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# Failures of a New Start-up Business

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Helsinki Metropolia University of Applied Sciences

Master's Degree

Logistics Management

Master's Thesis

8 February 2023

These years while developing this thesis has been instructive in many ways. First of all, it has been delightful to operate with significant logistics operators in warehouse truck training service field. Also, the support of the fellow students with logistics management master's group 2018-2019 has been significant mental asset to finish this thesis. Also, the support and constant guidance of Metropolia's instructors was admirable.

This thesis was started in January 2018 and the original objective was to develop a business model that guides the case company in its starting point level. Even though, the case company initiated its operative level business while this thesis was unfinished in first place and therefore, the case company failed. truthfully, the reason of the case company's failure was deficiencies in planning stage, in other words, the case company did not have a business plan to guide it in its starting point level. Therefore, the original thesis plan changed and objective became to research what were the factors that caused the case company's failure and what the case company's failure can teach to other start-ups generally. This thesis is a study of start-up companies' failures and how to avoid them by using the case company as an example.

Especially the author of thesis wants to thank interviewed logistics operators and personnel from Toyota Material Handling, Inex Partners and Oriola Finland. Special thanks for being instructor of thesis to Dr. Thomas Rohweder and Dr. Sami Sainio.

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8 February 2023

Author Title	Antti Toivanen Failures of a New Start-up Business
Number of Pages Date	60 pages + 1 appendices 8 February 2023
Degree	Master of Engineering
Degree Programme	Logistics Management
Instructors	Dr. Thomas Rohweder, Principal Lecturer Dr. Sami Sainio, Principal Lecturer
<p>Numerous start-up companies are formed every year, from which up to 20 % fail within the first 12 months. Understanding the failure process of start-ups is important to avoid common pitfalls that are relevant for most companies. One important aspect is to understand what are the requirements of entering a market with a viable and competitive business model.</p> <p>This study uses a case company as an example of what can happen when there is a disconnection between the business model and expected market entry and the real market requirements. Although the case company was expected to have a good product-market fit it eventually failed due to the discontinuity in the expected and real market requirements, which were more regulatory related than was expected.</p> <p>The literature review part of this work shed light to the facts that often lead to start-up companies ultimate failure. This work also shows how many start-up companies survive their first years and what are the most important factors for survival.</p>	
Keywords	Start-up Failures, Business Model

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## 1 Introduction

Numerous start-up companies enter into markets every year and quite many of them fail in first years ([Failory](#): 8.2.2023). Understanding the failure process of start-ups is important to avoid common pitfalls that are relevant for most companies. One important aspect is to understand what are the requirements of entering a market with a viable and competitive business model.

This study describes in detail what can happen when a business model and market entry requirements for a company that was expected to have a good product-market fit when there is discontinuity in the expected and real market requirements.

The results of this study describe of some facts that often lead to the start-up companies ultimate failure and how many start-up companies survive their first years. This work also lists some of the most important factors for survival for new companies.

At first, what is start-up? Could a new hair dressing service be start-up? Most think, that not. Usually start-up is something new – an innovation. Usually, start-ups have two features. (i) It tests something that has never been tested before such as technologies, products or services and markets and (ii) start-ups has a potential for exponential growth and it is scalable. In other words, start-up is potential business experiment ([Failory](#): 6.12.2022).

This study was initiated originally to answer how a new company providing warehouse truck training services could enter the market in Finland. The original goal of the study was both to validate the product-market fit and the necessary steps to take in order to comply with local rules and regulations. Because of the case company's failure this study aims to capture start-up companies survivability, viability and other factors affecting newly started businesses.

The warehouse truck training business was initiated before the original study was finished. Initiating the warehouse training service before the original study was finished proved out to be a catastrophic decision, since the newly founded company could not enter the market as was initially expected. Thus, there was at least one major problem

in the product-market fit, which was not known prior to forming the company, but which this study, if allowed to finish before starting the company, would have been able to answer.

The proposed product-market fit along with the pitfalls identified during the early phases of the company are described in detail. Further, since the company ended up being forfeited the details leading to this decision are explained. These decisions, and the decision to act prior to understanding the market in detail are discussed and contrasted to available literature about start-up companies.

Based on the findings the following conclusions can be made (i) business requires a business model for its starting point level, (ii) adequate background research of local rules and regulations are critical before starting the business.

### 1.1 The Case Company's Business Context

The case company initiated operative business with incomplete original study albeit the starting point should have been after the original study was finished and all the necessary information had been collected and documented.

The case company planned to start its operation primarily in the Uusimaa region and aimed to serve such clients as whole-sale companies (Inex Partners) and logistics labor operators (Barona) and warehouse truck manufacturers (Toyota).

For developing the original study and understanding the markets needs this study's one focus is of study the company's founder's professionalism. The company's founder has been working himself in several Finnish warehouses and realized that the practical skills to handle warehouse trucks are incomplete. Also, warehouse trucks cause few fatal accidents in year, statistically ([Työtapaturomatieto](#): 28.1.2023). Therefore, there are improvements to be made related to occupational safety. Incomplete skills to handle warehouse trucks and deficiencies in occupational safety causes dangerous situations in warehouses and accidents causes unnecessary expenses to companies. The case company planned to deliver the training modules that would include not only the theory of



occupational safety and practical skills training. Training would additionally include training videos of operating the warehouse trucks in an effective and safe way.

Finnish Transport and Communications agency could grant the company the license to operate as a licensed training center if the company's lead trainer has a pedagogical qualification ([Finlex](#): 9.1.2023). After that the company is may apply for license to operate as licensed training service ([Traficom](#): 19.1.2023) This study is of initiating the warehouse truck training service with incomplete information and therefore, its pitfalls.

## 1.2 Objective and Outcome

The objective of this study is to produce information of how the start-ups could avoid pitfalls by using the case company as an example of failure.

The outcome of this study is information for guiding start-ups about how to avoid pitfalls while planning and initiating business.

## 1.3 Thesis Outline

In this study, the main question is how to implement information of the case company's failure and literature and therefore, produce information for guiding start-ups how to avoid pitfalls while planning and initiating business.

This study is written in five sections which are (i) introduction, (ii) case study company, (iii) analysis of small business failures, (iv) discussions and (v) conclusions.

## 2 Case Company

This section is of developing stage of the case company before it initiated its operative level business. Take notice, that this section is developed with original thesis plan to build a business model for the company. This section is the main benchmark for mistakes made.

### 2.1 Research Reform

This sub-section is of research design and methods used by developing the case company.

#### 2.1.1 Action research

This study uses an Action Case research approach as its guiding research approach. The Action research is the method that uses cases studies as its basis ([ResearchGate: 28.1.2023](#)). Action research typically uses an Action research cycle for conducting research in a step-by-step manner. Figure 1 below shows the Action research cycle.



Figure 1. Action research cycle.

As seen in Figure 1, Action research cycle typically consists of four steps: (i) Planning (ii) Acting (iii) Observing (iv) Reflecting. In the first stage, the researcher plans for the action points, by identifying the problem and organizing for the actions. In the next step, he/she implements the planned action, by acting in the organizational context as well as collecting information and questioning other participants in the organization or context. After that, the researcher observes the consequences of the actions by analyzing and reporting the results and sharing the results with the organization. These observations lead to reflecting on the results that includes evaluation and revising the implemented actions. This final stage serves as the preparation for the next cycle of planning, acting and so on in the next Action research cycle ([ResearchGate](#): 8.2.2023)

In this study, action research approach is used to build the business model for the start-up company. The study will plan and prepare for the implementation of the action points, while observe and reflecting will be left outside the scope of this study.

The study will utilize a range of research methods for data collection and analysis. First, this study relies on conducting interviews and using company's founder's observations

and experience. The persons selected for the interviews are all professionals in the logistics field, with many years of practical experience, which makes their input into the development of warehouse truck training services a valuable contribution. The questions for the interviews are collected in Appendix 1.

### 2.1.2 Research Design

This study was originally planned to use the research design that includes six consecutive stages.

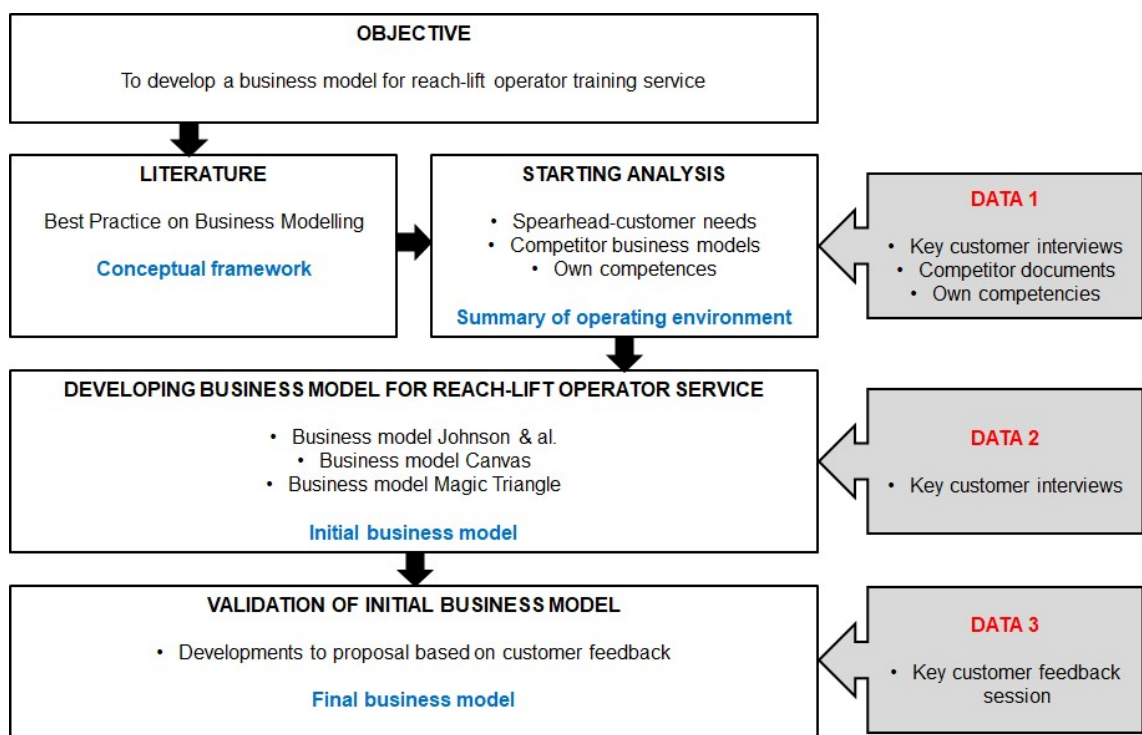


Figure 2. Research design of this study (Original in period 1.)

As shown in Figure 2, the first stage of the research design aim is to identify the objective for the study. The objective was to develop the business model for warehouse truck training service.

In the second stage, the literature review was supposed to be conducted for identifying the key elements of a business model. Literature sources were selected for learning how to build an operative-level business model. The interviews with the spearhead customers were in the second stage.

The third stage of this study was planned to research selected literature and develop conceptual framework with the literature and the results of the interviews with the spearhead customers. The conceptual framework was developed. Developing conceptual framework was the last stage before the case company initiated its operative level business.

The fourth stage of this study was planned to be validation of initial business model by results of second interview round with the spearhead customers. that guides the case company as its starting point.

### 2.1.3 Data Collection and Analysis

Data collecting is a process where the information is gathered from selected subjects. It is critical to make sure that the gathered information is right and gathering it has been legal and ethical. If there has been omissions in gathering information it may have catastrophic consequences in future ([Harvard Business School](#): 28.1.2023).

This study draws from a variety of data sources. Data was also collected in three data collection rounds, which consisted of interviews. Table 1 below overviews Data collections 1-3 conducted in this study.

DATA STAGE	CONTENT OF DATA COLLECTION	DATA SOURCE / COLLECTION METHOD	OUTCOME OF DATA COLLECTION	DATE
<b>Data 1</b> Starting analysis	Analysis of spearhead-customer needs  Analysis of analogical company business model  Analysis of entrepreneur's own competences & resources	1 theme interview with spearhead customer(s) with the help of CFW structure  Public competitor documents  Analysis of own competencies based on CFW structure	Structured deep-understanding of:  - customer needs - competitor models - own competencies	By end FEBRUARY 18
<b>Data 2</b> Developing a business model for truck operator training service	Developing business model Johnson & al.  Developing business model Canvas  Developing business model Magic Triangle	2 interviews with spearhead customer(s) with the help of CFW structure	Initial business model proposal for the above training service	By end MARCH 18
<b>Data 3</b> Validation of the business model proposal	Developments to proposal based on customer feedback	Spearhead customer feedback session	Final business model proposal for the above training service	By end April 18

Table 1. Data plan (Original in period 1.)

As seen in Table 1. data for this study was supposed to be collected in three rounds. The first round was collecting Data 1 conducted for the current state analysis. The current state analysis will rely on conducting interviews and using observations and own competences by the researcher collected in his jobs.

Data 1 collection round ends up with the summary of results received from the interviews, observations and customer document analysis.

In the next round, Data 2 was collected to gather suggestions from the customers and experienced colleagues for developing the proposal. This data includes (i) key customer interviews and (ii) interviews with professionals.

In this study the interviews made the primary method of data collection. The interviews were conducted as semi-structured, face-to-face interviews, with questions created in advance. The results from interviews were documented during them.

## 2.2 Best Practice for Building Business Model

This sub-section is of best practice in business model building. It validates the key concepts of three different business models and the business model building. Validated business models are following (i) Business model Jonson et al., (ii) business model Canvas (iii) Magic triangle business model by Gassman. This sub-section presents conceptual framework developed by implementing three mentioned business models.

### 2.2.1 Overview and a Definition of a Business Model

Every company operates with a business model, even though they know it or not. Over the years, best practice in business modelling has seen various business models discussed in literature. Since the start of the business model concept from year 1975 (Long Range Planning 49. 2016: 38), many authors have released their own concept of what kind the business model should be and what are elements and / or dimensions to use in it. Every company has a unique business model.

The first business model is developed by (Johnson et al. 2011) which presents that the business model consisting of four key elements. The second business model is from (Osterwalder et al. 2010), which developed a business model canvas and presents that business model consisting of nine key elements. The third business model is the Magic Triangle developed by (Gassman et al. 2020) that presents that business model consisting of four dimensions.

Next, the review starts with the business model by (Johnson et al. 2011). The second section presents the business model canvas by (Osterwalder et al. 2010). The third section focuses on the Magic Triangle by (Gassman et al. 2020). Finally, the fourth section contains a comparison of these business models and their features, which is eventually merged into the conceptual framework for building own business model later in this study in section 2.2.6.

### 2.2.2 Business Model Jonson et al.

Presenting (Johnson et al. 2011) who believes that “by systematically identifying all of company’s constituent parts, executives can understand how the model fulfills a potent

value proposition in a profitable way using certain key resources and key processes. With that understanding, they can then judge how well the same model could be used to fulfill a radically different CVP and what they'd need to do to construct a new one, if need be, to capitalize on that opportunity" (Johnson et al. 2011:50).

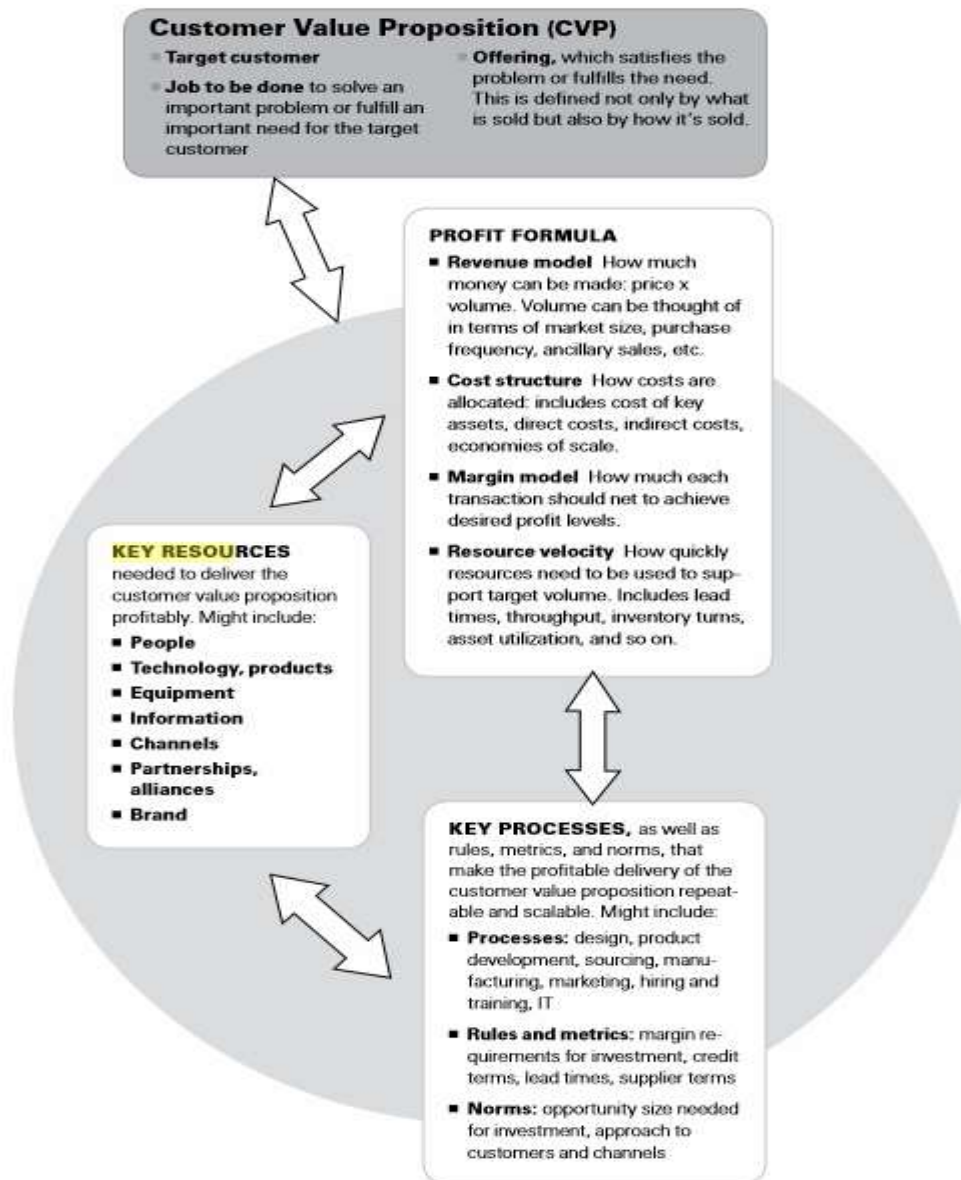


Figure 3. Business model by Johnson et al.

As seen from Figure 3. the business model by (Johnson et al. 2011: 50) has four key elements. (i). Customer value proposition (ii) Profit formula (iii) Key Resources (iv) Key processes. All four key processes contain several sub-elements which are presented in



this section. This study applied the sub-elements of (Johnson et al. 2011). for using its data primarily with building conceptual framework in section 2.2.6.

## CUSTOMER VALUE PROPOSITON

The first key element is Customer value proposition, also known as CVP. CVP details how the customer sees the value of what the supplier provides by its work or product or service. The measurement could be immaterial goods such as safety or the skills that service provides. The measurement could also be financial such as money or stocks. CVP is one of the key elements of the business model. To build an operative business, the business model should be able to inform how the value is created to the customer and how to make customer see the value what the company brings. According to (Johnson et al. 2011: 44). the CVP consists of three sub elements that are (i) Target customer (ii) Job to be done and (iii) offering (Johnson et al. 2011: 47, 50).

### *Target Customer*

The first sub-element of CVP is target customer. The way how to identify value for the customer starts with identifying the target customer that the company has in mind. Companies usually have the necessary assets as the people, technology, products, facilities, equipment and brand. These are required to deliver the value proposition to your targeted customers. Companies could also have processes such as training, manufacturing, service (Johnson et al. 20011: 50).

### *Job to Be Done*

The second sub-element of CVP is the job to be done for the customer. According to (Johnson et al. 2011: 44) a successful company is the one that has found a way to create value to the customers. That is, a way to help customers get an important job done. By “job” (Johnson et al. 2011: 44) mean a fundamental problem in each situation that needs a solution. Once this problem is understood, including the customer job and all its dimensions, together with the full process for how to get the job done, the offering can be designed (Johnson et al. 2011: 44).

Business practice suggests that the best CVPs are created, when alternative products and services have not been designed with the real customer job in mind, and the offering was designed so that to get that job done perfectly (Johnson et al. 2011: 44).

### *Offering*

The third sub-element of CVP is the offering. After the company has fully understood the job to be done, the company can start planning the offering. The offering is the final stage of CVP (Johnson et al. 2011: 45).

Summing up, a *CVP* relates to how the customer perceives value offered by the company.

### PROFIT FORMULA

The second key element in Johnson's business model is the profit formula. Johnson et al. describes the profit formula as a blueprint that defines how the company plans to capitalize on providing this offering to the target customer. Profit formula is factor that is producing value for your company along with factors such as revenue model, cost structure, margins, and inventory turnover (Johnson et al. 2011: 45).

The profit formula by (Johnson et al. 2011: 50) consists of four sub-elements. The first is the revenue model. The second is cost structure. The third is margin model. The fourth and the final is resource velocity.

### *Revenue Model*

The first sub-element of profit formula is revenue model. Revenue model can be described by: Price x volume. By more specifically, this concept is of how much money can be made by simply calculating: Price x volume. Volume can be thought of in terms of market size, purchase frequency, ancillary sales and so on (Johnson et al. 2011: 45).

### *Cost Structure*

The second sub-element of profit formula is cost structure. The cost structure means the direct costs and indirect costs, economies of scale. Cost structure will be predominantly driven by the cost of the key resources required by the business model. By the cost structure Johnson et al. means all the costs the company has with its business (Johnson et al. 2011: 45).

### *Margin Model*

The third sub-element of profit formula profit formula is the margin model. The margin model means the expected volume and cost structure, the contribution needed from each transaction to achieve desired profits. By margin model Johnson et al. means, what is the profit of every transaction to reach the targeted profit level (Johnson et al. 2011: 45).

### *Resource Velocity*

The fourth sub-element of the profit formula is the resource velocity. Resource velocity means how fast the company needs to turn over inventory, fixed assets, and other assets, and overall, how fast the company needs to utilize resources so that to support the expected costs based on the volume and anticipated profit (Johnson et al. 2011: 45).

Summing up, the profit formula relates of how the money is earned by providing this offering to the target customer.

## KEY RESOURCES

The third key element is key resources. The key resources are assets such as the people, technology, products, facilities, equipment, channels, and brand. These assets are required to deliver the value proposition to the targeted customer. The core of this element is that the assets create value to both, company and customer in the interaction (Johnson et al. 2011: 46).

The key resources consist of seven sub-elements. The first is people. The second is technology and products. The third is equipment. The fourth is information. The fifth is channels. The sixth is partnerships and alliances. The seventh and final is brand (Johnson et al. 2011: 50).

### *People*

The first sub-element of key resources is people. By people Johnson et al. discusses of employees that are working in the company. Employees create resources to the company by their professional invest to the company and customer (Johnson et al. 2011: 51).

By people being a resource Johnson et al. means that the value the company and customer receives is shown in the product or services where the profession of the working people is directly or in-directly seen.

#### *Technology and products*

The second sub-element of key resources is technology and products. These are the technologies or / and products that generates more value to the company. Such a product could be an update from the previous version that company has made known before (Johnson et al. 2011: 43).

By technology and products being the resource Johnson et al. means that the company can for example learn from the previous versions of designed or produced technologies and products.

#### *Equipment*

The third sub-element of key resources is the equipment. Equipment is an asset with which people in the company can work together. In example when producing same product in different locations, the equipment must be similar to receive the same outcome (Johnson et al. 2011: 46).

By equipment being the resource Johnson et al. means that equipment could be a manual or guidelines or standard about how to produce the product or service.

#### *Information*

The fourth sub-element of key resources is channels. With this asset Johnson et al. meant of operating system within the production. With that system the operators in intra logistics of the company could be in real time aware of where abouts (Johnson et al. 2011: 54).

#### *Channels*

The fifth sub-element of key resources is channels. With this asset Johnson et al. means that the channel is the way that exports or / and imports goods as an information or physical products (Johnson et al. 2011: 51).

### *Partnerships and alliances*

The sixth sub-element of key resources is partnership and alliances. With this asset Johnson et al. means reliable connections between companies or with companies and customers that increases value to partnership (Johnson et al. 2011: 51).

### *Brand*

The seventh sub-element of key resources is brand. This asset is for target the value of the product or service to the customer (Johnson et al. 2011: 46).

By brand being the resource Johnson et al. means that brand could be example the promise of the quality of the product or service.

## KEY PROCESSES

The fourth element is key processes. Successful companies have operational and managerial processes that allow them to deliver value in a way they can successfully repeat and increase in scale. These may include such recurrent tasks as training, development, manufacturing, budgeting, planning, sales, and service. Key processes also include the company's rules, metrics, and norms (Johnson et al. 2011: 46).

Companies will almost always need to integrate their key resources and processes in a unique way to get a job done perfectly for a set of customers. When they do, they almost always create enduring competitive advantage (Johnson et al. 2008: 52).

The key processes consist of three sub-elements. The first is processes. The second is rules and metrics. The third is norms.

### *Processes*

The first sub-element of key processes is processes. Processes are leverage to the resources. Processes are example training, manufacturing and service (Johnson et al. 2011: 46).

### *Rules and metrics*

The second sub-element of key processes is rules and metrics. In generally, investments margin requirements, such as supplier terms, credit terms and lead times (Johnson et al. 2011: 50).

### *Norms*

The third sub-element of key processes is norms. It is a way to approach channels and customers (Johnson et al. 2011: 50).

## 2.2.3 Business Model Canvas

Osterwalder et al. gets close to a business model developing with nine elements and like (Osterwader et al. 2010) describes them building blocks.



Figure 4. Business model Canvas

Business model canvas is consisting of nine different building blocks. These nine building blocks are (i) key partners, (ii) key activities, (iii) key resources, (iv) value propositions, (v) customer relationships, (vi) channels, (vii) customer Segments, (viii) cost structure and (ix) revenue streams (Osterwalder et al. 2015: 16,17).

## KEY PARTNERS

According to (Osterwalder et al 2015: 38) there are four type partnerships (i) strategic alliances with between non-competitors, (ii) coopetition, strategic level partnerships between competitors, (iii) joint ventures to develop new business and (iv) buyer-supplier relationships to assure reliable supplies. Without partners business model is unable to be functional (Osterwalder et al. 2015: 38).

Overall, partners are the factor that enables operate profitable business.

## KEY ACTIVITIES

This building block of most critical activities that organization needs to perform successful for functional business model (Osterwalder et al. 2015: 36).

According to (Osterwalder et al. 2015: 36) activities are functional operations such as production and problem solving.

## KEY RESOURCES

This building block is resources that company has by itself (Osterwalder et al 2015: 34).

According to (Osterwalder et al 2015: 34) there could be key resources as (i) human resources (ii) intellectual processes (iii) financial processes and (iv) physical resources.

### *Human resources*

According to Osterwalder, employees are often the most important and yet the most easily overlooked assets of an organization. Specifically for companies in the service industries or companies requiring a great deal of creativity and an extensive

knowledge pool, human resources such as customer service representatives, software engineers or scientists are pivotal (Osterwalder et al 2015: 35).

### *Intellectual resources*

According to Osterwalder, these are non-physical, intangible resources like brand, patents, and even partnerships. Customer lists, customer knowledge, and even your own people, represent a form of intellectual resource perspective. Intellectual resources take a great deal of time and expenditure to develop. Once developed, they can offer unique advantages to the company (Osterwalder et al 2015: 35).

### *Financial resources*

This resource includes cash, lines of credit and the ability to have stock option plans for employees. All businesses have key resources in finance, but some will have stronger financial resources than other, such as banks that are based entirely on the availability of this key resource (Osterwalder et al 2015: 35).

### *Physical resources*

According to Osterwalder, the physical assets are tangible resources that a company uses to create its value proposition. These could include equipment, inventory, buildings, manufacturing plants and distribution networks that enables the business to operate functionally (Osterwalder et al 2015: 35).

## VALUE PROPOSITION

This building block is collection of products and services that creates value for customer segment. Value propositions are specific details in product or service that characterizes it (Osterwalder et al. 2015: 23, 24).

## CUSTOMER RELATIONSHIPS

This building block is outline of what type of relationships is established and maintained with each customer segment, and how the customers are acquired and retained (Osterwalder et al. 2015: 28).



According to (Osterwalder et al. 2015: 29) customer relationships is about interaction, digital or personal and various ways to execute interactions.

## CHANNELS

This building block describes how the company and customers communicates and what are the channels to execute communication. (Osterwalder et al. 2015: 26).

According to (Osterwalder et al. 2015: 27) the channels is of product and services selling before and after.

## CUSTOMERS SEGMENTS

This building block is of who and whom the company tries to connect with and sell its products and services (Osterwalder et al. 2015: 20).

According to (Osterwalder et al. 2015: 20) the company can connect small or large businesses to sell its product and services, but it must be based on well-planned decision.

## COST STRUCTURE

This building block describes all costs incurred to operate a business model (Osterwalder et al. 2015: 9).

According to (Osterwalder et al. 2015: 10) there are business models that are either a) cost-driven or b) value driven and it is critical to separate these two from each other.

## REVENUE STREAMS

This building block is of how the money comes into the company (Osterwalder et al 2015: 30).

According to (Osterwalder et al 2015: 31) revenue streams is what is the worth of product or service and how and with what price customer is willing to pay.

### 2.2.4 Business Model Magic Triangle

Magic Triangle is presented by Professor Gassman (Gassman et al. 2020). Magic Triangle differences of two previous presented business models by the dimensions. Magic Triangle is consisting of four dimensions. The first dimension is the customer – Who are target customers. The second dimension is the value proposition - What do we offer to customer. The third dimension is the value chain – How do we produce our offerings. The fourth dimension is the profit mechanism – Why does it generate value (Gassman et al. 2015: 6).

According to (Gassman et al. 2015: 6) a new methodology has been developed that structures the process of innovation of a company's business model and encourages outside-the-box thinking, which is a key prerequisite for successful business models.

Business model has proven its applicability in practical settings many times before. To develop a successful business model innovations within a company, it is critical to not only realize the importance of business model innovation. Also, implement effective business model innovation process within the firm. Usually this is the most difficult, but also the most important step. There are multiple tools developed to support managers during the business model innovation process (Gassman et al. 2015: 6).



Figure 5. Magic triangle

Next this study presents four dimensions presented in figure 5. (Gassman et al. 2015: 7).

#### THE CUSTOMER – WHO ARE OUR TARGET CUSTOMERS?

Every business model serves a certain customer group, in other words, customer segments. It is critical to understand which segments of customer's matters to your company most. Also, it is critical to understand which segments of customer's matter to your company less. Therefore, your company has a knowledge of which segment of customer's company addresses to (Gassman et al. 2015: 6).

According to (Gassman et al. 2015: 6) business model's heart is the customers.

#### THE VALUE PROPOSITON – WHAT DO WE OFFER TO OUR CUSTOMERS?

The second dimension describes what is offered to the target customer. In other words, what brings the value to the customer. Usually referred as the customer value proposition, or, more simplified, the value proposition. It can be defined as a holistic view of a company's products and services that brings the value to the customer (Gassman et al. 2015: 6).

#### THE VALE CHAIN – HOW DO WE PRODUCE OUR OFFERINGS?

To build and distribute the value proposition, the company must master several processes and activities. The build and distribute the value proposition the company must also master its resources and capabilities (Gassman et al. 2015: 7)

#### THE PROFIT MECHANISM – WHY DOES IT GENERATE VALUE?

The fourth dimension explains why the business model is financially viable. The fourth dimension relates to the revenue model. In essence, it unifies aspects such as, for example, the cost structure and the applied revenue mechanisms (Gassman et al. 2015: 7).

## 2.2.5 Comparison of Business Models

This study compares three previous presented business models on a general level.

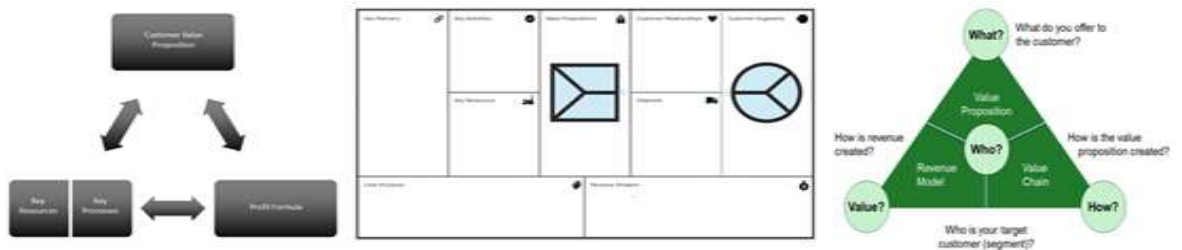


Figure 6. Business models

### BUSINESS MODEL BY JOHNSON ET AL. COMPARING WITH BUSINESS MODEL CANVAS AND MAGIC TRIANGLE

Business model by Johnson et al. consist of four different elements (i) customer value proposition, (ii) profit formula, (iii) key resources, and (iv) key processes. These four elements together hold the building materials for the business model (Johnson et al. 2008: 50).

Johnson & al. business model do not follow any certain line or logic how to build the business model, it is more like holistic view of elements and the business model is combination of them.

Business model canvas is consisting of nine different building blocks. These nine building blocks are (i) customer segments, (ii) value proposition, (iii) channels, (iv) customer relationships, (v) revenue streams, (vi) key resources, (vii) key activities, (viii) key partnerships and (ix) cost structure (Osterwalder et al 2015: 16,17).

According to (Gassman: 2015) business model literature has not yet reached a common opinion of which components exactly make up the business model.

This study speaks business models' elements, building blocks and dimensions as factors. Business models' canvas's factors are named as building blocks even though the

content of these are relatively same with business model Johnson's elements. This study interprets this that business model proposed Johnson et al. is a holistic outcome of elements and sub-elements and that holistic outcome is the business model. This study interprets this that business model Canvas is more like puzzle that is built up peace by peace.

Magic triangle is consisting of four elements (i) the customer – who are our target customers? (ii) the value proposition – what do we offer to customers? (iii) the value chain – how do we produce offering? (iv) the profit mechanism – why does it generate value (Gassman et al. 2015: 6,7).

Comparing Johnson et al. business model to the magic triangle this study interprets that magic triangle has brought new factors (i) who, (ii) what and (iii) how, and that is an interesting way to clarify the mess of previous mentioned elements and building blocks. This study interprets the above so, that with magic triangle there is more information in smaller amount of text.

Because there has been lack of conceptual clarity about business models in the wealth of literature so far, the concept of business model is relatively wide and there is not one truly genuine business model to follow (Long Range Planning 49. 2016: 51).

#### COMPARISON TABLE

The next table describes simple method to merge factors with previous presented three different business models.

Factors for Comparison	CVP	Key Resources	Key Processes	Profit Formula	Value Chain	Dimensions
Johnson et al. Business model	Yes	Yes	Yes	Yes	No	No
Business Model Canvas	Yes	Yes	Yes	Yes	No	No
Magic Triangle	Yes	No	No	Yes	Yes	Yes

Table 2. Factors for Comparison

Depending on the source, business model literature does not have standardized building blocks, elements or dimensions for the one specific business model. Therefore, this study modifies these all three business models to develop conceptual framework.

### 2.2.6 Conceptual Framework

Conceptual framework presents to reader how the different factors combine and therefore conceptual framework helps to imagine holistic picture of subject ([Applied Doctoral Center](#): 25.1.2023).

Conceptual framework is built of five factors by using business model by Johnson et al., business model Canvas and Magic Triangle. This combine of factors was planned to serve the case company's needs best at its starting point.

The combine integrates following factors: The customer CVP, the profit formula, key processes, and key resources. Developing new business model begins with devising a new CVP by what are the factors to create it.

To create a fully operative business from the very beginning the case company must measure these elements and dimensions and what is inside of them and how to use them to start operating business.

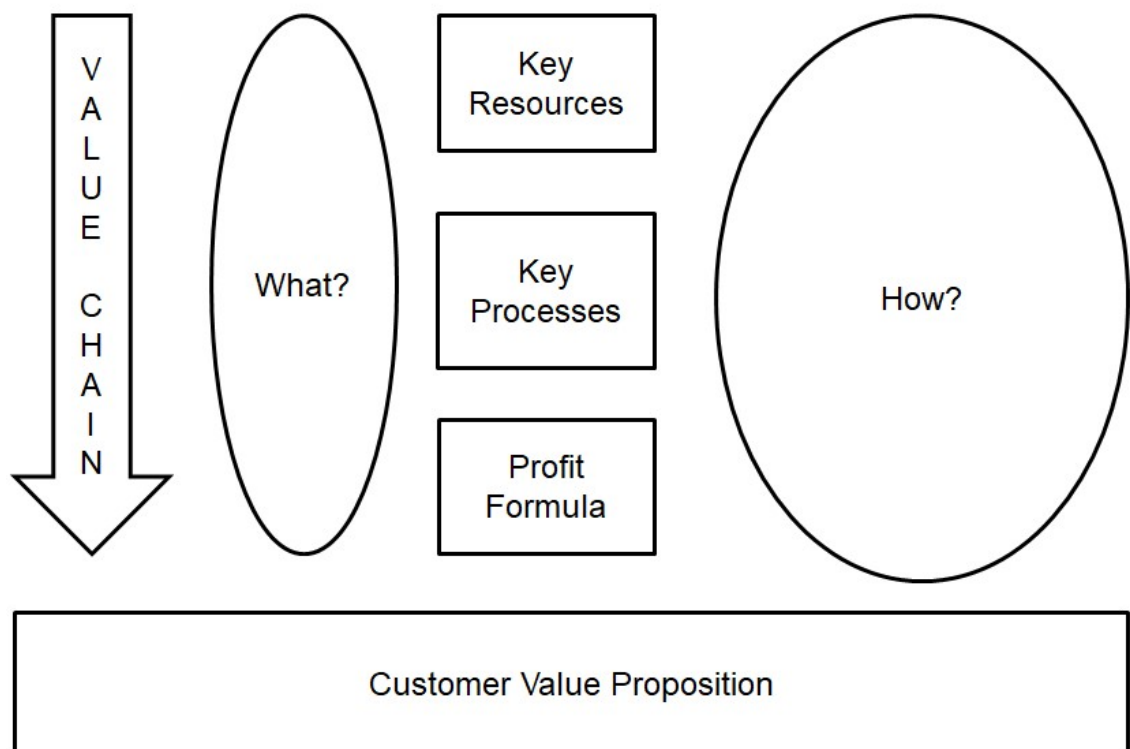


Figure 7. Conceptual Framework

To develop an operative business right from the starting point, this study research the company's founder's own resources and competences. To enable profitable, high quality of service that serves both the customer and the company the following factors were studied and evaluated: (i) key processes, (ii) profit formulas, and (iii) value chains.

With original thesis plan Section 5. Initial business model was supposed to form of conceptual framework presented to the companies that interviews was kept in interview round 2.

### 2.3 Starting Analysis

This sub-section is of starting analysis. Starting analysis is consisting of analogic analysis along with interviews kept with warehouse logistics operators such as Oriola Finland, Toyota Material Handling and Inex Partners. The question that interviews was based on, is presented as Appendix 1.

#### 2.3.1 Overview of a Current State Analysis

A company's future target holds tightly to a well-planned current state analysis which focuses on financial management or service offering ([Greenstep](#): 28.1.2023). Current state analysis of this study is conducted with two methods, by having an interview with warehouse logistics operatives and analogically analyzing company's founder's own experiences from the operating field. When developing the questions for basic ground for interviews and discussion, this study has used data collection presented in section 2.1.3.

The questions were produced for searching the way to find out how to create value to the customer and what are the customer requirements from the outsourced warehouse truck training service and what they are willing to pay for this kind of service.

Current state analysis has been conducted by having an interview with both side of operatives, competitors and potential customers. (i) Inex Partners is a possible customer (ii) Toyota Material Handling is possible rival and (iii) Toyota Material Handling could be business partner and customer in future.

### 2.3.2 Customer Needs Concerning Finished Work

The need of the professional warehouse truck drivers is real. In Finland, there are occasional deaths caused by accidental events with warehouse trucks ([Tapaturmavakuutuskeskus](#): 28.1.2023). Companies who work with warehouse trucks do not typically have enough practical training.

To address this challenge, the case company was planning to offer warehouse truck training as an outsourced service. The business is to make such services more affordable for the companies, as compared to own in-house training.

Customer needs have been charted with well-planned interviews. Interviews were based on following factors (i) preparation like notes and things bringing value, (ii) finding a right way to show the questions, the technique and (iii) how much the interviewer controls the discussion ([Harvard Business Review](#): 28.1.2023). The interview platform the logistics operators is presented in appendix 1.

The interviews were held for Oriola Finland, Toyota Material Handling and Inex Partners. Based on the interviews the companies stated that their requirements and expectations for the training were that it should base on facts and that includes the critical points of the safely using warehouse truck in warehouse environment.

Theory part can be taught to bigger group at once. Points that stood up in interviews were following: (i) Battery Change. How to change battery and what the operator must know while changing it and what to do if something goes wrong with the operation. Things that could go wrong while changing the battery to the warehouse truck, is that the battery gets damage during the operation. (ii) Power source. With what power source equipped warehouse trucks are allowed to operate in what environment. In example warehouse trucks using fossil fuel are not allowed to work interior because of the exhausts. Warehouse trucks those are allowed to work inside uses either electric or gas as a power source (iii) Capabilities and limitations. What are the capabilities and limitations of the machines. These things are example warehouse truck's vertical and horizontal ability to move cargo and weight limitations for cargo. Example when lifting heavy cargo to 7 meters high, too heavy cargo could bring down the warehouse truck. Therefore, all warehouse trucks must include plate or similar what indicates warehouse trucks limitations. (iv) Inspections. What inspections must to be perform before starting to work with



each warehouse truck model. These things are example checking the pneumatic or hydraulic lifting devices before the drive and go around the warehouse truck to see if there are any faults with the wheels or / and controlling device, this can be called as a visual check. (v) Traffic rules. Warehouses follows some logic to handle the traffic within them. If warehouse do not follow any logic and the moving is free, the risk of damage increases ([SafetyCulture](#): 29.1.2023). One way to handle the traffic is to apply general rules of traffic in warehouses. (vi) Critical points. Critical points in warehouse, like blind spots. These are points where is hard or impossible to detect other traffic. (vii) First aid points locations. Customer-based requirements and expectations, the theory of occupational safety and therefore, how to work in warehouse environment is critical according to previous mentioned things by the customers.

Based on interviews and company's founder's own experiences the need of the theory training should be a relevant part in warehouse truck training service. Concerning all points presented the theory part should be the starting point of an education. Based on interviews and company's founder's own experiences it is desirable to have several year of experience with warehouse trucks in warehouse environment before starting to train warehouse truck drivers.

### 2.3.3 Customer Needs Concerning Core Offering

Customer needs are separated by the interviews with the operators on the next table.

<b>Need</b>	<b>Oriola Finland</b>	<b>Toyota Material Handling</b>	<b>Inex Partners</b>
Picking truck operators	Yes	Yes	Yes
Pallet truck operators	Yes	Yes	Yes
Forklift truck operators	Yes	Yes	Yes
Reach truck operators	Yes	Yes	Yes
Training with customers own trucks	Yes	Yes	Yes
Training in customers own facility	Yes	Yes	Yes
Theory training	Yes	Yes	Yes
Practical training	Yes	Yes	Yes
Outsourced training service	No	Maybe	Maybe

Table 3. Customer needs

Table 3. describes warehouse truck types in warehouses of logistics operators presented in this study. Therefore, the case company's service was to train to operate warehouse truck models; (i) picking truck, (ii) pallet truck2, (iii) forklift truck and (iv) reach truck.

The interviews results indicated that business model based on training one specific warehouse truck model operators would unlikely be profitable. Based on the interviews, training the theory of how to handle warehouse trucks and how to operate them in a warehouse environment is also necessary for the fact-based training. Although, the core the training must be dedicated to the development of practical skills of operating a warehouse truck in a warehouse.

Also, based on company's founder's own experiences the need of practical training comes with all previous mentioned warehouse truck models. In warehouse environment the job description can variate during the working day. Job description can variate in example from operating the picking truck to operate forklift or / and pallet truck (loading or / and unloading to cargo), to operate reach truck (to lift up / take down goods).

#### 2.3.4 Customer Needs Concerning Profit Formula

Training services which are benchmarked in study offers 8-hour (One day) course. ([Alertum](#): 19.4.2019), ([Koulutusmaailma](#) 19.4.2019), ([Rocla](#): 19.4.2019), ([Logmil](#): 19.4.2019), ([Länsi-Suomen työturvallisuuskeskus](#) 19.4.2019). These kinds of courses consist mainly or only about theory. In some cases, courses include small practical handling part ([Rocla](#): 19.4.2019). If the company is about to serve professional qualification training the training program must be proven by Finnish Transport and Communications Agency. Note, that company cannot operate as a training center without director with pedagogical qualification ([Finlex](#): 29.1.2023).

Trainer	Price / Person (€)
Alertum	120
Koulutusmaailma	120
Rocla	249
Logmill	100
Länsi-Suomen työturvallisuuskoulutus	100

Table 4. Prices of warehouse truck courses

Table 4 above is conducted by comparing prices between operators that offers warehouse truck card by eight hours session. As shown in table, the prices are between 100 and 120 euros except one exception, Rocla 249 euros. Again, all the courses are one day courses and it seems that the focus is on teaching theory ([Alertum](#): 19.4.2019), ([Koulutusmaailma](#) 19.4.2019), ([Rocla](#): 19.4.2019), ([Logmill](#): 19.4.2019), ([Länsi-Suomen työturvallisuuskeskus](#) 19.4.2019).

According to company's founder's own experience of Rocla's service, it consists of the theory part and practical driving test. Theory part is consisting of general things about operating with warehouse trucks in warehouse environment. Key topics in Rocla's training session are (i) power sources of the warehouse trucks, (ii) driving directions, (iii) warehouse truck's limitations and (iv) general things about safety. After the theory part there is a driving test which is possible to perform with reach truck, stand-on reach truck or forklift truck. The driving test can be divided in three parts: (i) Operator drives warehouse truck face ahead, (ii) operator takes the pallet out of the shelve and puts it back and (iii) operator drives reverse.

### 2.3.5 Buying Criteria

The next table presents results from the buying materials.

Oriola Finland	Toyota Material Handling	Inex Partners
No need for outsourced training service	Price	Price
	Toyota's brand must be shown	Insurance payments
	Professionalism	Professionalism
	Standards of how and what to train	Fact-based training
	Training must happen with customers trucks	Training must happen with customer's trucks
	Training must happen in customer's facility	Training must happen in customer's facility
	Transparency of training	Ability to train with different truck models in practice

Table 5. Buying criteria

#### ORIOLA FINLAND

Oriola Finland is large operator in Finnish pharmaceuticals. Oriola Finland has two target facilities to sell services in Uusimaa region. The first facility is located in Espoo's Niitykumpu and the other facility is located in Espoo's Juvanmalmi ([Oriola](#): 19.4.2019). Oriola Finland has not concerned to outsource their warehouse truck training service.

#### TOYOTA MATERIAL HANDLING

Toyota Material Handling is warehouse truck training facility and it operates with most common warehouse truck types. Toyota Material Handling is located in Vantaa's Korso ([Toyota Material Handling](#): 19.4.2019). If Toyota is buying warehouse truck training service as a subcontracting, then Toyota's brand must be shown clearly to the end customer. Toyota also emphasized that the transparency of the training would be one of the buying criteria. The principle behind this was that in future there might be and is desirable

to have standards for the warehouse truck training service and transparency of training contributes it. Toyota has come to conclusion that the training must take place in customer's own facility with customer's own warehouse trucks.

## INEX PARTNERS

Inex Partners is a large Finnish logistics operator with most common warehouse truck types. Inex Partner's facility is located in Sipoo ([Inex](#): 19.4.2019). Inex's buying criterions would be the price and the possible mitigation in insurance payments. Inex was emphasizing safety before all and savings realized by improved safety. Buying criterions would also be fact-based training. According to Inex the training must take place in customer's own facility with customer's own warehouse trucks.

As shown in above table, the highest criterion for the service is money. Both, Toyota and Inex emphasized the importance that the trainer has experience from the field. Important was also that the trainer has practical experience with commonly used warehouse truck models in warehouse industry.

### 2.3.6 Analogical Analysis of Competitors

Analogical analysis depends on four principles. (i) The strength of an analogy depends upon the number of similarities (ii) Similarity reduces to identical properties and relations (iii) Good analogies derive from underlying common causes or general laws (iv) A good analogical argument need not pre-suppose acquaintance with the underlying universal (generalization) ([Stanford Encyclopedia of Philosophy](#): 20.1.2023).

	Alertum	Koulutusmaailma	Rocla	Logmill	Länsi-Suomen työturvallisuuskoulutus	Trukkikoulutus
Theory instruction	Eight hours	Eight hours	Eight hours	Eight hours	Eight hours	As long as needed
Practical instruction with different truck models	No	Minor	Minor	Minor	Minor	As much as needed
Own facility where to train	Yes	No	Yes	Yes	Yes	No
Own machines to train with	No	No	Yes	Yes	Yes	No
Training service that comes to customer	No	No	No	No	No	Yes
Traning service with customer's own trucks	No	No	No	No	No	Yes

Table 6. Service of the competitors

As presented in table 6. the competitors offer one day course. Some of the competitors has their own warehouse trucks and facilities where to train. None of the known competitors offer customer tailored service.

## 2.4 Analysis of company's founder's Own Competences and Resources

This sub-section is of research the company's founder's and case company's own competences and resources. This section presents the company's founder's own practical warehouse truck handling knowledge.

### 2.4.1 Physical Competences and Resources

The case company has no physical competences or resources at this point. According to interviews these are of secondary importance for starting the company. According to the interviews there is no necessary need for the physical assets. According to interviews

the best practice on instruction seems to be training warehouse truck drivers with customers own warehouse trucks in customer own production facilities, where the actual work is done.

#### 2.4.2 Intellectual Competences and Resources

The case company will be developed by the safety first -principle. Safety is viewed as the key of generating create value to the customer. This is realized by decreasing indirect costs that will arise from for example accident with warehouse trucks, which lead to loss of money, in other words.

The second competence and resource is the customer knowledge. Like presented in section 1. the company's founder has been working with the large Finnish operators in warehousing logistics field. Therefore, connections to many operators have already been established. The company's founder has been expanding the case company's connections by interviews with other operators in warehousing logistics field, such as Toyota Material Handling. In order to build a working customer network, the case company has to develop connections between operators in logistics field. Collaboration and connections with the other operators in warehousing logistics field should also be considered important aspects of the customer network.

#### 2.4.3 Human Resources

According to (Osterwalder 2015: 34) employees are often the most important asset for the company. Initially, the case company will employ only the company's founder. According to interviews kept, the training should be based on facts. Therefore, the human resource is of the company's founder himself and his practical handling experience with many types of warehouse trucks, which is critical to the case company.

#### 2.4.4 Financial Resources

The case company's financial resources are limited. The case company has received financial support for the first months from Finnish Work and Economic Development Office. On other hand, the case company is not required to have large financial resources based on the interviews. This conclusion is the outcome of the interviews kept. According



to study.com to understanding the need of external funding is critical and the company must weight it's financial state to growth it is terminated target to ([Study](#): 23.1.2023). The best possible way to train warehouse truck drivers is with customer's own warehouse trucks in customer's own facility. Therefore, large amounts of capital is not necessary as there is no need to invest into warehouse trucks and private training facility, and therefore it is possible to start the business with low initial financial investments.

#### 2.4.5 Professional Competences and Resources

The next table presents company's founder's work experience with warehouse trucks.

	Inex partners (months)	Heinon tukku (months)	Oriola Finland (months)
Pickig Truck	20	23	6
Pallet Truck		23	6
Forklift Truck		23	
Reach Truck	15	23	6
Stand-on Reach Truck		23	

Table 7. The company's Founder's Work experience

Table 7. above describes the work experience that the company's founder has with each warehouse truck type. Note, that the company's founder could have worked with different

types of warehouse trucks in a same period. Measured in months, the picking truck handling would be the strongest knowhow together with forty-nine months experience altogether. The second strongest handling knowhow is with reach truck with forty-four months experience altogether. The third strongest handling knowhow is with pallet truck with 29 months experience altogether. The fifth and sixth strongest handling knowhow is with forklift truck and stand-on reach truck with 23 months with each warehouse truck.

According to data presented of the Table 7. the company's founder has relatively wide experience of operating the most common warehouse truck types

#### 2.4.6 Summary of Operating Environment

Strenghts	Reverse Side	Weaknesses
Unique kind of service by training practical skills with various truck models	Is not known	Multiple choices of where to buy theory instruction
Small starting costs	Insurance costs	Material damage could cost a lot
Lots of potential customers	Every warehouse is unig with its own ways	
Free hands to develop the training	No standards	There are lots of vain instructors in theory training field
Entrepreneur's own experience on working with trucks		
Entrepreneur's education		
Entrepreneur's connections in logistics field		
		Stubbornes, unableness to see the value of safety
		Resistance to change
Interest to the service from the field		

Table 8. Strengths, reverse side and weaknesses in operating field

During this study, there was no other warehouse truck training service whose main domain was to teach practical skills and technical know-how of the warehouse trucks. The case company was unique in this way because its main domain will be based mostly on practical training. Because there are number of different warehouse truck manufacturers, the case company's idea is to train at the customers own facilities with customer's own warehouse trucks. That is requiring long contacts with customers or at least being familiar with the customers machines and facilities. Therefore, the benefit of the instruction will be pointed straight to where the actual work is done.

## 2.5 Developing a Business Model for Warehouse Truck Training Service

This sub-section is of results of the current state analysis and the conceptual framework towards the building of the proposal using Data 2.

### 2.5.1 Overview of Proposal Building

To build a new business model to a new company this study has gathered information of interviews with Finnish logistics operators and the results are presented in section 2.3. and 2.4. The information from the interviews is implemented with the principles of literature and the conclusions of this chapter is result of that work.

### 2.5.2 Developing Key Resources

One factor of this study is to research company's founder's own resources and competences.

The key resources for the case company is company's founder's channels to logistics work-life and long experience from the warehouse truck operating with different models of warehouse trucks. The case company's number one selling argument is safety. Therefore, the case company's name and safety are targeted to go forward hand-in-hand aiming to create a brand. The interviews indicated, that about the case company's name matters, but the corporate form is irrelevant and has not affect with buying decision.

### 2.5.3 Developing Key Processes

The case company's key processes can be divided in three processes: Rules, sales and marketing and service.

#### RULES

The standards are expectations from the case company, trainer himself and from customer who has paid for the service. In other words, the case company is obligated to create standards to its training service. It is desirable to uphold some sort of measurement of passing the training. This could also be understood as grading the operating skills of the student in their competences such as (i) theoretical knowhow, (ii) knowledge of working environment and its rules, (iii) theoretical knowledge of warehouse trucks capabilities and limitations and (iv) practical handling skills of the warehouse trucks.

#### SALES

Most of the competitors are found from the internet and the primarily marketing is presumably centered there. In this section study uses information from interviews and buying criteria to develop its sales and marketing.

Different customer seems to have different requirements and expectations from this kind of service. However, common things which had value in interviews was the price of the service. To sell this kind of service the customer must have understood the financial benefit he / she gets. The financial benefit is consisting primarily of savings from costs of accidents and material damages. By that this study is concerning of broken goods and injuries. Savings could also be some sort of mitigation from insurance payments by insurance companies risk analysis ([Tapaturmavakuutuskeskus](#): 8.2.2023). Therefore, the case company is obligated to get close to with insurance companies and let them know about the pitfalls in industry and how improve practices into safer and more profitable direction.

#### SERVICE

The holistic quality forms services such as a) certainty of delivery and b) individual attention of customer's needs. In warehouse truck training business field there are lots of

variation of warehouse industry like example traffic rules that warehouses follow ([SafetyCulture](#): 29.1.2023). Therefore, the warehouse truck training service must tailor to its customers individual needs for developing its tailored service.

#### 2.5.4 Developing Profit Formula

The case company is obligated to measure how much customers are willing to pay for the practical training service. The results gathered from interviews according to pricing was that when training practically handling warehouse trucks, the agreeable price could be 150 euros per day. The result of the interview was that the practical training should last at minimum three days. Therefore, the price for that would be minimum 450 euros. Results from the interviews reveals that theory instruction is necessary in addition of practical training. The result from interviews reveals that the theory training day offers starts from 1500 euros, when customer requires the trainer to come instructing to its facility. Therefore, four days course including three days practical training and one theory day, total amount would be  $3 \times 150 \text{ euros} + 1500 \text{ euros} = 1950 \text{ euros}$ .

The trainer is obligated to consider the possibility to train several trainee's in same time without jeopardizing safety. This is for maximizing the profit.

The result from interviews reveals that the prices of the one days warehouse truck courses are roughly 120 euros per participant. Like mentioned previously the company's founder has completed Rocla's one day course. According to this, during that training day at Rocla's there were approximately 20 participants on that course. Therefore, the total amount for the training day was  $20 \times 249 \text{ euros} = 4980 \text{ euros}$ .

#### 2.5.5 Developing Value Chain

The original idea behind the value chain has come from Michal Porter about how does the value form to the customer with company's own operations ([Harvard Business School](#): 8.2.2023). The idea of developing value chain is how all participants in supply chain could get material and immaterial benefit.

In this study the base ground of generating the value chain comes from idea, that when the training is finished the subscriber benefits financially by safety and therefore with

savings in repair expenses and material procurement. Also, the case company receives monetary compensation of its efforts.

### 2.5.6 Developing Dimensions

This study uses dimensions to develop the business model for its starting point. The dimensions are what and how. Johnson et al. business model or the Business Model Canvas does not directly handle these dimensions. Therefore, this study has used the Magic Triangle as a one literature source for data collecting for to develop the outcome of this study.

For the case company to sell its service, it must know and understand what the product to sell is and what it is consisting of. For the case company to sell its service it must understand what the service is. This section aims to clarifying these two dimensions and about how to implement them as a part of the resulting business model.

### 2.5.7 Customer Value Proposal

CVP is the core element of this study. The case company must know what are these factors that creates value to the customer. This sub-section is generated according to conceptual framework presented in section 2.2.6.

All previously presented elements and dimensions combined generates the CVP. Value chain is one of the key factors in this study presented in section 2.5.5 The idea of developing value chain is to enable all participants in supply chain materially and immaterially.

### 3 Analysis of Small Business Failures

This section presents small business failures generally. This section presents five stages of small business growth, lean start-up model and common reasons for start-up failure

#### 3.1 Research of Difficulties in Small Business Growth

This sub-section presents five stages of small business growth. According to Churchill and Lewis ([Harvard Business Review](#): 5.12.2022) Small businesses sizes and growth capacities varies rapidly. That is why building a growth pattern and categorize problems at very early stage could be impossible tasks to small businesses. Small businesses are usually characterized by their independent way of operation and there are variations in organizational structures and management.

According to literature utilized in this study it seems that building framework helps company to understand its challenges (Johnson et. al. 2011), (Osterwalder et al. 2015), (Gassman et al. 2015). According to Churchill and Lewis ([Harvard Business Review](#): 5.12.2022) Business Growth follows five stages that are stage (I) existence, stage (ii) survival, stage (iii) success, stage (iv) take off and stage (v) resource maturity. These stages are characterized in Figure 8. These five stages are presented next in figure 8 ([Harvard Business Review](#): 5.12.2022).

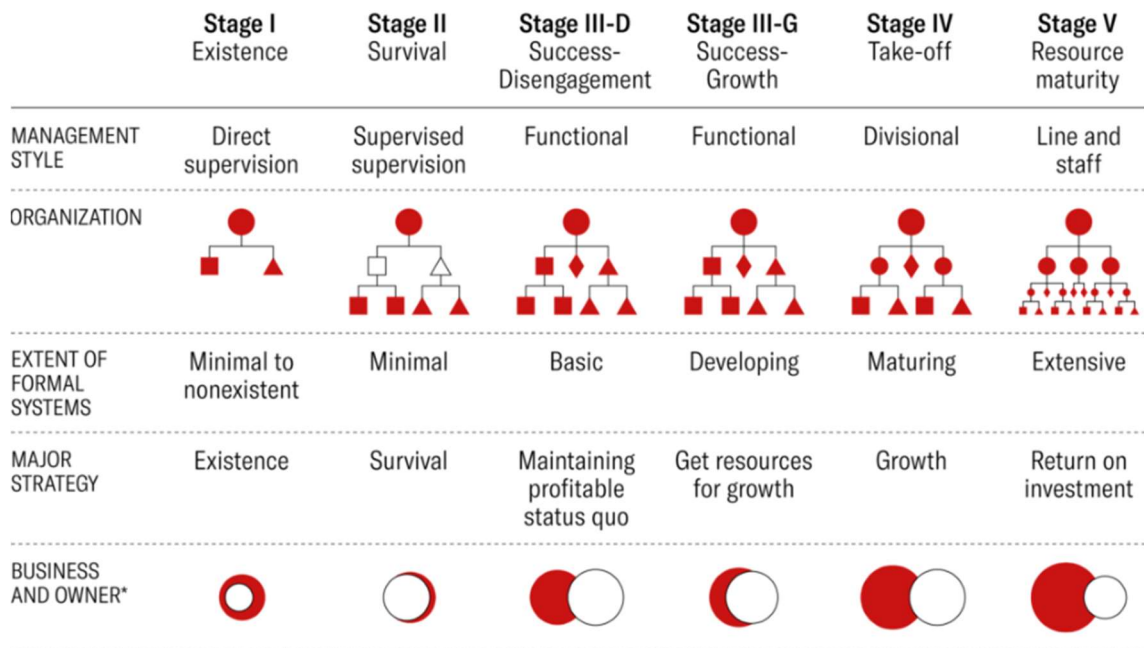


Figure 8. Characteristics of each stage of development

### 3.1.1 Stage 1. Existence

This stage describes the main key questions of how the company could start its operations. How the company attracts customers and how to get contracts and how to organize logistics. The first key question in this stage is how the company maintains its quality and develops it using example delivery times and certainty as indicator. The second key question in this stage is, is it possible to grow the production and search for new customers or could the company grow its production scale for generating more sales. The third key question in this stage is what financial realities are now. Is the company in that stage that it could cover its expenses while developing extension ([Harvard Business Review: 5.12.2022](#)).

In this stage company is usually the entrepreneur himself / herself. All the coordinating work and management are done by the entrepreneur. Most of the company's tasks are done by the entrepreneur being the asset for the company by taking care of relationships and financial tasks ([Harvard Business Review: 5.12.2022](#)).



### 3.1.2 Stage 2. Survival

To reaching this stage the company must have shown to its customers that it can operate as reliable partner. The company has succeeded to attract customers to practice business with their products or services. The main problem in this stage is how to organize them expenses and therefore, how to make profit with existing sales. The first key question in this stage is what the ways are to increase profit to cover all expenses in short run. The second key question in this stage is what are the ways to increase the profit for the company so it could continue its growth and what are the ways to generate financial value on our labor and assets ([Harvard Business Review](#): 5.12.2022).

In this stage the business is still small. There is usually organizational growth after stage 1. and the labor force has grown. There could be sub-manager or foreman as a help on coordinating and management. Focus is still on surviving ([Harvard Business Review](#): 5.12.2022).

### 3.1.3 State 3. Success

In this stage the company has reached the point that its business is profitable and stable. In this stage the company must weights its future business and operations - Does it want to grow or stay stable. The company could operate (i) as base ground to growth or (i) management disengagements from the company in example starting a new business and the company's state stays stable. ([Harvard Business Review](#): 5.12.2022)

In Sub-stage III-I the company has grown and is in possession of a market sector gaining profit indefinitely if the circumstances stay stable and no environmental change cause difficulties to it. ([Harvard Business Review](#): 5.12.2022)

In Sub-stage III-II the owner or owners coordinates the profits and resources grow company and risks it all. ([Harvard Business Review](#): 5.12.2022)

#### 3.1.4 Stage 4. Take Off

In this stage the company expands its business and operations aggressively and therefore, the owners must have the tools of how to handle financially aggressive expansion. ([Harvard Business Review](#): 5.12.2022)

In this stage owners must develop a way to delegate its responsibilities successfully to the lower management and therefore, the management must be capable of effective growth. In this stage company's owners must tolerate a high debt-equity ratio. ([Harvard Business Review](#): 5.12.2022)

#### 3.1.5 Stage 5. Resource Maturity

In this stage company has had knowhow of handling financial realities what aggressive growth has brought into. Secondly, the company must have knowhow about how to maintain aggressive growth and at the same time keep the small business benefits like flexibility and spirit of entrepreneurship.

The company must develop a way to increase lower management and foremen in constantly evolving and growing production and sales. The company must develop a way to loose inefficiencies that can come with growth. In this stage company has a lot of planning tools, in example budgets, strategic plans and systems. ([Harvard Business Review](#): 5.12.2022)

### 3.2 Lean Start-Up Model

This sub-section presents Lean start-up model. According to Blank ([Harvard Business Review](#): 5.12.2022) starting up a new business is always search shooting at the best. Old way is to build a business model, gather investors, create a product, build a network and then start to sell as hard as you can. Blank reminds, that according to research produced by Harvard Business School 75% of all start-ups fails. ([Harvard Business Review](#): 5.12.2022)

Now we have a competitor with old fashion business model, and it's called Lean Business Model. This new lean business model does not follow traditional line, that the company's founder or founders forms a business model which is forecasting, at the best ([Harvard Business Review](#): 5.12.2022).

Instead of building a business model and forecasting the future lean business model favors experimental try out that relies on customer feedback ([Harvard Business Review](#): 5.12.2022).

According to Blank ([Harvard Business Review](#): 5.12.2022) a) business plans do not typically survive from the first contact with the customers. b) old school business plan forming and forecasting are dreaming and wasting time. c) Start-ups are their own individuals, not miniatures of the big companies.

According to Blank ([Harvard Business Review](#): 5.12.2022) one of the largest differences between old school business model and lean business model is, that lean business model "looks" for one.

Lean business model has three key principles. 1. Instead of planning and research the founder writes him or her hypothesis in framework such as Canvas Business Model. 2. Listen to customers. Company test markets and scales into them. 3. Lean start-ups practices agile development. This means that instead of years of planning of finished product lean method divides plannings into smaller pieces ([Harvard Business Review](#): 5.12.2022)

Lean	Traditional
<b>Strategy</b>	
Business Model Hypothesis-driven	Business Plan Implementation-driven
<b>New-Product Process</b>	
Customer Development Get out of the office and test hypotheses	Product Management Prepare offering for market following a linear, step-by-step plan
<b>Engineering</b>	
Agile Development Build the product iteratively and incrementally	Agile or Waterfall Development Build the product iteratively, or fully specify the product before building it
<b>Organization</b>	
Customer and Agile Development Teams Hire for learning, nimbleness, and speed	Departments by Function Hire for experience and ability to execute
<b>Financial Reporting</b>	
Metrics That Matter Customer acquisition cost, lifetime customer value, churn, viralness	Accounting Income statement, balance sheet, cash flow statement
<b>Failure</b>	
Expected Fix by iterating on ideas and pivoting away from ones that don't work	Exception Fix by firing executives
<b>Speed</b>	
Rapid Operates on good-enough data	Measured Operates on complete data

Figure 9. Lean and traditional business models comparison

Above figure 9. compares seven different phases comparing lean business model with traditional business model. (i) Strategy. In lean model strategy is hypothesis and in traditional model it is implementation driven. (ii) New product process. In lean model success of a new product is hypothesis and product should be tested. In traditional model company starts to market the product. (iii) Engineering. In lean model engineering is agile and products are developed step by step, through mistakes and succeeds. In traditional

model the product was also built iteratively, or the product was defined how it is going to be done before manufacturing it. (iv) Organization. In lean business model the organization is evolving unit. In traditional model organization is executive unit. (v) Financial reporting. In lean model financial reporting is customer-based expenses and value. In traditional model the focus is on physical money. (vi) Failure. In lean model failure is expected and then fixed right after the failure. In traditional model failure is exception and unforgiven mistake that leads to firing of executives. (vii) Speed. In lean model the speed is fast and the flow is in palpation. In traditional business model the speed is predetermined ([Harvard Business Review](#): 5.12.2022).

### 3.3 Common Reasons for Start-up Failure

This sub-section presents common reasons why start-ups fail.

When we take a closer look for start-up failures it is critical to understand what are we looking for? Are we looking failures start-ups generally, in other words are we looking all new companies that failed or are we looking for start-ups that has come with a new innovation?

In this study we take a closer look for all start-ups that has failed and reasons to it. Case company's business idea is not totally new, and it has been implemented in practice before with different variations. See section 2.3.5.

Next, in figure 10. this study presents start-up failure rates through the years.

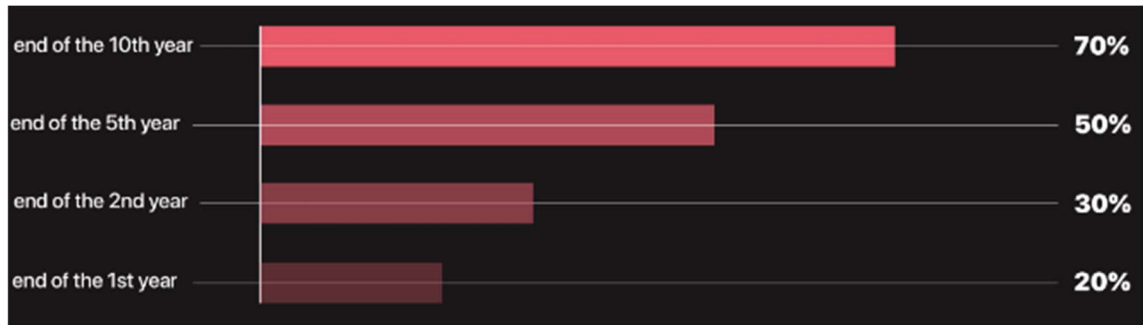


Figure 10. Failure rates through years

As presented in figure 10. (i) 20% of the all new businesses fails in first year. (ii) 30% of the all new businesses fail in second year. (iii) 50% of the all new businesses fail in third year. (iv) 70% of the all new business fail in 10 years ([Failory](#): 6.12.2022).

The most common reason why start-ups fail is the lack of funding. Of course, the early-stage start-ups carries bigger risk to fail and therefore raising capital could be challenging. In most cases start-ups are funded by founder's and entrepreneurs own savings, or capital comes from friends and family ([Failory](#): 6.12.2022).

Founders and entrepreneurs should accept the fact that most likely the business is going to fail if the idea is even remotely new ([Failory](#): 6.12.2022). There are plenty of other reasons why start-ups mostly fail, such as marketing, markets and inner problems in company. Next in figure 11. this study presents common reasons start-up failure.

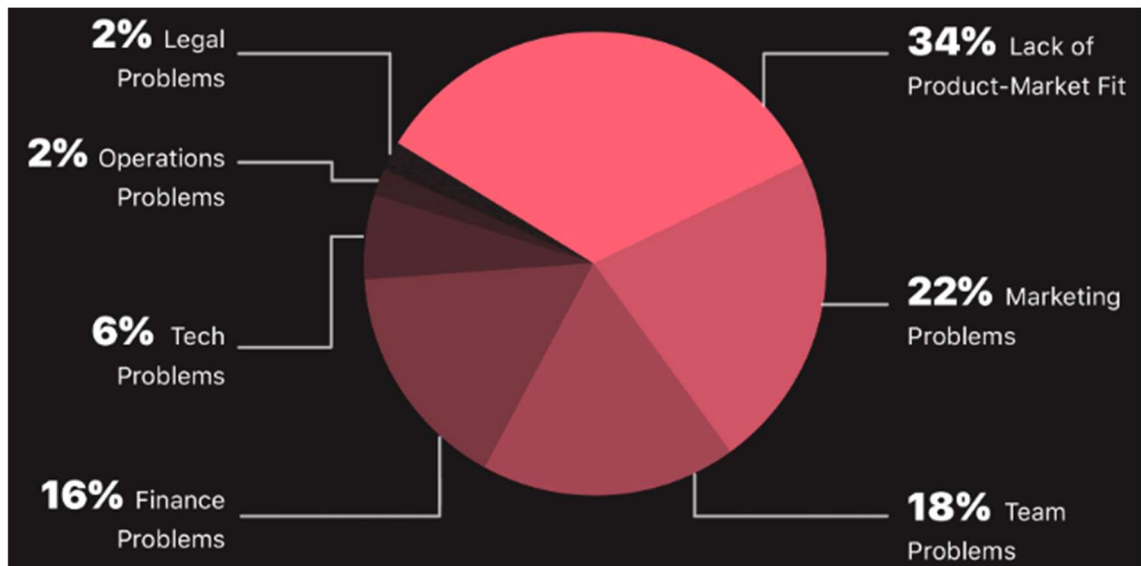


Figure 11. Common reasons for start-up failure

As presented in figure 11. (i) the biggest reason why start-up fail is that it does not find its place in markets. (ii) The second biggest reason why start-up fail is that it has problems with marketing. (iii) The third biggest reason why start-up fail is inner problems with team. (iv) The fourth biggest reason financial problems. (v) The fifth biggest reason is technical problems. (vi) The smallest problems are legal problems and problems in operations ([Failory](#): 6.12.2022).

More reasons for start-up failures are (i) Lack of money (ii) No need for the product (iii) Cost issues (iv) No investors (v) Undeveloped business (vi) Lack on enthusiasm (vii) Ignoring customers opinion (viii) Great power of competition (ix) unattractive product (x) Burnout ([ResearchGate](#): 28.1.2023)

According to research ([ResearchGate](#): 28.1.203) there are three critical factors the small business should focus (i) Having the right people (ii) Focusing on customers rather than technology and product (iii) Concentrating on sales.

See section 4. for discussion data presented in section 2. and 3. comparing to the case company's failure.

## 4 Discussions

This section discusses of mistakes made in planning business model. This section also discusses of mistakes made in competitor analysis and case company's starting point.

### 4.1 Background for Discussions

This study is produced in two periods. The first period was produced in 2018-2019 when the case company failed. The second period was produced in 2022-2023 and the focus became of what were the pitfalls the case company fell by using the case company as an example. The first period of this study that was produced in 2018-2019 is presented in section 2. Section 3. that presents LEAN-business model was produced in 2022-2023. Therefore, the original conceptual framework was developed with the knowledge based on old and traditional business models. Sections 4. and 5. are also produced in second period 2022-2023.

The case company was initiated after the conceptual framework and the results of the round two interview was gathered. The case company initiated its operative level business without a business model. The case company started operating after original stage 3. was finished and were guided by the conceptual framework and starting analysis. See figure 2.

Literature sources were selected to present perspective and different angles for what kind of pitfalls there may be on the new businesses road and how to manage them. Literature sources support and formed the base to build the conceptual framework. Conceptual framework was supposed to be used the base to build the proposal business model. The original objective was that the literature review focuses on different factors of a business model and would merge them into one conceptualized business model guiding of how to start the business with the outcome of the business model.

With the original thesis plan the conceptual framework was supposed to be built in stage three after the literature. The original plan in stage three was also produce an objective starting analysis, revealing the needs of the customers and the offerings from the competitors, as well as investigating the processes and resources needed from the start-up to start this new business. In the fifth stage, the proposal or proposals that were produced



by data collected was supposed to be valid. In the sixth stage, validation of initial business model was supposed to be done by data previously mentioned including results of interviews with key customers of their opinion of the offering. See figure 2.

The case company started its operative level business before this study was finished and started to operate after the conceptual framework was finished with the original thesis plan. Also, despite the lack of results of competitor analysis the case company started its operative business and failed. Therefore, the focus of this study changed and became of what were the pitfalls the case company fell by using the case company as an example.

#### 4.2 Discussion of Mistakes in Planning Business Model

This sub-section discusses of presented business models in this study and presents argument about are these business models useful in modern day business.

At first, the general business field is developing all the time and only constant factor is change ([Stanford Encyclopedia of Philosophy](#): 27.1.2023). Business models presented and used in this study in section 2. are forecasting, at best. There is a new business model, called LEAN-business model and with this model companies more like learns of their own starting point mistakes and adapt their operations with the best perceptions. The old and traditional business models used in this study was (i) Johnson et al. Business model, (ii) business model Canvas and (iii) Magic triangle. These old and traditional business models are most likely useful in many cases but when starting small business within in relatively new business field, the big question is where goes the line with forecasting? Academics have also discussed of importing green values into business models ([ResearchGate](#): 28.1.2023). Could informing green value be something to sell with?

Like presented earlier the business field is changing and developing all the time ([Stanford Encyclopedia of Philosophy](#): 27.1.2023). This is one reason why companies face difficulties in everyday business. Therefore, the companies must adapt to the changes. The companies are required to develop their strategic agility (The impact of strategic planning, strategic thinking, and strategic agility on competitive advantage Vol. 22)

The original objective of this study was to develop a new business model and the holistic outcome was supposed to be the combination of three presented business model in section 2. To develop the best possible business model for the case company this study originally came to into conclusion that the best possible way was to combine factors. The core of the study was CVP and the company's founder's own competences and resources. The conceptual framework was developed with these old and traditional business models, and it is combination of factors presented in this study. Conceptual framework is presented in section 2.2.6

LEAN-business model was brought into this study for the basis of comparison between old and traditional business models and new LEAN-business model. Therefore, this study discusses could it have been better to start the case company business without a traditional business model that is forecasting, at best and start the business with LEAN-business model and document its learning and adaptation process. Although, the case company initiated its operative level business after conceptual framework was developed by using old and traditional business models.

Like presented earlier, the case company started its operative level business after the conceptual framework was developed. The idea was to start to sell services directly to the potential corporate customers but also to the private individuals. The case company also produced website to lure the customers even though the marketing was discussed while planning the business model in small manner.

Also, the case company started its operative level business without the knowledge, that it is impossible for the case company to provide professional qualification training ([Finlex: 9.1.2023](#)). See next section.

#### 4.3 Discussion of Findings in Competitor Analysis

This sub-section discusses of findings in competitor analysis and how the case company implemented these findings in process of starting its operative level business.

The result of the interviews was that the first succession 'Uudenmaan Trukkikoulutus' for the company's name was workable. Therefore, the company's founder decided that the

name of the case company was 'Uudemaan trukkikoulutus' for that includes the region where the primarily offering is targeted and what is the domain of the case company.

The first idea was to keep training field as narrow as possible to make the starting point for the case company as light as possible. Meaning, that the first idea was to train only reach-lift truck operators. While the interviews were started, very soon came out that training only reach-lift truck operators is not enough.

During the process in competitor analysis, it was discovered that for reaching the profitable business the case company should apply license to provide professional qualification training proven by Finnish Transport and Communication Agency ([Finlex](#): 9.1.2023) as it did, but was not granted. For granting the license to provide professional qualification training the company that applies it must have operative director with pedagogical qualification ([Finlex](#): 9.1.2023). At the point that first period of this study was produced and the case company initiated its operative level business the company's founder himself did not have pedagogic qualification.

According to Finnish Transport and Communication Agency there could have been a way to receive the license to provide professional qualification training if the company could have hire operative director with pedagogic qualification. The case company decided that it is not hiring operative director with pedagogic qualification due to financial the financial situation of the company. Possible income would most likely not be enough to cover operative director's salary without a financial help, at least in first year or two.

The case company initiated its operative level business by exploring the possibility of whether it would be possible to manage business by offering only informative education. Meaning, that education would not be professional qualification training. Offering only informative education is not requiring the license to operate as a training center ([Finlex](#): 9.1.2023). Also, the results of the interviews backed up the thought, that one day course was not enough to achieve the necessary skills for working with warehouse trucks. Therefore, it also seemed pointless to hire director with a pedagogical qualification and apply the license to operate as a training center, because the competitors presented in this study offered a one-day course and professional qualification education was a one-day course. See section 2.3.4.

Like presented earlier, the original objective of this study was to develop a business model to a new kind of warehouse truck training service. At the time first period of this study was produced and the case company started its operative level business, there was no other operator with similar concept providing more than one day theory course and could possibly scale to its customer needs with their own warehouse trucks in their own facilities. With that concept the case company started its operative level business.

#### 4.4 Discussion of Mistakes in Company's Starting Point

This sub-section discusses of mistakes in case company's starting point.

The case company relied critically on the company's founder's own physical and mental competences and professional resources and ability to form value to customer with them. The case company started its operative level business in 4/2019.

In 4/2019 the case company started to directly sell its services to previous mentioned businesses among many others with poor success. Like presented earlier, the case company also produced its own website to lure customers even though the marketing was researched only in small manner. Websites were produced cheaply and therefore the quality was not great.

While considering the form for the case company, the possible damages during practical training, example broken goods or human accidents costs money and therefore these was things to measure. Although, the results of the interviews were that the company form did not truly matter. The starting point was to initiate the business with single practice and possibly change company form and later on to limited company, if the case company is succeeding.

The case company relied on results of interview round one and therefore, it did not apply for funding. The case company did not have financial resources in its starting point. The decision was to start as light as possible. It seemed that if the product is bought by the customers as it was planned there was no need for external fund. Once more, according to results of interviews kept, it seemed that case company's primarily product was to sell training service with its customers own warehouse trucks in their own facilities. Also, the case company targeted to sustainable growth rate without raising of debt ratio.

The primary channel to reach out to the customers was direct contact. Therefore, it took a lot of effort and time to market the case company and the product to the potential customers. Like told, the case company relied critically on the company's founder's own physical and mental competences and professional resources.

The big questions are:

- (i) Was it a mistake to start the case company with the assumption that warehouse truck training should be more than one day course and scale to its customer's need and assume that the case company can succeed by providing only informative education?
- (ii) Were the company's founder's own mental and physical competences enough to start this magnitude project by himself and therefore, was this too much for one person to take?
- (iii) Could it have been profitable to start an operative level business with a LEAN-business model, or at least research it in the literature?

## 5 Conclusions

This section is of conclusions of this study. This section express author's critical opinion what mistakes the company's founder and case company did in the case company's starting point.

### 5.1 Conclusions of Starting Business Without a Business Model

This sub-section is of conclusions of starting operative level business without a business model. This sub-section expresses the author's critical opinion of that matter based on results of this study.

The case company did not have any functional business model to guide it in its infancy. In this point the author express that the company started its operative level business without any knowledge of how operative business should start up and develop business concerning the case company's future.

Even though, the company's founder has had interviews with logistics operators and therefore, had some sort of knowledge what the market's needs. Like presented earlier it was not clear at the starting point how the case company could create value for the customer. In addition to this, the case company should have thought about marketing of how to sell the value that comes with sold service.

However, the case company started its operative level business after the conceptual framework was developed with original thesis plan. Conceptual framework was developed with information of literature presented in section 2. The LEAN business model was brought into this study in second period and it seems that it could have been helpful for the case company if it has been researched in the first period.

The first round of interviews with logistics operators was based on conceptual framework – original plan was to have two rounds of interviews with logistics operators, the first before the conceptual framework and second for developing the actual business model for the case company. The base idea with the interviews was trying to solve what are the potential customers critical needs if they buy outsourced warehouse truck training service and how the case company could answer to it. One of the mistakes was to start

operative level business after the first round of interviews and therefore, the actual business model was not developed, and the case company did not have anything that could have guided it from the beginning.

The case company tried to start its operative level business with low costs and without a business model. Could it be possible, that if the actual business model was developed, that there might have come out findings with operations that needs external funding? This study interprets LEAN-business model as it could possibly be “Low-Cost Model” where the company learns of its own mistakes adapt to its customer’s needs. Considering, that these kind of training services are relatively small business if using sales as indicator.

## 5.2 Conclusions of Starting Business with Competitor Analysis

This sub-section is of conclusions of starting operative level business with competitor analysis. This sub-section expresses the author’s critical opinion based on results of this study.

### *Professional Qualification Training*

During developing competitor analysis came out, that most of the competitors has a right to provide professional qualification training proven by Finnish Transport and Communication Agency. Even though, the case company had that knowledge it started its operative level business without a license to provide professional qualification training proven by Finnish Transport and Communication Agency. Note, that the case company applied the license but was not granted for it. Note also, that it is allowed for the warehouse truck training service to provide informative education even though it has not license to provide professional qualification education, like presented previously.

With the results of interviews the case company decided that it starts to develop and sell specifically tailored warehouse truck training service to its potential customers. By the time the case company started its operative level business, there was not significant compete with specifically tailored warehouse truck training service. Note, that the competitors sold one day warehouse truck training course and this one course was professional qualification training proven by Finnish Transport and Communication Agency.

Toyota was the competitor that sold specifically tailored warehouse truck training service to its customers, but could small unknown start-up compete with operator like Toyota? Based on company's founder's own experiences it is almost impossible to compete with rival warehouse truck training services without a license to provide professional qualification education – Especially if warehouse truck training service is a new operative in business field and therefore it is unknown to potential customers.

### 5.3 Conclusions of Mistakes in Company's Starting Point

This sub-section is of conclusions of mistakes in the case company's starting point. This sub-section expresses the author's critical opinion of that matter based on results of this study.

#### *Company's name*

Like presented in section 4.4. after a descent consideration the company's founder decided that the name of the case company was 'Uudemaaan trukkikoulutus' for that includes the region where the primarily offering is targeted and what is the domain of the case company. The results of interviews were that the name for the case company was a good choice, for it tells the region where the primarily offering is targeted and what is the domain of the case company. Could it have been more profitable if the company's founder had named the company differentially. It is indicated the name of the company is one critical factor considering its success ([ResearchGate](#): 29.1.2023).

#### *Company form*

The company form matters in many ways and one these matters are legal issues ([ResearchGate](#): 29.1.2023) The case company's form was decided to be single practice. Even though the results of the interviews were that the company form do not matter if selecting outsources warehouse truck training service. This study argues that company form matter and with selection of single practice the company's founder made a mistake. The warehouse truck training field is much of legal instruments and how to implement them in practice.



### *Financials*

Like presented in section 4.3. The case company started to directly sell its services to previous mentioned logistics operators, among many others with insubstantial success. The company's founder developed website for the case company by himself and with this solution tried to save in expenses. Take notice, that the company's founder himself is not graphic designer in any matter. The first-round interview did not take notice to marketing which could be one of mistakes. The focus with interviews was primarily how to create value to the customer. This study has come to conclusion that one mistake was the company's founder's ignorance with marketing. This study focused on marketing insubstantially and that was a mistake.

Based on results of first-round interviews it seemed that there was no need for external funding. Based on results on first round interviews it seemed that the best way to develop the service is offer specifically tailored warehouse truck training service to the potential customers.

Based on that result the case company did not apply for external funding. The primary way to reach out the customers was direct contact. Soon after the case company had initiated its operative level business came out, that the company's founder's physical and mental competences was not enough to develop a service and sell and market it in same time.

Answers to the big questions presented in section 4.4.

- (i) Was it mistake to start the case company with assumption that warehouse truck training should be more than one day course and scale to its customer's need and assume that the case company can success by providing only informative education?

ANSWER: Yes, it was. The company could not compete with its competitors even though it was prepared to scale its services to its customer's needs. In generally, descent preparation in targeted business field's laws and regulations is critical.

- (ii) Were the company's founder's own mental and physical competences enough to start this magnitude project by himself and therefore, was this too much for one person to take?

ANSWER: In this case the case company's founder's own mental and physical competences could have require more research. This study has come into conclusion that this factor is one critical matter in small start-up business developing.

- (iii) Could it have been profitable to start operative level business with LEAN-business model, or at least research it on literature

ANSWER: This study has come to conclusion that even though the LEAN-business model seems to be practical tool to guide companies in starting point level, there is wise to develop some sort of business model by own or use existing one even if it is forecasting mostly. In other words, decent preparation, knowing the company's founder's own competences and develop a business model that forecasts company's future is a working stage for starting start-up business – Also keeping in mind that the change is constant, said Herakleitos ([Stanford Encyclopedia of Philosophy](#): 27.1.2023).

#### *Failures summarized*

- (i) Financial planning
- (ii) Marketing problems
- (iii) No need for the product
- (iv) Undeveloped business
- (v) Great power of competition
- (vi) Unattractive product.

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## **INTERVIEW PLATFORM FOR THE LOGISTICS OPERATORS**

1. How well do you think your warehouse truck operators are aware of safety issues and practical handling of the warehouse trucks?
2. Have you considered of buying warehouse truck training services as outsourced service?
3. What would be buying criterions from outsourced warehouse truck training service?
4. What would be the main issues while training warehouse truck operators?
5. Where do you think that practical training should take place?
6. Is training with one warehouse truck type enough?
7. Is it relevant to train with customer's own warehouse trucks in customer's own facilities?
8. What do you think of how long the training should be?
9. Do you think this field requires standards for training?
10. What would be reasonable price for outsourced training service?
11. Does company form relevant with outsourced warehouse truck training service?
12. What do you think of name 'Uudenmaan Trukkikoulutus'?