previous effectively and logically from the mass of information.



Picture 4. Assigning metadata in M-Files.

An important part of the usability of a document management software is also revision management. Revision management stands for managing all the different versions of a document. When a document is given a new revision, it usually means either a change of information or a change of visual presentation. Despite all the revisions, more than one of them may be effective due to different uses. (Suomen Standardisoimisliitto SFS 2006). Even though a revision is not in force, it must be stored and has to be found if needed because its status may change or the users may have a need to check it out for different reasons such as finding out the direction of product development during the years. The document management software has to be able to find all the revisions and tell which of them are approved for use and which of them not.

### 3.2 Client perspective

Throughout the period when Therefore has been in active use at Etteplan, there have been two client companies who have taken advantage of using Therefore between Etteplan and themselves. However, one of the two clients decided to abandon Therefore in October 2018 due to its own new document management strategy, which aims for simplicity and better performance.

During a few years, Etteplan has been trying to offer Therefore for many of its clients but with poor success. Despite the many attempts to encourage its clients to utilise the opportunity, there is no detailed documentation regarding to whom the software was offered and why they refused it. Therefore has also been used internally at Etteplan but the poor success in increasing customer use has been the main reason to abandon it entirely.

However, even though clients have not been interested in switching to Therefore to exchange documents with Etteplan, it does not make Therefore a bad choice. The clients may have matching needs with Etteplan but their views on how to answer those needs may be completely different compared to the views of Etteplan. This is when marketing and negotiations step in. To be able to market something, one must prove that the idea or product is a profitable choice that benefits the buyer who is potentially willing to invest in what is on sale.

Document management software are not different compared to other things and ideas that people and companies try to sell to each other. In fact, a document management

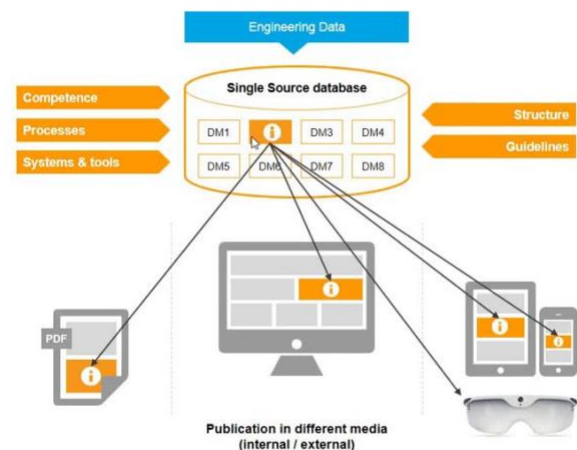
software is a product that includes an idea of effective utilisation. Consequently, a potential buyer must be convinced with both the facts and the idea before the purchase decision is made. In Therefore's case, the recognition and number of users are probably the biggest obstacles that do not convince. A client does not want to lightly invest in a software that is not widely known and commonly used because an investment reduces resources that could potentially have been used for something more profitable. Thus, a less-known software is more likely seen as a risk and it is always in the position of an underdog.

### 3.3 Company perspective

Behind a company's decision to start using a document management software and to offer it for its clients lies an expectation that the selected software will produce results by being an efficient and profitable investment. Consequently, Etteplan has made a decision to select Therefore since the company has seen it as a good investment for its own needs that aim to conduct profitable business in the field of technical documentation.

## Etteplan's Model for Technical Documentation

1. **DITA XML** for structure
  1. Reuse (single sourcing)
  2. Easier to manage
  3. Faster to find information
  4. Multiple publication formats
  5. Data exchange
2. **Simplified Technical English** for text
3. **Simplified Technical Illustration** for structure and simplification of illustrations – from 3D to reusable SVGs
4. **Experienced** documentation specialists



Picture 5. Etteplan's Model for Technical Documentation (Etteplan Oyj 2019).

According to Etteplan's model for Technical Documentation, it carries out projects where the focus is to deliver various assignments based on defined scope, schedule and cost. Thus, it is important to choose the document management software that best serves

these purposes by being multifunctional and with a good quality-price ratio. However, the challenge is to choose the most suitable tool which also suits the customers because Etteplan's business is made possible through file management. The chosen software must meet not only Etteplan's needs but also the needs of the customers as well.

To prove a client that a certain document management software is a profitable choice there should be facts such as comparison data or usage information that can be used to highlight the positive and profitable features of the software. After the facts are collected, they can be utilised to sell the idea for the client in the best possible way such as promises of saving time or general effectiveness. However, even if the facts were as good as possible, they must be sold as a profitable idea that also benefits the customer. Thus, the people responsible for marketing and negotiations have to be skilled and professional.

### 3.3.1 Employee perspective

Employees are subordinate to the company but it is still important to pay attention to their views and how they experience their job and the tools that are given to them to carry out their daily tasks at work. A single employee is the true fulfiller of the job, which makes employees' opinions important even though decisions are usually made on the higher level and in the cabinets without minding what the employees have to say.

However, spending a little time to hear what the employees have to say may prevent making poor and expensive decisions such as choosing ill-conceived software, which only slows down and disturbs daily operations. Bad tools can also reduce the motivation to conduct the job as effectively as preferable, so choosing the right tools is also important from this point of view. Generally, employees wish for a comfortable working environment in which to work with effective tools. Nobody wishes for bad tools, although sometimes it is an obligatory evil to settle for them under duress.

The employee perspective was utilised in this thesis by making it an essential part of the main study. A document management software usage experiences survey was conducted to collect the views and experiences of the employees of Etteplan regarding document management software. The survey provides data not only about the experiences regarding Therefore but also about document management software in general.

## 4 DOCUMENT MANAGEMENT SOFTWARE COMPARISON

In order to be able to evaluate Therefore, there must be reference software. For this purpose, Kronodoc by BlueCielo ECM Solutions Oy and M-Files by M-Files Oy were chosen because they are widely used in document management in industry. Reference software must be used widely in the industry to be able to make a comparison that creates value for the company that commissioned this thesis.

### 4.1 The main comparison

The main comparison was completed by studying the information and promises the software producers themselves provide at their official websites regarding their products. The main comparison is followed by a document management software usage experiences survey, which was conducted to collect actual user experiences from the employees who use the software in their everyday working lives.

#### 4.1.1 Therefore

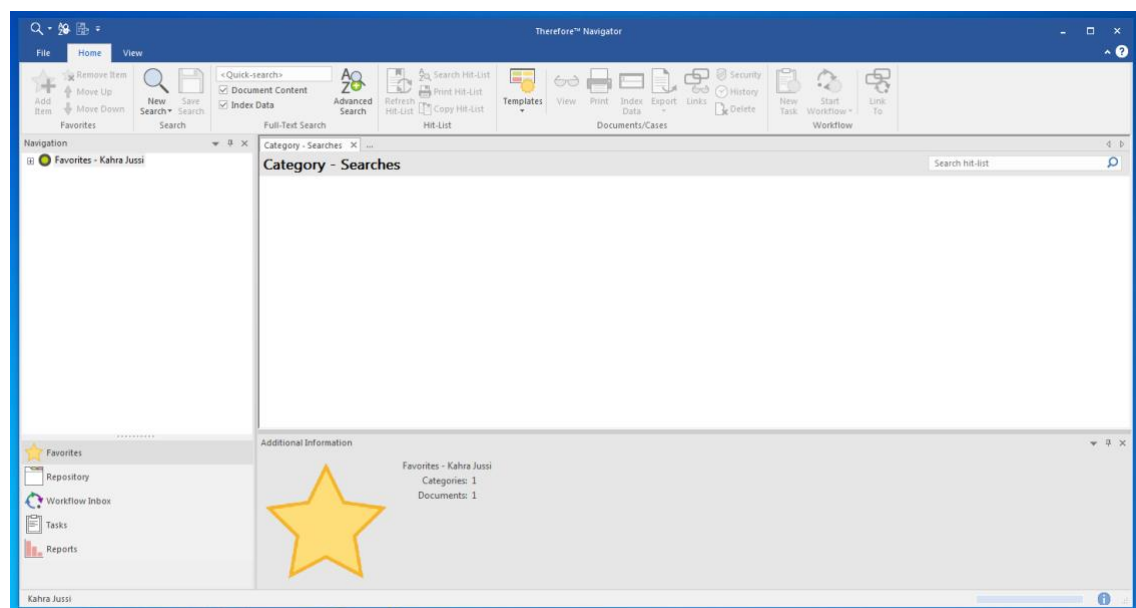
According to Canon's own words regarding Therefore, it promises that Therefore has fewer management processes than document management software usually have because it enables picking the essential information from both digital and paper documents (Canon Oy 2019). Picking the information from paper documents is possible because Therefore's user interface enables scanning documents and adding them directly into the desired project folders, where they are found afterwards.

Therefore promises to offer powerful simplicity which saves time and allows quick file sharing and management (Canon Oy 2019). It has a web-interface which is independent of time and place as it works via different devices including computers, tablets and smartphones. An important part of Therefore's document management promises is also a safe and reliable cloud service where the company information is safe and can be used in any location. The cloud service also makes it possible for two or more companies to share information with each other.





Picture 6. The document management philosophy of Canon Therefore (Canon Singapore Pte Ltd 2016).



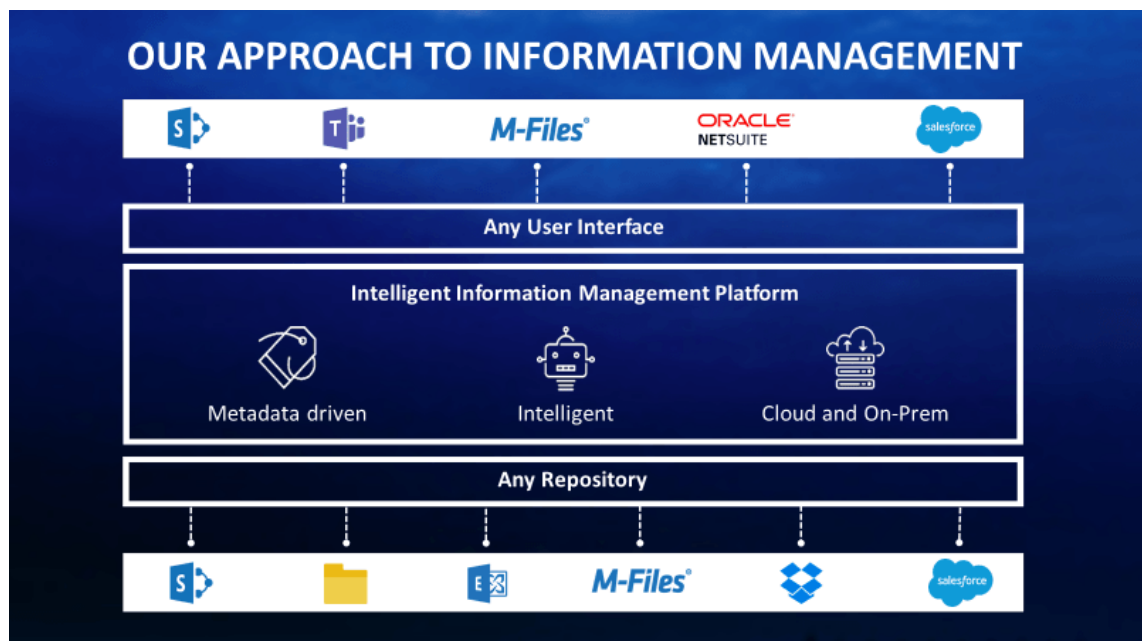
Picture 7. Canon Therefore home screen.

#### 4.1.2 M-Files

M-Files is a document management software produced by the Finnish technology company M-Files Oy. The software entered the market in 2005 and has since been one of the most-used document management software in Finland. It also has many

international users since the software company has expanded its operations worldwide. (M-Files Inc 2019.)

Like Canon Therefore, M-Files also relies on a cloud service, which enables saving, editing, using and processing information wherever and whenever needed. According to M-Files, 82 % of people believe that finding documents from different systems and locations reduces productivity (M-Files Inc 2019). Hence, M-Files has enabled extensive compatibility between many commonly used software, which enables a generally seamless usability.

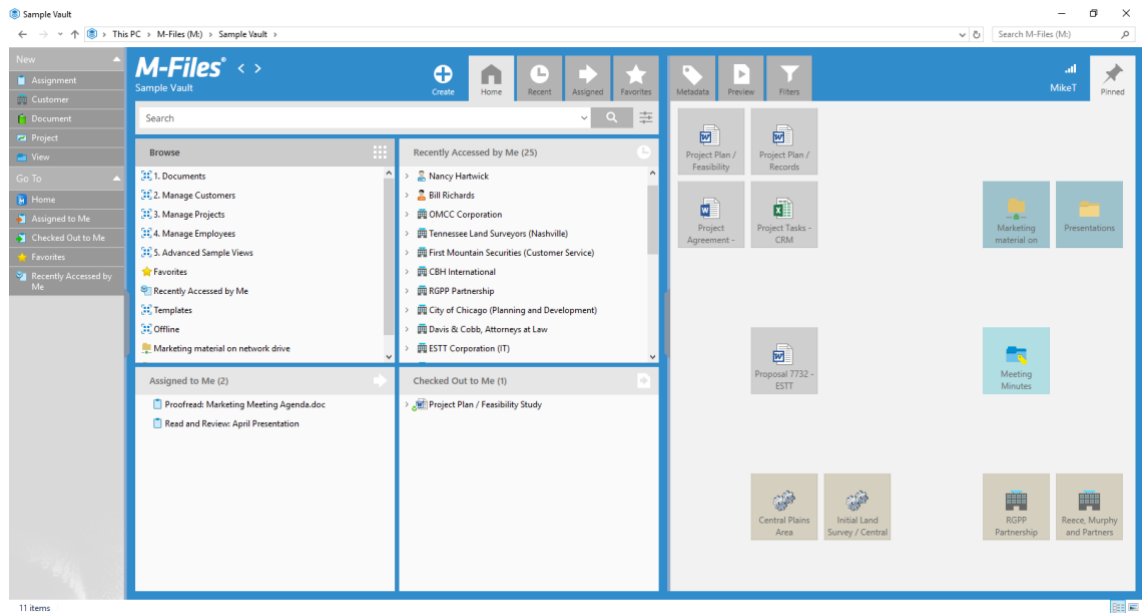


Picture 8. M-Files approach to document management (M-Files Inc 2019).

Without relying on metadata, seamless usability would not be possible. By metadata, all essential documents can be found from different compatible systems such as Dropbox or Microsoft Teams, and then be accessible in M-Files. However, miscellaneous metadata can be a potential weakness because a document management software might possibly find wrong or irrelevant documents instead of the relevant ones. Thus, searching for documents in many other systems makes assigning metadata to documents particularly careful work in which metadata must be properly defined to enable finding the relevant documents.

M-Files promises to find the relevant documents wherever they are located and to show the same original documents without copying them to other locations. Still, the logic of

M-Files is based on the folder structure that most people are used to (M-Files Inc 2019). The biggest advantages of M-Files are the ease of use and familiarity in logic which create positive thoughts about the software. They also help people to adapt better to using the software. Generally, M-Files has a very low threshold for getting started.



Picture 9. M-Files home screen.

#### 4.1.3 Kronodoc

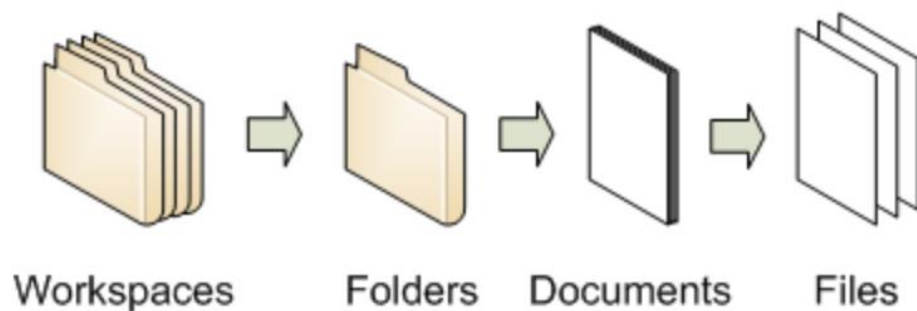
Kronodoc Oy (later BlueCielo ECM Solutions Oy) is the founder of Kronodoc document management software which is a widely-used and well-known document management software in the industry.

Kronodoc has a document management logic of its own since it relies on four levels of information. Workspaces are the top-level of information because they contain everything else. Workspaces are all unique as their folder structures, document properties, access rights and everything else is set according to the needs of each project. A workspace contains folders which are used to organise information which means different kinds of documents.

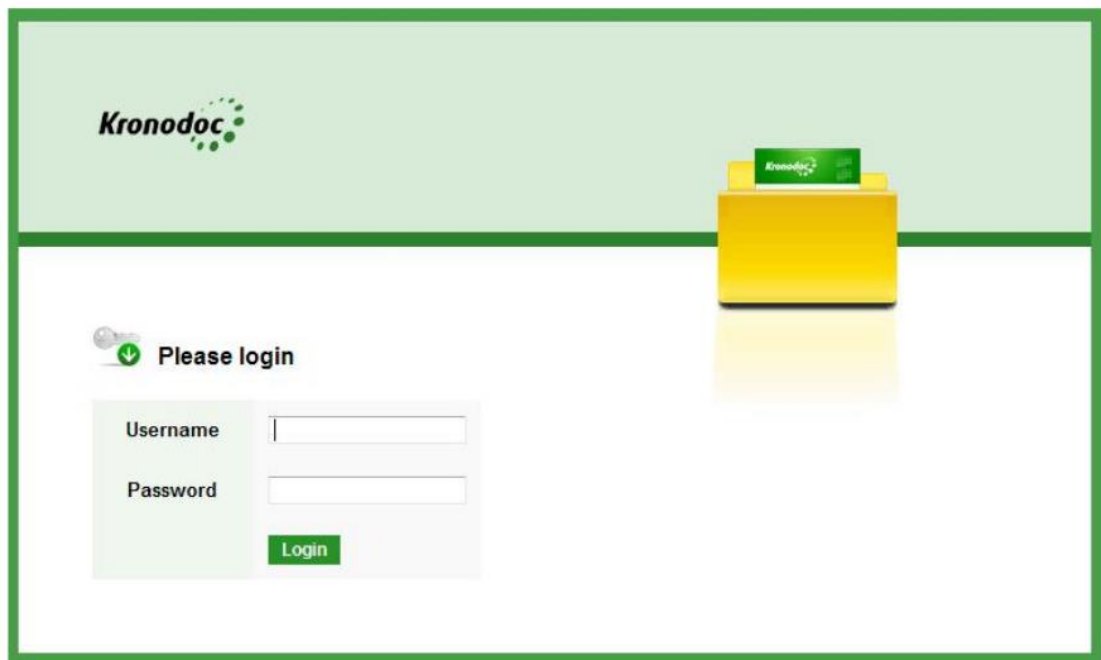
Documents can be of many types and they can have different purposes such as contract, proposal, claim, task, event, or report. Documents also have a certain status, a certain relevance, and they always contain general properties that are author, document

number, date of creation and so on. Files are always attached to documents and they can be of any size. (BlueCielo ECM Solutions Oy 2012).

Since the document management approach of Kronodoc is rather different compared to other document management software such as M-Files, it is possible that its use can be experienced as stiff and inflexible. If the user has to proceed through different levels of information in a certain order without any possibility to jump directly to the desired documents, it takes time to reach what is needed when there are levels to pass. However, the positive side of the logic of Kronodoc is that it is simple and clean so there are no expectations to its operation.



Picture 10. Kronodoc document management approach: The four levels of information (BlueCielo ECM Solutions Oy 2012).



Picture 11. Kronodoc login screen.

**Kronodoc Information**

General | Export subfolders | Document reference report | History

**General:**

Name: Kronodoc Information

User code: Created: 28.08.2000, 14:29 by Support, Kronodoc

Letter code: Modified: 02.01.2003, 16:43 by Administrator, System

Version: Position: 4

Type: Item

Description: To learn more about Kronodoc view the Kronodoc Online Help, by clicking the Help link in the top frame. The Online Help provides contains topics for Getting Started, User's Reference and Administration topics.  
The document "Network collaboration - The big picture" that is available in this folder is linked also to the folder "Subfolder with documents".

**Lifecycle:**

Status:  Released Lifecycle: Folder lifecycle

**Collaboration** Add | Subscribe | List access profiles

**Comments:**

Comments: No comments

**Notifications:**

Subscriber notification: No subscriptions Notification: No notifications

**Access profile:**

Profile "No changes"

**Role accesses:**

Role Users Groups

**Links** Clipboard: Copy | Add | View

Parent folders: Workspace root folder

Subfolders: Further References

Picture 12. Kronodoc folder properties screen.

**General**

Name: Kronodoc Support Author: Kronodoc Support

Number: 000019 Email: Support@kronodoc.com

Version: 1 [Version history](#) Created: 28.08.2000, 15:15 by Kronodoc Support

Relevance: Public Modified: 29.08.2000, 12:29 by Kronodoc Support

Type: Resource document

Description: Mail link to Kronodoc support.

**Files and URLs**

Files: No files

URLs: No URLs

**Lifecycle** [History](#)

Status: Released Lifecycle: Approval Lifecycle

**Links** Clipboard : Copy • Add • View

Present in folders: /Item: [Further References](#) • [List contents](#)

Parent documents:

Sub documents:

**Comments** [Add](#)

Comments: No comments

**Notifications**

Subscriber notification: No subscriptions Notifications: No notifications

**Access control:** Access profile "No changes"

**Role accesses:** [List roles](#)

Role Users Groups

Picture 13. Kronodoc document properties screen.

## 5 DOCUMENT MANAGEMENT SOFTWARE USAGE EXPERIENCES SURVEY

A survey was conducted to research the user experiences of the employees who are the daily users of the document management software. The purpose was to research what are their views regarding using document management software and what they find important in them.

The survey was created in Microsoft Forms and the survey link was sent to 63 Etteplan employees who had stated in Etteplan's internal human resources system that they have experience in Therefore, M-Files or Kronodoc. Many employees had experience in only one type of the software mentioned but others had experience in two of them or even all of them. Out of 63 employees six were out of office which makes it unsure if they even noticed the survey link during the given answering time, since they never answered. Out of the rest 57 employees 21 answered the survey during the given answering time. The survey was conducted in March 2019 and was available for three weeks.

### 5.1 The structure of the survey

The survey consisted of 16 questions that were formulated to gather usage experience information regarding the three main document management software compared in this thesis, but also regarding other document management software that the respondents have used, desired software features, and what the respondents find the most important in document management software.

The first three questions were about the respondent skill levels of Kronodoc, M-Files and Therefore. They were followed by questions regarding the usage of other document management software, the most important features and desired platforms as well as what is the software the respondents find the best in fulfilling their desired features and platforms. The respondents were also asked to describe how they experience using Kronodoc, M-Files and Therefore, and to name the software they find the best in general.

The next questions dealt with the features of the respondent choices of best document management software and the possible disadvantages that they have. Finally, the next two questions before the final question asked about the respondent years of experience

in technical documentation and if the respondents are willing to be interviewed if there is a need for it later. The final question was an opportunity to write whatever the respondents wanted to say about technical documentation and document management in general.

## 5.2 The survey results

Of all the survey respondents 11 people indicated they have some level of experience in using Kronodoc, 10 in M-Files and six in Therefore. Nine respondents have experience in two out of the three software but none of the respondents indicated they have experience in all three. In addition, 11 respondents reported that they have experience in some other document management software such as Agile, Autodesk Vault and Elodoc.

The arithmetic means of the skill levels of the main three document management software on a scale of 1-6 (no experience, adequate, moderate, satisfactory, good, very good) were 2.05 for Kronodoc, 2.24 for M-Files and 1.62 for Therefore, which makes M-Files the most best known software in this case. However, the skill level results imply that employees usually know only the basics of a document management software and have no deeper expertise regarding a software because lighter skills are enough to operate the needed processes of a software needed in one's job.

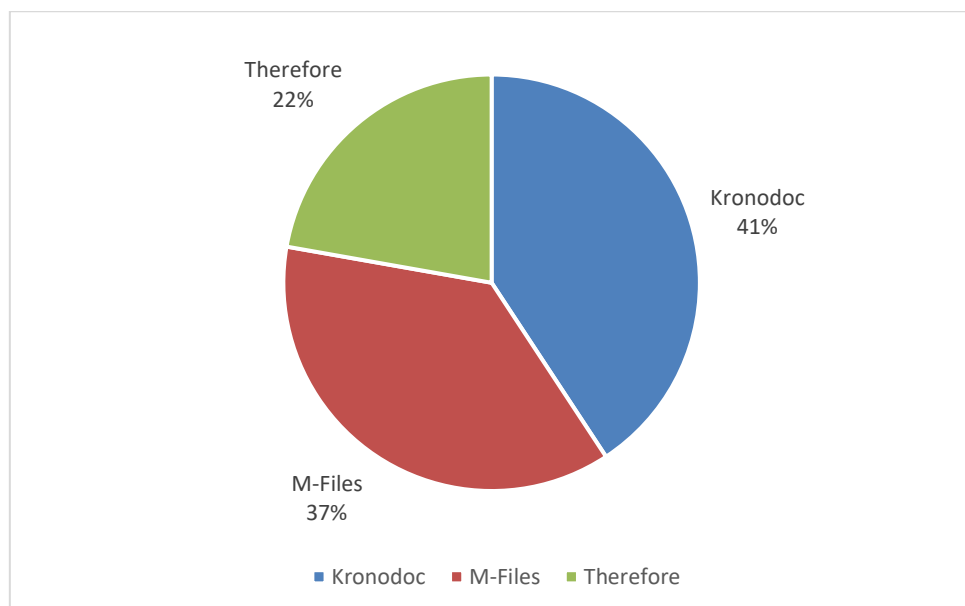


Figure 1. Distribution of respondent experience in Kronodoc, M-Files and Therefore.

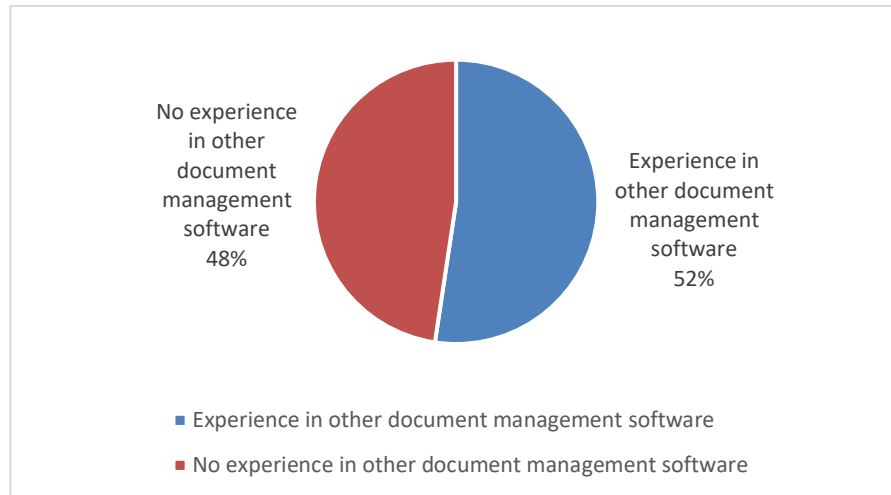


Figure 2. Respondent experience in other document management software.

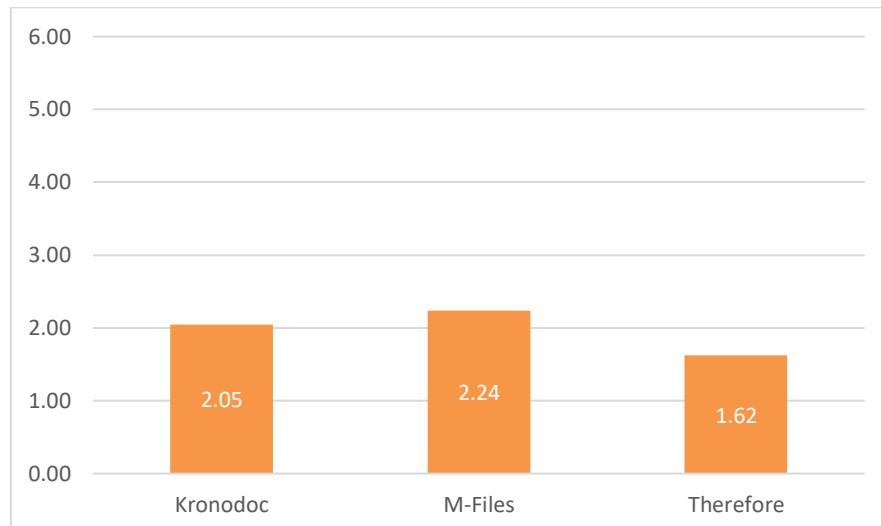


Figure 3. Respondent skill levels in Kronodoc, M-Files and Therefore.

The most desired features of the survey respondents in a document management software are user-friendliness, logicity and compatibility. In this case, compatibility means being compatible with other software in general and can be interpreted from every respondent's own point of view because different jobs require different software. However, the general opinion in this survey values the three features mentioned high. Quick processes was also chosen by quite many, while the fair price of a software, customers using the same software, visually appealing user interface and possible other features were not as important features of a document management software. The question required respondents to choose 1-4 features, while most chose three.



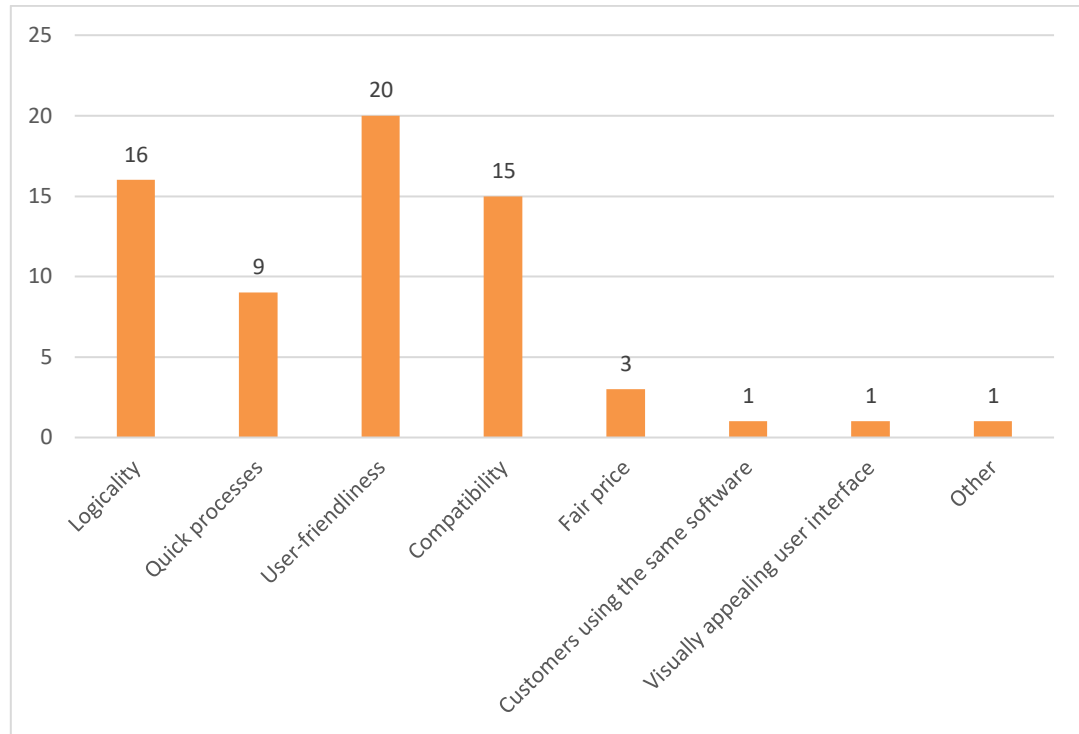


Figure 4. Desired features of respondents in a document management software.

Most respondents chose an application working through a web-interface the most desired platform of a document management software but a significant number also valued a program installed on a computer very important. Tablet and smartphone were equally valued, but not as much as the two mentioned earlier. It is assumed that the nature of a job has a great impact on what an employee favours: Those working more closely with the field operations want solutions that are not tied to place and physical connections as office computers are. However, an application working through a web-interface implies that quick and user-friendly solutions are valued and a program requiring installation is not necessary. This question required respondents to choose 1-3 features, while most chose two.

As mentioned earlier, M-Files was the most well-known of the three main comparables. It was also mentioned as the software in which the desired features are best fulfilled. Therefore was chosen by 19 % of the respondents and Kronodoc by 14 %, which makes Kronodoc the least favoured in terms of the desired features. However, 29 % of the respondents chose another software and 14 % had no choice, but this can be explained by the fact that none of the three main software is used regularly at these respondents' daily jobs since people tend to favour what they use on a regular basis.

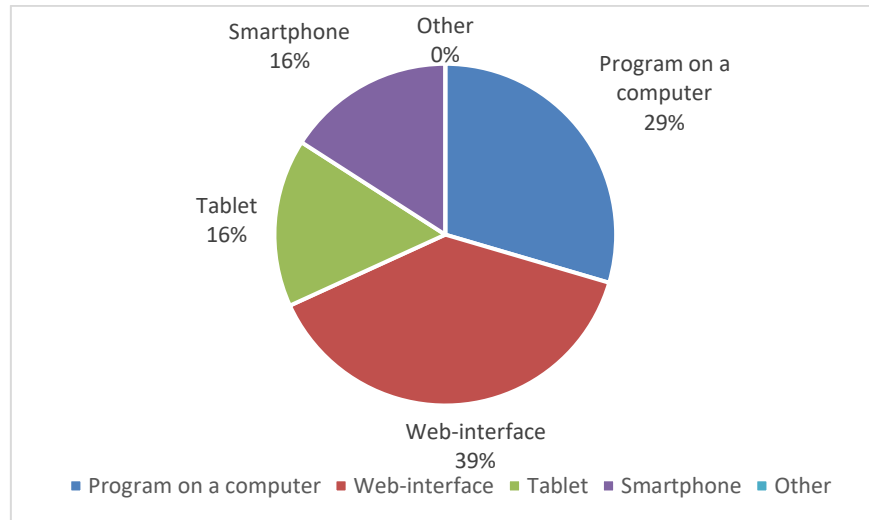


Figure 5. Desired platforms of respondents regarding using a document management software.

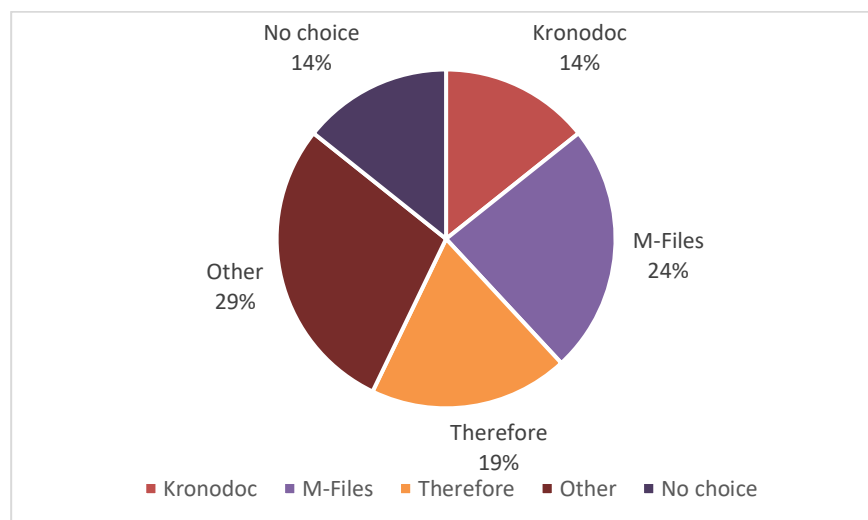


Figure 6. Respondent choice of document management software regarding features and platforms.

The respondents who wrote about their Kronodoc experiences usually described it rather positively by stating it is easy to learn and use. However, it also gained negative comments regarding its user interface. For example, one of the respondents describes his personal experience regarding Kronodoc:

I have only used Kronodoc for checking how my documents appear in it from a customer's point of view after linking the documents there from an internal document management system (it is only used for delivering documents to external parties). I haven't used it much lately, however. It seemed clear enough, but I heard some customers had difficulties seeing all metadata of the documents.

Comments regarding M-Files were positive but it gained many complaints regarding its logic, which does not follow the folder-based file management logic to which most people are used to as a result of using the most common computer operating system Microsoft Windows. However, one of the respondents wrote about M-Files:

To my experience, M-Files is currently leading the field in user-friendliness and user-centered design in documentation management systems. Most of the competitors have been developed from the background and viewpoint of other earlier types of data management environments (such as ERP, PDM, PLM and other database systems). M-Files is logical, easy and quick to use, and it has ready-made, easy to modify workflows, interfaces and tools that cover the needs of all departments and functions in a company. M-Files is also well integrated to other database systems. The price and system scalability seem competitive.

Therefore did not gain as many comments as the other two software but almost all of its feedback was positive. It was praised for being easy to learn and use, and its user interface and search properties were described as brilliant. After all, Therefore also gained some criticism on e.g. its feature to rely on physical documents:

Canon Therefore is quick to learn and easy to use, but feels a bit cumbersome and old-fashioned in some ways. There are multiple ways of performing a task or a query and not all of them seem logical or well executed. The integration for managing printouts and paper archives can be a benefit in some companies and business areas, which still rely heavily on them. Integration and automation possibilities seem to be good, and the price seems to be competitive, especially for smaller companies.

Of the three main software M-Files was mostly considered to be the best even though it gained many complaints regarding its logic. Kronodoc and Therefore were placed immediately after it. 24 % of the respondents had their own favourite such as Autodesk Vault or Agile, but many chose one of the main trio just because they did not have experience in any other document management software. 29 % of the respondents - the majority - did not have an opinion about the best document management software in general for different reasons, which varied from disliking them all this far to not having enough experience of them:

I'm hesitant to answer that since I haven't used that many different ones. It seems that they always have their positive and negative sides. I do like the one that I currently use, ECM, but it's far from perfect.

In general, it seems that a person's job and whatever it requires dictates what software is used. The employee does not really have a word about it since they must become used to the tools given for them even though they do not really enjoy it or find the tools suitable.

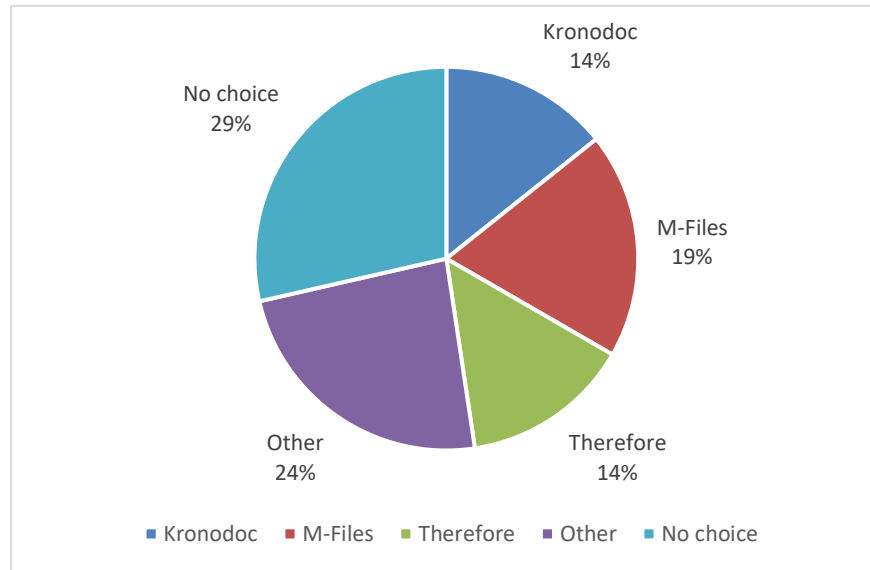


Figure 7. Respondent choice of the best document management software in general.

The respondents were asked about the disadvantages of the document management software of their choice. The majority answered that the main disadvantage of their chosen document management software is that not many customers are using it. Limited capabilities and heavy usability were also mentioned often.

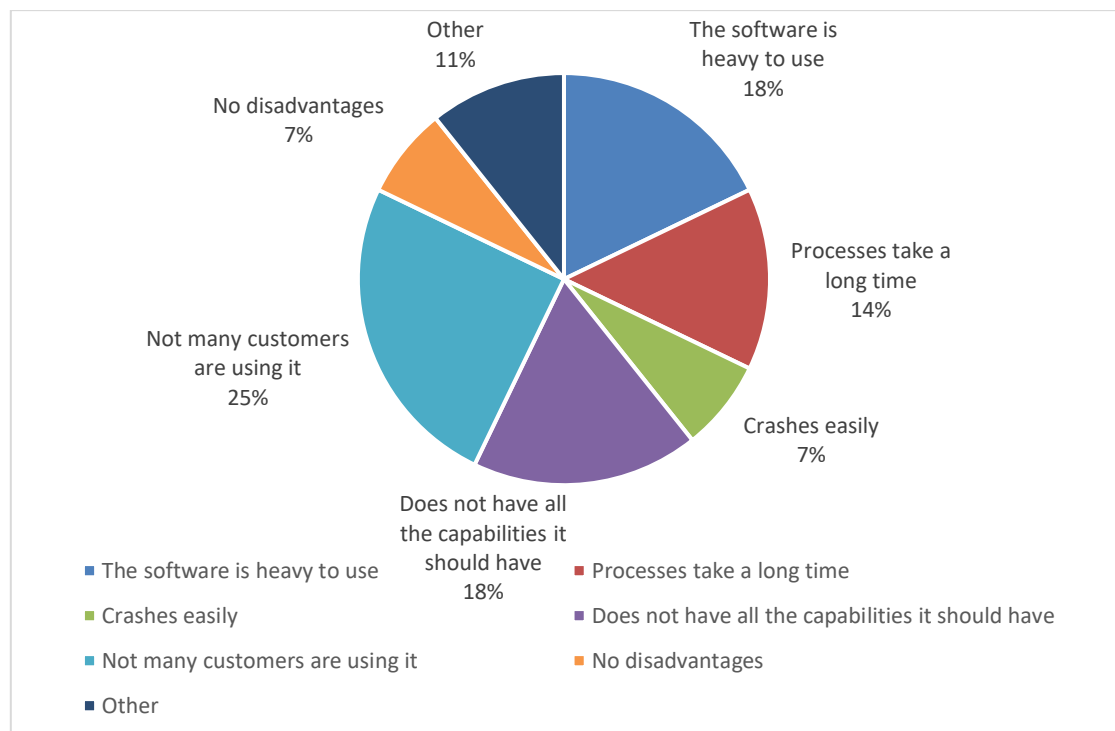


Figure 8. Disadvantages of the document management software chosen by the respondents.

Finally, respondents were asked about their experience in technical documentation in years in order to further examine how the answers to previous questions correlate with experience. 33 % of the respondents have 0-2 years of experience in technical documentation, while the 3-5 years option was answered by 29 %. The rest had more experience but the majority had the maximum five years of experience. The distribution of experience in years may imply that many of the respondents are younger professionals or that they have changed their job at some stage. Those with fewer years of experience were more generally ones whose answers were more uncertain and they did not want to draw as definite conclusions about software and their features as more experienced respondents.

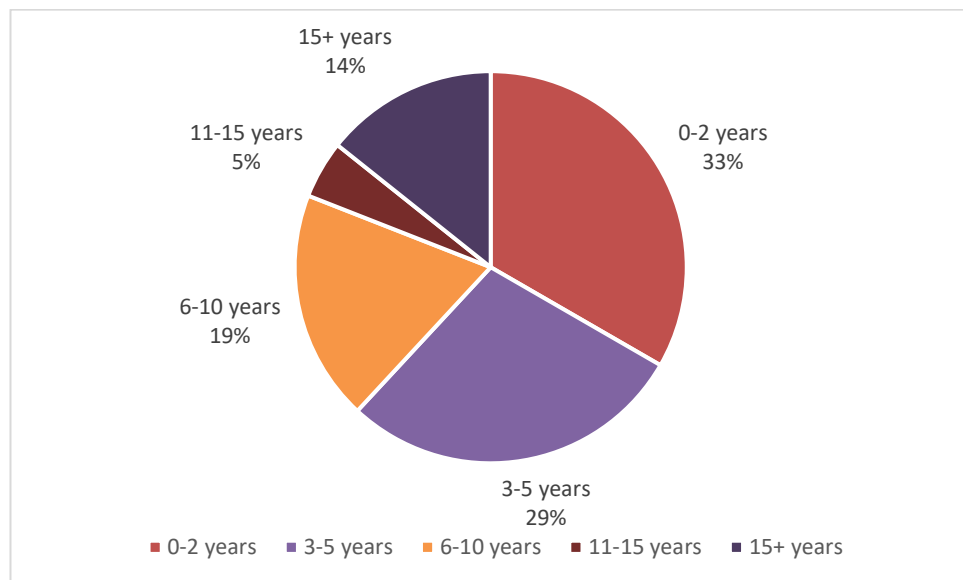


Figure 9. Respondent experience in technical documentation in years.

### 5.3 A summary of the survey

It is important to note that only 21 people out of the 57 possible respondents answered the survey, which makes the results somewhat indicative only. Even if all the employees who received the survey link had responded, the sample would have been more extensive in order to draw more definite conclusions. However, the number of suitable respondents is limited to the company and its size. It should be noted that time and resources also limit the conduct of a wider survey and that it would have been more complicated to reach the employees of other companies just because of this thesis.

In general, Therefore managed rather well even though it is a more recent document management software and not so widely known. Kronodoc and M-Files have been available for much longer and have consolidated their positions in the industry, so from this perspective Therefore was an underdog all the time. Regardless of the setting at first, it turned out that Therefore is experienced positively by those who have used it in their work.

M-Files was also experienced very positively in general as it got the best points regarding its features and it was chosen the best in general most often. Compared to M-Files, the success of Therefore was very good even though it does not have as many and as skilled users as M-Files. It seems that the conspicuousness of Therefore is the limiting factor that prevented it from passing M-Files.

Kronodoc had its admirers but it was not admired as much as Therefore and M-Files. It must be noted that many respondents also chose some other document management software than Therefore, M-Files or Kronodoc, but it can be explained by the fact that either they do not have much experience in the three main comparables or that they use some other document management software in their daily work. Most of the respondents also had less than five years of experience in technical documentation, which can also be a contributing factor as those with less experience tend to hold to what they are the most familiar with. Many of the respondents were also uncertain to give accurate answers when the question allowed them to write freely.

The respondents appreciated user-friendliness, logicity and compatibility with other software as the most desired features while they usually saw slowness, lack of capabilities and only a few customers using the same software as disadvantages. Still, the dispersion of opinions is wide because people tend to favour everything they are best used to. However, it can be said generally that the generally appreciated features do not necessarily apply to only one document management software.

## 6 CONCLUSION

The original aim of the thesis was to find out how to make Canon Therefore more appealing to the customers of Etteplan and collect data that would support the objective. However, during the writing process of the thesis the main focus was moved to a more general level where technical documentation and client project views were studied. A document management software usage experiences survey was conducted to find out how the employees who use document management software experience them.

A document management software should be chosen not only for the needs of the customer and the company itself but also for the employees whose tool it will become. Even though the customer always comes first and the company providing services wants a fair price when they invest in something, it must be taken into account that a document management software is an everyday tool for some people. When the tools are functional and pleasant to use, the work is done well and efficiently – and when the work is done successfully, it creates value for all involved. And if the customers are happy, business will follow.

The document management software usage experiences survey suggests that Therefore is a competitive alternative for a document management software because the respondents who have used it enjoyed it and they had almost nothing bad to say about it. However, Therefore is not a widely known software, which leads to the fact that people have not heard of it. Generally, respondents usually favoured the document management software they had used earlier or the most. Still, the most desired features in a document management software are very much the same regardless of the software, which implies that Therefore has potential because employees tend to appreciate features such as logicality and user-friendliness that streamline their work.

All in all, the selection process of a document management software must look at the features and capacity of the software from the perspective of both the company itself, the customer and the employee. The features of the software have to be comprehensive enough while the software has to be smooth and efficient to use. If a company wants its customers to acquire a certain document management software for file management, the idea must be sold to them. Thus, investing in marketing training might be a profitable move.

## REFERENCES

BlueCielo ECM Solutions Oy 2012. BlueCielo Kronodoc 2012 User's Guide. [https://documentation.bluecieloecm.com/BCWebHelp/en/kronodoc/2012/ug/Kronodoc\\_UG.htm](https://documentation.bluecieloecm.com/BCWebHelp/en/kronodoc/2012/ug/Kronodoc_UG.htm). Referred 6.5.2019.

Canon Oy 2019. Therefore. <https://www.canon.fi/software/therefore/>. Referred 12.5.2019.

Canon Singapore Pte Ltd 2016. Therefore Document Management Solution. <http://www.canon.com.sg/thinkbig/software-solutions/therefore-document-management-solution>. Referred 18.5.2019.

Etteplan Oyj 2019. Tekninen dokumentointi. <https://www.etteplan.com/fi/asiantuntemus/teknisen-dokumentoinnin-ratkaisut/tuotekehitys/tekninen-dokumentointi>. Referred 16.5.2019.

Etteplan Oyj 2019. Teknisen dokumentoinnin ohjelmistoratkaisut. <https://www.etteplan.com/fi/asiantuntemus/teknisen-dokumentoinnin-ratkaisut/teknisen-dokumentoinnin-ohjelmistoratkaisut>. Referred 16.5.2019.

Example of the modular structure of a common technical document. [https://commons.wikimedia.org/wiki/File:CTD\\_Pyramid.jpg](https://commons.wikimedia.org/wiki/File:CTD_Pyramid.jpg). Referred 6.6.2019.

M-Files Inc 2019. Metadata-Driven Enterprise Content Management (ECM). <https://www.m-files.com/fi/folderless-metadata-driven>. Referred 6.6.2019.

M-Files Inc 2019. M-Filesin älykäs tiedonhallinta. <https://www.m-files.com/fi/intelligent-information-management>. Referred 15.5.2019.

M-Files Inc 2019. Yksi yhteinen näkymä kaikkeen tietoon. <https://www.m-files.com/fi/search-anywhere>. Referred 18.5.2019.

Suomen Standardisoimisliitto SFS 2006. Tekninen dokumentointi. Osa 1: Informaation jäsentely, dokumenttien luokittelu ja dokumenttien hallinta. Helsinki: SFS. Pages 92-95.

Whitaker, Jerry C., Mancini, Robert K. 2013. Technical Documentation and Process. Boca Raton, Florida, USA: CRC Press, Taylor & Francis Group. Pages 1-19.



## Document management software usage experiences survey questions

1. What is the level of your Kronodoc usage skills? (1 no experience, 2 adequate, 3 moderate, 4 satisfactory, 5 good, 6 very good)
2. What is the level of your M-Files usage skills? (1 no experience, 2 adequate, 3 moderate, 4 satisfactory, 5 good, 6 very good)
3. What is the level of your Therefore usage skills? (1 no experience, 2 adequate, 3 moderate, 4 satisfactory, 5 good, 6 very good)
4. If you have used another document management software, what software? How experienced are you in using that software? (You can answer in English or in Finnish.)
5. In your opinion, what are the most important features regarding a document management software? (Choose 1-4: Logicality; Quick processes; User-friendliness; As many capabilities as possible; Fair price (from the company's point of view); Visually appealing user interface; Compatibility with other software and operating systems in general; The fact that a significant number of customers is using the same software; Other, what?)
6. A document management software should work... (Choose 1-3: Through a program installed on a computer; Through a web-interface; On a tablet; On a smartphone; Other, what?)
7. The features and ways of using a software of my choice are best fulfilled in... (Kronodoc; M-Files; Therefore; Other, what?)
8. Kronodoc users: In your own words, describe how you experience using the software. (You can answer in English or in Finnish.)
9. M-Files users: In your own words, describe how you experience using the software. (You can answer in English or in Finnish.)
10. Therefore users: In your own words, describe how you experience using the software. (You can answer in English or in Finnish.)
11. Name the document management software you find the best in general and describe why. (It can be any software and not just Kronodoc/M-Files/Therefore.)
12. The document management software I find the best has the next following features... (Choose 1-4: Logicality; Quick processes; User-friendliness; As many capabilities as possible; Fair price (from the company's point of view); Visually appealing user interface; Compatibility with other software and operating systems

in general; The fact that a significant number of customers is using the same software; Other, what?)

13. Disadvantages of the document management software of my choice are that...  
(Choose 1-4: The software is quite heavy, which makes it slow to use in general; The software's processes take a long time; The software crashes easily; The software doesn't have all the capabilities it should preferably have; Not many customers are using it; The software doesn't have any disadvantages; Other, what?)
14. How much experience do you have in technical documentation? (0-2 years; 3-5 years; 6-10 years; 11-15 years; 15+ years)
15. If there is a need later, can I interview you regarding document management software and technical documentation? (Yes; No)
16. Anything else you would like to tell me about document management software and/or technical documentation at this moment? (You can write in English or in Finnish.)

## Document management software usage experiences survey results

What is the level of your Kronodoc usage skills? ▼	What is the level of your M-Files usage skills? ▼	What is the level of your Therefore usage skills? ▼
1	2	6
1	1	1
1	1	4
3	5	1
3	1	1
2	5	1
1	4	2
5	4	1
2	1	1
2	1	1
1	4	3
2	1	1
4	1	1
1	1	1
1	1	1
1	3	2
3	3	1
2	1	1
1	1	2
5	2	1
1	4	1

If you have used another document management software, what software? How experienced you are in using that software? ▼
-
TIM-RS, 6 very good
Sokopro, Moderate experienced. Tolkku by Valio, experience is satisfactory
Agile was selected as official document management tool In Elcoteq and I was the key-user of the tool in R&D department.
I have used Autodesk Vault over 2 years. My level of usage skill in it is good and I have used it in R&D designing.
I have also used Teamcenter over 0,5 years. My level of usage skill in it is satisfactory and I have used it in mechanical designing.
ECM by EMC2 Documentum and another similar document management system whose name I can't remember. Both are web-based systems and I have used both while working at customers. I wouldn't remember anymore how to use the other system I
used various of the Valmet's customer's document management systems (Kronodoc was used in some project years ago). I have only been "user", not manager or architect (maybe level 4 or 5). For machine manuals (model documents and project documents), we use Valmet's own Bookmanager.
Windchill PDM DMS 5, IFS ERP DMS 5, SAP PM DMS 3, Outokumpu DOHA 4 ja lisäksi muutamia muita asiakaskohtaisia räätälöityjä Lotus Notesin ja SharePointin ympärille rakennettuja järjestelmiä 4.
Experience of document management software only about the Elomatic Elodoc software.
Word, Powerpoint, Excel. Experience is something between adequate and moderate.
EasyDM; itse tehty dokumentointijärjestelmä. Olen sen pääkäyttäjä.
Elodoc, 3
No I haven't so no experience.

In your opinion, what are the most important features regarding a document management software? (Choose 1-4)
Logicality;Quick processes;User-friendliness;
Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general;
User-friendliness;Visually appealing user interface;Compatibility with other software and operating systems in general;
Logicality;User-friendliness;Fair price (from the company's point of view);Compatibility with other software and operating systems in general;
Logicality;User-friendliness;Compatibility with other software and operating systems in general;
Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general;
Logicality;User-friendliness;Compatibility with other software and operating systems in general;
Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general;
Logicality;User-friendliness;Compatibility with other software and operating systems in general;
Logicality;User-friendliness;Compatibility with other software and operating systems in general;
Inbuilt and interconnected (e.g. to ERP, PDM and project management software) process workflows, which guide and force users to follow the company's information management process;User-friendliness;Visually appealing user interface;Compatibility with other software and operating systems in general;
Logicality;User-friendliness;
Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general;
Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general;
User-friendliness;Fair price (from the company's point of view);Visually appealing user interface;Compatibility with other software and operating systems in general;
Logicality;User-friendliness;Fair price (from the company's point of view);Compatibility with other software and operating systems in general;
Logicality;User-friendliness;Compatibility with other software and operating systems in general;
User-friendliness;Compatibility with other software and operating systems in general;
User-friendliness;
Logicality;Quick processes;User-friendliness;
Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general;

A document management software should work... (Choose 1-3)	The features and ways of using a software of my choice are best fulfilled in...
Through a web-interface;On a tablet;On a smartphone;	Therefore
Through a program installed on a computer;Through a web-interface;	Therefore
Through a web-interface;On a tablet;On a smartphone;	Therefore
Through a web-interface;On a tablet;On a smartphone;	M-Files
Through a program installed on a computer;Through a web-interface;	Agile
Through a program installed on a computer;Through a web-interface;On a tablet;	M-Files
Through a program installed on a computer;On a tablet;On a smartphone;	teams
Through a program installed on a computer;Through a web-interface;	Autodesk Vault
Through a program installed on a computer;Through a web-interface;	don't know since I've only used one of these
Through a web-interface;	Sharepoint based document hotel
Through a program installed on a computer;Through a web-interface;On a tablet;	M-Files
Through a web-interface;	Ei valintaa
Through a program installed on a computer;Through a web-interface;	Kronodoc
Through a program installed on a computer;On a smartphone;	Elodoc
Through a program installed on a computer;Through a web-interface;	Word
Through a web-interface;On a tablet;On a smartphone;	M-Files
Through a program installed on a computer;Through a web-interface;	Kronodoc
Through a web-interface;	Elodoc
Through a program installed on a computer;	Therefore
Through a program installed on a computer;	Kronodoc
Through a web-interface;On a smartphone;	Only familiar with M-Files

Kronodoc users: In your own words, describe how you experience using the software. (You can answer in English or in Finnish.)	
-	
NA	
	<p>I have used just sometime. Probably haven't gotten to use every single feature but in general it is quite simple and I don't have anything specifically bad to say about it. sure they are somehow reviewed and internally approved by somebody.</p> <p>Vähäistä kokemusta erään projektin yhteydessä (urakoitsijan roolissa), mutta dokumentit oli rajattu vain niihin mitä minä tarvitsin/oli oikeus käyttää. Vähäisellä opastuksella tuntui olevan hankala käyttää/päästä Jyväskylä jyvälle kaikista toiminnoista. Pääsin käsiin kuitenkin kaikkeen tarvittavaan.</p>
	<p>Kronodoc is logical and user-friendly but some times you needed to wait for it maintenance quite long before you could work with it again.</p> <p>I have only used Kronodoc for checking how my documents appear in it from a customer's point of view after linking the documents there from an internal document management system (it is only used for delivering documents to external parties). I haven't used it much lately, however. It seemed clear enough, but I heard some</p>
-	
	<p>Tiedostojen kaikki versiot pysyvät tallassa ja löytyvät helposti, ja tuoreimman version tunnistaa aika helposti. Datakorttien ominaisuuksien muokkaaminen (esim. status tarkastukseen tai dokumentin aikataulutietojen muokkaaminen) tuntuu kankealta.</p>
	<p>Simple, easy to learn.</p> <p>Olen käyttänyt erittäin vanhaa versiota, siinä suurin ongelma oli käyttöliittymässä, nykyisiin lienee parantunut</p>
	<p>Easy to use. Advanced search is good.</p>

M-Files users: In your own words, describe how you experience using the software. (You can answer in English or in Finnish.)
-
NA
requires systematic way of behaviour from users, need to input enough metadata about files to upload so it will be easily accessed and found later on. But if the whole organization uses it correctly, it was very good and can be integrated to ERP-systems such as V10.
perehtyneet. Yleisten näkymien avulla sitä on pyritty helpottamaan. Ongelmaa on myös hyvin erilaisten dokumenttien tallentamisessa oikein, jotta löytyisivät jatkossa helposti. Oleellisia ominaisuuksia (löydettävyyden kannalta) ei ole pakotettu täyttämään dokumenttia tallennettaessa. Oikein tallentaminen on siten käyttäjän vastuulla.
Useasti käytetään asiakkaan järjestelmää webfilesin kautta ja sen käyttö on pääsääntöisesti hirveää. Järjestelmä on hyvin hidas ja dokumenttien lisääminen (metadatan syöttö) on työlästä.
M-files was reliable but it was a bit complicated to use.
To my experience, M-Files is currently leading the field in user-friendliness and user-centered design in documentation management systems. Most of the competitors have been developed from the background and viewpoint of other earlier types of data management environments (such as ERP, PDM, PLM and other database systems). M-Files is logical, easy and quick to use, and it has ready-made, easy to modify workflows, interfaces and tools that cover the needs of all departments and functions in a company. M-Files is also well integrated to other database systems. The price and system scalability seem competitive.
Some good features, but takes a bit time to get to know to.
Basic usage does not require much training.

There are users: In your own words, describe how you experience using the software. (You can answer in English or in Finnish.)

ominaisuus. Työkiertojen tekeminen ei ole ihan suoraviivaista ja vaatii useita iteroitukertoja, siinä olisi mielestäni parannettavaa. Web-käyttöliittymä on hyvä ominaisuus, mutta tuntuu, että se on liian hidas verrattuna client-softaan koneella. Hyvää on myös mobiil-appi, joka on ominaisuuksiltaan erittäin hyvä. Itse dokumenttien katseluun puhelin on liian pieni, mutta tablet on jo kokoluokassa sopiva.

Easy to use interface

I can provide feedback from a maintenance point of view, the automated processes are very well supported. There is a lot of control on the handling of files.

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Canon Therefore is quick to learn and easy to use, but feels a bit cumbersome and old-fashioned in some ways. There are multiple ways of performing a task or a query and not all of them seem logical or well executed. The integration for managing printouts and paper archives can be a benefit in some companies and business areas, which still rely heavily on them. Integration and automation possibilities seem to be good, and the price seems to be competitive, especially for smaller companies.

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It was quite easy to use in my opinion but I have used it only couple of times.

-



<p><b>Name the document management software you find the best in general and describe why. (It can be any software and not just Kronodoc/M-Files/Th</b></p>
<p>Olen eniten tutustunut Thereforeen, joka käsittääkseni vastaa hyvin paljolti M-Filesia. Kronodocin olen nähnyt ja se vaikuttaa näistä kolmesta eniten epämääräiseltä. Sekä Therefore ja M-files sisältävät paljon liitännäisiä, joilla järjestelmän voi kytkeä skannereihin, Sharepointiin, Sales Forceen yms. Nämä ovat suuremmissa yrityksissä varmaan melko merkittäviä asioita. Liitännäiset ainakin Thereforessa maksavat tosin peruskäytön päälle lisää.</p>
<p>-</p>
<p>From what I have seen until now it would be Therefore. I can provide feedback from a maintenance point of view, the automated processes are very well supported. There is a lot of control on the handling of files.</p>
<p>Currently so far I found M-files to be best because served the need well. Of course main thing that we chose M-files to be the one to use is because of V10- ERP and we knew about integration possibilities already.</p>
<p>Agile, since it was configured to support CMII practices and it was compatible with other softwares we were using in company (RM tools, both PCB and Mechanic design SW -tools)</p>
<p>M-Files, koska tunnen sen parhaiten ja tiedän aika hyvin mitä sillä pystyy tehdä.</p>
<p>Tällä hetkellä kallistun MS Teamsiin monipuolisuuden ja käytettävyyden takia.</p>
<p>Autodesk Vault is the best document management software I have used. It is logical, user-friendly, easy to learn and reliable.</p>
<p>I'm hesitant to answer that since I haven't used that many different ones. It seems that they always have their positive and negative sides. I do like the one that I currently use, ECM, but it's far from perfect.</p>
<p>system, the more user friendly it feels, because you learn how to use it. A new system usually doesn't seem very user friendly at first. But when you learn the logicity and where the tools are etc., I think almost any system is as usable as the next one.</p>
<p>M-Files (see answer 9)</p>
<p>Useimmat toimivat enemmän tai vähemmän heikosti...</p>
<p>En juuri tunne muita dokumentinhallintajärjestelmiä kuin Kronodocin.</p>
<p>Elodoc.</p>
<p>Word. Simple to use.</p>
<p>Hyvää järjestelmää en ole vielä nähnyt, kaikissa on omat hankaluutensa. Käyttämässäni EasyDM:ssä on siinäkin ongelmia.</p>
<p>Kronodoc. Easy and simple to use, fulfills the basic document management needs, fast to learn how to use.</p>
<p>Käytön helppous, ja myös yksinkertaisuus. Dokumentinhallintasoftwaren ei tarvitse tehdä KAIKKEA maailmassa.</p>
<p>In my case where I handle images, I feel that Therefore might be good way to manage those files.</p>
<p>Kronodoc, I have not used so much other softwares.</p>
<p>Only familiar with M-Files</p>

<p>The document management software I find the best has the following features: (Choose 1-4)</p>
<p>Laajat hakuominaisuudet ja raportointimahdollisuudet;Logicality; Quick processes;User-friendliness;</p>
<p>User-friendliness;Visually appealing user interface;Compatibility with other software and operating systems in general; As many capabilities as possible in one software;Fair price (from the company's point of view);Compatibility with other software and operating systems in general;</p>
<p>Logicality;Compatibility with other software and operating systems in general; Restricted documents;Logicality;As many capabilities as possible in one software;</p>
<p>Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general; Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general;</p>
<p>Logicality;User-friendliness;</p>
<p>Logicality;User-friendliness;Compatibility with other software and operating systems in general;The fact that a significant number of customers is using the same software;</p>
<p>Logicality;User-friendliness;Visually appealing user interface;Compatibility with other software and operating systems in general;</p>
<p>Logicality;User-friendliness;</p>
<p>Logicality;</p>
<p>Logicality;As many capabilities as possible in one software;Visually appealing user interface;</p>
<p>User-friendliness;Fair price (from the company's point of view);Visually appealing user interface;Compatibility with other software and operating systems in general;</p>
<p>Logicality;User-friendliness;Fair price (from the company's point of view);Compatibility with other software and operating systems in general;</p>
<p>Logicality;Quick processes;User-friendliness;Compatibility with other software and operating systems in general;</p>
<p>Logicality;User-friendliness;</p>
<p>Logicality;User-friendliness;</p>
<p>Logicality;Quick processes;User-friendliness;Visually appealing user interface;</p>
<p>Logicality;User-friendliness;The fact that a significant number of customers is using the same software;</p>

Disadvantages of the document management software of my choice are that.... (Choose 1-4)
The software is quite heavy, which makes it slow to use in general;Not many customers are using it;
The software doesn't have all the capabilities it should preferably have;
The GUI could have been more simple;
Not many customers are using it;
The software is quite heavy, which makes it slow to use in general;
The software doesn't have all the capabilities it should preferably have;
The software doesn't have any disadvantages;
Lisences could cost a lot for small company;
The software's processes take a long time;The software doesn't have all the capabilities it should preferably have;
The software is quite heavy, which makes it slow to use in general;The software doesn't have all the capabilities it should preferably have;Not many customers are using it;
Not many customers are using it;
The software doesn't have all the capabilities it should preferably have;
The software is quite heavy, which makes it slow to use in general;The software's processes take a long time;
The software is quite heavy, which makes it slow to use in general;The software's processes take a long time;
Could be even more simple.;
The software crashes easily;Not many customers are using it;
The software crashes easily;
Not many customers are using it;
Not many customers are using it;
The software doesn't have any disadvantages;
The software's processes take a long time;

How much experience do you have in technical documentation?
6-10 years
3-5 years
15+ years
3-5 years
3-5 years
0-2 years
6-10 years
3-5 years
6-10 years
11-15 years
15+ years
15+ years
0-2 years
0-2 years
0-2 years
6-10 years
3-5 years
0-2 years
0-2 years
3-5 years
0-2 years

If there is a need later, can I interview you regarding document management software and technical documentation?
Yes
Yes
Yes
Yes
Yes
No
Yes
Yes
No
Yes
Yes
Yes
No
No
Yes
Yes
No
Yes
No
No
No

Anything else you would like to tell me about document management software and/or technical documentation at this moment? (You can write in English or in Finnish.)

I have experience in Content Management Systems and not so much in Document Management Systems.

Document management is more familiar to me compared to technical documentation. Not really a profession that I have had to do but overall in engineering, we have to create technical documentation all the time but it is not the same as the people who are specialized in technical documentation

Dokumentointikokemukseni perustuu lähinnä yhden asiakkaan dokumentointitarpeisiin ja heidän käyttämään M-Filesiin ja kuinka se heitä palvelee.

The different needs for organizing and managing large amounts of information are evolving rapidly, which will challenge the customary notion of 'documents' and changes author, user and manager roles in documentation management. There will be increased need for deeper system integration, information process automation and AI-enabled intelligent information management in the near future. This will require radical rethinking of data management - instead of an afterthought, it will become of critical importance and a competitive advantage in many businesses. Rapid development of AI learning will enable automated creation of metadata, categorization of content, and verification of validity and authenticity.