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TIIVISTELMÄ

Tekijä	Mikko Manni
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Työn tavoitteena on tuottaa hankesuunnitelma ja markkinoille pääsyn strategia, kehittää liiketoimintasuunnitelma, saada enemmän tietoa asiakkaiden tarpeista, asenteista, ja vaatimuksista sekä todistaa, että tuote luo asiakkaille säästöä ajassa ja rahassa.

Tutkimus tehtiin empiirisesti käyttäen tekijän omaa kokemusta ja asiantunte-
musta rakennusteollisuudesta Suomessa sekä kokemusta Aasian markkinoista.
Tehty empiirinen tutkimus oli sekä kvantitatiivinen että kvalitatiivinen ja siinä sel-
vitettiin, mitä konkreettisia etuja Congrid-alusta tuo asiakkaille. Lisäksi tehtiin
kattava kirjallisuustutkimus digitaalisista alustoista, kulttuurieroista ja projektin-
hallinnasta. Tehdyssä tutkimuksessa yhdistyvät tieto projektisuunnittelusta, pro-
jektinhallinnasta, kulttuurieroista ja siitä, miten ne otetaan huomioon, alustata-
lous, virtuaalijohtaminen ja liiketoiminnan suunnittelu markkinoille pääsyn stra-
tegiaksi.

Lopputyön tuloksena saatiin selkeä suunnitelma markkinoille pääsyn strategiaksi
ja hankesuunnitelma toteutukseen. Tutkimus tuotti myös hyödyllistä tietoa siitä,
mitä etuja asiakkaan voivat saada hyödyntämällä digitaalisia työkaluja projektin
johdossa ja valvonnassa.

Covid-19 pandemia esti matkustamisen Vietnamiin ja markkinatutkimuksen po-
tentiaalisten asiakkaiden keskuudessa eikä tuotteen hyötyä voitu osoittaa. Tuo-
tetta ei myöskään tunneta Aasiassa. Mutta tutkimus selkeästi osoittaa kuinka
tuote hyödyttää asiakkaita säästämällä aikaa ja rahaa ja tuotokset helpottavat
siirtymistä uusille markkinoille.

Avainsanat	Digitalisaatio, digitaaliset alustat, markkinoille pääsyn strategia, ASEAN, Vietnam, projektinjohto
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ABSTRACT

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The objectives of the thesis were to create a project plan to enter Vietnam's markets, to create a business plan, to gain knowledge of clients' needs, attitudes and demands, and to prove that the product will bring time and economic savings for the clients.

The research was conducted empirically using both the authors' own experience and expertise in construction industry in Finland as well as experience in Asian markets. The empirical research conducted was both quantitative and qualitative to determine the tangible benefits the Congrid platform brings to clients. A comprehensive literature research of material aligning digital platforms, cultural differences, and project management was also conducted. The research combines knowledge of project planning, project management, cultural differences and how to take them account, platform economy, virtual management, and business planning into a market entry strategy.

The results of the thesis are a market entry strategy to foreign markets and a project plan as well as data received from the research to support the benefits the digital tools can bring the clients in project management and supervision.

Covid-19 pandemic created limitations for the thesis as it was not possible to travel to Vietnam to do market research among potential clients and show the benefits the product could bring them. The product is also not known in Asia. But, the research clearly shows the clients how much time and money they will save using the product and will help to enter the markets.

Keywords digitalization, digital platform, market entry strategy, ASEAN, Vietnam, project management.

ABBREVIATIONS USED

ASEAN	Association of South East Asian Nations
BEP	Break Even Point
BSC	Balanced Score Card
CI	Cultural Intelligence
EQ	Emotional Intelligence
HSE	Health, Safety, and Environment
IRR	Internal Rate of Revenue
PBP	Pay Back Period
PM	Project Management
PMO	Project Management Office
PRM	Project Risk Management
PSM	Project Scope Management
QM	Quality Management
ROI	Return of Investment
SPM	Strategic Project Management
TQM	Total Quality Management
WBS	Work Breakdown Structure

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1 INTRODUCTION

Digitalization is rapidly growing and taking place in the world. Our business environment has become much more connected due to the globalization and the fast-growing speed of data transfer throughout the globe. This enabled the world to become more digitalized and enjoy the benefits from it. The benefits of digitalization are more data available for faster and more accurate decision making, data is available in real time, time saving for everyone, possibility of remote working thus giving more freedom for people as the workplace is not bound to a single location, and more jobs. But there are also downsides to digitalization: it replaces people as some jobs become redundant, people need more training to master digital platforms, and digital platforms can be hacked by ill meaning parties.

Congrid is a construction management and supervision platform that brings lean into construction management process by enhancing transparency, safety, and quality in construction. It also makes decision making easier and faster by providing data in real time and the data can be found in one place. Congrid operates in the Nordic countries.

The purpose of this thesis is to create a market entry strategy to ASEAN markets as the Nordic markets are limited in size and ASEAN markets have large economies of scale for Congrid to find its full potential. To achieve this goal, a client survey, empirical research about time saving using Congrid, and literature review was conducted. The survey was conducted to achieve insight of clients' attitudes and use of Congrid and what benefits they see it brings. These results can be utilized in Vietnam markets to convince the clients that the platform brings them benefits. The empirical research was conducted by comparing traditional supervision process and process by using Congrid. The survey and research show that considerable time savings are achievable and that the clients have adopted Congrid as their daily business strategy and see it beneficial.

The literature review gave a comprehensive picture of what needs to be considered for the entry to foreign markets to be successful. The literature review conducted showed that there are only few studies conducted about market entry to ASEAN but there are different guidebooks and consultancies that provide this service. It also showed that a successful market entry depends on many different factors that need to be aligned to create a holistic picture. One of the most important factors is to understand the cultural differences between country of origin and the target country.

The market entry strategy gives the company a tool and a guideline on how to enter different markets and to understand what is needed to be successful in the target country. Important parts of the market entry strategy are a project plan and a business plan on how to enter the markets and how to conduct business there. It is also important to set a time frame for the market entry to eliminate unnecessary delays and costs in the project (Figure 1).

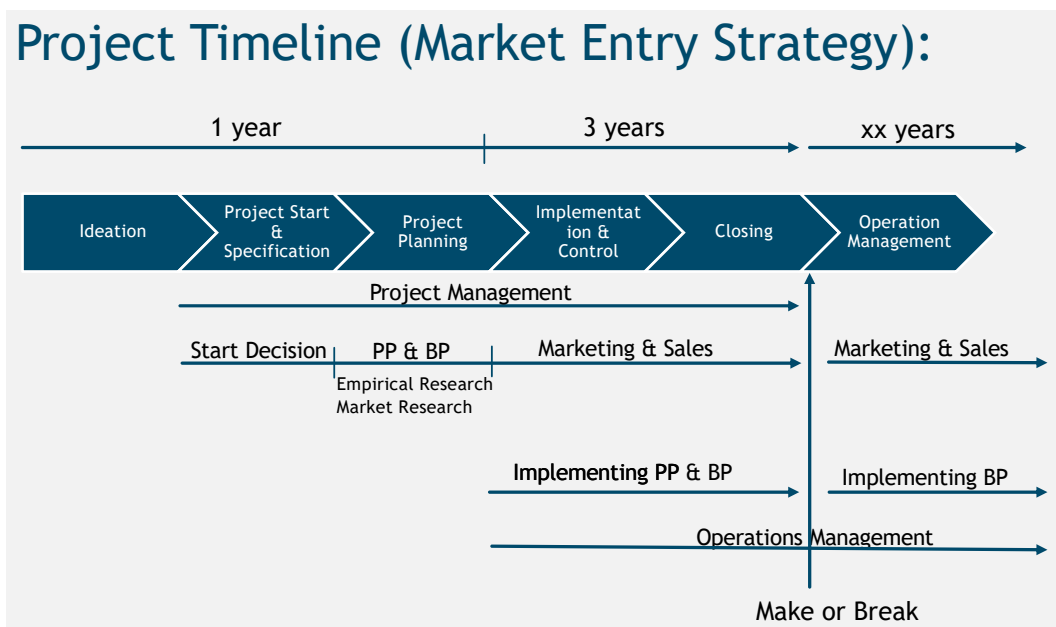


Figure 1. Project Timeline (Manni, 2021).

1.1 Aims and Objectives

The main objective of this project is to develop a project plan and a business plan that can be used to enter foreign markets to expand business and increase revenue streams. The project plan and the business plan will give information of the foreign business environment and reduce risks of entering new markets. It is believed that the plans developed will deepen the knowledge of the markets, business conducts and culture in target country. This allows them to serve as an asset by bringing more value for the company. Therefore, the aims of this study to meet the main objective are.

Aim 1

To evaluate critically what factors, need to be considered managing a project in a different business environment and culture to reduce risks and based on information gained, create a project plan to enter Vietnam's markets. This aim is important to meet so that the PM can gain an understanding of project phases, project practices, and stakeholders involved in the project to conduct efficient project management and recognize the client's needs and demands. This way the PM can find and suggest methods to improve the project management process. The PM needs to understand what factors affect the project management process and what is included in it. By mastering project management, the PM will be able to bring value for the client by selecting the most suitable method of implementing the project in question by considering different factors that affect the individual project, e.g. client's needs and wants, cost, location, market situation, and culture.

Aim 2

To identify factors that must be considered to be successful in foreign markets. This is achieved by evaluating the business environment, market size, political environment, and local culture. It is also for the PM to understand business mod-

els and local authorities' regulations. A business plan is created based on information gained from the research and personal knowledge of the markets and the culture.

Aim 3

To identify and categorize clients' understanding and needs because of their experience of projects is important to gain an insight of their knowledge and attitudes of digital tools. The survey with the clients gives a more comprehensive picture about the clients' demands and expectations for digital tools, what benefits, both tangible and intangible, they think the tools bring them, knowledge, and attitudes about digital tools, and how important they consider these tools in their projects.

Aim 4

It is also important to recognize what factors different cultures value.

A survey conducted will be made to prove that the platform brings time and cost savings for the clients by utilizing a digital construction management and supervision tool. The research aims to prove the following benefits the platform brings:

Tangible:

- Time savings in supervision and site management
- Savings by LEAN as some phases in the supervision process are reduced, defect listing site rounds together with supervisor and contractor, post defect listing site rounds with supervisor and contractor
- Economic savings due to time savings, improved quality, and safety

Intangible:

- Better communication between project stakeholders
- Transparency

- Accessibility into daily operations of project and monitoring of project in real time by different stakeholders
- Increased speed of decision making
- Benefits during Covid-19

The outcome of this thesis, the project plan and the business plan are presented in appendices 1 and 2. The results of the client survey and the authors own survey are presented in the results section of this thesis.

1.2 Research Questions

The research questions arise from the need to enter Vietnam's markets successfully and to reduce risks of entering foreign markets. They also deal with issues needed to show what benefits the product brings for the clients in the target market so that they are willing to purchase the product. The research questions are:

Question 1: What plan is needed to prepare the company for the market entry study? This question answers what is needed after the project owner decides to proceed with the market entry venture. It also deals with the many issues that must be considered to reduce risks and to construct a clear framework and plan for the project.

Question 2: What plan is needed to combine and align project management and operations management? This question answers when the project ends, and operations begin and what plan is needed to proceed smoothly from project management to operations management. The question also considers the environmental factors for the venture to be successful in foreign business environment.

Question 3: What should be researched to show the benefits of the product to clients in different culture with different approach and attitude towards digitalization of construction industry? This question answers what needs to be studied to show tangible and intangible features of the product for the clients to purchase the product. It also answers the question what kind of features people and businesses from different cultures value.

These questions will be answered and analyzed during the literature review and empirical study in this thesis through the findings. These findings will be synthesized into a project plan and a business plan that help to manage the project and combine project management and operations management.

1.3 Research Limitations

The empirical research was conducted in Finland due to Covid-19 restrictions and because the platform is not known in Asia. This created challenges to do comparison of the Finland's and Vietnam's business environment, attitudes to digitalization, and cultures. Although there were challenges to do comparison between the two countries the research in Finland showed the platform brings clients benefits and the results correlate with previous surveys conducted in Vietnam and Thailand outside of this project, i.e. the author has interviewed local professionals during 2017 to 2019.

Platform economy and digitalization are very attractive subjects now and there are several publications on it recently in Europe and United States. This created challenges to find the most suitable literature for the thesis because the literature published is aimed mostly for Western markets and needs to be applied to Vietnam's business environment culture. As Vietnam is not as open society as Finland and not all material is published in English, so it was challenging to retrieve information from government sources and about Vietnam's markets.

Technology and digitalization are also developing at a rapid pace so a research paper published in 2019 may not be current anymore today.

1.4 Structure of the Study

Chapter 2 presents the literature review that consists of the following topics: Project Management, Cultural Dimensions, Virtual Management, and platform Economy and Digitalization.

Chapter 3 describes the research done, what methods were used, and how the data was collected. It also describes why the topic of the thesis was selected.

Chapter 4 describes what results were gained from the research and how they relate to research questions. It also gives recommendations how to best utilize and further develop the outcomes of the research to gain most of them.

Chapter 5 conclude the research and describes briefly what was studied. It also describes what the outcomes, i.e. the plans developed, will be used for.

Chapter 6 gives recommendations for further research and what challenges were faced during the study.

2 LITERATURE REVIEW

The literature review was conducted to support the outcome of the surveys and the author's personal experience, expertise, and knowledge. The literature review gave empirical and current information about platform economy and digitalisation, project management, supervision of projects, strategy, and virtual management and importance of cultural dimensions. The literature review consists of the following sections: project management, virtual management, platform economy and digitalization, and cultural dimensions. The data used in the literature review was retrieved from scholarly articles, peer-review papers, published professional books, company reports, conference publications, and various web sites related to the subject. The data retrieved from the previously mentioned sources was detailed and comprehensive on digitalization, cultural dimensions and project management and many studies that combine these subjects were found in the literature.

The literature review helped to form a holistic view for the project in hand, which is to develop a market entry strategy to foreign markets for a digital construction management and supervision tool, and how the parts researched are linked together. It also helped to develop a project plan and a business plan that are vital for a project to be successful as they set a framework for the project. The literature review also helped to understand how to keep the project on budget and the scope and the importance of an exit strategy, so the project is not an ongoing endeavor.

2.1 Project Management

Management can be understood as a very broad task or concept and it comprises many different disciplines such as project management, corporate management, production management, and organization management. In this thesis the following sub-sections of project management will be considered because

they are relevantly related to digitalization and entering a foreign market. Project Planning, Risk Management, Quality Management, Cost Management, Project Scope Management, Strategic Project Management, and Supervision of Projects. A project has many phases (Figure 2) and although each of these are important, in this thesis the most important phases related to market entry strategy for foreign markets are considered.

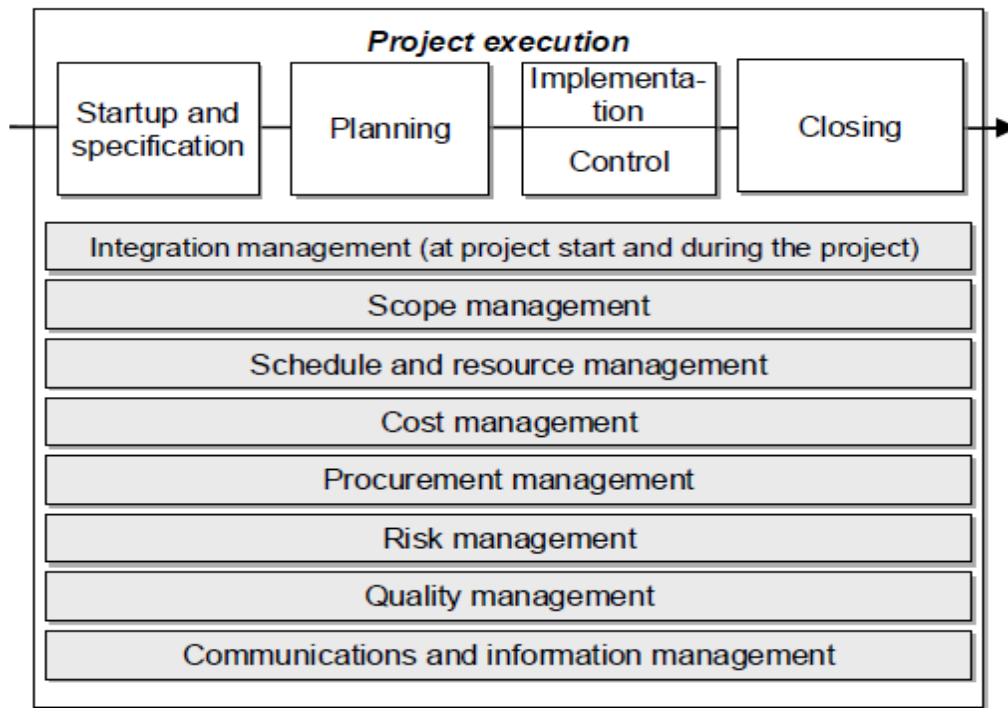


Figure 2. Phases of Project Execution and Knowledge Areas (Artto et al, 2011, p. 80).

Management is usually very hierargical in construction industry which makes the decision making slow and rigid. As the building projects are very complex, a more feasible management approach could be holocratic organizational structure which enables faster and more agile decision making as there is no traditional chain of command and thus brings bring more value for the clients by making the project period shorter by giving more autonomy to teams and individuals as can be seen in Figure 3. After all, the people on management level in building projects are all well educated and experienced (Holacracy, 2021). There seems to be a silo culture in construction industry when it comes to management and the

management practices should be more agile to enable better communication and information sharing between different parties in construction. This is where digitalization comes into the picture by creating more communication and transparency.

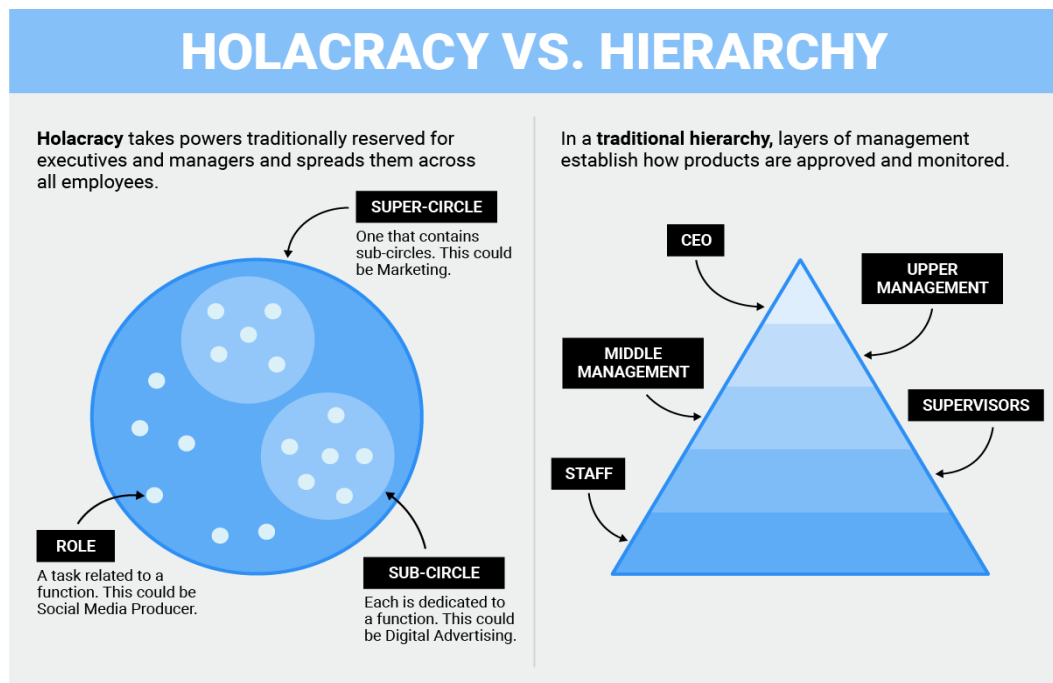


Figure 3. Holacracy vs. Hierarchy (Lee, 2017).

Managing change and innovation is vital for enterprises as the business environment is in constant change, especially the construction industry. Technology is developing at a rapid pace; climate change creates new challenges and opportunities, and people are migrating with vast numbers. This also creates pressure for project stakeholders as they must change with the business environment and bring more value for clients. Otherwise, there is a threat of stagnation and the clients select another service provider as they have become more demanding and aware of the services provided. So, the services must be developed to meet the customer needs and to keep us with the changing business environment. This should be included in service providers' business strategy to gain competitive advantage over competitors (Tidd, 2014). As the business environment is

constantly changing and so are the customer needs, there is a real risk of marketing myopia, which means that the service provider pays more attention to the service than the benefits and experience it provides, i.e., the service provider concentrates only on existing customer needs and fail to recognize underlying customer needs. If these underlying customer needs are recognized it gives the service provider a competitive advantage to its competitors (Kotler, 2014).

To build sustainable and high-quality buildings the project manager and supervisors need to manage and supervise the project in sustainability and quality in mind in all project phases and digital tools enable this. Both project managers and supervisors, as well as the client, need to be trained in digitalization and sustainability, i.e., to implement high-quality and sustainable processes, practices and products in a project. The sustainable project management brings benefits to the client in the long run compared to traditional project management, as can be seen in Figure 4. Figure 4 shows how sustainable project management brings benefits by considering the whole life cycle of the whole building and not just to the hand over phase of the project. The local and global societies are included in the project and thus emphasises more on quality and sustainability in long term.

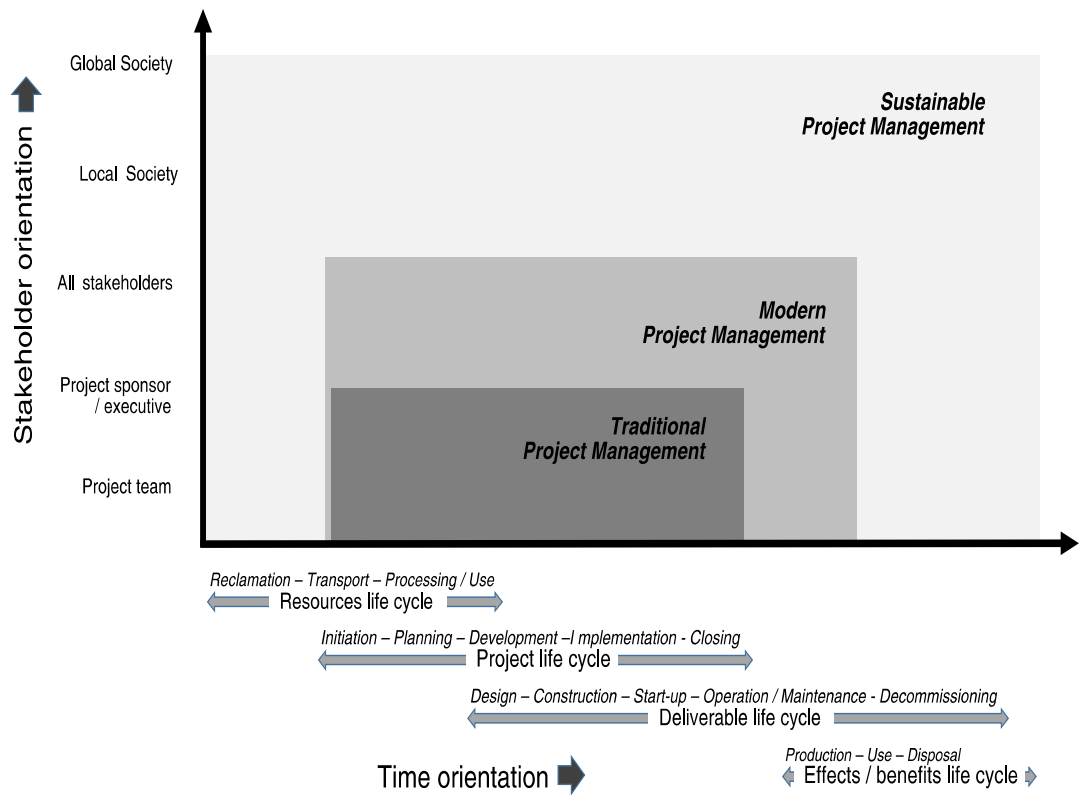


Figure 4. Effect of Sustainable Project Management on the Project (Silvius, 2017, p. 74).

As the world has become more complex in the modern era, so has the building projects. Technology has taken huge leaps forwards in recent decades and projects have more people involved. This has led to a situation that we can define the project personnel as team of teams and they need to be more agile, independent, and flexible in decision making and management (McChrystal, 2015).

A competent and experienced project manager is vital for the success of the project as a projects' personnel comprises many different stakeholders such as client, consultants, designers, contractors, officials, and different experts. The cooperation of all above mentioned needs good skills in project management and people management. Also, the surroundings of the construction site must be considered as there may be people living adjacent to the site and there can be

other construction sites close by so the logistics can be challenging. Digital tools are a valuable tool to enhance the above mentioned (Manni, 2017).

2.1.1 Project Planning

Project planning is extremely important phase as it sets the guideline and framework for the project. Project planning should always be done with company strategy in mind, to align the project plan with it. Also, as in this case, planning to enter to foreign markets, the project plan should align with the business plan, which can be found in Appendix 2. Project planning is an activity that the project manager should include most of the project stakeholders, e.g., sales, marketing, project personnel, the client, etc., to develop a comprehensive plan that considers many points of view and not only the project manager's and serves the project and its owner holistically.

In project planning phase the stakeholders that participate in the planning process agree about project objectives, content, execution methods, resources, and other details concerning project execution. The project plan is not, and should not, be a scripture carved in stone rather than a work in progress that is updated and specified as the project proceeds. If new issues arise, the plan is updated and specified accordingly to meet new issues and expectations (Artto et al, 2011).

The project plan must be accepted by the decision makers in the project to achieve validity and all alterations to the plan must also be approved with the decision makers. The project plan must also be in line with the contract made between the client and the project manager (Artto et al, 2011).

According to Artto et al (Artto et al, 2011, p. 85-87) the project plan should cover the following content and headers.

Background and benefits

Goals and objectives

Risks and risk management
Project organization and responsibilities
Scope and scope management
Work breakdown structure
Schedule and schedule management
Resources and resource management
Procurement management
Budget and cost management
Reporting and communication
Complementary parts and appendices

The project plan developed for Market Entry Strategy to Vietnam can be found in Appendix 1.

2.1.2 Risk Management

Risk can be defined as a problem or event that has not yet happened and may occur. Although risk management should be among the most important tasks in projects to assure safety, cost efficiency, and quality many project managers react lightly to risk management when they should invest much effort in it. Effective risk management is vital for project success and should be the responsibility of all project stakeholders. Risks should firstly be avoided but this is not always possible, therefore, project managers may reduce or eliminate the risk by including risk mitigation activities into the project plan for example, in a form of risk matrix, transfer the risk to other activities or other responsible parties, such as an outside vendor, planning for foreseeable risks, and by putting quality control practices and procedures into place (Cervone, 2006, International Project Management Association, 2012). When entering foreign market, there are many risks to be dealt with to avoid possible pitfalls and this only emphasizes the importance of risk management for the company to be successful.

Risk management is an ongoing process throughout all project phases, and it is a dynamic function which means that potential risks are monitored constantly and mitigation actions accordingly. There are different phases in risk management: identification, assessment, analysis and prioritizing, and risk control. Risk control comprises risk management planning, risk mitigation planning, risk monitoring planning, and tracking and monitoring risks (Raz et al, 1999).

When identifying risks, past projects should be considered, investigate lessons learned at the end of the project and learn from them. Risks should be reduced before they appear, and many project managers use successive principal technique to reduce the uncertainty surrounding any particular risk. The technique estimates the uncertainty of an item subject to the estimate when it is broken down into its component parts. The sum of the variances of the estimates of the sub-items is less than the variance of the total item (International Project Management Association, 2012).

The risk assessment recognizes the severity and probability of the risk and where and when it may occur. The risk matrix is a useful tool for this, and it is also useful to integrate the possible risk event into project schedule to monitor when it may happen.

Risk analysis and prioritizing categorizes the risk on its severity and how to best mitigate the risk. Risk analysis helps to control cost of projects and aiding organizations decision-making process (Rosencrans).

Risks need constant monitoring to control them. Although all project stakeholders should be included into controlling and monitoring risks, the project manager should designate an owner for individual risks identified. This makes the monitoring more efficient as the responsibilities are clear. Digital tools are valuable in

risk monitoring as the risk owner can proactively point out the risk or hazard in the platform and all stakeholders can see it in real time and act accordingly.

There are many computer aided tools that can be used to support Project Risk Management (PRM) and to utilize these tools necessary infrastructure must be in place, i.e., technical abilities, equipment, operating procedures, and databases. In addition, the employees using these tools need training and support activities from the providers of the tools. Raz et al (Raz et al 1999, p. 10) put PRM tools into six groups; identification, analysis, planning, tracking, control, and processes and practices depending on the action the tool is developed for. When planning PRM the most used tools should be used as these are better available and the support activities are better available. Raz et al (Raz et al, 1999, p. 11) ranked thirty-eight different tools, on the top five most used tools are: Simulation, responsibility assessment, risk impact assessment, configuration control, and sub-contractor management. PRM tools give added value for project managers by reducing mistakes in the PRM process and by connecting and engaging project stakeholders better into the PRM activities.

The risk matrix to identify and categorize risks entering a foreign market was developed and can be found in the Project Plan (Appendix 1). The risk matrix developed deal with issues such as currency fluctuations, corruption, changes in business environment, new government regulations towards digital platforms and foreign operators, copyrights, labour, cash flow, and problems in platform readiness and safety.

2.1.3 Quality Management

Quality Management (QM) is a task that ensures the project fulfils the requirements and expectations the client sets for the product that the project delivers. The requirements and expectations comprise meeting product specifications, reliability, convenience, durability, and predictability. As the client's requirements

and expectations as well as the circumstances in business environment may be unclear at the start of the project and may change during the project, the project manager must be able to identify, manage, and control these changes and it may have an effect on the project scope and budget, thus the QM is highly aligned with the project scope and budget. This also aligns the quality of the product and the project management quality and if one is emphasized more, it may affect negatively the other. Therefore, a holistic approach is needed and concentrating on overall quality instead of single factors. This is called Total Quality Management (TQM) and it consists of the following factors.

- Quality should be a part of company strategy and should be part of all member's agenda, from lowest level to directors
- The company should recognize quality problems and direct resources in time to solve the problems
- The company should recognize what processes create high quality and how to measure these processes
- The company should solve quality problems using analytics and create tools to solve the problems (Artto et al, 2011).

As can be seen in Figure 5, there are three main activities in QM, quality planning, quality assurance and quality control.

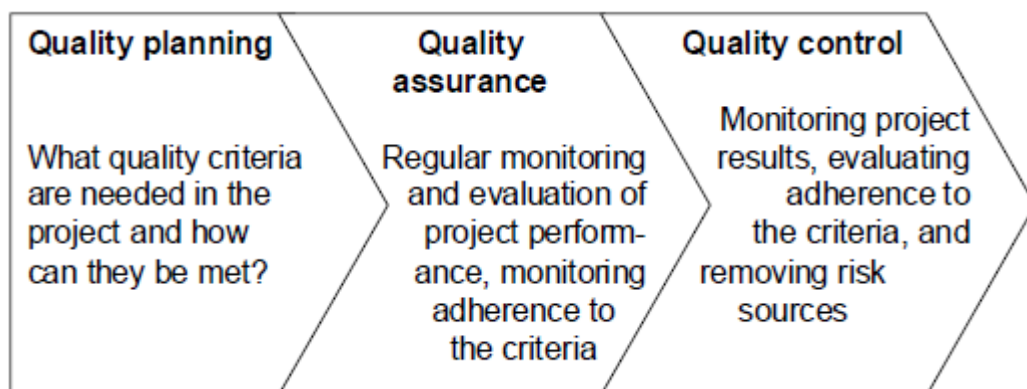


Figure 5. Components of Project Scope Management (Artto et al, 2011, p. 175).

Quality plan can be an appendix in the project plan, and it identifies the quality criteria in projects and how to meet these criteria. Quality plan should also include at least responsibilities of stakeholders, procedures and practices used in QM, and resources needed to assure required outcome. There are many techniques to be utilized in quality planning and the most suitable for a market entry strategy project are cost-benefit analysis, benchmarking, and flowcharts that show in detail QM actions (Artto et al, 2011).

Quality assurance is a set of activities that assure the quality criteria set by the client are met during the whole project life cycle. Quality assurance activities comprise follow-up, evaluation and anticipation presented in the quality plan. To assure a successful market entry the client and the project manager must in cooperation set clear specifications for the project, define what criteria are monitored, follow good practice and standards such as ISO 9000 and ISO 10006, utilize local partner's experience and knowledge, utilize competent resources, do regular audits, and engage in active change management in cooperation with local partners. There is no single right way to perform quality assurance, it is important to apply the right methods for the project in hand to assure project quality (Artto et al, 2011).

Quality control is done to assure the required quality level by identifying and eliminating quality problems and variations as they appear. Problems and variations can be identified in many ways but in the market entry project the most suitable tools are audits, comparative analysis of competitors, and client surveys to monitor satisfaction and quality of the service provided which also helps to manage local partners and customer relations (Artto et al, 2011).

Achieving product and project management quality is not cheap, it requires a lot of work and resources to develop procedures, standards, and cooperation to change attitudes to quality thinking within the company. But the benefits exceed

the costs of developing quality in long term as once the quality standards and procedures are in place, it does not require as many resources to monitor and develop these. The preliminary cost benefits are shown usually in 18 months and the cost benefits from preventing quality mistakes start to show in a few years. When the company's product and project management are of high quality it will bring other intangible benefits also beside lower costs like better image due to less complaints and reputation of high quality. According to Artto et al (Artto et al, 2011 p. 179) the cost of quality consists of four factors.

1. Costs of self-detected mistakes, scrap, and rework: Costs consists of searching for mistakes, excess and faulty materials, and the costs of disposing these, unnecessary work for repairs and paperwork, and handling delays and rescheduling
2. Costs of faults reported in customer complaints: Customer complaint about products and works affect revenue by installation costs, returning or reducing fees already paid, extra transportation, answers to reclamations, and reduced company image which can affect future business opportunities
3. Costs of quality assurance and control: These costs consist of maintaining and developing the quality system including inspections, audits, testing, and troubleshooting
4. Costs of preventing and avoiding mistakes: This requires resources for training, communication, research and development, and cooperation with partners to avoid quality problems.

For the project to be successful constant monitoring of partners activities, quality of the training they provide, and quality of service is vital. Constant development of the product provided assures that the quality is high level in all project phases. It is also important to adjust the product to different markets and cultures, i.e., translations to different language, and ease of use is the same everywhere. The project manager also needs to have clear responsibilities and mandate to make

changes into the project, so the quality issues can be solved quickly the decision making is not delayed unnecessarily.

2.1.4 Cost Management

Project cost management is necessary for the project to be accomplished within a set budget which consist of direct costs and indirect costs. In any project, the time, cost, and scope are linked together, meaning that change in any of these, will change all of them. The balance of these also influence the project quality. Project Management Institute (PMI) defines four project cost management processes as: cost management planning, cost estimation, budget setting, and cost control. The client usually sets the limit for the budget and the project manager plans the budget in cooperation with the client and other project professionals and the client finally approves the budget to be monitored and controlled by the project manager and his sub-ordinates (Anicic, 2019, Project Management Institute, 2012).

There are many tools and techniques to estimate and manage the project costs, the most suitable tools, and techniques for a market entry project in this case are expert judgement, analogous estimating, parametric estimating, cost-benefit analysis, and activity cost estimation. These techniques mentioned rely on experience and knowledge of the project manager, research data, and educated assumptions of the markets in question and the cost of the project. Other variables must also be considered when estimating costs of a project, i.e., political environment, corruption level, and trustworthiness of partners and employees. Failure and inefficiency in projects are usually a result of inadequate preparation and research of the business environment, social environment, and cost structure in the target market. This only emphasizes the selection of right tools and techniques to be implemented in cost management (Anicic, 2019, Project Management Institute, 2012).

Entering a new market always requires capital to establish business operations in the target country. Money will be used for sending employees to a new country, establishing offices, hiring new employees, marketing, finding right partners, equipment, and translation fees. All projects require money to be implemented and entering a foreign market that has many uncertainties, the budget cannot be estimated with 100 % accuracy as the business environment in general is very complex. This emphasizes the importance of project cost management and that the budget developed is as realistic as possible but longer and larger the project is, more uncertainties arise and may require more funding (Anicic, 2019, Project Management Institute, 2012).

There are very useful parameters to be monitored in project cost management practise to monitor project success. These are Payback Period (PBP), Return on Investment (ROI), Break Even Point (BEP), and Internal Rate of Return (IRR). These parameters enable the project manager to assess the project profitability and they are not bound to project size (Anicic, 2019, Project Management Institute, 2012).

The project manager must monitor the costs of the project constantly, the payments to the partners and cash flow back to mother company. The project manager is responsible for reporting regularly back to the mother company and take necessary actions if costs exceed the planned. The project budget can be found in the Project Plan (Appendix 1) and more detailed financial examinations of the project in the Business Plan (Appendix 2).

2.1.5 Project Scope Management

Project Scope Management (PSM) is about identifying, planning, and controlling the execution of the required amount of project work to ensure successful completion of the project in the time limit and quality level set to the project. PSM determines how much work is needed to complete the project efficiently from

different project stakeholders. PSM is an ongoing process throughout the project, it is constantly evolving as the plans become more specific and changes are made into the plans. The project manager must report the progress, status, deviations, and changes in the scope regularly and get approval from the client to make larger changes in project scope (Artto et al, 2011, Derenskaya, 2018).

As can be seen in Figure 6, there are three components that relate to project scope management: product content, the content of works, and project content. For the PSM to be effective it is important to determine the work to be performed, sequence of works, work duration, resources needed for the works, and the cost of works (Derenskaya, 2018).

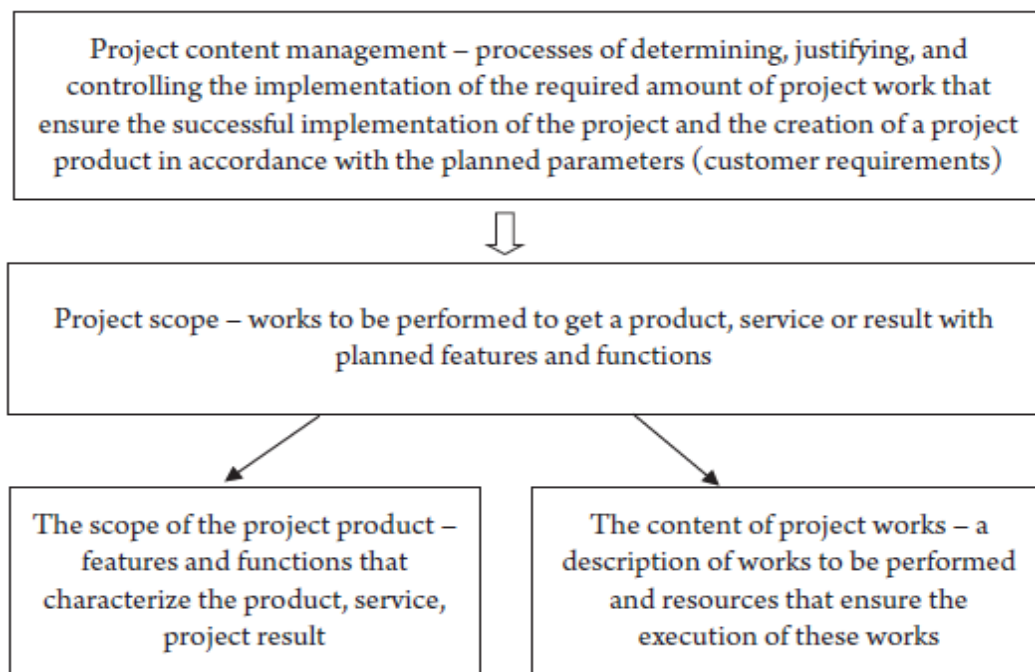


Figure 6. Components of Project Scope Management (Derenskaya, 2018, p. 119).

For the project manager to be able to manage and control the project scope in a very complex environment a Work Breakdown Structure (WBS) must be devised. This enables the project scope to be broken down in smaller work packages and thus is easier to manage. The WBS is essential and central structure to plan the

project scope and to determine how much work is needed to complete the project as well as project planning and following the project plan. The WBS is a hierarchical structure that becomes more detailed when proceeding to the lower levels of the hierarchy and show in greater detail the tasks and resources allocated to PSM. In the lower levels the WBS is broken into single work packages and tasks and these should be manageable, sufficiently independent of each other, relevant to the whole project, and measurable. An example of an WBS can be seen in Figure 7, more detailed WBS can be found in the Project Plan developed (Appendix 1) (Artto et al, 2011).

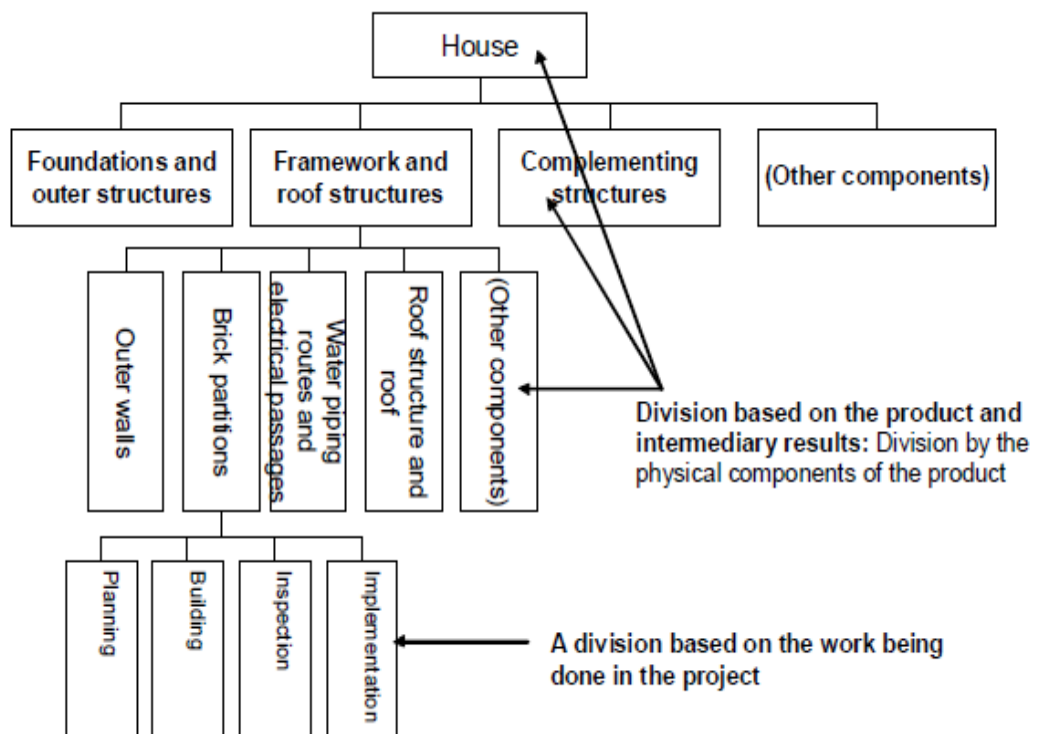


Figure 7. Example of Work Breakdown Structure (Artto et al, 2011, p. 91).

PSM is a very complex process with many variables as the project is progressing and changing. The project manager needs to cooperate closely with other stakeholders to be successful, and this is only emphasized when working in unfamiliar foreign markets where there are even more uncertainties (Derenskaya, 2018).

2.1.6 Strategic Project Management

Strategy is a set of guides and tools for a company to achieve its goals, what to do to reach the goals set and what not to do to avoid pitfalls that the company will face on the way. Strategy helps the management in decision making and resources management to achieve key objectives. Strategy should be aligned with the company's mission, vision and values as presented in Figure 8 (Watkins, 2007).

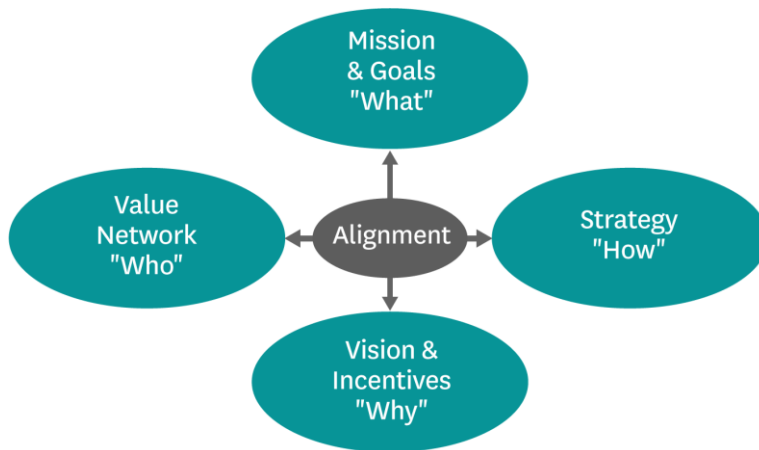


Figure 8. Alignment Between Mission, Vision, Goals, Value and Strategy (Watkins, 2007).

Strategic project management (SPM) on the other hand is about managing the company's project portfolio in a way that it aligns with the company's overall business strategy. With strategic project management the company ensures that the projects the company has are sufficient and appropriate to reach the strategic objectives of the company, the projects are sufficiently resourced, and projects are prioritized based on the strategic plan of the company. SPM links and integrates together strategic project and knowledge management; that is why it is vital for companies to achieve success as the business environment is continuously changing and technology is rapidly evolving. With SPM companies can develop an integrated management system and enables it to achieve its mission, vision, goals, and objectives (Knight, 2020, Camci, 2016).

It is also important for the company to select and invest in the right projects to prevent business failure. If too large portion of the company's funds are bound in wrong projects, the risks of can become unbearable and cause business failure (Anicic, 2019).

Every company needs to create a strategy to gain competitive advantage in markets they are operating. This creates challenges to achieve competitive advantage otherwise than to reduce prices, which leads to reduced revenue and profit margins. Decreased revenues cannot keep a company profitable as the markets will be saturated with competitors if they see that there is money to be made in the markets. The company must stand out from its competitors by providing better products. The company strategy should be aligned with the company's strategic project management practices. If the two above mentioned are aligned, it creates competitive advantage in a very competed market.

In the case of digital platforms, the first mover to the markets gains advantages to its competitors as it gains a stronger market position and visibility and thus higher profitability. When entering the market, the company must develop a strategy for how to differentiate from its competitors in either with the pricing strategy of the product, quality of the product, service provided, and width of the product line. It is also important to consider the positioning of the product in the market, the market scope, and when to launch the product to be successful (Rodriguez-Pinto, 2006).

The difference with SPM and PM is that SPM aligns heavily with company strategy, operations management, organizational culture and structure and projects, as PM deals with individual projects. The two are normally considered in isolation although they are linked. To achieve project management maturity, the company must achieve success in the before mentioned (Luciano, 2010).

There are many tools to be used in SPM: Strategic Maps, Balanced Score Card (BSC), Strategic Planning, Benchmarking, Outsourcing, Reengineering and Total Quality Management (TQM). BSC measures success in financial, customer, business process and learning and growth perspectives. The company can also use benchmarking activities to monitor the price level of services and services provided by competitors (Camci, 2016).

An exit strategy must be set in place not to exceed the budget and schedule and to decide whether to give up on the endeavour or to proceed to operate the business in the market. Clear limits and goals must be set so the project length and scope are not exceeded.

Digitalization brings new tools to ease the project management practices and it works as an aid for communication between different project stakeholders. Digitalization also helps to reduce time consumed for different tasks in project management and thus money. More research is needed to show what benefits digitalization brings into construction industry as the change is usually slow due to old established mind-set.

2.1.7 Supervision of Projects

The supervisor has an important two-part role in the construction project. Primarily, the supervisor acts as the client's contact person and ensures that matters proceed as planned. At the same time, he works closely with contractors and instructs them as needed.

Supervision in construction projects is one of the most important tasks to ensure the project meets quality, health, safety, and environment (HSE), schedule, and budget targets set to the project. Project success is a collective effort, and it is vital for the project success to include all stakeholders into the supervision process. With digital tools the supervision process is made transparent and reduces

misunderstandings when it comes to quality and HSE and thus supervision benefits all parties. Supervision also helps to build workers' attitudes towards their work. Also, training of stakeholders to use digital tools used in supervision helps to ensure they are used correctly and get the most out of them (Ogundipe, 2018).

One of the challenges in supervision is the flow of data to the right stakeholders and communication between the stakeholders. The data may be hidden from important parties if the supervision is conducted in so called traditional way, i.e., creating reports and minutes and sharing them by email and orally. Digital tools are a great aid to enhance the flow of data and communication to different stakeholders as they can be used to share data in real time to all parties considered. This improves communication in projects and reduces the risk of someone not getting the data required and thus enhances the decision making in the project. This also enables to solve future disputes as all data is easily found and in one place and parties do not have to rely on their memory only.

According to studies, the quality of supervision of different projects varies quite a lot depending on the client and project size and scope. Properly conducted supervision helps the project to stay on budget and schedule as well as reduces risk and accidents and improves quality. To ensure this, the supervision process must be planned, and the supervisor must follow the plan and make additions and changes into the plan when needed, for example, in the case the project scope changes or there are additional works from the client (Keskisaari, 2018).

With help of digital tools such as Congrid, the supervision process can be monitored by different stakeholders such as the developer, senior management, and other parties to ensure it is conducted as intended in contracts and it helps them to commit to the supervision process and to support it (Croner-i, 2021). This helps the client to achieve top quality supervision and the contractor gains a

good image and saves money when the same tasks do not have to be done many times.

Properly conducted supervision decreases the probability of risk in projects and thus reduces financial losses for the client and contractor. The biggest risks in construction projects are realized in the implementation phase of the project but poor design can also lead to an increased risk level but can be managed with good preliminary design and design management. To reduce these risks, it is vital to develop an organizational and technological supervision method and to utilize digital tools and technologies and established standards in supervision process. With these measures mentioned, and digital tools, the control of supervision process can be centralized and the risk of quality defects and health, safety and environment risks in projects can be reduced as well as the risk of corruption in projects (Topchiy, 2018).

Poor risk management and lack of supervision in projects can also lead to delays in the project. Although there are many reasons for projects to be delayed, one important factor that most often leads to delays in projects is that the client awards the project to the lowest bidder. The lowest bidder usually has not sufficient resources and skills to deliver the project in the desired scope and quality and this leads to low performance in all sectors in the project. Other reasons that usually causes delays are ineffective planning and scheduling of project by contractor, low productivity level of labors, changed orders by the owner during construction, effects of hot / cold weather effect on construction activities, type of construction contract, conflicts encountered with the subcontractor's schedule in project execution, poor site management and supervision by the contractor. These factors mentioned very often are the result of a poor contractor, which usually is the lowest bidder, and thus should be avoided to avoid delays and quality issues. This only emphasizes the importance of the contractor's own

supervision, to avoid financial losses through poor quality and delays that lead to fines from the client (Sadi, 2006).

Quality supervision of works, materials and site conditions is vital for the desired outcome of the project as well as HSE, it helps avoiding delays in schedule and costs in projects. Quality supervision should be practiced at all project stages to avoid hidden defects caused by poor installations and defected materials. Often the project schedule is very tight, and contractors may be tempted to cut corners in installations and material use, for example, use wet materials that are covered and have no time to dry causing mold problems. With digital supervision tools all phases of the installations can be recorded and included all stakeholders into supervision process and thus a transparent project environment is created that benefit all parties. With quality supervision the project can prevent defects at all project phases that could be cumulated and escalated affecting the outcome critically (Ogundipe, 2018).

The author has 13 years' experience of supervision and project management and has noticed an increase of client demand of supervision in construction projects although there is room for improvement as it is always in the client's interest to invest in comprehensive supervision as the cost is a fraction of the implementation costs. This has led to increased quality, safety, and savings in projects. The digital tools have made the supervision process LEAN and have enhanced the communication between stakeholders and made decision making more agile when all the data and information is available in real time. It has also brought more transparency into the project management and supervision process leading to improved quality of the outcome and included the contractors and clients more to the supervision process and has led to the contractors finishing the works in required quality and reduced the need to correct the works multiple times.

Good cooperation with the supervisor is an advantage for the main contractor. Supervisors often bring their know-how in the field of construction works and constantly evolving building services technology. For a young foreman, conversations with a supervisor can be a valuable opportunity to learn. More experienced work management will again be able to update their skills as information is transferred.

A well knowledgeable supervisor can also raise issues, thus saving the main contractor time and money compared to a situation where repairs are made later through demolition and re-making. This also benefits the contractor, as it is in everyone's interest that the project progresses on schedule without rush needs or other production disruptions.

Sometimes, however, it happens that the personalities of the supervisor and the foreman in charge do not meet or stress and pressure can create confrontation. In this case, the opportunities to benefit from the cooperation are reduced and the field of vision narrows. Especially in such situations one should remember the common goal and try to avoid silo thinking. The goal of the project is to be complete the project safely, with high quality, within the agreed timeframe and within the budget. Unnecessary arguing does not contribute to any of these efforts. In an inflamed situation, both parties are required to persevere and resolve to solve the situation.

The main contractor should think the supervisors as resource and advisors rather than opponents. This also makes it easier to involve the supervisor in important site inspections, for example for model installations. This procedure ensures that the final product meets the customer's requirements, and that the main contractor can complete the finished product in one go.

2.2 Cultural Dimensions

Culture is a very difficult issue, it is tangible and intangible and there are different levels of culture and these are national, regional, organizational, team, and individual. People in a same culture share the same beliefs, values, assumptions, behavior, and often the language that are learned from the birth.

One can see that the cultural landscape is a very complex one and it is almost impossible to learn all the finesses of different cultures if not born into one. But it is possible for a cultural intelligent (CI) leader to learn and adopt into different cultures to be successful in his job. One must be able to admit one's mistakes and unawareness when it comes to different cultures and be willing to learn about more about different cultures, this requires strategic thinking skills. Cultural intelligence framework consists of four parts: knowledge, strategic thinking, motivation, and behavior. A leader that is working in a different culture must be able to acquire information and knowledge from the culture in question to get a deeper understanding about the differences. He must also be able to think strategically to make sense of the information he already has and how to add new information and how to process the information to form a holistic view. The motivation part emphasizes the leader's ability to pay attention to surroundings and how he can adapt outside his comfort zone as well as be genuinely interested to work with and learn about different cultures.

The GLOBE study recognizes nine core cultural dimensions in different societies: uncertainty avoidance, power distance, institutional collectivism, in-group collectivism, gender egalitarianism, assertiveness, future orientation, and performance orientation. When considering business venture in different markets one need to study and understand these dimensions to avoid any pitfalls and be successful in its venture. Hofstede-Insight tool a valuable tool to compare different countries and their cultural dimensions when a company is devising a business plan and strategic plan to enter new markets (Figure 9). When entering new markets, one

must also adapt one's leadership style accordingly. The GLOBE study recognizes six global leadership behaviors that are charismatic / value-based leadership, team-oriented leadership, participative leadership, humane-oriented leadership, autonomous leadership, and self-protective leadership. To be successful in entering new markets and cultures it is important to adapt the right leadership behavior to the culture in question. When devising the business plan and strategic plan one must equally study the cultural dimensions and leadership behavior types and align these to find the right leadership behavior.

As the globalization has affected almost every society in the world and movement of people from different cultures is larger than ever before, it is vital for any project manager to be able to recognize the importance of how to manage people from different cultures to ensure the success of the project. For the leader to bring value for its project and organization, he needs to address the following qualities: make diversity a priority, must familiarize with people and their differences, must enable transparent communication, must create an organizational culture where accountability is a core value, and must thrive to find a mutual view of things, mutual respect, and trust as a common goal. It is vital for the leader to avoid any cultural stereotypes as these are in general negative perceptions and very often do not apply. Even if generalizations of cultures are broadly based on facts, experiences, examples, and logic, a leader must be able to recognize are these generalizations false or valid and that these generalizations do not apply to everyone within a cultural group. This is where cultural intelligence of the leader plays a big role (Open University of Hong Kong, 2016).

2.2.1 Importance of Considering Different Cultures in Project Management

Although construction industry should have only one culture of quality, safety, budget, and schedule, the different attitudes and cultures can create a challenge for that. There may be misunderstandings due to different languages, attitudes (this is how we have always done it, or this is how we do it in our country) and

different level of training and education. Digital tools help to reduce the impact of these misunderstandings by clearly expressing a default, quality risk and safety risk with a photo taken from the source and clearly showing the location of the note. It is easier to understand a picture and a map of a note than try to explain it in a different language.

Right kind of leadership style is important when dealing with people from different cultures, it can have impact on the project success depending how large the cultural gap is and how this gap is dealt with. A competent leader must be able to navigate and consider different opinions and attitudes and find the optimal style to lead people. This does not mean that the leader must give in to every little difference but to be able to create a project culture where everyone is considered, and no one is discriminated. Compromises must be made but everyone must contribute and understand and be able to consider other people and their cultural differences. This can be achieved with cooperation and by getting to know each other, say, with of the work activities. For example, some countries have a strong face losing culture and it requires the leader to be familiar how to express himself when delegating tasks or giving feedback. This requires cultural intelligence from the leader (Open University of Hong Kong, 2016).

Too often problems are solved by arguing rather than with cooperation and constructively communication in project business and this often leads to inflamed relationships in projects and has a negative impact on project success. For the client, supervisor, or contractor to effectively manage projects and stakeholder relationships, emotional intelligence (EQ) is vital for project success. self-awareness, self-regulation, self-motivation, and empathy are emotional intelligence abilities. Leaders with these abilities create better working and project environment for all stakeholders which lead to more productivity, trust, communication, and cooperation in projects and thus more motivation to reach a common goal

which is a successful project. Digital tools can be a great asset in enhancing communication between project stakeholders and improve quality and safety in projects. When using these tools, the communication happens in real time and makes decision making more agile when all information can be easily found in one place and in real time (Congrid, 2021, Verywellmind, 2021).

When entering a market that is so different from one's own, it is important to understand the differences in cultural dimensions between one's own culture and the target country. As can be seen in Figure 9, the differences between Vietnam and Finland are considerable in many dimensions. When in Finland one can go to the client to present the product even if never have met the client, in Vietnam (and in South East Asia in general) relationships must be established before even considering presenting and sell anything is vital. Important is also to go straight to the top management as the power distance is very high in Vietnam, if going to the middle management, there is a good chance that one's presentation will be left on the managers table and never reach the decision makers. It is also important to emphasize how one's product will benefit the whole community as the individualism is not as strong as in Finland.

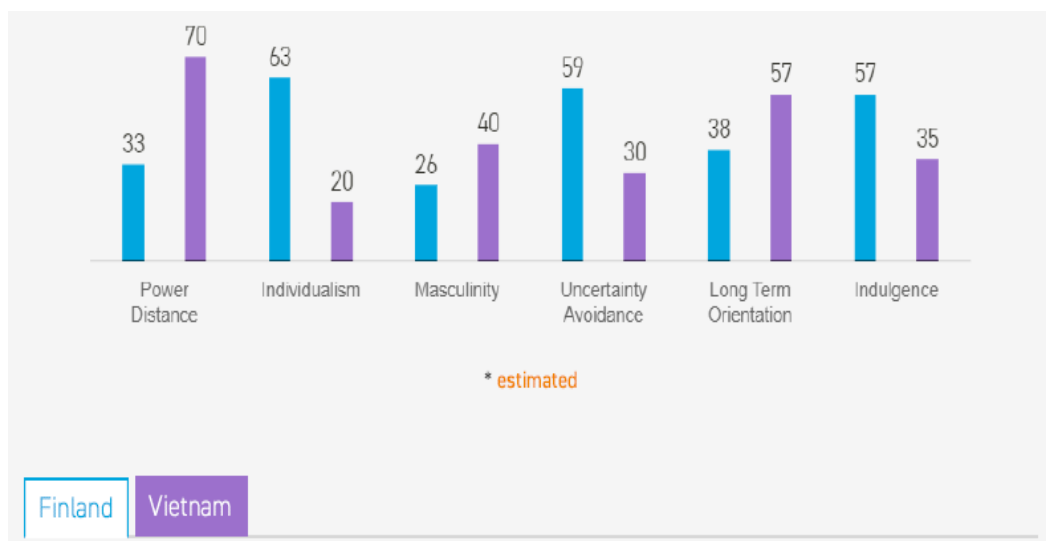


Figure 9. Cultural Dimensions Country Comparison (Hofstede Indight, 2021).

2.3 Virtual Management

As the world becomes more digitalized and smaller due to globalization, the virtual management also grows more important. As we noticed in the year 2020 as the Covid-19 pandemic storm every corner of the world, there have been heavy restrictions on travel internationally and domestically and on traditional social and professional interaction. This has made remote work a new normal in the world and emphasizes the importance of virtual management in construction management and project management. The tools for virtual project management exist and they are developing in fast pace but they also must be used to harness the benefits they bring.

In management, trust is the key issue and trust is built in interaction and communication between people and by creating common rules and procedures. This is even further emphasized in virtual management. With remote work employees and management can create more productive working environment as the work is not necessarily bound into the location and can be done at any hour of the day if so chosen. This saves time in travel and communication between stakeholders if the right digital tools are available (Vilkman, 2015). This creates LEAN into the management and supervision process. LEAN is an operation strategy that reduces the use of resources in a process without weakening quality of the outcome and thus creates savings in time and money (Lean Construction Institute, 2021).

There are many benefits virtual management can bring to projects and operations, these are: The supported advantages were working globally, working with foreign people, better effectiveness, faster information flow, and flexibility. Other advantages are cost reduction, better visualization, global operation, better monitoring of projects, better recruitment options, up-to-date documentation, diversity in team, possibility of home office, practice of foreign language,

improved networking, increased global knowledge, and getting to know different cultures (Acsai, 2016).

Virtual management can be challenging, and it creates challenges for the virtual team and the management, both the team and the manager must be able to work independently and be self-guiding and this does not suit all people. Virtual teams and managers must also be able to organize and schedule their work to be successful in their tasks. Most important tasks of a virtual manager are showing direction, developing co-operation, and coordinating operations (The Centre for Occupational Safety, 2018).

Cultural differences can also create challenges in virtual teams and management, especially when members have different levels of digitalization in their communities, some might adapt digital tools easier than others. There will be resistance to new tools and procedures. One of the most important tasks before the project starts is team building, to choose the right, motivated and capable people to the virtual team. A dedicated virtual manager is vital for team building and how the team work together, the manager must not be a distant entity in a computer screen but rather be present when needed to make the virtual team feel comfortable that they receive the support, trust, interaction, and management they need. Another challenge virtual teams face is lack of face-to-face interaction which can be difficult for people not used to work alone without personal interaction, different technical and language skills of team members, and the fear of team members free riding, i.e., some team members participation in the project is not sufficient from the point of view of other team members (Haikola, 2017, Acsai, 2016).

One might think that virtual management contributes to project risk as the management is not present and supervise the process and digital tools are adopted but this is not the case. Research shows that it does not matter if the project

members are in one place or scattered around the world, communication and knowledge transfer play a vital role here, if it is inadequate, the risk level is the same in both situations. Virtual teams require digital tools for communication, to arrange meetings, transfer data and knowledge in real time to all stakeholders, this said, there is no evidence of increased project risk in case of technological failure (April, 2010).

Virtual management requires the right tools to communicate and transfer data and knowledge between virtual team and management as well as different stakeholders of a project. Congrid provides a solution to this and all happens in real time and at the same time it creates LEAN into the construction management and supervision process and enhances quality and safety.

2.4 Platform Economy and Digitalization

Digital platforms are taking the world by storm and it is vital for the construction industry to adopt digital platforms to enhance profitability, safety, and transparency. Digital platforms have in the past been in the hands of large technology and digital-born companies like Google, Apple, Facebook, and Amazon but it is possible for application developers, entrepreneurs, and complementors to benefit from platform economy. Congrid falls into the latter category. Digital platforms' market value in 2016 was 4,3 Trillion USD and employ over 1,3 Million people and several Million people indirectly and conservative estimation suggest the value in 2025 exceed 100 Trillion USD. For a market to be attractive and successful in platform economy it needs collaboration between government, institutions like universities, and businesses. This ensures that the talent base is there, and data security is on high level (Evans, 2016, Schenker, 2019, Commonwealth Scientific and Industrial Organization, 2019).

What is a digital platform? A digital platform is a new, technology-enabled business model that creates value by connects and enhances communication between at least three interdependent parties, for example in construction industry the client, the consultant, and the contractor. It is networking different stakeholders and create information and data stream in real time that the stakeholders can utilize for faster decision making, transparency, and lean operations. Digital platforms are a route to economies of scale in the markets. Digital platforms also enable the globalization of work, i.e., they make it possible to work from anywhere in the world and supportive actions, such as training and customer support, are still available for users of the platforms in real time and is not bound to a specific location (Parthasarathy, 2019, Morvan et al, 2016).

Platform economy and digitalization can have both positive and negative effects, they create economies of scale and new business areas, more information, and more value and choices for customers, and in Congrid's case, transparency and lean in operations but on the other hand they can create fears that employees become obsolete or do not possess required skills to work with them. These fears can be met by employers providing training, education, and support for the employees to change the attitudes. Digital tools also enable remote work, and as Covid-19 has shown, more people work remotely, and many studies show that productivity and work satisfaction has increased with adoption of remote work as people can better plan their own schedules. Companies using digital platforms can achieve competitive advantage if they have clear goals, strategies, and operations but the employees must be trained and incorporate into these as well as corporate culture and values must be aligned with these (Jakosuo, 2019).

The power and success lie behind three features and they are the network effect, concurrence of technologies, and open and shared data. The network effect brings together players in the market and more customers mean more mer-

chants and partners and vice versa. Concurrence of technologies enable dynamic, on-demand, and targeted services that attract investments, make the market entry faster, and lower the cost of services as vast number of customers are using the services. Finally, open, and shared data can create value for the platform as well as the customers by creating collaboration and agility to better serve companies and customer's needs by anticipating their behavior (Morvan et al, 2016).

Morvan et al (Morvan et al, 2016 p. 6) suggest in their study that there are five steps to achieve success with digital platforms: proposition, personalization, price, protection, and partners.

Proposition is traditionally about companies are creating value for consumers with their products but in platform economy value is created by users of the platforms to other users and this is facilitated by the owner of the platform. In case of Congrid, the users are the client, construction company, and supervisor that create value for each other and Congrid is the entity that provides and uphold the platform.

Personalization in platforms differ from traditional businesses as it is less oriented around products but rather around the outcome. In platforms one must be able target individuals and organizations and tailor the service to meet them through all channels, this is called mass personalization. It is important to understand customer needs and intent and dynamically tailor the service to each customer. Artificial intelligence and machine learning are a great way to harness for this kind of operation. It depends on country and region how well this succeeds because of the privacy laws are different.

Platform pricing differ from traditional business by being more dynamic and can be more flexible and rewarding. This means that users of the platform can have

free access to the platform and can decide if they are willing to be customers of the service. An alternative for this is a pay-as-you-go combined with fixed subscription fee. Also, a surge pricing model is widely used, i.e., higher prices during high demand or high season in hospitality industry. Scale can be a good pricing strategy, if a platform has larger user base than its competitors, it can sell the service cheaper and anyway receive larger revenues than the competitors.

Data and privacy protection are vital for customer's trust and thus for the platform's image, there will be an exodus of customers if their personal data is leaked or breached by an outside entity. With high cyber security and commitment to protecting its customers the platform can differentiate itself from less committed competitors. This is vital for business success now when cybercrime is a daily news.

For the platform to scale its operations and gain agility, it needs partners. The partners can be payment service providers, application developers, analytical service providers, helping the platform to provide wider service for customers and support scaling of business. The platform can also provide data for its partners and this way monetize the data it is collecting but this must be made with great care and customer data protection in mind so that customer privacy does not deteriorate (Jakosuo, 2019).

Vietnam's Global Digital Readiness (GDR) score is 12,06 out of possible 25 which puts it in the middle category of countries. In Global Innovation Index (GII) Vietnam ranks number 42 out of 131 countries as can be seen in Figure 10. This creates challenges as well as opportunities especially when it comes to human capital, there is opportunities to hire talent to work for the company. Vietnam's government has developed an Industry 4.0 initiative that seeks to enhance the digitalization of the nation and this means Vietnam is an attractive market. People in Vietnam have adopted a digital mind-set, i.e., they have positive attitude

towards learning and becoming digitally savvy and they see that digitalization will bring them more job opportunities and enhance their careers as well as enhance their work efficiency as technology is changing the working environment. But there is also a fear that many jobs will be obsolete due to digitalization and this requires actions from the government, as well as the businesses, to invest in education and training and cooperation between the government and businesses, which is on the government's agenda (PwC Vietnam, 2021, Commonwealth Scientific and Industrial Organization, 2019).

This creates opportunities for a Nordic company with high quality product as the right attitude and goals are in place and the talent base is rapidly developing in the region.

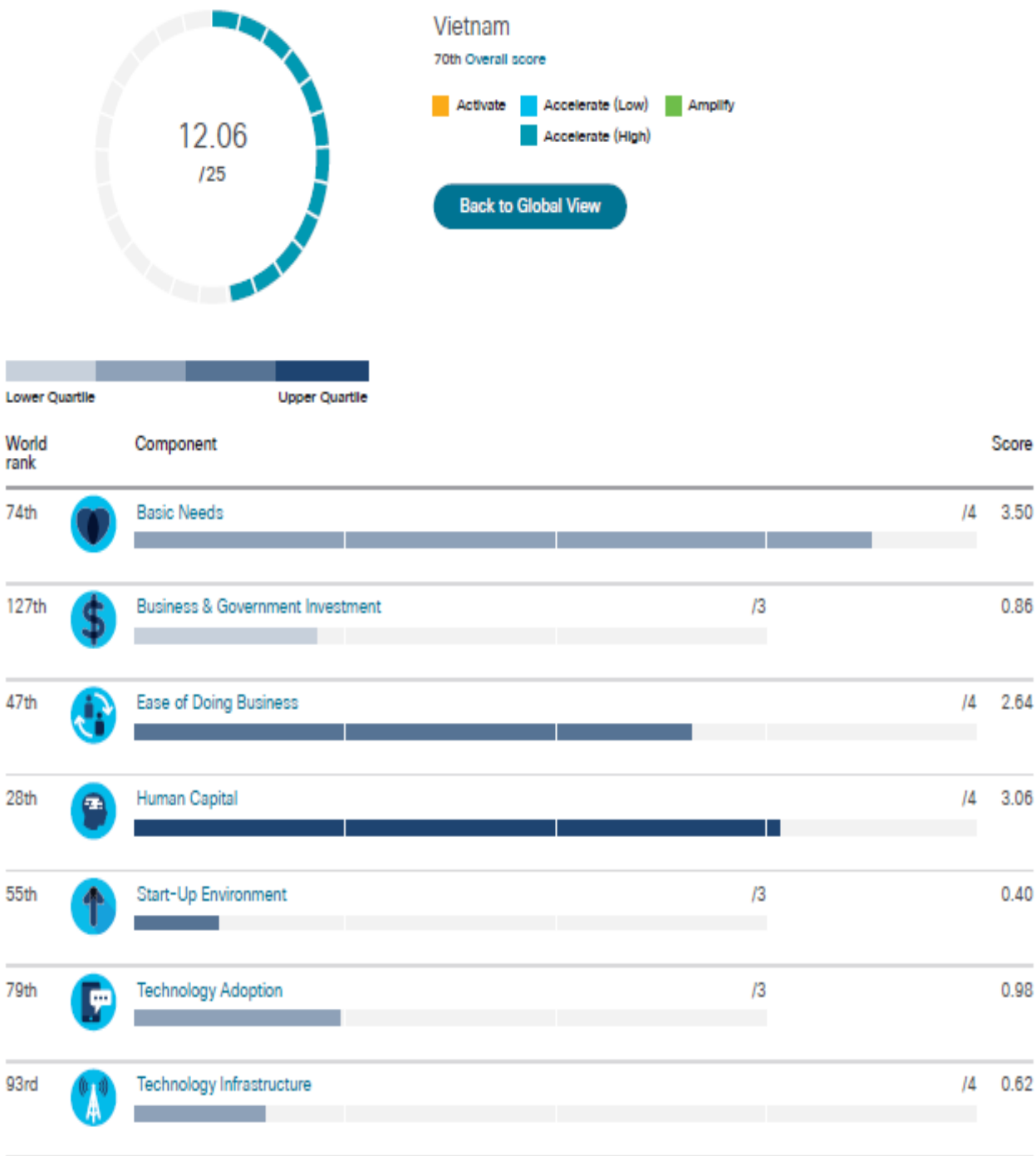


Figure 10. Digital Readiness Index of Vietnam (Cisco, 2021).

3 RESEARCH AND ANALYSIS

3.1 Research Setting

The author has been working as a project manager and supervisor for the last thirteen years in demanding new build and refurbishment projects and in 2017 noticed how good tool Congrid was, easy to learn with first use, saved a lot of time in activities and gave new ideas on how to improve business processes. After spending two years in Asia before this realization, the author immediately saw the potential in Asian markets, large markets, and how the level of Finnish quality has huge potential there.

Finland is in the forefront of development of digitalization in construction and the level of know how is among the highest in the world, this gives a great competition advantage to the competitors. Vietnam is developing its digital society at a rapid pace and construction industry is booming and growing each year, this, and the population of 96 million people makes it a very lucrative starting point to Asian markets.

3.2 Research Approach

To meet the aims the following three methods are adopted.

1. A project plan and a business plan are developed from the outcome of the survey, as well as evidence about the tangible benefit the product brings the clients, with support of literature review's secondary data to gain deeper knowledge on the subject.

The literature review conducted include the following topics and sources.

- Project management
- Cultural dimensions
- Virtual management
- Platform economy and digitalization

- Other literature on project management, platform economy and digitalization, and culture
 - Current papers and articles on the subject.
2. The literature review to be conducted supports the outcome of the survey and author's personal experience, expertise, and knowledge by giving empirical and current information about project management, platform economies and digitalization, and importance of understanding different culture and business environment. From the data collected from the survey and literature review a critical evaluation of current situation of the client opinions and needs and business environment is conducted.
 3. The survey to investigate clients' attitudes and have they adopted digital tools in their projects is sent to contractors and developers. The questionnaire gives information of clients' attitudes and needs of digital tools. The answers are analysed and critically reviewed. The outcome of the survey is presented in form of charts and textual analysis to show the understanding and the use of digital tools in clients' projects.

When the aims listed above have been achieved the project plan and the business plan shall be developed to manage scope, schedules, quality, and economic matters of a project.

3.3 Data Collection

Data was collected with a questionnaire that was sent to constructors and developers, who are responsible for implementing construction projects and procurement of building projects. The questionnaire was sent to 60 clients in

Finland and received 45 answers. The questions of the questionnaire were developed so that they are not leading and avoiding any of author's own expectations.

Data was also collected by conducting site supervision rounds with using both traditional supervision method and Congrid method. The research was conducted using both traditional method and with Congrid digital tool in refurbishment projects. The sample size was 10 site rounds in 8000 m² – 12000 m² office buildings that are relatively similar by layout and building practice and building services. The research was limited to 30 defect notes per site rounds in similar office floors and no floor was used twice to eliminate any routine to find the same defect notes as on previous site round. Although there was fluctuation in each site round, averages of these fluctuations were used in the research.

Aim 3 of the thesis was achieved by getting understanding of their knowledge, attitudes and needs in their projects and how important they consider the platform in managing their projects. This was done so the author can gain a larger picture of the clients' demands and needs for the platform and to bring more value for the clients. This was achieved with a client survey.

Aim 4 of the thesis was achieved by proving that the platform brings tangible benefits for the clients by saving time and costs. This was done by conducting 10 defects listing rounds by the author using traditional supervision method and by using a digital supervision tool.

The sample size of the client survey is sufficient because the survey was conducted among the large operators of the Finnish markets and they all have a very large project portfolio. The answers were analysed and are presented later in the next chapters in tabular and textual form. The questionnaire sent to the clients can be found in Appendix 3.

The secondary data, existing data from the literature, was collected from numerous websites, professional books, peer reviews, and publications. To achieve aim 1 and 2 of the thesis, a comprehensive literature review on the subject was conducted to understand and evaluate the current situation of project management, platform economy and digitalization, and to understand cultural differences between business environments. This helps the author to identify shortcomings in the project management processes and gain a deeper knowledge about platform economies and digitalization, and importance of cultural differences and how to deal with these differences. This helps the author to implement a market entry venture by developing a project plan and a business plan. The author also used his own experience and knowledge about Asian business environment and culture to develop these plans.

Primary and secondary data was analysed qualitatively and quantitatively and integrated in the thesis outcome that is the project plan and the business plan and affirmation that the platform brings the clients time and cost savings and create LEAN into their project management processes (Appendixes 1 - 2). The author also used own experience and knowledge from conducting project and contract management and supervision of construction projects to develop the plans and recommendations.

4 DATA ANALYSIS

The outcome of the thesis, a project plan, and a business plan (Appendixes 1 and 2) and evidence of time and cost savings in projects can be used to make the project procedure more organised, standardized, and effective. This brings more value for the company because it reduces the risks of poor quality in the project and business management and aligns with the company's strategy and thus brings cost savings and reduces risks of market entry.

The plans and evidence also bring value for the manager operating the company in Vietnam by providing a guideline to manage the business and by helping to show the local clients the benefits the platform brings and thus making sales easier. The evidence from the research can be used as a marketing tool for the company because it shows that the platform is able to bring more value for clients by bringing LEAN into the project and thus time and cost savings. The research results have already utilized to create white papers in Finland to show the clients what benefits the platform can bring. The plans can also be used as a communication tool between different parties in a project. It helps every party to know his or her tasks and responsibilities which is vital for the success of the project in today's complex business environment.

The following documents were developed based on literature review, authors own survey, and customer survey (Appendix 1 & 2).

- Project Plan (Appendix 1) sets the frame of project management and helps the consultant to conduct project management in a consistent way
- Business Plan (Appendix 2) helps the company to implement business operations in a consistent way, better understand the business environment and markets and the culture in Vietnam and avoid risks.

4.1 Empirical Findings

Empirical findings and answers to the research questions 1 - 3 of the research are presented in the following Chapters 4.2 - 4.4.

4.2 What plan is needed to prepare the company for the market entry study?

(Research Question 1)

The Project Plan (Appendix 1) is an important tool for project planning, scheduling, and controlling. It is the masterplan of the project that defines the project management frame and other project documents, plans and check lists are developed based on the Project Plan (Manni, 2017). The plan is a result of the author's own experience and knowledge in project management and Asian markets as well as the comprehensive literature research. The project plan must be followed constantly and updated accordingly when any changes in the project environment and business environment arise. This is the responsibility of all market entry project stakeholders. Good planning is vital for any project's success.

4.3 What plan is needed to combine and align project management and operations management? (Research Question 2)

The business plan (Appendix 2) is a vital tool to start operations in the target country, it raises issues that await the company as well as sets the frame of operations. The business plan is a result of a comprehensive market and literature research as well as the author's own experience and knowledge of Asian markets.

4.4 What should be researched to show the benefits of the product to clients in different culture with different approach and attitude towards digitalization of construction industry? (Research Question 3)

The flowchart and figures showing the reduction in task phases and time savings are good and visual tools to show the clients the benefits of the product in a

short glimpse and enables more detailed presentation and discussion of the product.

4.4.1 General Information of the Panelists

The panellists surveyed all work in construction projects for large companies that concentrate on large projects. The age of the panellists ranges from 30 – 58 years and the experience in construction industry from 2 years with majority over 15 years' experience in various roles as can be seen in Figures 11 and 12. Majority of the panellists are working for large construction companies that have the role of main contractor in projects and they usually buy the platform and incorporate other stakeholders to use the platform. Majority of the panellists have a bachelor's or master's degree in engineering. The members of the panel represent the largest construction companies in Finland; Skanska Ltd., SRV Ltd., YIT Ltd., just to mention a few and large real estate owners like HOK-Elanto Ltd. Their project portfolio comprises mostly of office buildings, but they also have residential buildings and retail in their portfolio. The results of the client survey are presented below in Figures 11 – 20 in percentage form from the panellists' answers to the questionnaire which can be found in Appendix 3.

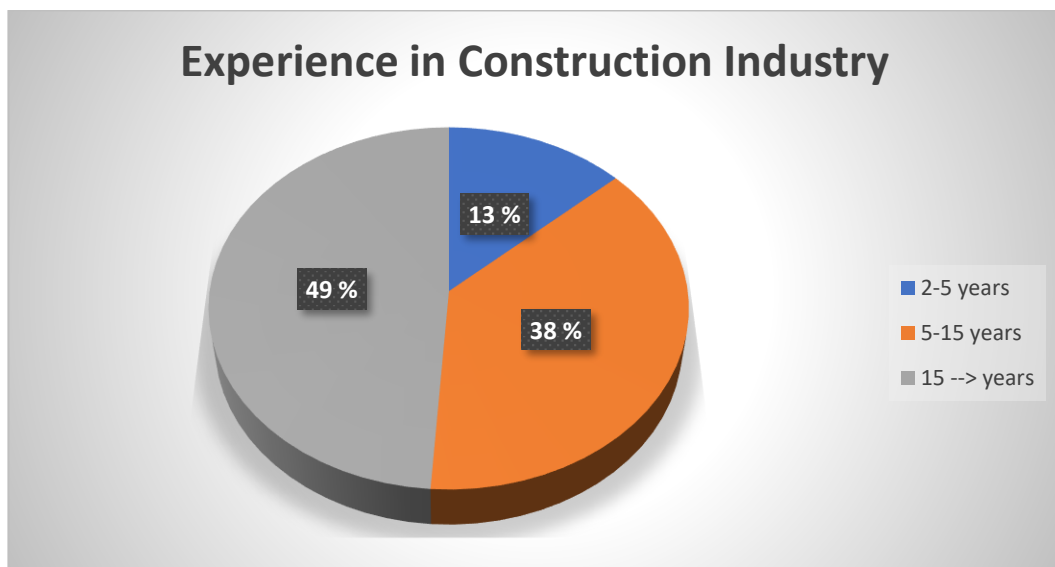


Figure 11. Experience in Construction Industry (Manni, 2021).

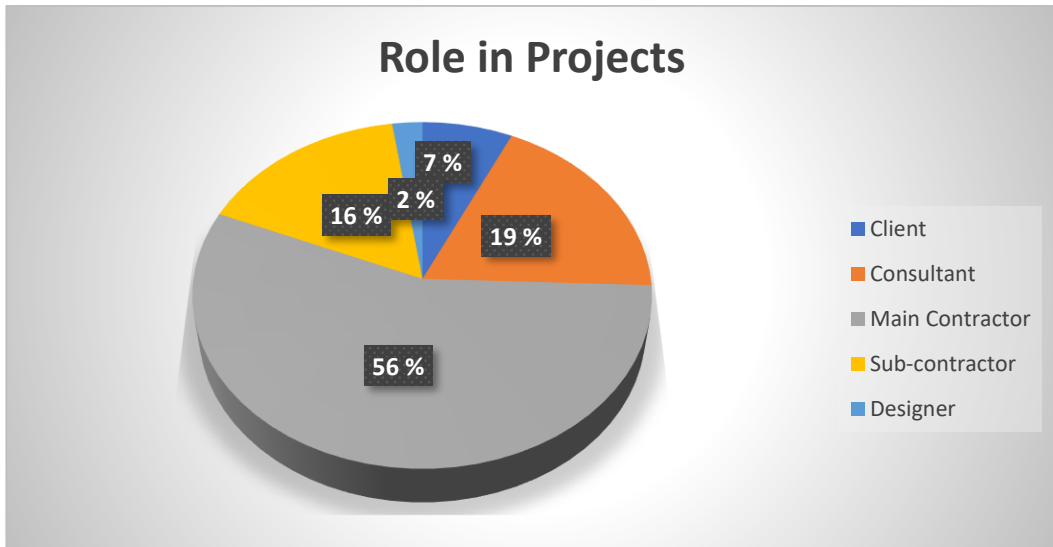


Figure 12. Role in Construction Projects (Manni, 2021).

4.4.2 Discussion About the Panelists' Answers

Congrid supports mobile and desktop use for site management and supervision, Congrid application that is used at site and Congrid Live that is used as a desktop version. As can be seen in Figure 13, 31 % use Congrid Mobile, 17 % use Congrid Live, and 52 % use both platforms. People that use both platforms are usually supervisors and site managers as they create reports and lists with Congrid Mobile and monitor what is happening in the project with Congrid Live. The 17 % that only use Congrid Live are the designers, senior management of clients and construction companies, and project managers who do not participate in site activities rather than lead the project with meetings. The reason why Congrid Mobile have more users than Congrid Live is that the sub-contractors and their installers use it at the site.

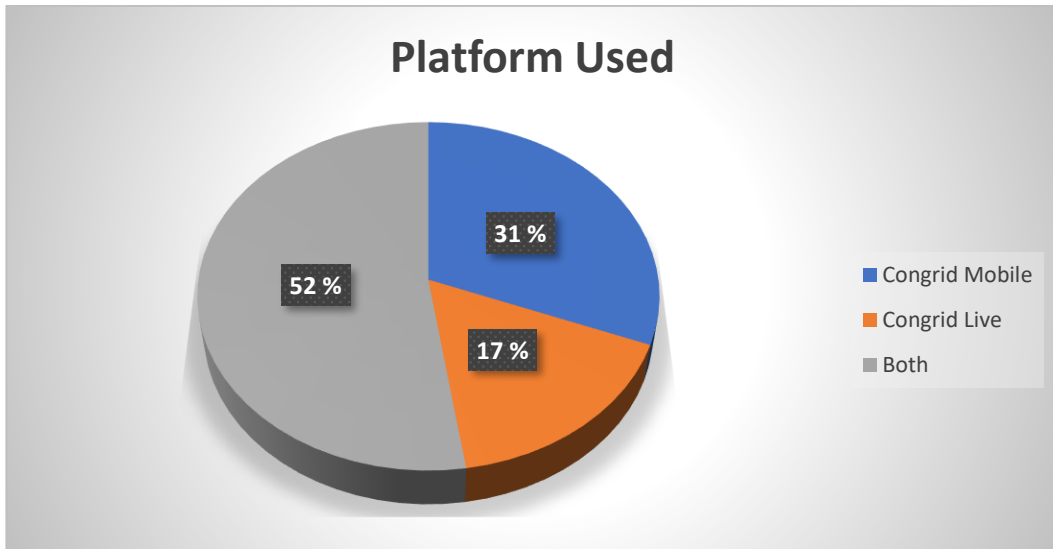


Figure 13. Version of the Platform Used (Manni, 2021).

As can be seen in Figure 14, all panellists are at least somewhat familiar with the platform and the majority are very familiar. This is the result from the fact that majority of the large construction companies and project owners have adopted Congrid in their strategy to create LEAN in operations. People that are not that familiar of the platform are usually, in the author’s own perception, the sub-contractors’, installers, and designers. To gain most of the tool more training should be provided for these parties mentioned.

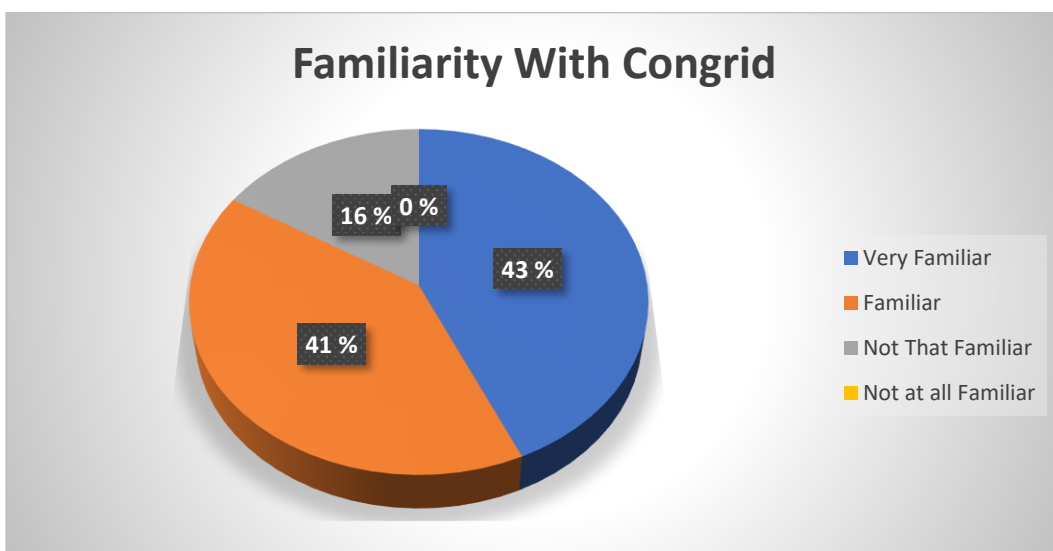


Figure 14. Familiarity with Congrid (Manni, 2021).

Only 5 % of the panellists consider the user friendliness to be bad which could be a result of unfamiliarity of the platform or lack of training as most panellists consider the platform user friendliness to be good or very good as can be seen in Figure 15.

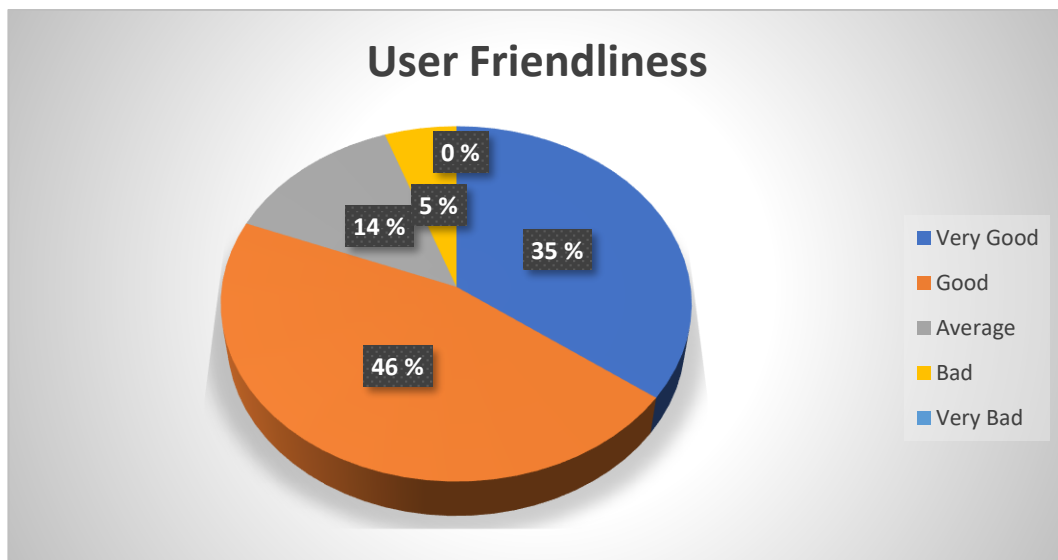


Figure 15. User Friendliness (Manni, 2021).

70 % of the panellists consider that the platform enhances time saving in operations considerably and only 5 % thinks it weakens time saving (Figure 16). 11 % think that it enhances time saving and 14 % do not see any change which can be explained with stakeholders that do not participate in creating reports and other actions rather than use the platform only to monitor the project progress with the platform.

The fact that 81 % of the panellists consider the platform to enhance time saving correlates with the author's own survey that is discussed more in the next chapter.

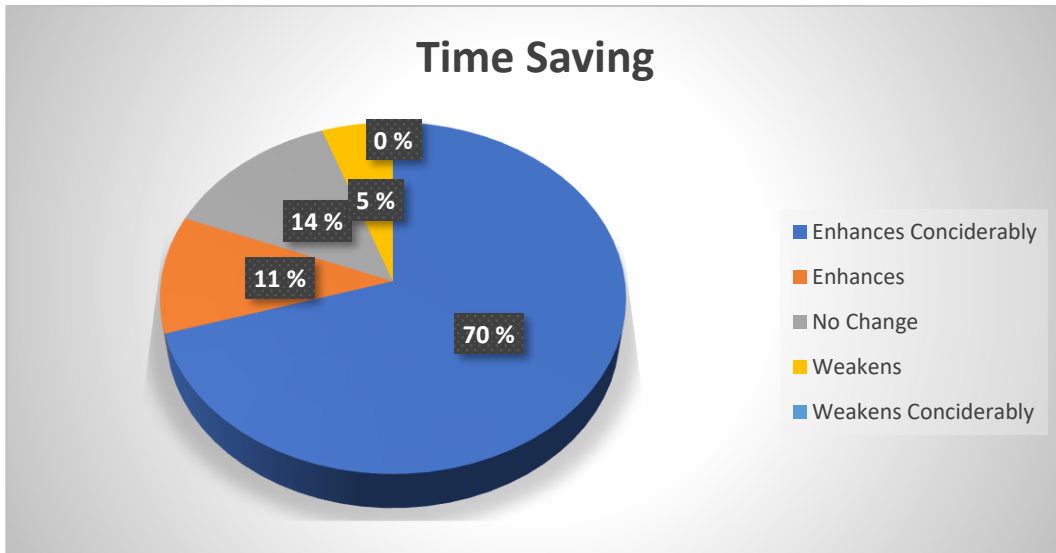


Figure 16. Time Saving with Congrid (Manni, 2021).

As can be seen in Figure 17, 75 % of the panellists consider Congrid enhancing safety or enhancing safety considerably. Again, the 22 % that see no change may be people that do not participate in site processes or are not familiar with the platform. 3 % consider the platform weakens safety and this may correlate to the answers to other suggestions -part of the questionnaire where some people commented that the interface and processes are quite confusing and that no-one can operate the platform with confident.

Most construction companies that have adopted Congrid for their use perform site safety rounds with it and this enhances the communication as all stakeholders can see the results in real time as well as safety.

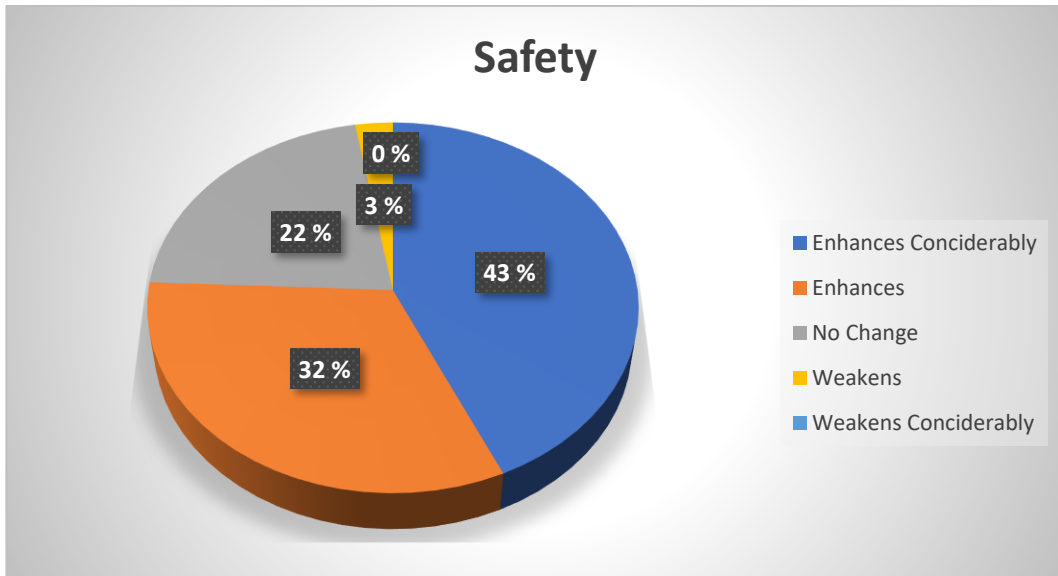


Figure 17. Safety (Manni, 2021).

81 % of the panellists consider that Congrid enhances quality or enhances considerably and 19 % do not see any change (Figure 18). The reason 19 % do not see any change may be because they do not use the platform for quality inspections and defect listings.

The platform enhances quality by making model installations and quality inspections with photo and location of the defect very easy to report and share to stakeholders. One can also see in Congrid Live when the contractor has fixed defects and other issues immediately when the contractor notifies the issue fixed.

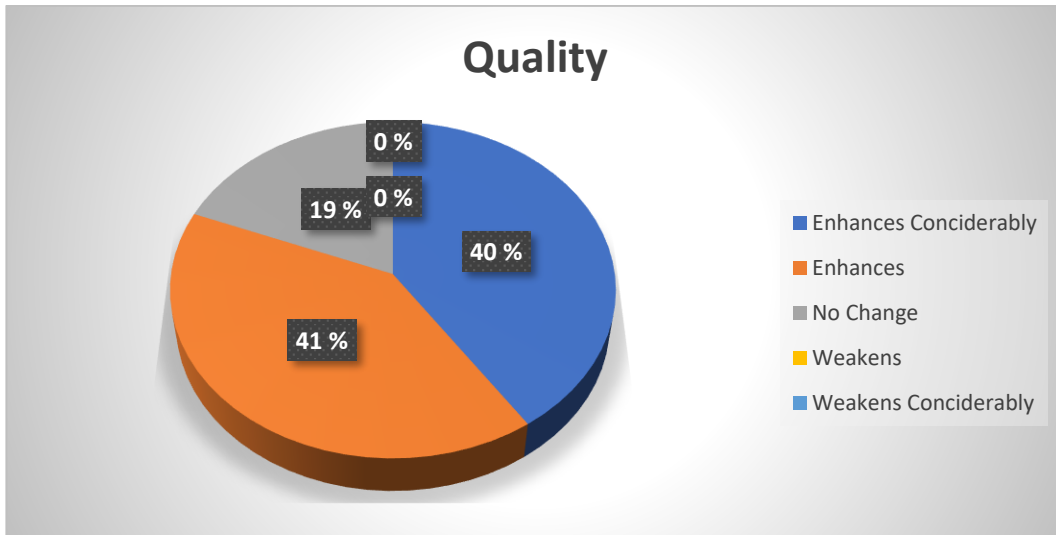


Figure 18. Quality (Manni, 2021).

As communication between project stakeholders is one of the most factors that influence the project success it is valued among clients as they need all available information for decision making. 46 % of the panellists consider Congrid enhancing communication considerably and 21 % consider it enhancing communication. This is because all information and data are available for all project stakeholders in real time and nothing is lost in bit space or no-one is forgotten in the mailing list, a scenario that often happens when sharing information and data with email or mouth to mouth. Although Congrid is not considered as a primary means of communication in project management it is a valuable aid for that. The 30 % of the panellists that see no change in communication improvement and the 3 % that see weakening with the platform may be explained by them using other communication channels and tools as a primary method.

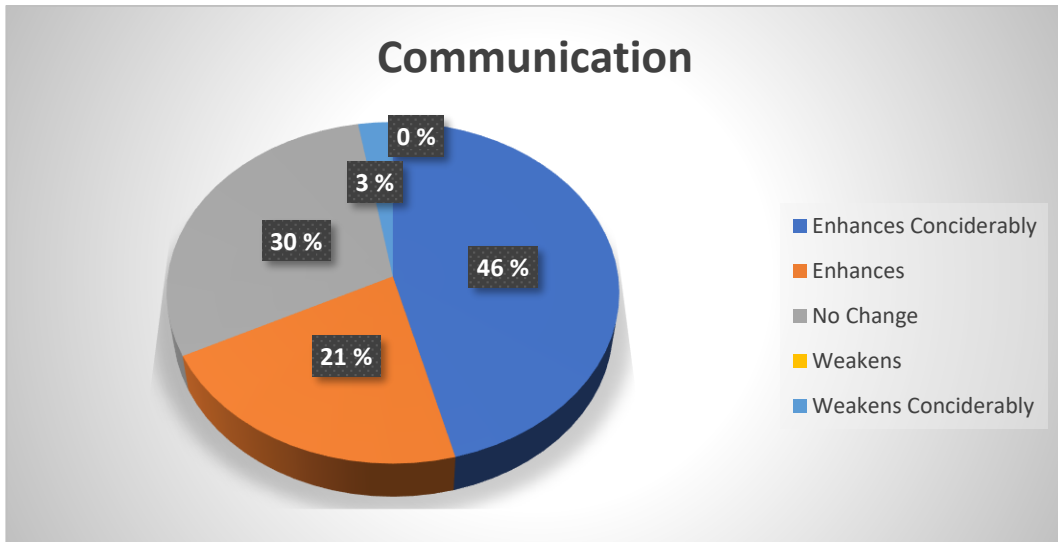


Figure 19. Communication (Manni, 2021).

Transparency in projects is important for the clients to get what they bought and to avoid corruption and that no information is lost into silo's that are quite usual in construction industry. The fact that 81 % of the panellists consider the platform enhancing transparency or enhancing it considerably proves it is a valuable too that brings more value for all project stakeholders. The 19 % of the panellists that do not see any change in transparency may be explained by that they are not familiar with the platform or they do not use the platform actively.

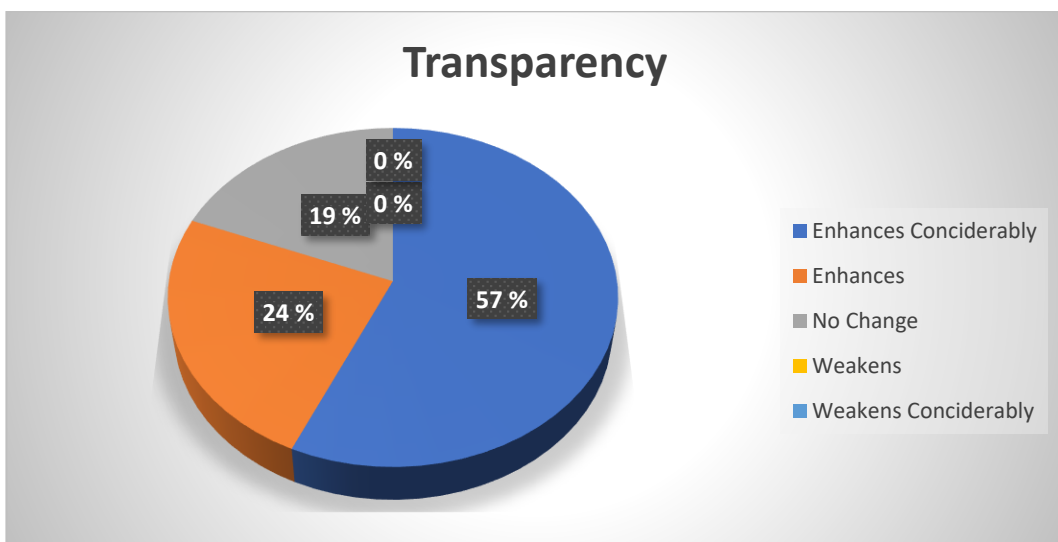


Figure 20. Transparency (Manni, 2021).

In conclusion, most of the clients consider Congrid to bring them time savings and enhance the communication between project stakeholders as the information is available in real time and in one place. They also appreciate the usability and ease of documentation of the platform in reporting, project management process, and supervision process. Quality issues have also become easier to manage as collected data is vast and easy to find and analyse, i.e., they find the platform to enhance quality in projects.

In conclusion, almost all panellists see the platform bringing extra value in their projects compared to traditional processes by bringing LEAN into the processes and enhancing quality, safety, transparency, and communication.

4.4.3 Other Benefits the Platform Brings

Analysis of the other benefits the clients believe Congrid bring for their projects and processes was evaluated qualitatively from the answers to the questionnaire. The analysis was conducted by searching for themes that arise often from the answers and gain an understanding of the client's needs and opinions. A word cloud (Figure 21) was developed to see what themes are repeated in the answers.

The panellists see the platform enhances delegation of tasks on individual level, it saves time, reduces risks, enhances communication and transparency, enhances quality, and makes reporting easier. One important aspect is that the platform is not culture or language bound and helps to narrow the gap on these as everyone can understand designs and photos. They also consider the platform to help maintain and manage the vast amount of data included in a construction project as it can be found in one place easily and allows analysis of it also afterwards.

Some panellists also have issues with the platform, mainly usability issues and what features should be further developed.



Figure 22. Word Cloud of Clients’ Other Recommendations and Suggestions (Manni, 2021).

In summary, almost all interviewed panellists think that the digital platform would bring more value for their projects by making the management and supervision process more effective, organized, and standardised. Also, the digital platform will decrease construction errors and risks, increase quality, increase time, and cost savings, safety, and create better communication between parties in the project and thus better cooperation.

But there is room for improvement in training of the users of the platform to gain the value it can offer. For the project stakeholders to gain optimal benefit from the platform more training is needed, and this can be done by Congrid Ltd., or the clients representative. The organizations should include the platform into their strategy and appoint a representative to manage activities related to the platform and training of the users of the platform.

There are restrictions in the study made with a questionnaire as it is impossible to know every answerer's personal role in a project and have, they answered the questions with thought or just gone through the questionnaire quickly as many people do. A personal interview face to face would have been given more accurate results but it is very time consuming and was not possible doing this thesis. It can also be seen from the answers that people that are less familiar with the platform usually think it does not bring them much value.

There may also be normal resistance among people to adopt new tools and procedures which is quite normal human behaviour. This could also explain why some panellists cannot see the benefits the platform brings.

4.4.5 Congrid Site Management & Supervision Platform

The research was conducted using both traditional method and with Congrid digital tool in refurbishment projects. The sample size was 10 site rounds in 8000 m² – 12000 m² office buildings that are relatively similar by layout and building practice and building services. The research was limited to 30 defect notes per site rounds in similar office floors and no floor was used twice to eliminate any routine to find the same defect notes as on previous site round. Although there was fluctuation in each site round, averages of these fluctuations were used in the research.

The results of the research can be seen in Figure 24 (Traditional supervision process) and 25 (Supervision process with Congrid), and in Table 1 (Time comparison in traditional vs. Congrid method). As can be seen from the results, the traditional procedure has 13 steps and the procedure with Congrid only 6 steps and the time spent is 2,62 times more compared with the procedure using Congrid.

The study describes the time savings of supervision compared to the traditional way of supervision. However, this is only part of the whole picture in a project. By dismantling the steps of the various stakeholders works that lead to the outcome, the benefits of digitalization begin to stand out even more.

In the traditional procedure, after receiving the list that the supervisor devised, the main contractor would have either in writing or verbally instructed the various subcontractors to correct their own deficiencies. With the help of digital tools, the instructing can happen directly at site without any interphase.

Flow traditionally.

1. The supervisor shall forward the report to the person in charge, who shall read it
2. The person in charge is responsible for handling the matter
3. The foreman reads the material and extracts copies or otherwise forwards for each subcontractor, their deficiencies. He will clarify any unclear matters with the supervisor
4. Subcontractors receive information either face-to-face, or by email.
5. Subcontractor's delegate work to their staff
6. The subcontractor's employees notify their foreman when the work is completed or notify directly to the main contractor's management
7. The foreman of the main contractor supervises that all subcontractors' carry out their own work.

8. The foreman of the main contractor will go on tour when everything should be ready but notices that items 4 are not corrected
9. He records those points and delegates the work again to the subcontractors.
10. Repeat steps 5 to 7
11. When everything is ready, the main contractor's representative will notify the foreman in charge that defects have been fixed
12. The foreman in charge informs the Supervisor that everything is in order
13. The supervisor comes and notices that the works are mostly in order, but three defects are still not fixed. Repeat steps 1 to 12
14. The supervisor makes a new defect round and finds that all the points are in order, but there are new defects that have not been noticed before. Repeat steps 1 to 13.

Flow with Congrid.

1. The supervisor will report that the defect round has been completed and the foreman in charge will review the deficiencies
2. The foreman in charge delegates the lists to his subordinates to review and forward them for subcontractors
3. The foreman looks at the findings and directs them to the right sub-contractors with Congrid Live at his workstation
4. The representatives of the subcontractors' see the defects from Congrid and go to work
5. When correcting the defects, they will acknowledge the items ready for inspection and will also take photographs of the correct work performance
6. The supervisor and foreman can monitor the progress of correcting deficiencies in real time
7. They point out to the sub-contractor that 4 defects have not yet been corrected and will not go to check the corrections until they have been declared corrected
8. When all deficiencies have been fixed, an inspection will be carried out

9. Additional notes are recorded and corrected accordingly.

Phase	Traditional	Congrid	Congrid (Desk-top)
1	30	30	30
2	240	180	180
3	30	30	30
4	10	0	0
5	10	0	0
6	90	0	0
7	10	0	0
8	15	0	0
9	30	30	0
10	120	120	0
11	30	30	0
12	30	0	10
13	10	0	0
Σ	655 minutes	420 minutes	250 minutes

Table 1. Time Comparison in Traditional vs. Congrid Method (Manni, 2021).

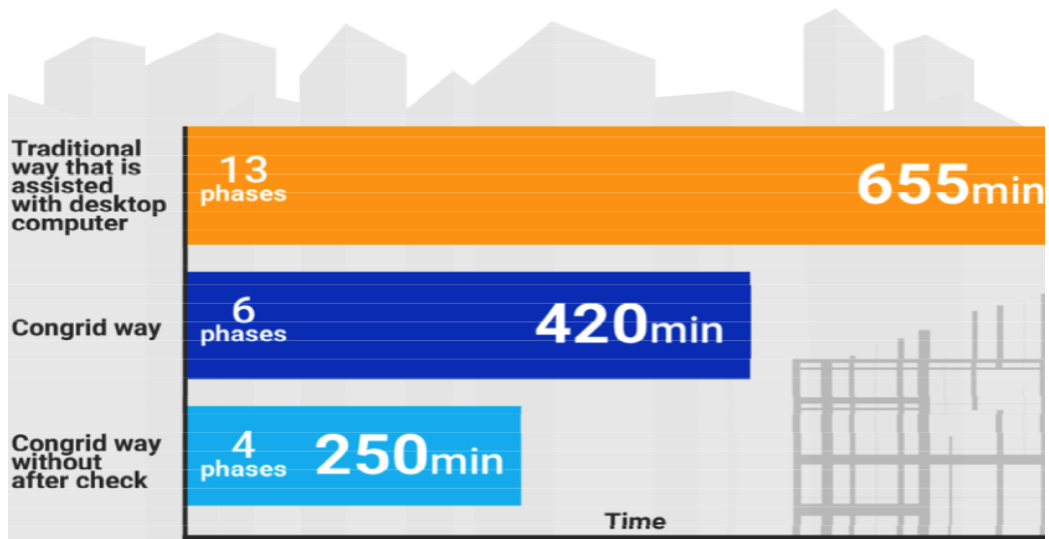


Figure 23. Phases and Time Consumption in Traditional vs. Congrid Method (Congrid, 2021).



Figure 24. Traditional Supervision Process (Manni, 2021).

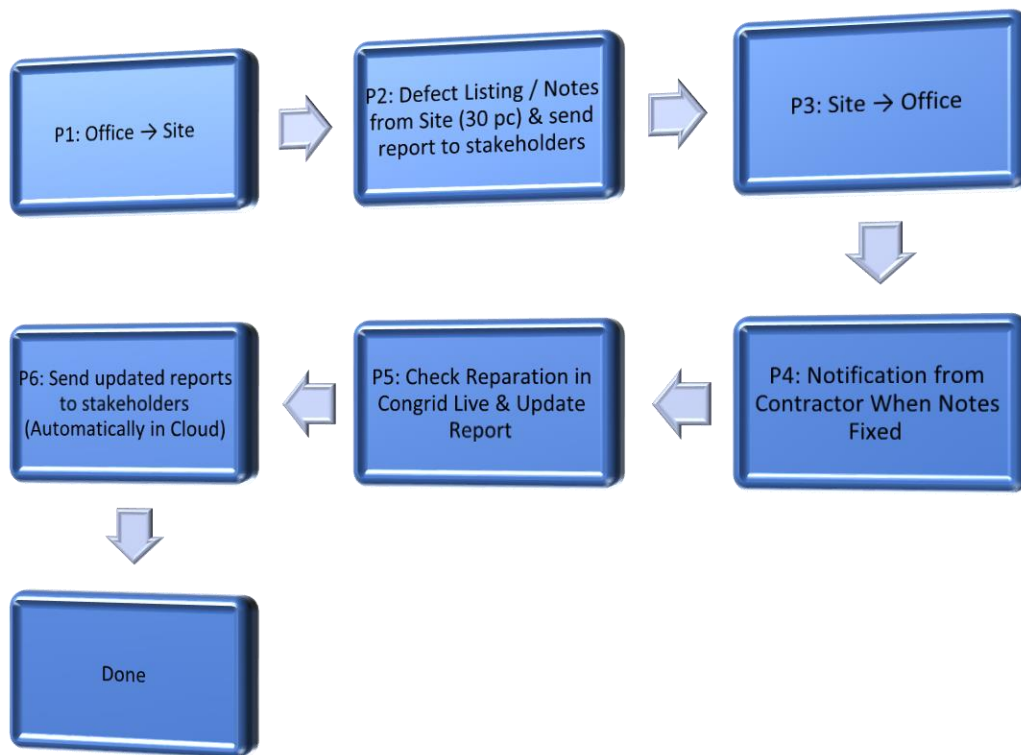


Figure 25. Supervision Process with Congrid (Manni, 2021).

In summary, the research shows real evidence that the platform brings time and cost savings for the client if the platform is used. It also shows that the project managers and supervisors can allocate more time to other important activities as they save a lot of time in these time-consuming processes. Although there might be fear that if the platform saves a lot of time for the managers and supervisors and thus might reduce their fees, the clients most likely appreciate the extra effort in quality and safety management that is available when saving time in other tasks.

4.4.6 Synthesizing Interpretations

As the clients value the time and cost savings, value, and efficiency the platform brings into project management and supervision process, the platform is a relevant tool creating better safety, transparency, and quality as well as enhance the communication in projects. There is also a real need for training of stakeholders because it improves the use of the platform and helps to gain more value and benefits of the tool. Clients' that do not use the platform that much is most likely because they have not enough expertise or knowledge of it. That is why training is vital for the clients.

Good tools for project management and supervision are in the eyes of the client a good aid to ensure project success. They decrease construction errors, bring LEAN for operations and processes, and bring value for client. To utilize the tools in project management and supervision would mean more successful and efficient projects.

Congrid reduces the culture and language barrier and creates a culture of LEAN, safety, quality, and transparency into construction projects, just as it should be. The platform can be used in all kinds of construction projects by any stakeholder as the previously mentioned are the goal of any project.

The other authors have not concentrated on clients' point of view in digitalization, culture, management, and supervision of projects and the value it could bring them as have been done in this study. The work differs from other studies by combining the scattered information available to a useful product which is the combination of the project plan, the business plan, and the evidence provided about the benefits the platform brings to the clients. These aspects are tangible value in a form of improved LEAN for the clients and the value the project plan and the business plan bring for the company in a form of improved practices in managing market entry to foreign markets and operations there.

4.5 Recommendations

The project plan and the business plan (Appendixes 1 – 2) and the author's own research about the time and cost saving the platform brings its clients helps the company to develop a successful strategy to enter Vietnam's markets. The plans will be used through the project phases and operations by recording and monitoring the progress of the project and in transition to operations management activities and further to operations management. The author's own research about time and cost savings will help the company to show the potential clients the benefits it will bring them and help to sell the platform to them. Simply put, the plans and the evidence from the author's own research brings value for the company and its clients by reduced risks, time and cost savings, predictability, agility and improved project and operations performance.

The following recommendations to improve project and operations management efficiency, minimize risks related to entering foreign markets, and adopting to a different culture and thus bring value for the clients in foreign business environment are a result of the literature review, client survey, author's own research, and author's personal experience. The recommendations can be utilized in all foreign markets and products modified.

When implementing the market entry venture, one must also consider the financial impact of the venture. That is, is it feasible, payback period, return on investment, internal rate of revenue, and net present value are good indicators of this and they are presented in the business plan.

4.5.1 Project Plan

The project plan should be constantly monitored and updated accordingly if any deviations should arise. Regular meetings and reviews with the PMO and PS should be kept monitoring the progress of the project. The local partners should

also be included in monitoring and reviewing the plan so there are no misunderstandings about the project goals, scope, and quality. This binds all stakeholders in the project and enhances the communication and project efficiency and the project gain different viewpoints and expertise on target market culture and business environment.

4.5.2 Business Plan

The business plan should also be monitored and updated accordingly by all stakeholders to deal with any changes in business environment. The business plan should be implemented at the same time with the project plan as the processes are overlapping. While implementing the business plan the PM should proceed to business process reengineering activities as there will most probably be changes in the business environment or issues that could not be anticipated because the plan was devised in Finland and the knowledge of the target market and local culture is not at the local partners' level.

4.5.3 Congrid vs. Traditional Method

The research shows that Congrid saves time in supervision and therefore costs. To gain most benefits out of the platform organizations should adopt it as part of their strategy and invest in training. More research should be done in different projects and environments to gain more comprehensive picture of the benefits the platform brings.

4.5.4 Client Survey

The company should continue doing client surveys in different areas such as benefits during Covid-19, and enabling remote working. One of these have already been done and a white paper has been published about the results. When doing constant research with the clients and users the company gain valuable information about any shortcomings and what needs more development and what

features are unnecessary and what features should be developed more or added.

4.5.5 Other Recommendations

Other recommendations comprise of the following methods and actions.

- Provide extra training about cultural dimensions for people that participate in a market entry project to a foreign market
- Contribute to training of all project stakeholders but especially of those that work at the site
- Emphasize the importance of client relationships, reliability, quality of services, importance of constant research and development, and after sales care
- Constantly monitor the progress of the venture and update accordingly both the project plan and the business plan depending what phase of the venture is ongoing.

5 CONCLUSIONS

If a company wants to increase its revenue, it must step outside its own comfort zone and seek new markets for its product. There are a lot of risks doing this, but the reward will be worth it. To deal with the risks of a market entry to foreign markets where culture differs from one's own needs careful and comprehensive planning, good cooperation, and communication within project stakeholders as well as finding right local partners as can be seen in Chapter 2. It is vital to not only possess the right technical knowledge of the product and project management processes but also have an understanding about target market culture and business environment to be successful in one's venture. The business plan developed, Chapter 4.2, and literature review in Chapter 2.2, Cultural Dimensions, deal with these issues.

The research question: will the plans and the author's own research help the company to enter Vietnam's markets to help to create more revenue and thus bring more value for the owners has been answered in this thesis, in Chapter 2 and Chapter 4.3. The client survey, the author's own research and the literature review show the value it brings to the customers by saving them time and money and for the company how to minimize risks of a market entry. When conducting the literature review this author did not find any similar products as the market entry strategy developed in this study.

The plans will be used to perform market entry activities to Vietnam and to help to avoid risks related to that. The information in Chapter 2 about project management, cultural dimensions, digitalization, and virtual management and remote working, which the platform enables, is very scattered and the plans and the author's own research in Chapter 4 synthesizes the practices and information used in market entry to Vietnam. The survey also shows that the client's value systematic and reliable digital tools in their projects. The survey shows that the use of digital tools is increasing but is still not at a desirable level, as can be seen

in the client survey in Chapter 4. The clients' expertise of these is insufficient and they need more training. The literature on the subject is vast but very scattered and needs synthesizing.

6 RECOMMENDATIONS

To gain better insight of clients' attitudes, wants, and needs more empirical and detailed information is needed from client surveys. More effort must also be put to research on the field, i.e., do more comprehensive research about the tangible benefits the product brings the clients. From the outcome of the thesis can be noticed that some additional specific investigation is needed, this additional investigation includes.

- How much training do the project parties need to gain the benefits the product can bring?
- Are all project stakeholders using the tool?
- How is the tool welcomed in a foreign, more hierarchical culture?
- What features of the tool are the clients utilizing in their projects?
- A holistic research about how much tangible benefits the tool brings the clients, a comprehensive comparison of projects where the tool is used and not used.
- Does the tool contribute to better documentation of a project?

The time to do the dissertation was 4 months which is quite limited for a project of this magnitude. If there would have been more time, a more profound investigation would have been conducted by studying the subject more from the IT technology approach. This meaning, what possible benefits artificial intelligence, customer relationship management platforms, and project management platforms would have brought to the outcome of this project. The financial aspects for this project are assumptions. Despite the lack of time to conduct a more profound study on the subject, the goals of this study were met by conducting a comprehensive literature review, client survey, authors own empirical research, and by relying on authors broad knowledge, experience, and expertise of the subject. The possible weaknesses of the plans developed are detected by con-

stantly utilizing and updating the plans. If any weaknesses are detected, corrections should be made to improve it by adding and updating any new information that arise as the business environment is in constant change.

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Appendix A: Project Plan

30.5.2021

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Vilhonkatu 6

00100 Helsinki

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Project Plan

Market Entry Strategy to Vietnam 00100 HELSINKI

Version: 1.0

Version	Date	Name	Description
1.0	30.5.2021	Mikko Manni	Original Version

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1 EXECUTIVE SUMMARY

The purpose of the project is to establish operations to Vietnam for Congrid Ltd. Congrid provides its clients a digital construction management and supervision platform. The purpose is to establish relationships with local partners that will take care of the sales, marketing, and training. Congrid Ltd. will take care of the management and supervision of those local partners and will assign their own representative in that role.

As the markets in Finland are small, moving to Vietnam's markets will increase revenue and enable to enter to the rest of ASEAN countries' markets.

The goal of the project is to set up operations in Vietnam within two years after the project plan is approved and investment decision has been made. The operations management activities will be in action aligned with project management activities and will continue after the completion of the project.

2 PROJECT ORGANIZATION

Project Sponsor (PS)		
Timo Makkonen	timo.makkonen@congrid.fi	[Telephone]
Signature		30.5.2021

Project Owner (PO)		
[Name]	[Email]	[Telephone]
Signature		Date

Project Manager (PM)		
Mikko Manni	mikko73.manni@gmail.com	+358 50 5933 613
Signature		30.5.2021

Marketing Manager (MM)		
[Name]	[Email]	[Telephone]
Signature		Date

Contract Manager (CM)		
[Name]	[Email]	[Telephone]
Signature		Date

IT Manager (ITM)		
[Name]	[Email]	[Telephone]
Signature		Date

3 PROJECT MANAGEMENT APPROACH

The Project Manager (PM), Mr. Mikko Manni, has the overall authority and responsibility for managing and executing this project according to this Project Plan and its Subsidiary Management Plans. The project team will consist of personnel from Congrid Ltd., quality control, supervision group, IT-group, and marketing group. The Project Management Office (PMO) is established, and it comprises of PO, PS, PM, MM, and CM. The PM will work with all resources to perform project planning. All project and subsidiary management plans will be reviewed and approved by the Project Sponsor (PS). All funding decisions will be made by the PS and Project Owner (PO). Any delegation of approval authority to the project manager should be done in writing and be signed by both the PS and the PM.

The PM is responsible for communicating with PMO on the progress and performance of each project resource. The members of the project team report to the PM and the managers of each organization involved in the project report to the PM.

4 PROJECT SCOPE

The scope of project includes the marketing, networking, establishing the distribution channels, training, and proceeding to operations management activities. Project completion will occur when the operation has started full time and the business plan is deployed.

All project management work will be performed by Congrid Ltd. and no portion of the duties will be outsourced. The scope of this project does not include any works after the business plan is deployed.

Scope management for the project will be the responsibility of the PM. The scope for this project is defined by the Work Breakdown Structure (WBS) (Appendix B and C). The PM, PS, and PMO will establish and approve documentation for measuring project scope which includes deliverable quality checklists and work performance measurements.

Proposed scope changes may be initiated by the PM or the PS. All change requests will be submitted to the PM who will then evaluate the requested scope change. Upon acceptance of the scope change request the PM will submit the scope change request to the PMO and the PS for acceptance. Upon approval of scope changes by the PMO the PM will update all project documents and communicate the scope change to all relevant stakeholders. Based on feedback and input from the PM and Stakeholders, the PMO is responsible for the acceptance of the final project deliverables and project scope.

The PMO is responsible for formally accepting the project's final deliverable. This acceptance will be based on a review of all project documentation, results, and completion of all tasks/work packages.

5 MILESTONES

The below chart lists the major milestones for the Project. This chart is comprised only of major project milestones such as completion of a project phase or gate review. There may be smaller milestones which are not included on this chart but are included in the project Work Breakdown Structure (WBS). If there are any scheduling delays which may impact a milestone or delivery date, the PM and PS must be notified immediately so proactive measures may be taken to mitigate deviations in dates. Any approved changes to these milestones or dates will be communicated to the PMO by the PM.

Milestone	Description	Date
Marketing	Marketing activities in Vietnam	2022/01/15
Distribution Channels	Establishing distribution channels and contracts	2022/02/01
Training	Training of partners and clients	2022/07/01
Operations Management	Start of operations in Vietnam	2021/09/01

6 WORK BREAKDOWN STRUCTURE

The WBS for the project is comprised of work packages. Work packages were developed through close collaboration among project team members and stakeholders and research from past projects.

The WBS defines all work packages for the project. These definitions include all tasks, resources, and deliverables. Every work package in the WBS will aid in resource planning, task completion, and ensuring deliverables meet project requirements. The project schedule is presented in the WBS.

The PM and the PS will determine the impact of the change on the schedule, cost, resources, scope, and risks. If it is determined that the impacts will exceed the boundary conditions, then the change will be forwarded to the PMO for review and approval. The project boundary conditions are:

CPI (Cost Performance Index) less than 0.8 or greater than 1.2

SPI (Schedule Performance Index) less than 0.8 or greater than 1.2

If the change is approved by the PMO then it will be implemented by the PM who will update the schedule and all documentation and communicate the change to all relevant stakeholders in accordance with the Change Control Process (CCP).

The project Work Breakdown Structure are provided in Appendixes B & C.

7 CHANGE MANAGEMENT

The following steps will be utilized on the Project:

- 1: Identify the need for a change (Any Stakeholder). Requestor will submit a completed change request form to the PM.
- 2: Log change in the change request register (PM) The PM will maintain a log of all change requests for the duration of the project
- 3: Conduct an evaluation of the change (PM, Project Team, Requestor) The PM will conduct an evaluation of the impact of the change to budget, quality, risk, schedule, and scope
- 4: Submit change request to PMO (PM). The PM will submit the change request and analysis to the PMO for review.
- 5: The PMO will discuss the proposed change and decide whether it will be approved based on all submitted information
- 6: Implement change (PM). If a change is approved by the PMO, the PM will update and re-baseline project documentation as necessary as well as ensure any changes are communicated to the team and stakeholders.

Any team member or stakeholder may submit a change request for the Project. Any changes to project scope, budget, quality, or schedule must meet PS approval. All change requests will be logged in the change control register by the PM and tracked through to completion whether approved or not.

8 COMMUNICATIONS AND REPORTING

This Communications Management Plan (CMP) sets the communications framework for this project. It will serve as a guide for communications throughout the life of the project and will be updated as communication requirements change. This plan identifies and defines the roles of the project team members as they pertain to communications. It also includes a communications matrix which maps the communication requirements of this project, and communication conduct for meetings and other forms of communication. A project team directory is also included to provide contact information for all stakeholders directly involved in the project.

The PM will take the lead role in ensuring effective communications on this project. The communications requirements are documented in the Communications Matrix below. The Communications Matrix will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it, and to whom to communicate.

Communication Type	Description	Frequency	Format	Participants/ Distribution	Deliverable	Owner
Weekly Status Report	Email summary of project status	Weekly	Email	PS, Team and Stakeholders	Status Report	PM
Weekly Project Team Meeting	Meeting to review action register and status	Weekly	In Person	Local Project Team	Updated Action Register	PM
Project Monthly Review (PMR)	Present metrics and status to team and sponsor	Monthly	In Person, TEAMS	PS, PMO	Status and Metric Presentation	PM
Project Gate Reviews	Present closeout of project phase and kickoff next phase	As Needed	In Person, TEAMS	PS, PMO	Phase completion report and phase kickoff	PM

Project team directory for all communications is:

Name	Title	E mail	Office Phone	Cell Phone
Timo Makkonen	Project Sponsor	xx.xx@ltd.com	xxx-xxx-xxxx	xxx-xxx-xxxx
Mikko Manni	Project Manager	xx.xx@ltd.com	xxx-xxx-xxxx	xxx-xxx-xxxx
Xx xx	Marketing Manager	xx.xx@ltd.com	xxx-xxx-xxxx	xxx-xxx-xxxx
Xx xx	IT Manger	xx.xx@ltd.com	xxx-xxx-xxxx	xxx-xxx-xxxx
Xx xx	Project Owner	xx.xx@ltd.com	xxx-xxx-xxxx	xxx-xxx-xxxx
Xx xx	xxx	xx.xx@ltd.com	xxx-xxx-xxxx	xxx-xxx-xxxx

Communications Conduct:

Meetings:

The PM will distribute a meeting agenda at least 2 days prior to any scheduled meeting and all participants are expected to review the agenda prior to the meeting. During all project meetings, the secretary will take all notes for distribution to the team upon completion of the meeting. It is imperative that all participants arrive to each meeting on time and all cell phones should be turned off or set to vibrate mode to minimize distractions. Meeting minutes will be distributed no later than 24 hours after each meeting is completed. During Covid-19 pandemic TEAMS, Google Meet, Skype are used for meetings in Vietnam when possible and always when having a meeting with Finland team.

Email:

All email pertaining to the project should be professional and provide brief communication. Email should be distributed to the correct project participants in accordance with the communication matrix above based on its content. All attachments should be small enough. If the email is to bring an issue forward then it should discuss what the issue is, provide a brief background on the issue, and provide a recommendation to correct the issue. If the email is of extreme importance, the sender must call the receivers to make sure they have read it. The PM should be included on any email pertaining to the project.

Informal Communications:

While informal communication is a part of every project and is necessary for successful project completion, any issues, concerns, or updates that arise from informal discussion between team members must be communicated to the PM and recorded so appropriate action may be taken.

9 COST MANAGEMENT AND BUDGET

The PM will be responsible for managing and reporting on the project's cost throughout the duration of the project. The PM will present and review the project's cost performance during the monthly project status meeting. Using earned value calculations, the PM is responsible for accounting for cost deviations and presenting the PS and PMO with options for getting the project back on budget. All budget authority and decisions, to include budget changes, reside with the PS and PMO.

Control accounts will be created for all level of the WBS which is where all costs and performance will be managed and tracked. Financial performance of the project will be measured through earned value calculations pertaining to the project's cost accounts. Work started on work packages will grant that work package with 100% credit.

Cost and Schedule Performance Index (CPI and SPI) will be reported monthly by the PM to the PS and PMO. Variances of 10% or +/- 0.1 in the cost and schedule performance indexes will change the status of the cost to cautionary. These will be reported and if it is determined that there is no or minimal impact on the project's cost or schedule baseline then there may be no action required. Cost variances of 20%, or +/- 0.2 in the cost and schedule performance indexes will change the status of the cost to critical. These will be reported and require corrective action from the PM to bring the cost and/or schedule performance indexes back in line with the allowable variance. Any corrective actions will require a project change request and must approve by the PMO before it can be implemented.

Earned value calculations will be compiled by the PM and reported at the monthly project status meeting. If there are indications that these values will approach or reach the critical stage before a subsequent meeting, the PM will communicate this to the PS and PMO immediately.

The cost baseline for the project includes all budgeted costs for the successful completion of the project. A preliminary cost estimate is presented in table below.

Project Phase	Budgeted Total	Comments
Marketing	40,000€	Includes work hours for PM for establishing marketing processes in Vietnam
Distribution Channels	45,000€	Includes work hours for PM

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		for establishing marketing processes in Vietnam
Training	20,000€	Includes work hours for PM for establishing marketing processes in Vietnam
Operation Management	25,000€	Includes work hours for PM for establishing marketing processes in Vietnam
Other Costs	70,000€	Salaries, office space, equipment, etc.
Total	200,000€	

10 PROCUREMENT MANAGEMENT

The PM will provide oversight and management for all procurement activities under this project.

The PM is authorized to approve all procurement actions up to 130.000 €. Any procurement actions exceeding this amount must be approved by the PS.

The PM will be responsible for management of any selected vendor or external resource. The PM will also measure performance as it relates to the vendor providing goods and/or services and communicate this to the PS.

11 SCHEDULE MANAGEMENT

Project schedules for the project will be created using MS Project or equivalent scheduling program starting with the deliverables identified in the project's Work Breakdown Structure (WBS). Activity definition will identify the specific work packages which must be performed to complete each deliverable. Activity sequencing will be used to determine the order of work packages and assign relationships between project activities. Activity duration estimating will be used to calculate the number of work periods required to complete work packages. Resource estimating will be used to assign resources to work packages to complete schedule development.

Once a preliminary schedule has been developed, it will be reviewed by the project team. The project team and resources must agree to the proposed work package assignments, durations, and schedule. Once this is achieved the PS will review and approve the schedule and it will then be base lined.

The following will be designated as milestones for the project schedule:

- Completion of scope statement and WBS
- Base lined project schedule
- Approval of final project budget
- Project start
- Approval of roles and responsibilities
- Requirement's definition approval
- Project implementation
- Acceptance of final deliverables

Roles and responsibilities for schedule development are as follows:

The PM will be responsible for facilitating work package definition, sequencing, and estimating duration and resources with the project team. The PM will also create the project schedule using MS Project or equivalent scheduling program and validate the schedule with the project team. The PM will obtain schedule approval from the PS and baseline the schedule.

The project team is responsible for participating in work package definition, sequencing, duration, and resource estimating. The project team will also review and validate the proposed schedule and perform assigned activities once the schedule is approved.

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The PS and PMO will participate in reviews of the proposed schedule and approve the final schedule before it is base lined.

12 QUALITY MANAGEMENT

All members of the project team will play a role in quality management. It is imperative that the team ensures that work is completed at an adequate level of quality from individual work packages to the final project deliverable. The following are the quality roles and responsibilities for the project.

The PS is responsible for approving all quality standards for the project. The PS will review all project tasks and deliverables to ensure compliance with established and approved quality standards. Additionally, the PS will sign off on the final acceptance of the project deliverable.

The PM is responsible for quality management throughout the duration of the project. The PM is responsible for implementing the Quality Management Plan (Appendix A) and ensuring all tasks, processes, and documentation are compliant with the plan. The PM is also responsible for communicating and tracking all quality standards to the project team and PMO.

The project team are responsible for working with the Project Manager to develop and implement the Quality Management Plan. The PM will create and maintain Quality Control and Assurance Logs throughout the project.

The project team, as well as the stakeholders will be responsible for assisting the PM in the establishment of acceptable quality standards. They will also work to ensure that all quality standards are met and communicate any concerns regarding quality to the PM.

Quality control for the project will utilize tools and methodologies for ensuring that all project deliverables comply with approved quality standards. To meet deliverable requirements and expectations, a formal process in which quality standards are measured and accepted must be implemented. The PM will ensure all quality standards and quality control activities are met throughout the project. If any changes are proposed and approved by the PS and the PMO, the PM is responsible for communicating the changes to the project team and updating all project plans and documentation.

Quality assurance for the project will ensure that all processes used in the completion of the project meet acceptable quality standards. These process standards are in place to maximize project

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efficiency and minimize risk. For each process used throughout the project, the PM will track and measure quality against the approved standards and ensure all quality standards are met. If any changes are proposed and approved by the PS and PMO, the PM is responsible for communicating the changes to the project team and updating all project plans and documentation.

13 RISK MANAGEMENT

The approach for managing risks for the project includes a methodical process by which the project team identifies, scores, and ranks the various risks. Every effort will be made to proactively identify risks ahead of time to implement a mitigation strategy from the project's inception. The most likely and highest impact risks are added to the WBS to ensure that the PM take the necessary steps to implement the mitigation response at the appropriate time during the project. The PM will provide status updates on their assigned risks in the bi-weekly project team meetings and monthly PMO meetings.

Upon the completion of the project, during the closing process, the PM, in cooperation with the project team and PMO, will analyze each risk as well as the risk management process. Based on this analysis, the project manager will identify any improvements that can be made to the risk management process for future projects. These improvements will be captured as part of the lessons learned knowledge base.

The Risk Register for this project is provided in Appendix D.

14 RESOURCE MANAGEMENT

Staffing requirements for the project include the following:

PM is responsible for all management for the project. The PM is responsible for planning, managing, supervising, reporting, communicating, performance evaluations of local partners, and internal coordination of activities with local partners.

Quality Specialists / supervisors of local partners are responsible for assisting the PM in creating and tracking quality control and assurance standards. The Quality Specialists / supervisors will have primary responsibility for compiling quality reporting and metrics for the PM to communicate further. The Quality Specialists / supervisors will be managed by local partners' management and the PM who will provide feedback for performance evaluations.

The Project Manager will negotiate with all necessary managers to identify and assign resources for the Project. All resources must be approved by the PM before the resource may begin any project work.

Sponsor Acceptance

Approved by the Project Sponsor:

_____ Date: _____

<Project Sponsor>

<Project Sponsor Title>

**MARKET ENTRY STRATEGY TO VIETNAM
PROJECT QUALITY MANAGEMENT PLAN**

Version 1.0

30.5.2021

VERSION HISTORY

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason
1.0	Mikko Manni	30.5.2021	nn	mm/dd/yy	reason

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1 INTRODUCTION

1.1 PURPOSE OF THE PROJECT QUALITY MANAGEMENT PLAN

The Project Quality Management Plan documents the necessary information required to effectively manage project quality from project planning to delivery. It defines a project's quality policies, procedures, criteria for and areas of application, and roles, responsibilities, and authorities.

The Project Quality Management Plan is created during the Planning Phase of the project. Its intended audience is the project manager, project team, project sponsor and any senior leaders whose support is needed to carry out the plan.

2 PROJECT QUALITY MANAGEMENT OVERVIEW

2.1 ORGANIZATION, RESPONSIBILITIES, AND INTERFACES

Name	Role	Quality Responsibility
Mikko Manni	Project Manager	Quality mentoring, monitoring, coaching
Timo Makkonen	Project Owner	Quality audits, monitoring, mentoring
nn	Role	Responsibility

2.2 TOOLS, ENVIRONMENT, AND INTERFACES

Tool	Description
Benchmarking	Industry recognized benchmarks
Cost-benefit Analysis	Systematic analysis of what actions to implement and how to proceed
Flowcharts	QM actions definition and monitoring

3 PROJECT QUALITY MANAGEMENT

Quality Management involves planning, implementing, checking, and acting to improve project quality standards. Three procedures are followed: Quality Planning, Quality Assurance and Quality Control. The following sections define how this project will apply each of these procedures to define, monitor and control quality standards.

3.1 QUALITY PLANNING

Relevant quality standards for the product are the same as in Finland, i.e., the product must be easy to use, must work off-line, and a few to none bugs in operating the platform. This is achieved with constant monitoring and auditing the performance of the platform and cooperating with clients and local partners. Project management must also be of high quality and this is ensured by using industry standards as well as PMI and IPMA standards and guidelines. The project manager reports to project owner weekly and a video meeting is arranged weekly for the project owner to keep up with the progress of the project. The senior management of the company validates the performance of the project manager.

3.1.1 Define Project Quality

The goal of the project is to enter Vietnam's market and create more revenue stream for the company. The senior management will assess the project quality with the following Key

Performance Indicators (KPI): Return on Investment (ROI) = > 15 %, Net Present Value (NPV) = >10 %, and Internal Rate of Revenue (IRR) = >10 %.

3.1.2 Measure Project Quality

Project quality is measured by conducting customer satisfaction surveys (>80 % satisfaction) and benchmarking competitors' product quality and offering. Data is collected with questionnaires, interviewing local partners, local partners' sales reports, and accounting reports, and from competitors' annual reports. Customer complaints are taken seriously and the project manager will deal with them personally with the local partner.

3.2 QUALITY ASSURANCE

Comparison with set quality goals and actual progress will be done and reported by the project manager. A report of mistakes, deviations, changes, and how they are handled is made monthly. If a bigger quality issue arises, that will be dealt with instantly, and if needed, in cooperation with senior management. Recognized industry standards, i.e., PMO and IPMA project management standards are used to manage the project.

3.2.1 Analyze Project Quality

Project quality is analyzed from data collected and by comparing it to set goals. Both quantitative and qualitative analysis is used and reported to Finland to be accepted. Any deviations or gaps in project performance is identified and corrected.

3.2.2 Improve Project Quality

The project manager will constantly be in contact with the clients and create personal relationships with them as well as to inquire what can be done better and what new features they need or want to the product. Brainstorming sessions with local partners will be arranged to improve the product and to make it better fit into the Vietnamese culture. Lessons learned workshops will be arranged to eliminate future mistakes and to improve the project and project management processes.

3.3 QUALITY CONTROL

The project owner and senior management of the company will monitor the project manager's performance and cumulated costs during the project, and they provide feedback where to improve and what is done well. Feedback will be given in monthly meetings. The project manager will monitor how the local partners are performing, i.e., sales, training, and marketing efforts, and give feedback to them. Corrective actions are made if quality issues arise. Reporting of project progress is done monthly by the project manager and if any important issues arise, they will be reported and dealt with instantly.

APPENDIX A: PROJECT QUALITY MANAGEMENT PLAN APPROVAL

The undersigned acknowledge they have reviewed the Market Entry Strategy to Vietnam **Project Quality Management Plan** and agree with the approach it presents. Changes to this **Project Quality Management Plan** will be coordinated with and approved by the undersigned or their designated representatives.

Signature:	_____	Date:	30.5.2021
Print Name:	Timo Makkonen		
Title:	CEO		
Role:	Project Owner		

Signature:	_____	Date:	30.5.2021
Print Name:	Mikko Manni		
Title:	Project Manager		
Role:	Project Manager		

Signature:	_____	Date:	_____
Print Name:	_____		
Title:	_____		
Role:	_____		

APPENDIX B: REFERENCES

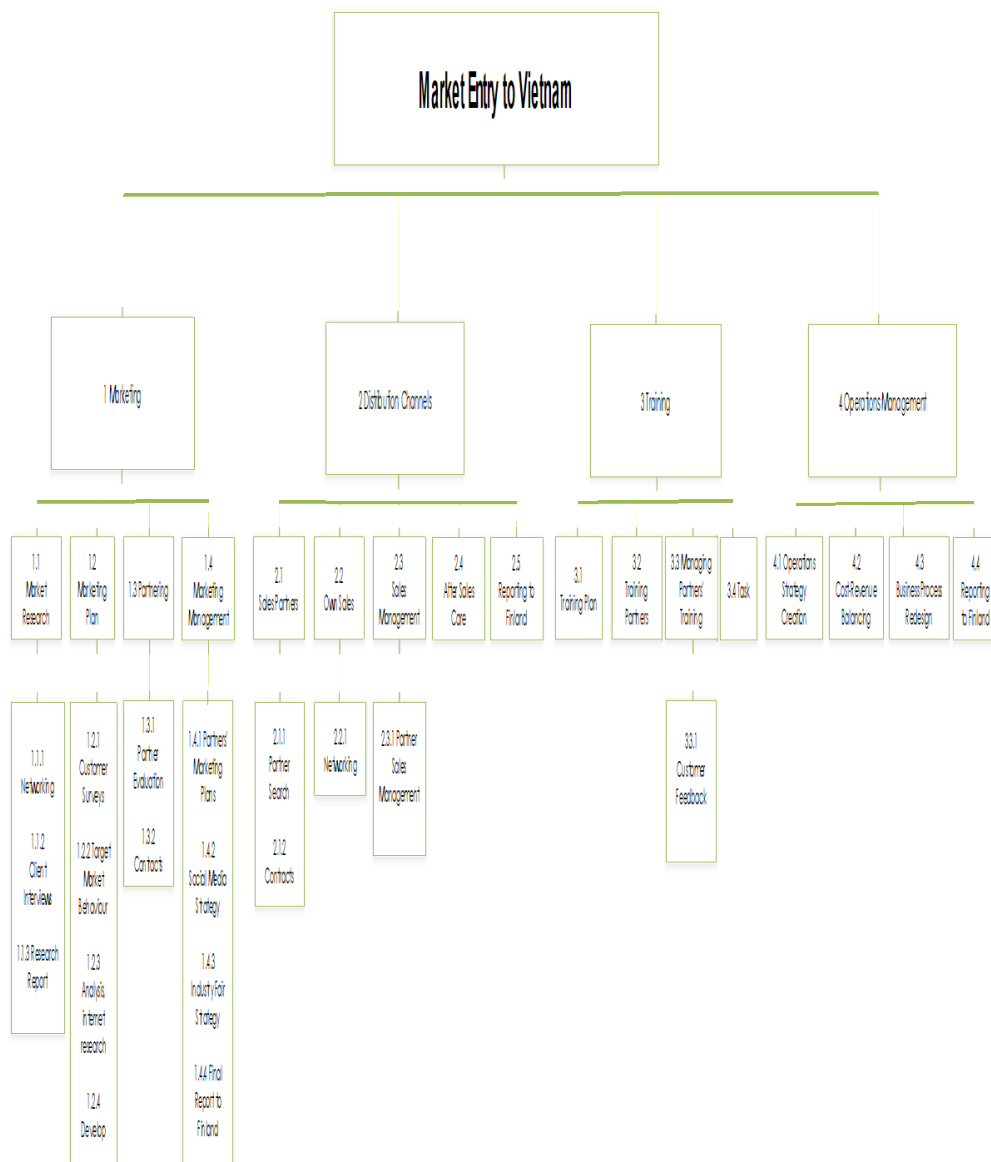
The following table summarizes the documents referenced in this document.

Document Name and Version	Description	Location
Cost-Benefit Analysis	Systematic analysis of what actions to implement and how to proceed	Server
Flowchart	QM actions definition and monitoring	Server
Benchmarking	Industry recognized benchmarks	Server

APPENDIX C

WBS

PROJECT	Market Entry to Vietnam	COMPANY NAME	Coged Ltd.
PROJECT MANAGER	Mikko Manni	DATE	30.5.2021



APPENDIX D

Market Entry to Vietnam		Version 1.0	30.5.2021	Appendix B				
Risk Matrix		Version x.x	xx.xx.2021					
Congrid Ltd. / Mikko Manni								
Pos.	Risk	WBS Activity	Stage of Project	Parties Involved	Risk Mitigation	Risk Probability, %	Risk Severity 1-10	Risk Level
1	Corruption	Operations Management	Start of Operations	Government, local partners, PM	Clear communication towards non acceptance of corruption, changing partner if needed, transparent conduct in all activities	40%	9	3,6
2	Plagiarism, copy rights	Sales, Training, Operations Management	Implementation - Operations Management	Local partners, clients, PO, PM, PS, judiciary	Clear contracts and sanctions, no access to source code	20%	10	2
3	Changes in political environment	Marketing, Sales, Training, Operations Management	Start to end	Government, PO, PM, PS	Holding company in Singapore, contingency planning,	10%	10	1
4	Employee / partner turnover	Sales, Training, Operations Management	Implementation - Operations Management	Local partners, PM	Diversification, many partners, better working conditions and salary, commit key employees with incentives	50%	3	1,5
5	Cash flow issues	Operations Management	Operations Management	Clients, local partners, PM, PS, judiciary	Clear contracts, sanctions for late payments, local dept collector	15%	6	0,9
6	Contract breaches	Sales, Training, Operations Management	Implementation - Operations Management	Clients, local partners, PM, PS, judiciary	Clear contracts and sanctions, good law firm	10%	6	0,6
7	Platform readiness issues	Operations Management	Implementation - Operations Management	Tele operators, local partners, client, PM, PS	Good customer support, off line readlines, aftersales care	10%	5	0,5
8	Currency fluctuations	Sales, Operation Management	Implementation - Operations Management	Government, local partners, PM, PS	Price adjustments, carefully plan transactions to Europe	20%	3	0,6
9	Changes in business environment	Marketing, Sales, Training, Operations Management	Start to end	Client, local partners, PM, PS	Competitor benchmarking, contingency planning, Holding company in Singapore	15%	4	0,6
	Risk levels:							
	Insignificant 0-0,5							
	Low 0,6-1,9							
	Moderate 2,0-5,9							
	Significant 6,0-7,9							
	Intolerable 8,0-10,0							
				PM = Project Manager				
				PO = Project Owner				
				PS = Project Sponsor				

Appendix B: Business Plan

BUSINESS PLAN

Congrid Asia Ltd.

BUSINESS PLAN

CONGRID ASIA LTD.



OWNER

Congrid Ltd.

By Mikko Manni

1

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1 Executive Summary

The potential for digital project management and supervision platform business in Vietnam and rest of ASEAN countries is huge as the development of the countries and growth of the middle class that need more housing and services is rapid and thus the construction industry is constantly growing. Only in Vietnam the construction industry has been growing 8,5 % annually for the last ten years (Mordor Intelligence, 2021). As the competition is growing in construction industry in Asia there is a need to find competitive advantage so the profit margins do not decrease and digital platforms enable this by making operations LEAN.

The average price of the program license / project / month is 500 €, depending on width of features needed, which makes it a very lucrative purchase considering the benefits it brings to the client. From this 600 € the local partners will receive 25 – 50 % sales commission depending on their contract and what tasks they will do. The program is easy to use and it brings better quality, communication, transparency, and savings into projects by making the project tasks LEAN.

The amount of funding the venture is seeking is 200 000 € to establish operations in Vietnam. The Return On Investment (ROI) will be 13,05 %, the Internal Rate of Revenue 12 % and the Break Even Point for the product will be in third year in February.

2 Value Proposition

The product and service make sense because it brings more value for the customers, developers, builders by:

- Increasing the life span of constructions by increased quality and documentation
- Creates LEAN and thus savings into projects
- Creates better communication and transparency between project parties
- Creates proactivity in project management and supervision and thus reduces defects, delays and quality issues in projects and helps the project to keep its budget and schedule
- Increases HSE in projects

With Congrid the project will be safer, shorter, cheaper and better quality with practically no extra cost. With services provided by Congrid the customer gets a very easy to use and very functioning end product that increases the quality and LEAN of a project with a very reasonable price.

Developers and builders gain more value in sales and marketing as they can provide their customers more safety and increased quality with a low cost and relatively low effort. A value proposition canvas that simplify the value proposition can be found in Appendix 4 (Thomson, 2013).

3 General Description of Congrid Asia Ltd.

The company provides project management and site management program to its clients as well as customer support and after sales care. The goal is to start with Vietnam markets and move to ASEAN markets when a strong foothold is established in Vietnam. The growth is sought organically in years to come.

3.1 Lenders & Investors

Every business need cash, especially in the inception phase. Cash is needed to cover operations, salaries, rent, office equipment and supplies, etc.

The company will fund the venture from its own finances and also seek grants from Business Finland and Finnpartnership that provide grants for Finnish companies for internationalization and growth (Business Finland, 2021), (Finnpartnership, 2021).

3.2 Key employees

When the venture operations and clientele are on solid ground and orders start to come at a constant pace, it is time to start hiring more staff, mainly some key personnel who are able to take over responsibilities from the management team to manage sales partners. The key personnel comprise of sales and marketing managers. As the company wants to do its own sales after the sales grow, it will hire its own sales people and technical managers as well.

3.3 Advisors

Technical knowledge, R&D and support is provided from Finland. Other mentors to help with conducting business in Thailand comprise of the writer's business school professors who all have PhDs in economics and management and have created and managed their own profitable businesses in North America and ASEAN region.

The author has also good contacts in Vietnam, friends from university and other walks of life who are Vietnamese and can provide valuable insight and aid on how to do business in Vietnam as well as help networking better.

3.4 Other professionals

Other professionals consist of people supporting the business and operations that can be outsourced like accounting and IT support. One of the most important professionals is the assistant for management who takes care of important tasks of daily operations like customer service (although it is the responsibility of every member of the company), being the personal translator, etc.

3.5 Markets of operation

Congrid Asia Ltd. will operate mainly in Ho Chi Minh City markets in the beginning. The purpose is to expand relatively quickly to the whole of Vietnam when the business is set and running. After establishing foothold in Vietnam, the next logical step is to expand to rest of ASEAN markets.

4 Products and Services

The product the company is providing is a streamlined project management solution for transparent site management. The program is compatible with both iOS and Android and can be used with laptop and desktop computer, tablet computer and smartphone. The program works also in off-line mode when not in Wi-Fi reach.

The program provides comprehensive documentation of the project and thus creates LEAN in project practices like devising LEED and BREEAM documentation for the end product. With LEAN created for the project, the productivity of the project increases compared to traditional project and site management methods by eliminating steps from the project procedures.

While the program is proactive rather than reactive, as construction project tasks usually are, the program help the project to keep its budget and schedule. The project stake holders are kept up to date all the time what is happening in the project and help them to react quickly to any necessary changes needed to guide the project on the right tracks whether it is a budget issue, HSE issue or schedule issue.

The company is providing comprehensive customer support for clients and constant R&D is done to improve the program.

More details of pricing of the product and services can be found in Appendix 1, the financial examination of the company.

5 Management and Organization

The management activities comprise of managing local partners, marketing activities, and customer relations and as can be seen in Figure 1, the company structure, these tasks are the responsibility of the Managing Director that also acts as the Project Manager (PM) in market entry phase. The MD concentrates also on creating customer relationships and governmental duties of the daughter company in Vietnam. All local partners report to the MD and weekly meeting are held to share information between all members. The MD reports to Finland.

When the company has established its relationships with the local partners and core customer relations and obtained foothold in the industry and the projects are increasing (after 3 years), it is time to hire more people and grow the company. Accounting services and IT services are still outsourced as the company is still medium size with 5 – 10 employees. At this time the company will also do its own sales activities and establish strategic partnerships to develop the product and operations in Vietnam markets to meet local demands and grow the business.

6 Business Model

The business model value chain of the company is a digital model. The company is providing digital project management and supervision platform services in construction industry. A business model canvas that simplifies the business can be found in Appendix 3 (DIY, 2021).

The business model in the beginning is to have local partners do the sales and most of marketing and the MD will manage these partners and develop business processes.

6.1 Marketing and Market Research

Marketing is a vital part of any company's success in fast changing business environment. When starting the company, a marketing plan is created and it is developed constantly to adapt to changes in business environment. Also, the company realizes the importance of digital marketing and social media in modern marketing.

Market research is conducted by searching data from industry publications and different statistics data bases as well as interviewing developers, construction companies and consultants.

Marketing is mostly outsourced to local partners.

6.2 Economics

Financing is needed in the inception phase for registering the company, creating web site, translation costs, work permits, insurances, tools, and marketing.

Also, creating the right customer relations and marketing takes time and financing is needed at this stage for salaries and office premises as well as participating in exhibitions and fairs to introduce the product to potential clients.

Constant marketing and customer relations care is needed and these costs comprise of salaries, travelling, participating in exhibitions, etc.

6.3 Customers

The larger developers and construction companies in Ho Chi Minh City's metropolitan area and rest of Vietnam are the main customers. The target group will be large developers and construction companies that value high quality in products and services and want to enhance the quality of buildings and efficiency of operations.

The company will focus its business to large operators. The other target group will be the medium size construction companies.

6.4 Competition

There are many construction project management applications in the markets but none of them are quite similar to Congrid, or as user friendly on the building site, especially when it comes to safety and quality control. The competitors' applications are more focused on schedule and budget management than site management.

Competitors and the similarity of their products and services are covered in more detail in competitor matrix in Appendix 2.

6.5 Markets

The target market in the start phase of the company is Ho Chi Minh City metropolitan area. The population is approximately 8,5 million (World population review, 2021) and growing on a yearly basis due to influx of people for search of work from the country side and abroad. The region is a growing economic market. When the company is growing, and established more ground in the industry, the target market is expanded to the whole of Vietnam and further to the ASEAN region at some point in the future.

The construction markets are influenced very much by the overall economic situation at a given time. At the moment, the situation in construction industry is good and the construction industry is growing in Vietnam. Also, the influx of people to Ho Chi Minh City metropolitan area is positive which means people need more housing and services. The middle class is also rapidly growing in Vietnam, fastest growing middle class in ASEAN region, and this also accelerates those demands (BMI, 2021), (World population review, 2021).

6.6 Marketing Strategy

The marketing strategy is that the MD together with the help of local sales staff handles the larger customer acquisitions by face-to-face marketing, i.e., personal visits to developers, construction companies, consultants, etc. Advertising is done in local professional magazines and by sending marketing material to potential customers. The company will gain visibility by attending industry fairs and exhibitions.

Digital marketing is done in Facebook, LinkedIn and Google.

Also, every member of the company is the face of the company towards clients and it is emphasized to employees that they conduct themselves as such.

7 Operational Plan

The company wants to be close to operating environment. Sales personnel are mostly on the road so it is vital to provide tools that enable distant working. Distant working is possible for all sales employees if it does not disturb customer relationships, i.e. reports can be done distant, there is no need to come to the office for that kind of work, after all, it is the outcome that counts, not if you are present or not and today's digital world enables this.

Vietnamese people are very business orientated but the business culture differs from Finland's, first one has to establish good relationship with them and only then start to do business. This may require some time as it is quite usual that one has at least two meetings with the client where there is no actual business talk. Vietnamese society is very hierarchical and they respect rank and honour, face losing culture is very strong and this must be considered at all interaction (Project Management.com, 2018). Covid-19 has shown the value of distance working and meetings and to save time in meetings etc., digital meeting platforms like MS TEAMS, Google Meet, and Skype will be used when possible. This is utilized of course after the relationships are already on solid ground. Meetings to Finland will be held with these platforms.

7.1 Location

The office premises are located close to customers, in proximity of central business area and the public transportation routes, close to the city center with good traffic connections.

7.2 Credit Policies

The products and services provided are invoiced normally with 2- or 3-weeks' time to pay depending on the customer. No extra time for payments is given so that the cash flow would slow down and jeopardize payment of salaries, rents and utilities.

8 Company Values and Their Impact on Business

One part of Congrid Asia's strategy is the knowledge that the people working there is their most valuable asset and thus the people are well taken care of by not having them working too long hours, to not put too much pressure on one individual but rather allocate the current tasks so the pressure is divided to the whole team working on the project. This approach reduces employee's sick days and lengthens their careers and creates more effective and motivated employees. Health, Safety and Environmental (HSE) –program developed is a vital part of keeping employees safe, productive and sustainable.

Education and constant training keep employee's skills up to date which is vital in modern fast-moving and constantly changing project environment and this motivates employee's better than, say, annual bonus, which is also given to the employee's if they perform well.

Congrid Asia Ltd. is cooperating with reliable and honest clients with whom most of the collaboration takes place. Zero tolerance with corruption applies. Also, the company is going to concentrate on after sales care to create more value for the customers.

Customers appreciate all above-mentioned values, which the company will adopt as part of its strategy because this brings value to their business and image also. The company's vision, mission, and values can be seen in Figure 2.

9 SWOT Forward with Future Steep Analysis

The SWOT analysis is used to analyze the product provided and internal potential rather than the surrounding factors such as environmental factors affecting the business environment. Using the SWOT analysis helps the company distinguish itself from the competitors (Mind Tools, 2021). The parts of SWOT analysis are:

- Strengths
- Weaknesses
- Opportunities
- Threats

9.1 Strengths

The strengths the company has are:

- High-quality product → Easy to sell to customers
- Easy to use product → Easy to adopt the product for customers
- LEAN, HSE, quality, transparency and savings the product brings for customers → easy to sell to customers
- Good existing contacts and personal relationships in the region and knowledge of markets → Easier to gain customers and projects
- Management team → diverse education and experience bring broader insight to the business and broad experience brings more value for customers
- High level of personal education and expertise in individual fields such as sales, project management and operations management → More credibility in the eyes of customers
- High adaptability for change in business environment → Easier to land new projects and customers
- Good knowledge and experience of sales, management, construction industry, sustainability, quality, HSE and energy efficiency → Brings advantage to competitors by improved customer service, more fluent projects and green image
- Dedicated and motivated team that is used to Scandinavian working environment, efficiency and HSE → Good working environment and low turnover of employees as well as better efficiency
- Dedication to bring more value for customers by after sales care → Long lasting customer relationships

9.2 Weaknesses

The weaknesses the company has are:

- New product → Can take time and work to establish foothold in the markets as customers don't yet know the benefits the product brings them and thus customer attitudes towards new products can be negative.
- Management not Vietnam nationals → Must have Thai national sales team for local clients (large international companies do not care rather than they value European education and efficiency)

9.3 Opportunities

The opportunities the start-up has are:

- Economies of scale → The number of projects in Vietnam is huge
- Customers don't know about the product yet → Customers are easily convinced about the benefits of the product
- ASEAN markets → When the company establishes foothold in Vietnam rest of the ASEAN markets are adjacent and easily accessible as the company has established good contacts and relationships in ASEAN markets
- Increasing energy efficiency, quality and HSE regulations and demands → Advantage for a competent team (and product) with good knowledge of these
- Increasing customer demands for quality of products and better customer service → Advantage for a competent team with customer service mind set and very high-quality product
- New free trade agreement between Vietnam and EU → Easier to move people and products between the two.

9.4 Threats

The threats the start-up faces are:

- Competitors → Constant R&D and better customer service must be provided
- Finding competent employees → Higher salaries and more supervision from management team is needed.
- Currency fluctuations → Can have an effect on revenue stream to Europe

10 PESTLE Analysis Vietnam

The PESTLE analysis used here is focused only on Congrid Vietnam Ltd., no consideration is made for client companies and competitors. The PESTLE analysis comprises of the following external pressures working for change on the organization under survey: political, economic, social, technological, legal and environmental pressures (Pestle Analysis, 2021).

10.1 Political Pressures

The political stability in Vietnam is stable and safe under the rule of the Communist Party. (UK Government, 2020)

10.2 Economic Pressures

The increasing tightness of timetables and rising revenue expectations of the building industry will have a negative effect on the following:

- Quality of building
- Work safety
- Exhaustion of employees as the work load increases and work hours get longer

Salaries in Vietnam are considerably lower than in Europe and this is an opportunity for a foreign company as labor cost form the main cost of operations in consultancy business.

If the client is having difficulties with cash flow, this also affect Congrid Vietnam Ltd., as consistent cash flow is vital to the company to keep the business running.

Vietnam is ranked on place 96/180 in Transparency Organizations Corruption List which could create problems for a company as corruption may impact the business (Transparency, 2021). The company will conduct its business with zero tolerance of corruption and bribery.

10.3 Social Pressures

As global warming is a hot issue now, the green image of the company is very important, it can be as small as saving printing paper by using both sides of the printing paper. Adopting green thinking and providing efficient digital solutions to clients gives not only for oneself a good image but also for the client. Green values, quality thinking, LEAN, and HSE have been rising in ASEAN for a while now and brings competitive advantage for companies that can provide solutions and know how in digital platforms.

Also, Corporate Social Responsibility (CSR) and Health, Safety & Environment (HSE) thinking and implementation as well as treating employees well, is crucial for the company image.

10.4 Technological Pressures

The increasing speed of development of technology and computer programs creates challenges to everyone on the building industry. Digitalization is taking over very traditional construction industry as well. Therefore, continuing education, self-development and product development is crucial for keeping ahead of competition. Customers also demand more functionality from buildings as their demands for quality living and green values (decreased energy use, quality, and environment stability) increase. This creates pressure on companies to develop new solutions and products to enhance efficiency in projects, operations, and sustainability, as well as to incorporate environmental values in operations.

10.5 Legal Pressures

Energy efficiency, sustainability demands, quality demands, HSE demands, and regulations are growing stricter all over the world because of the climate change and government awareness of the need for action. There is a need to adapt to this in the business operations and production. Building regulations are also directed more and more towards energy efficient and sustainable buildings, and HSE in construction industry.

10.6 Environmental Pressures

Good knowledge of platform economy and digitalization in operations are crucial to companies and of value for the modern client. Today's clients are very aware of the positive impact of digitalization and the impact of a HSE, so the company must have a wide range of knowledge of these factors.

10.7 Impact on Congrid Vietnam Ltd.

The most threatening impact of the above-mentioned external factors come from the changes in the economic situation, possible pandemics, and the current level of corruption. These issues have been considered in the company strategy of investing in employee education and working conditions, investing in customer service, providing digital solutions and efficiency in operations, and keeping up to date on the political and economic situation. This gives the company a competitive advantage in the marketplace.

Constant development of operations and services are crucial for the company to continue successfully compete as well as having agility and adaptability in response to changes.

Vietnam is also aspiring to develop to western level which creates opportunities for the company that can provide Scandinavian level services. There is a building boom going on in Vietnam, the country has invested in its hospitality industry and modern housing as the middle class is growing rapidly (BMI, 2021).

11 Legal Issues

Every starting company in platform economy business in Vietnam has to deal with a lot of legal issues concerning name, labor, responsibilities and operations.

11.1 Company Name

When starting a Limited Liability Company, one must make sure that the name the company is planning to take is not in use or pending. This can be checked from Department of Planning and Investment (GBS, 2021).

11.2 Labor Laws

Labor laws in Vietnam are set by the National Assembly of Vietnam, who set the rules for workers safety, payments, etc. that the employee must follow (The National Assembly of Vietnam, 2021).

11.3 Competition and Operation Laws

The laws about competition is set by the Ministry of Industry and Trade in Vietnam. These laws apply to both Vietnamese and foreign companies (Ministry of Industry and Trade, 2021).

11.4 Inventions and Intellectual Property Laws

Vietnam is a member of the World Trade Organization and World Intellectual Property Organization and Vietnam's laws covers most Intellectual Property (IP) aspects of IP in accordance with the international standards required by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). However, Vietnam's IP enforcement mechanisms still need improvement. Inventions, copyrights, trademarks and patents and their protection is regulated by Intellectual Property Office of Vietnam (Intellectual Property Office of Vietnam, 2021), (International Trade Administration, 2021).

11.5 Branch Office (BO) vs. Limited Liability Company (LLD)

There are two viable options for a company form in Vietnam, Branch Office (BO) and Limited Liability Company (LLC). They both can be considered depending what operations are adopted in Vietnam. At the beginning of the venture a BO is chosen and when the business expands a LLC will be established.

A foreign business entity can establish an BO in Vietnam to conduct business activities that are in line with the mother company. A branch is a unit dependent on the enterprise and obliged to perform part or all of enterprise's functions, including representation under authorization (Kenfox, 2021).

For registering an LLC in Vietnam, one has to go to Department of Planning and Investment (typically in the form of an Investment Registration Certificate, IRC) for your project in Vietnam, and then get an Enterprise Registration Certificate (ERC) for the creation of your company. This usually takes around 45 days and must be prepared carefully. The LLC can be 100 % owned by foreigners (GBS, 2021).

12 Drivers for Innovation and Change

The main drivers for innovation and change for Congrid Asia Ltd. are:

- Economic growth in Vietnam and ASEAN
- Growing platform economy
- Economic and political situation in Vietnam and ASEAN
- Low taxation and low salary expenses
- Efficiency, sustainability, quality and HSE issues and demands
- The rising number of expatriates in Vietnam and ASEAN
- Rivalry from competitors

It is vital in the modern fast changing business environment to keep up with the change, so a plan is developed to face and manage innovation and change.

12.1 Threats

If the economic situation in the region goes into turmoil its situation could lead to cash flow problems. Also, cash flow problems of clients reflect also to cash flow problems for the company. If the political situation in Vietnam and ASEAN region changes, it could impact the company's operations as economic situation usually reacts to political turmoil. The Covid-19 pandemic situation is ongoing and can pose a threat if nations are not able to control it.

The company needs skilled and motivated workers on all levels of operations and there can be challenges to find local employees that possess same skill and motivation levels as are a standard in Japan, Korea and Europe. The company has to train its workers constantly to keep the quality level high.

Rivalry from competitors may cause the company to lose clients if competitors offer them better products and services.

12.2 Opportunities

Low national taxation and low salary expenses creates more profits from operations.

Energy efficiency, sustainability, quality and environmental values are the talk of today and customers value these also more every day. This creates more opportunities and value for a company that has capable management, technological and innovative mind set and skills. Timetables in construction industry are also getting tighter all the time and this creates opportunities for the company.

The rising number of expatriates in Vietnam and ASEAN region creates opportunities as they usually have more money to spend and demand better quality in products and living standards.

There is a building boom in Vietnam and ASEAN region now. This only emphasizes the need for a product that increases the value and quality of the project.

Rivalry from competitors forces the company to perform better on the markets it is operating and develop new services, procedures and products and to value its assets, the people. All before mentioned creates a better image for the company and this will be notice by the customers also.

13 Financial Projections

The sales forecast of the company can be found in appendix 1, financial examination. The figures are of course assumptions but they are carefully based on existing number of building permits and projects to be started in the future. The figures are also based on general pricing (in Finland) of the product.

14 Exit Strategy

Although the company is in it for a long haul and very committed to the enterprise, there is always a possibility that some unexpected may happen, so the company will be prepared for change in ownership or to exit the markets.

Exit strategy of the company could be a Strategic Acquisition of another company. The best way to execute the Strategic Acquisition is to hire an outside consultant, who is familiar with markets of operation to evaluate the real and fair value of the company after it has been gained a solid ground in ASEAN markets. Based on the careful assumptions of future sales and the potential of the markets of operations, a realistic value of the company will be 2 – 4 times expected annual sales plus equity the company holds.

In case the market entry project is not successful the company has to withdraw itself from the Vietnam markets to cut further losses and not jeopardize operations in Europe.

15 Conclusions

The opportunities and potential of Congrid digital project management and supervision platform is huge in Vietnam and ASEAN region as the benefits and value the product brings to the customers of the company, i.e. developers and construction companies.

The Return On Investment (ROI) is very lucrative for the investors, ROI for the start-up is 13,05 %, the Internal Rate of Revenue 12 %, and the Break Even Point of the product is in the third year February. The sales figures are of course assumptions but the markets are huge and there are plenty of room for a product and company that is competent and business oriented, it is a great example of creating blue ocean strategy by providing something that does not yet exist in this form. Considering the market size and potential, the sales figures are estimated very low.

Figures

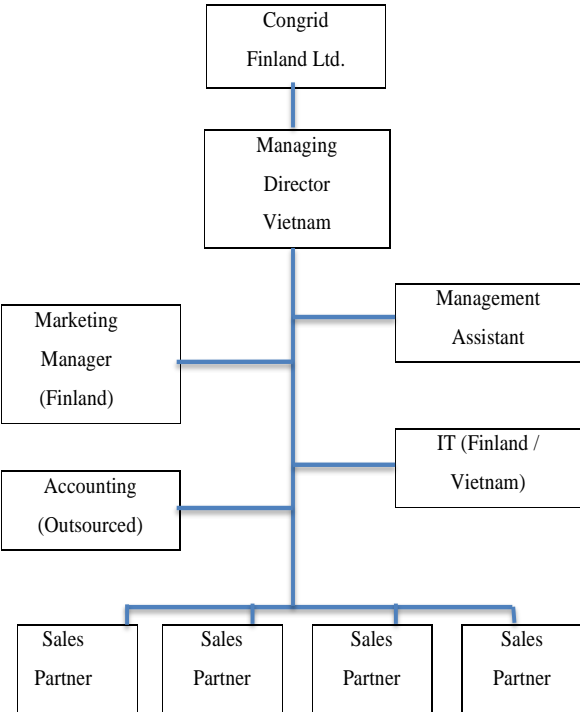


Figure 1: Organisation chart of Congrid Asia Ltd.

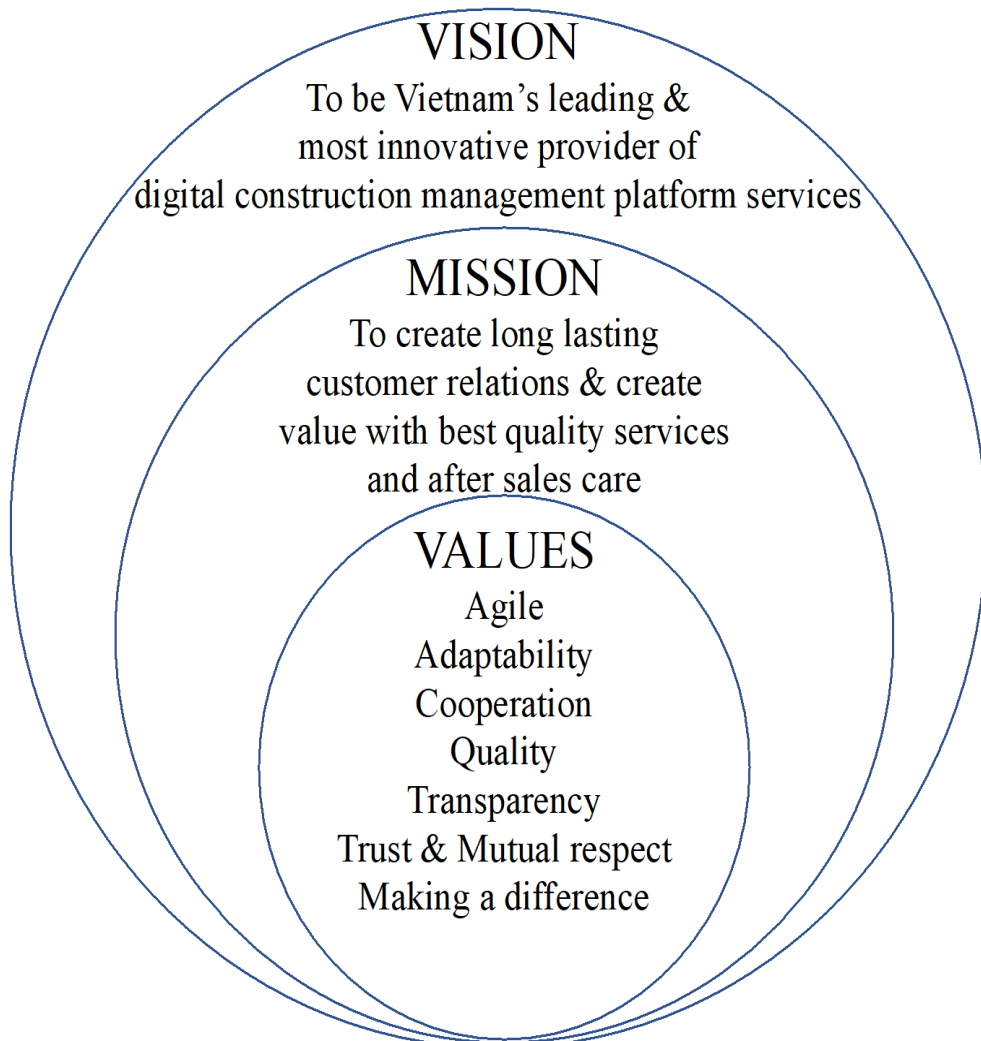


Figure 2: Vision, Mission & Values

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Financial examination
Page 1.1

All prices in Euro's	DC = Direct Cost
VAT = value-added tax	IC = Indirect Cost
EF = employer fee	FA = Fixed Assets
COGS = cost of goods sold	VC = Variable Cost
	FC = Fixed Cost
EBITDA = earnings before interest, taxes, depreciation & amortization	
Break even point, Units =	1201,0
= Break Even Point in February, third year	

Premises rent	price per sqm	# months	total rent cost / year	Notes
Office (sqm)	10	30	3 600	Hot Desk
				(incl. 10% VAT)

Interest Rate = 2%

USD	THB	USD
1.2	36	27.430

Salaries

number of employees	# months	cost per person	total cost / year	Notes
1	13	5000	65000	Project Manager
1	13	1500	19500	Assistant
0	12	0	0	
				(incl. 21,5 % EF) € <u>84.500,00</u>

Unit sale price = 300

Monthly sales forecast (year 1)

	January	February	March	April	May	June	July	August	September	October	November	December	total revenue	Monthly average revenue	Σ
Units sold	0	0	0	0	0	0	10	10	30	30	30	50			160
Price / unit (€, VAT 0%)	300	300	300	300	300	300	300	300	300	300	300	300			
<u>Revenue</u>	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
							3 000,00	3 000,00	9 000,00	9 000,00	9 000,00	15 000,00	€ 48 000,00	€	4 000,00
														€	4 800,00
														THB	144 000,00

Monthly sales forecast (year 2)

	January	February	March	April	May	June	July	August	September	October	November	December	total revenue	Monthly average revenue	Σ	
Units sold	50	50	50	50	50	50	60	100	100	100	100	100				860
Price /unit (€), VAT 0%	300	300	300	300	300	300	300	300	300	300	300	300				
Revenue	€ 15.000,00	€ 15.000,00	€ 15.000,00	€ 15.000,00	€ 15.000,00	€ 15.000,00	€ 18.000,00	€ 30.000,00	€ 30.000,00	€ 30.000,00	€ 30.000,00	€ 30.000,00	€ 258.000,00	€ 21.500,00		
													฿	25.800,00		
														THB	774.000,00	

Monthly sales forecast (year 3)

	January	February	March	April	May	June	July	August	September	October	November	December	total revenue	Monthly average revenue	Σ
Units sold	150	150	150	150	150	150	150	200	200	200	200	200			2050
Price /unit (€), VAT 0%	300	300	300	300	300	300	300	300	300	300	300	300			
Revenue	€ 45.000,00	€ 45.000,00	€ 45.000,00	€ 45.000,00	€ 45.000,00	€ 45.000,00	€ 45.000,00	€ 60.000,00	€ 60.000,00	€ 60.000,00	€ 60.000,00	€ 60.000,00	€ 615.000,00	€ 51.250,00	
													฿	61.500,00	
														THB	1.845.000,00

Depreciation

Rental contract	depreciation rate	total depreciation / year
€	3.600,00	90% € 3.240,00
fixed assets	depreciation rate	total depreciation / year
€	4.000,00	20,00% € 800,00 (VAT 0%)

Return On Investment	
ROI 3 years for 20% share of the company	Estimated company value after 3 years
(gain from investment - cost of investment) / cost of investment	Valuation multiplier = 3,0
13,05%	1.130.520,00 €
Cost of investment	200.000 €
	1.187.200,00
	5.468.000.000,00 (VID)
Company value is calculated using 3 year net profit taken from cash flow sheet and company assets taken from initial investment sheet.	
Depreciation is then deducted from the figure and valuation multiplier of 3 is used to calculate the company value and gain from investment.	
ROI is then calculated using equation (gain from investment - cost of investment) / cost of investment	
Net Present Value (NPV) of the investment is:	86.299,55 € and Internal Rate of Return (IRR) is: 12%

Sales revenue 3 years = € 921.000,00
 Units sold in 3 years = 3070

Congrid Asia Ltd.			Financial examination
	€	Notes	Page 2
Marketing, adverticing, IC	40000	Magazines, fairs, exhibitions, prints	
Premises rental, DC, IC	3600	1 year	
Office equipment, FA, IC	4 000	PC's, phones	
Training	20000	Local partners	
Salaries, DC & IC	84500	1 year	
Translation, IC	3000	Marketing material, web site, etc.	
Web site, IC	1000		
Insurance, operations, IC	5000	1 year	
Insurance, personnel, IC	2000	1 year	
Internet, phone usage, IC	1000	1 year	
Travel costs, accommodation, IC	5000	1 year	
Work permit, IC	1000	1 year	
Legal & registration fees, IC	20000		
Networking, customer relations costs, IC	4000	1 year	
Accounting + IT, IC	3000	1 year	
miscellenious costs, IC	3000	3 years	
Total cost	€ 200 100,00	VAT 0 %	

In USD \$ 240 120,00

in THB THB7 203 600

Investment:
 200 000,00 €
 240 000,00 USD
 7 200 000,00 THB
 5 486 000 000,00 VND

8 000,00 Price per share, €

9 600,00 Price per share, USD

288 000,00 Price per share, THB

219 440 000,00 Price per share, VND

Profit & Loss	Year 1		Year 2		Year 3		Financial examination
Revenue							Page 3
Operating revenue	€	48 000,00	€	258 000,00	€	615 000,00	All prices VAT = 0 %
Total revenue	€	48 000,00	€	258 000,00	€	615 000,00	
Direct cost							
Salaries, sales	€	-	€	-	€	-	
Sales commissions	\$	-	\$	-	\$	-	
Variable costs	\$	-	\$	-	\$	-	\$ -
Total direct costs	\$	-	\$	-	\$	-	
Operating profit		48 000,00 €		258 000,00 €		615 000,00 €	
Operating profit margin		100 %		100 %		100 %	
Indirect cost							
salaries, MD & Assistant	€	84 500,00 (Incl. 21,5 % of EBP)	€	84 500,00 (Incl. 21,5 % of EBP)	€	84 500,00 (Incl. 21,5 % of EBP)	
marketing and sales	€	40 000,00	€	20 000,00	€	20 000,00	
Rent office	€	3 600,00	€	3 600,00	€	3 600,00	
Office equipment	€	4 000,00	€	1 200,00	€	-	
Office supplies	€	20 000,00	€	20 000,00	€	20 000,00	
Translation	€	3 000,00	€	-	€	-	
Web site	€	1 000,00	€	-	€	-	
Work permits	€	1 000,00	€	1 000,00	€	1 000,00	
Insurance, operations	€	5 000,00	€	5 000,00	€	5 000,00	
Insurance, personnel	€	2 000,00	€	2 000,00	€	2 000,00	
Internet, phone	€	1 000,00	€	1 000,00	€	1 000,00	
Accounting+IT	€	3 000,00	€	3 000,00	€	3 000,00	
Networking	€	4 000,00	€	2 000,00	€	2 000,00	
Legal fees	€	20 000,00	€	2 000,00	€	2 000,00	
Travel Cost	€	5 000,00	€	3 500,00	€	3 500,00	
Miscellaneous costs	€	3 000,00	€	600,00	€	600,00	
Total indirect cost	€	200 100,00	€	149 400,00	€	148 200,00	
Fixed costs	€	120 100,00	€	120 100,00	€	120 100,00	€ 360 300,00
EBITDA	-	152 100,00 €	€	108 600,00	€	466 800,00	
EBITDA %		-317 %		42 %		76 %	
Depreciation	€	4 040,00	€	4 040,00	€	4 040,00	
Tax (20%)	€	-	€	21 720,00	€	93 360,00	
Net Income	-	156 140 €	€	82 840 €	€	369 400 €	
Net income %		-325 %		32 %		60 %	
in USD		\$187 368,00		\$99 408,00		\$443 280,00	
in VND		4 282 920 200,00 VND		2 272 301 200,00 VND		10 132 642 000,00 VND	

Income statement

		Year 1	Year 2	Year 3	TOTAL	Financial examination
Sales	Revenue	€ 48 000,00	€ 258 000,00	€ 615 000,00		Page 4
	Congrid					
Total sales		€ 48 000,00	€ 258 000,00	€ 615 000,00		
COGS		€ -	€ -	€ -		
	total COGS	\$ -	\$ -	\$ -		
gross profit		€ 48 000,00	€ 258 000,00	€ 615 000,00		
gross margin		100 %	100 %	100 %		
expenses	salaries (Incl. 15 % EF)	€ 84 500,00	€ 84 500,00	€ 84 500,00		
	marketing and sales	€ 40 000,00	€ 20 000,00	€ 20 000,00		
	Rent office	€ 3 600,00	€ 3 600,00	€ 3 600,00		
	Office equipment	€ 4 000,00	€ 1 200,00	€ -		
	Office supplies	€ 20 000,00	€ 20 000,00	€ 20 000,00		
	Translation	€ 3 000,00	€ -	€ -		
	Web site	€ 1 000,00	€ -	€ -		
	Work permits	€ 1 000,00	€ 1 000,00	€ 1 000,00		
	Insurance, operations	€ 5 000,00	€ 5 000,00	€ 5 000,00		
	Insurance, personnel	€ 2 000,00	€ 2 000,00	€ 2 000,00		
	Internet, phone	€ 1 000,00	€ 1 000,00	€ 1 000,00		
	Accounting+IT	€ 3 000,00	€ 3 000,00	€ 3 000,00		
	Networking	€ 4 000,00	€ 2 000,00	€ 2 000,00		
	Legal fees	€ 20 000,00	€ 2 000,00	€ 2 000,00		
	Travel Cost	€ 5 000,00	€ 3 500,00	€ 3 500,00		
	Miscellaneous costs	€ 3 000,00	€ 600,00	€ 600,00		
total expenses		€ 200 100,00	€ 149 400,00	€ 148 200,00		
	operating profit	- 152 100 €	108 600 €	€ 466 800,00		
Net profit	taxes (20%)	€ -	€ 21 720,00	€ 93 360,00		
		- 152 100 €	86 880 €	€ 373 440,00	€ 308 220,00	

in USD \$ 369 864,00

in THB 10 145 369 520,00 VND

NPV & IRR:

The NPV formula (when cash arrivals are uneven):	
$NPV = [C1/(1+r)^1 + C2/(1+r)^2 + C3/(1+r)^3 + \dots] - X_0$	
Cost of the investment	-200 000 €
Cash inflows	
Year 1	152 100 €
Year 2	86 880 €
Year 3	373 440 €
Present value of Year 1 Cash inflow	149 118 €
Present value of Year 2 Cash inflow	83 506 €
Present value of Year 3 Cash inflow	351 901 €
Present Value of Cash inflow	286 290 €
NPV	86 290 €
IRR (Internal Rate of Return)	12 %








Appendix 2: Competitor Matrix

Competitor Analysis	Congrid	Autodesk BIM 360	Procore	Plangrid	Redteam	Fieldwire	Yonyou
website	www.congrid.fi	https://bim360.autodesk.com	www.procore.com	www.plangrid.com/fi/	www.redteam.com	www.fieldwire.com	www.yonyou.com.hk
Features							
Point-to-Point							
Product similarity	4	3	1	3	2	2	1
Cost of product	4	4	2	4	4	4	2
Product quality	4	4	4	4	4	4	3
Simplicity	4	2	2	3	2	3	2
Project quality	4	4	4	3	3	3	3
Project safety	4	4	4	1	2	3	4
Project	4	3	3	3	3	3	3
Time saving for project parties	4	3	3	3	2	2	2
Ease of use	4	2	2	3	2	3	2
Compatibility with different operating systems	4	2	4	4	4	4	3
Miscellaneous	-	-	-	-	-	-	-
OUTCOME	40	31	29	31	28	31	25

Notice! Appraisal points 1-4

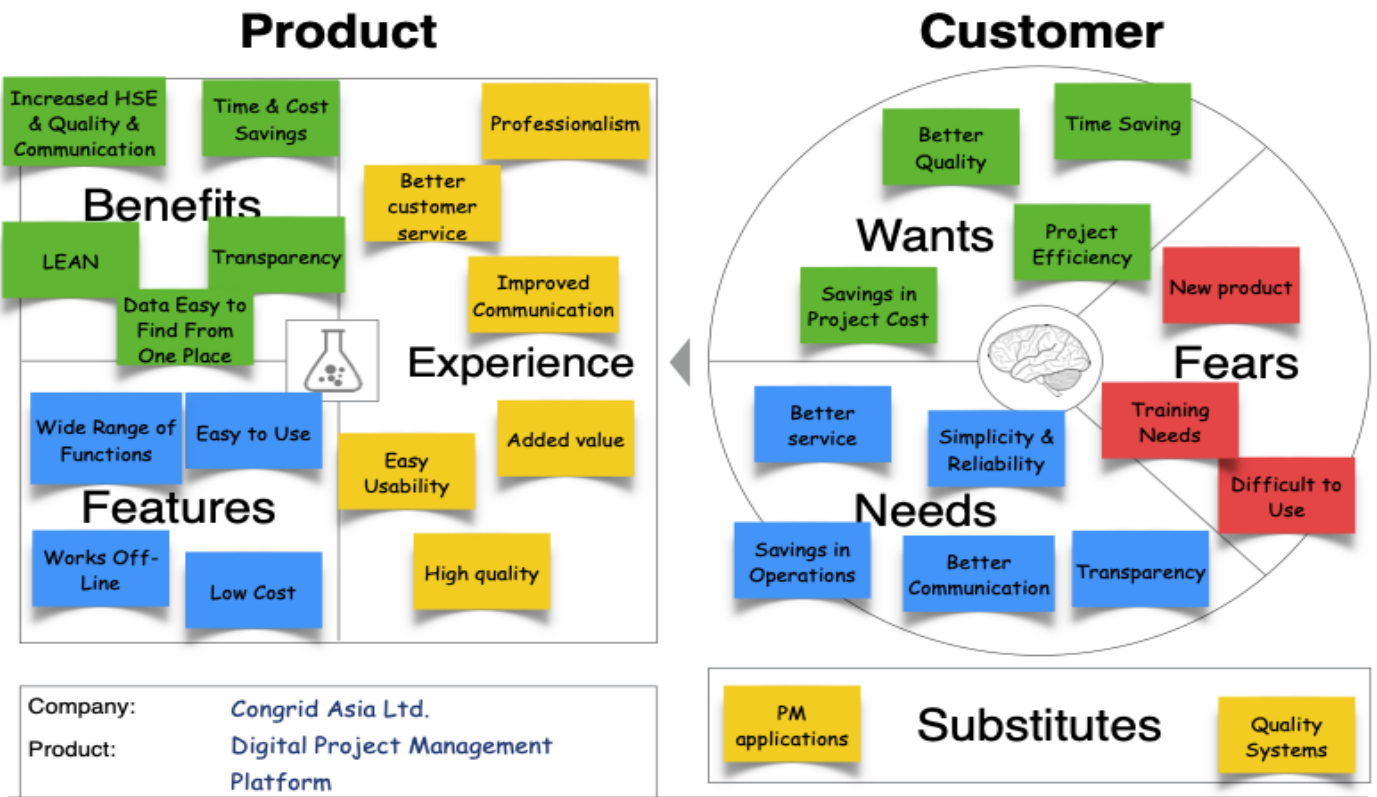
Appendix 3: Business Model Canvas

Business Model Canvas

 <p>Key Partners</p> <p>Congrid Finland Ltd. Local Sales Partners Developers Contractors Local Officials Industry Fairs Industry Publications</p>	 <p>Key Activities</p> <p>Sales Management Project Management Sales Marketing Program Support</p>	 <p>Value Propositions</p> <p>Added Value by increasing LEAN Added Value with Simplicity Added Value with Lower Project Costs & Better Quality & Increased Safety Better service for customers Competitive prices High product quality User Support After sales care</p>	 <p>Customer Relationships</p> <p>Competence in services Reliability Long term relationships Cooperation & Communication</p>	 <p>Customer Segments</p> <p>Developers Construction companies Public Sector</p>
 <p>Cost Structure</p> <p>Rent (office) Marketing & Sales Computers & Programmes Salaries Legal Fees</p>		 <p>Revenue Streams</p> <p>Licences sold</p>		

Appendix 4: Value Proposition Canvas

Value Proposition Canvas



MEng Project Management Questionnaire for Thesis

Age: _____
Education: _____
Experience in Constructing, years: _____
Position (developer, project manager, supervisor, contractor, etc.): _____
Company: _____

Congrid Site Management & Supervision Platform

Which platform do you use? Congrid Mobile Congrid Live

How familiar are you with Congrid platform? Very familiar Familiar Not that familiar Not at all that familiar

In how many projects have you used Congrid platform? _____

How user friendly do you consider Congrid platform? Very good Good Average Bad Very bad

Comparing to traditional way to operate, in your opinion, how well does Congrid enhance?

Time saving:	<input type="checkbox"/> Enhances considerably	<input type="checkbox"/> Enhances	<input type="checkbox"/> No change	<input type="checkbox"/> Weakens	<input type="checkbox"/> Weakens considerably.
Quality:	<input type="checkbox"/> Enhances considerably	<input type="checkbox"/> Enhances	<input type="checkbox"/> No change	<input type="checkbox"/> Weakens	<input type="checkbox"/> Weakens considerably
Safety:	<input type="checkbox"/> Enhances considerably	<input type="checkbox"/> Enhances	<input type="checkbox"/> No change	<input type="checkbox"/> Weakens	<input type="checkbox"/> Weakens considerably
Communication:	<input type="checkbox"/> Enhances considerably	<input type="checkbox"/> Enhances	<input type="checkbox"/> No change	<input type="checkbox"/> Weakens	<input type="checkbox"/> Weakens considerably
Transparency:	<input type="checkbox"/> Enhances considerably	<input type="checkbox"/> Enhances	<input type="checkbox"/> No change	<input type="checkbox"/> Weakens	<input type="checkbox"/> Weakens considerably

Do you think Congrid platform brings added value for your projects? Yes No

What other benefits do you consider Congrid platform brings? _____

Other comments or suggestions _____