

## **Pragmatic approach to project management**

Case Study: Product development at Wolt & Partners

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<p>The main objective of this thesis is to determine the practicalities involve in project management and to spotlight on the processes. The different methodologies and concepts involve in the process of software application product development.</p> <p>The thesis was carried out using case study research using qualitative method approach. The thesis is divided into two parts the theoretical part and the observational part. The theoretical part was based on the literature of Information technology project management, management information technology, agile project management and Scrum actions. While the empirical part was based on an unstructured questions which were ask through interviews.</p> <p>The search indicates that the project management process is very effective and efficient. As it has produced the Wolt application which is one of the best food delivery in Finland and has highly satisfy its end users.</p> <p>In conclusion, Information technology project management concept adds huge value to the process of software application product development. Companies can choose which methodology to follow, as outcome of the process depend on how best the company understands and implement it. Small and medium companies have the advantage of being more flexible than large scale companies and can take upon more risks in the process of software application product development.</p>	
<b>Keywords</b> Project management, product lifecycle, business process, product development, project management methodologies, Scrum.	

## Table of contents

1	Introduction .....	1
1.1	Company's Background .....	1
1.2	Thesis Objectives.....	2
1.3	Vision .....	2
1.4	Research Problem .....	3
1.5	Research Limitation and thesis topic.....	3
2	Introduction to project management .....	4
2.1	The differences between standard and IT projects.....	4
2.2	The triple constraint of project management .....	5
2.3	How to identify project successes or failures.....	5
2.4	The need for organizational commitment to information technology.....	6
2.5	Project phases and life cycle.....	6
2.6	Product Life cycle.....	7
2.6.1	A system development life cycle (SDLC).....	7
2.6.2	Adaptive Software Development Life Cycle (ASD).....	8
2.7	Project management processes.....	8
2.8	Project management methodologies .....	9
2.8.1	PMBOK.....	9
2.8.2	PRINCE2 .....	10
2.8.3	Agile Project Management.....	11
2.8.4	Extreme Project Management(XPM).....	12
2.8.5	Critical Chain Project Management (CCPM) .....	12
2.9	Agile manifesto principles .....	13
2.10	Why are agile and Scrum effective in requirement software project management...	14
3	Research method.....	17
3.1.1	Qualitative research method .....	17
3.2	Research question .....	17
3.3	Data collection process.....	18
3.4	Data Analysis .....	18
4	Result.....	19
4.1	Interview .....	19
4.2	Company management structure .....	19
4.3	The use of IT project management.....	20
4.4	Problem solve by project management .....	20
4.4.1	Communication .....	21

4.4.2	Quality.....	22
4.4.3	Evaluation and feedback .....	25
4.5	Challenges in using IT project management .....	26
4.5.1	Finance.....	26
4.5.2	Operation unit vs Information Technology unit .....	28
4.5.3	Documentation.....	28
4.5.4	Stakeholder.....	29
4.5.5	Employees .....	29
5	Conclusion .....	29
6	Bibliography .....	30

# 1 Introduction

Basically everything around our lives is a project or part of a bigger project, for example preparing food involves planning, time and money. Technology has modernized and improved every aspect of business that is the way businesses think and act. Management approach to business in the 21<sup>st</sup> century has change to reflect the modern environment. System and technology implementation and support are complex and involve many different elements; this therefore requires proper planning and project management. An information technology (IT) project usually involves a new technology which the team is not familiar with. Systems projects require strong cooperation between the business unit, IT and management.

Electronic business (E-business) is a major force and trend in business today, in as much as we recognizes its successes for example Facebook and Google, there are plenty of E-business failures and some of the causes are

- E-business project are treated like a traditional project
- The scope of E-Business project is defined as IT only
- The project is inflexible to change.

## 1.1 Company's Background

Wolt is a technology company building the one application (app) for food. It was founded in 2010 and its CEO is Miki Kuusi with more than 600 restaurants in Finland, Sweden, and Estonia.

The main idea behind this concept is to make eating be an experience rather than a task, one that brings happiness, adventure, good health, and lasting memories (Wolt 2 January 2017.)

Whether you have a craving for your favourite restaurant or you are hungry but not sure of what to eat, Wolt is there for you from 10:00 in the morning to 23:00 in the evening.

Using the Wolt app you have the choice to go out or stay indoors, choose delivery or take-away from a local restaurant. Likewise needing inspiration on where to go either way Wolt brings great food to your table or you to a table of great food.

In Finland Wolt have more than 100 000 users, over 300 couriers and over 400 restaurants that had signed up in less than a year. Using the Wolt app you can place an order in

a little less than 10 seconds for the food to be delivered to your home and it takes an average of 30 minutes including the preparation time from the restaurant.

Wolt has very strong competition as she is operating in an industry that is already crowded with competitors within Finland and around the globe such as Delivery Hero-Valued at 3 billion dollars, Just Eat, Take Eat Easy, Foodora, UberEats and Deliveroo (Techcrunch 2016.)

## **1.2 Thesis Objectives**

The purpose of this thesis is to study and elaborate on the processes of managing Information Technology (IT) projects and analysing how this directly affects the outcome of every project. The process of developing an IT product has to be well managed so as to produce a product that fulfils the original objectives of its creation and satisfy its users effectively.

This process of producing IT products is carried out through project management. The success and failures of most IT projects depend on how effective the projects are being managed. The advent of modern technology does not necessarily help in producing sophisticated IT products if the process is not well managed.

The development of IT products such as websites, software apps are done through IT projects. These projects have various processes and company might choose to manage each project individually or accommodate two or more projects in a project portfolio. Project management processes can change from one project to the other or same method can be used. This report is going to outline how these projects were managed and what management models were implemented.

## **1.3 Vision**

- The thesis entertains the road map of IT product development by Wolt.
- The combination of technology, finances and human resources in shaping project management. Analysing the different phases of product lifecycle.
- Innovative ideas and implementations at various phases of product development lifecycle.
- Qualitative research analysis.

## **1.4 Research Problem**

Wolt has over 50 Information technology (IT) employees, whose focus is on building applications, running and maintaining the overall Wolt system. Wolt has a combination of over 400 couriers, 600 merchants, and 800 000 customers using its app. Daily operation takes place from 10:00 to 23:00 which means the technical support team has to be working throughout this time. The company has as its vision plans to develop applications (apps) which are users friendly, effective, efficient and provides the fastest services to its clients. The very competitive business environment with known competitors like Foodora keeps Wolt on its toes. All of these circumstances push one to find out the response to these questions;

How to build a product that satisfy both the IT and business department objectives?

How to managed people, time and money?

How much time and money Wolt is spending building apps instead of outsourcing it production or purchasing already made apps?

How effective and efficient is Wolt apps compared to its competitors?

How to build an app the works effectively within a short time frame with less budget?

How to maintain and improve their apps?

How to properly implement users' feedback within the development and maintenance processes?

Why build instead of purchasing tailor made package that suit the business?

## **1.5 Research Limitation and thesis topic**

This report is limited to Wolt and partners generic production of IT products basically Wolt applications (apps). Wolt Company has expanded too many European countries, namely Estonia, Latvia, Lithuania, Norway, Georgia, Finland, Denmark and Sweden but its day to day operation of its business and IT Head Quarter (HQ) is centred in Helsinki, Finland.

The above explanation has limited the scope of this research to focus on Finland where all the software applications, which are the websites, the merchant app, the courier app and other software support tools, are being produced and maintain.

## **2 Introduction to project management**

To dive into the understanding of IT project management, I will like to define a few concepts that are directly related to this topic.

A project consist of work that is focused on specific purposes within a defined scope (Lientz 2011, 3).

A project is a temporary endeavor under taken to create a unique product, service, or result (Schwalbe 2010, 4).

A business process is a set of regularly performed, integrated business tasks that produce specific results, a few examples can be sales, payroll and planning analysis.

A project plan consists of related tasks or activities and milestones together with resources, cost or budget, benefits, roles and responsibilities and schedules (Lientz 2011, 3).

A project portfolio is a set of approved projects that will be funded and provided with all the necessary resources.

An Infrastructure is a collection of structure of software, hardware and system and system of network.

A project management is the application of knowledge, skill, tools, and techniques to project activities in order to meet the project requirement (Schwalbe 2010, 10).

Project management is needed at all time in the development of all Information technology products. The effect management of any project will have a direct effect of the outcome of the product.

### **2.1 The differences between standard and IT projects**

There are some basic differences between the standard projects and systems and technology. These can now be made more precise. The purpose of system and technology (Information technology) project are often not clearly defined as those of standard projects like engineering. System projects sometimes lack clear boundaries. More over the scope can creep and expand while the system is being built or installed, work can continue of the current system, creating changing requirements. System projects are more likely to have complex interfaces.



IT project are more likely to use new technology or one which they have very limited experience, raising the level of risks. Management expectations can impact the system project, due to the trend and promises of new technology. The cumulative effect of projects, one project can affect the other, the latest project dependence of the result of the previous one. Modern systems can only succeed by integrating multiple technologies. These require a deeper and thorough understanding of the technology but with standard project the reverse is true. System and technology projects are often affected by gaps between the newest technology and older technologies.

## **2.2 The triple constraint of project management**

Every project manager must consider the following; scope, time and cost and balance the three often –competing goals so as to create a successful project.

Scope: what work to be done as part of the project? What unique product, service, or results the stakeholders expect from the project? How will the scope be verified?

Time: how long will it take to complete the project? What is the project schedule? How will the team track actual performance? Who approves changes in the schedule?

Cost: what should it cost to complete the project? What is the project's budget? How will cost be monitored? Who can authorized change in the budget?

## **2.3 How to identify project successes or failures**

The project met scope, time and cost goals. If the project was done within the boundaries of its scope, with the total cost of the project not surpassing its original budget target and within the time frame which was estimated, this can be ascertain as a successful project. The project satisfied the stakeholders (customers/sponsors). Even if the project met the scope, time and cost, the users of the product or service of the management might not be satisfied. Perhaps on how the project was handled or how communication was managed. If the customers or sponsors are not happy then the project can be consider a failure. The result of the project met its main objectives. It might be, providing a good return on investment of making the sponsors happy. Making money for the company or saving the company's money. The project can be deem successful even if the above mentioned points where not met.

## **2.4 The need for organizational commitment to information technology**

This is one of the aspects affecting the success of IT projects. It is very difficult for an IT project be it large, medium or small to be successful if the organization itself does not value information technology (Schwalbe 2010, 55).

Information technology is an integral part of business nowadays, some CEO (chief executive officers) even take strong leadership role in promoting the use of IT in their companies.

## **2.5 Project phases and life cycle**

A project life cycle is a collection of phases (Schwalbe 2010, 57). Projects are always part of a system and involve uncertainties that are the more reason why it should be partition into phases. The project life cycle in simple terms define the work that needs to be done at each phase, what deliverables will be produced, and when, who is involve in each phase and how management will controls and approved work produced at each phase( Schwalbe 2010,57).

Project phases can be varied in projects and industry but there are some general phases in traditional project management often call the concept, development, implementation, and close out phases. These phases should not be confused with the project management process group of initiating, planning, executing, monitoring and control and closing.

The first two traditional phases of project management (concept and development) focuses on planning and are often referred to as project feasibility. The last two on phases (implementation and close-out) focuses on delivering the actual work and are often referred to as project acquisition (Schwalbe 2010, 57).

A project should completely finish each phase before going to the next phase. This approach provides management with better management control and appropriate links to the ongoing operations of the organization

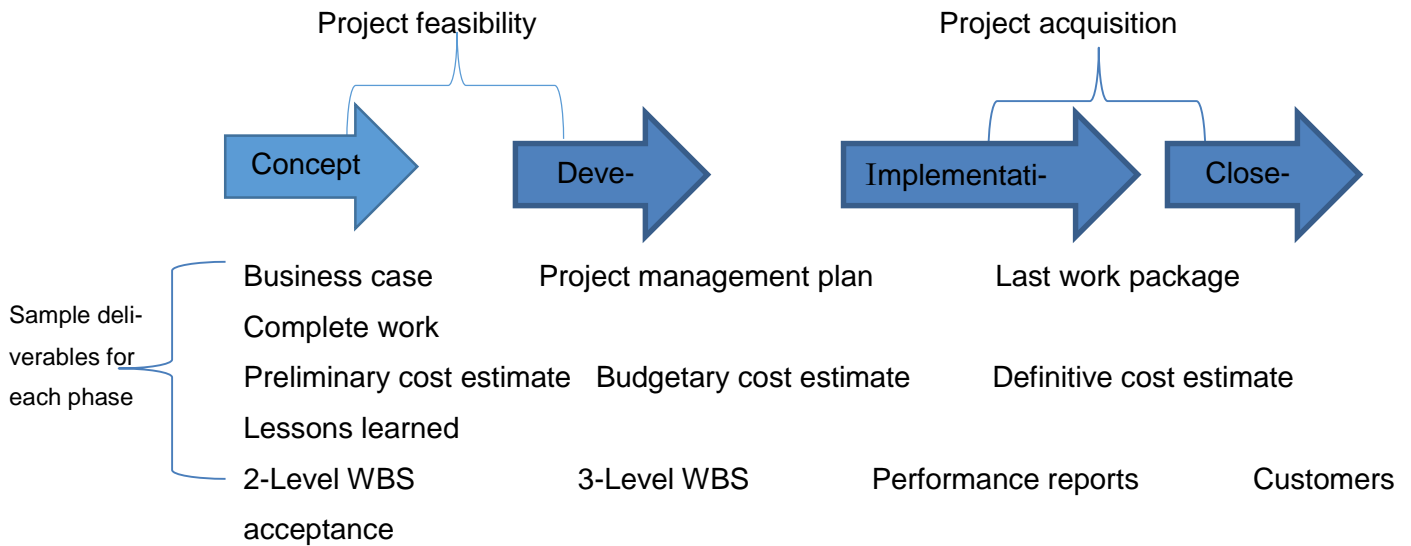


Figure 1. Phases of traditional project life cycle

## 2.6 Product Life cycle

A program is a group of projects managed in a coordinated fashion. A program often refers to the creation of a product for example a new operating system. Therefore creating a product often involves numerous projects. All products follow some kind of a life cycle. Most IT professionals are familiar with the concept of life cycle especially for developing software.

### 2.6.1 A system development life cycle (SDLC)

This is the frame work for describing the phases involved in developing information systems (Schwalbe 2010, 60). Some popular models of an SDLC include the waterfall model, the spiral model, the incremental build model, the rapid application development (RAD) and the prototyping model .These life cycle models are predictive life cycle, meaning the scope, schedule and cost can be clearly articulated and accurately predicted. Below are brief descriptions of several predictive SDLC models.

The waterfall cycle model has well defined, linear stages of system analysis, design and construction, testing and support. It assumes that requirement will remain stable after they are defined.

The spiral life cycle model was developed based on experience with various refinement of the waterfall model as applied to larger government projects. It recognizes the fact that most software is developed using an iterative or spiral approach instead of the linear approach.

The incremental build life cycle model provides for progressive development of operational software, with each release providing added capabilities making it better than the previous one.

The prototyping life cycle model is used for developing software prototypes to clarify user requirement for operational software. It requires a great deal of user involvement, and developers use a model to generate functional requirements and physical design specifications simultaneously. Developers can throw away or keep prototypes, depending on the project.

The RAD life cycle model uses an approach in which developers work with an evolving prototype. This model also requires heavy user involvement and helps produce system quickly without sacrificing quality.

### **2.6.2 Adaptive Software Development Life Cycle (ASD)**

In contrast to the predictive life cycle models, the adaptive software development (ASD) life cycle model assumes that software development follows an adaptive approach because the requirements cannot be clearly expressed in the early stages of the life cycle. It is also use to provide more flexibility or freedom. It allows the development to proceed by creating components that provides the functionality specified by the business group as these needs are discovered in a more free-form approach (Schwalbe 2010, 60).

The agile software development can be describe as an approach that focuses on the close collaboration between the programming team and the business experts

## **2.7 Project management processes.**

A process is a series of actions directed toward a particular result (Schwalbe 2010, 61). Project management process group progress from initiating activities, to planning activities, executing activities, monitoring and control activities and closing activities.

Initiating processes include defining and authorizing a project or project phase. The initiating process takes place in each phase of the project.

The planning processes include devising and maintaining a workable scheme to ensure that the project addresses the organization needs. There are several plans for projects, for example scope management, scheduling management, cost management, procurement management, and many others defining each knowledge area as it relates to the project at that point in time (Schwalbe 2010,79).

Executing processes entails coordinating people and other resources to carry out the various plans and produce the products, services of the project or results of the project or phase.

Monitoring and controlling processes include regularly measuring and monitoring progress to ensure that the project team meets the project objectives. The project team measure progress against the plans and take corrective action when necessary.

Closing processes include formalizing acceptance of the project or project phase and ending it efficiency. Administrative activities are often involved in this process group such as archiving project files, closing out contracts, documenting lessons learned, and receiving formal acceptance of delivered work as part of the phase or project (Schwalbe 2010, 79).

## **2.8 Project management methodologies**

At first project management was applied to larger engineering and military system projects. Managing project such as these on an ad hoc, individual basis resulted in many problems including; variation in project management technique, method and tool, mistakes recurred again and again etc.

Several early methodologies on individual firms, examples were at the old firm, NCR-National Cash Register. One of the first methodologies originated with Project Management Institute which along with other professionals produce the first version of Project Management Body of Knowledge -PMBOK (Lientz 2011, 20).

### **2.8.1 PMBOK**

In PMBOK there are five process groups: initiating, planning, executing, monitoring, control and closing. This method is divided into two parts: the first part initiating and planning focuses on the project life cycle, project organization and the project management processes. Twenty areas are defined and discussed

Develop project management plan

Collect requirements

Define scope  
Create WBS (work breakdown structure)  
Define activities  
Sequence activities  
Estimate activities resources  
Estimate activities durations  
Develop schedule  
Estimate costs  
Determined budget  
Plan quality  
Develop human resource plan  
Plan communications  
Plan risk management  
Identify risks  
Perform qualitative risk analysis  
Perform quantitative risk analysis  
Plan risk responses  
Plan procurement  
The second part execution, monitoring and controlling the process group addresses specific knowledge areas  
Project integration management  
Project scope management  
Project time management  
Project cost management  
Project quality management  
Project human resource management  
Project communication management  
Project risk management  
Project procurement management

## **2.8.2 PRINCE2**

PRINCE2 has seven principles:  
Continued business justification  
Lessons learned  
Defined roles and responsibilities  
Project management by project stages  
Management by exceptions

Focus on the products of work

Customization to fit a project's characteristics

There are seven PRINCE2 Themes:

Business case

Organization

Quality

Plans

Risk

Change

Progress (formerly called "control")

These principles need to be referred to under this methodology, if they are not adhered to throughout the project then there is a high probability of failure (Lientz 2011, 25).

PRINCE2 is known as a process-based methodology, comprising of seven management processes listed below:

-Starting up a project (covers work through the project concept)

-Directing a project (applies to the entire project life cycle)

-Initiating a project (covers the steps through development of the project plan)

-Controlling a stage of the project (covers the daily management of the work)

-Managing product delivery (includes the detailed planning, tracking and controlling of parts of the work-called "work package")

-managing a stage boundary (covers activities to prepare for the next stage of work as well as addressing exceptions)

Closing a project (covers the end of the project, measurement of benefits and lessons learned)

### **2.8.3 Agile Project Management**

Agile concept and principles were developed as a response to using the traditional project management methodologies. People felt that following different principles could lead to more effective project work (Lientz 2011, 26.)

Listed below are four principles of agile method

Individual people and their interactions should be giving more attention. Traditional management methods, by contrast, focus on processes and tools. Agile promotes team members expressing their views and getting rapid feedback with the goal of reducing communication time.

Working product or software is the focus. Traditional method favors documentation. Customer or business unit collaboration is the key throughout the project. In traditional projects, there is a strong user role at the start and end, but not as much in the middle.

Success is achieved through iterations. The duration of time between iteration is short. This applies to requirements and development.

Change during a project is encouraged. In traditional projects you want to stick to the plan. Agile emphasises that the project team should be an integrated unit or entity (Lientz 2011, 26).

The agile project leader does not overrule the decisions taken by experienced team members, as decisions are made with team not on behalf of team. He or she is not involved in technical decision-making. Motivation and coordination are his key role as a project leader.

#### **2.8.4 Extreme Project Management(XPM)**

Extreme Project management is one of the several ways to implement agile principles. This method is employed on complex projects that do not have an end point, example software and weapon systems. In such projects requirements start out as being partially defined, they will be refined and changed during the project. XPM is based on a close daily working relationship between the project team and the consumers, users, or business unit staff. As the work is being done feature and capabilities can be changed.

#### **2.8.5 Critical Chain Project Management (CCPM)**

The critical chain of a project consist of the tasks that defined the lowest possible lead time (Lientz 2011, 28).

There are two types of dependencies between tasks. One is the output of the task is required as input by another (called 'hands off dependency'). The second is a resource dependency. The person cannot start the next task if the first task is not finished.



In CCPM, you seek to optimize the schedule by working with the safety margin that people build into the task estimation. You look at individual tasks to see if the time duration can be reduced. If you don't do this then you cannot easily change the schedule (Lientz 2011, 28).

“Agility is the ability to both create and respond to change in order to profit in a turbulent business environment. Agility is the ability to balance flexibility and stability” (Highsmith 2010, 14).

In an uncertain and turbulent world, success belongs to companies that have the capacity to create change, for their competitors. Creating change disrupts competitors and the entire market, responding to changes guards against competitive thrusts.

Creating change requires innovation: developing new products or services, reducing products development time, creating new marketing channels, creating new sale channels, customizing product for smaller market segments. In addition companies should be able to respond quickly to both anticipated and unanticipated changes created by your competitors and customers.

Scrum is an agile process framework for software project management and development. Agile and scrum seem to help software team produce software result more effectively than their command and control counterparts (Pham &Pham 2012, 2).

Reasons why Scrum fails

- Many professional are still unaccustomed to Scrum
- The project might be too complex that more advanced techniques are needed to reduce the project's complexity and get it under control
- Some organizations are not yet setup for Scrum or the management team does not know how to use Scrum within the company's current constraints

## **2.9 Agile manifesto principles**

Our highest priority is to satisfy the customer through early and continuous delivery of valuable software. Welcome changing requirements, even late in development. Agile process harness change for the customer's competitive advantage. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale. Business people and developers must work together daily throughout the project. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done. The most efficient and effective method of conveying information to and within a development team is face –to-face conversation.

Working software is the primary measure of progress. Agile processes promote sustainable development. The sponsors, developers and users should be able to maintain a constant pace indefinitely. Continuous attention to technical excellence and good design enhances agility. Simplicity – the art of maximizing the amount of work not done-is essential. The best architecture, requirements and designs emerge from self-organizing teams. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

## 2.10 Why are agile and Scrum effective in software project management

Even though Agile and Scrum can be difficult to implement, it has proven to be extremely effective when properly deployed (Pham & Pham 2012, 12).

There are four advantages that make Agile and Scrum more effective in project management and development.

A systematic risk reduction mechanism: Everyone involved in project planning and execution knows how important it is to reduce the level of risk and uncertainty to zero or to the lowest level possible. A learner software development life cycle

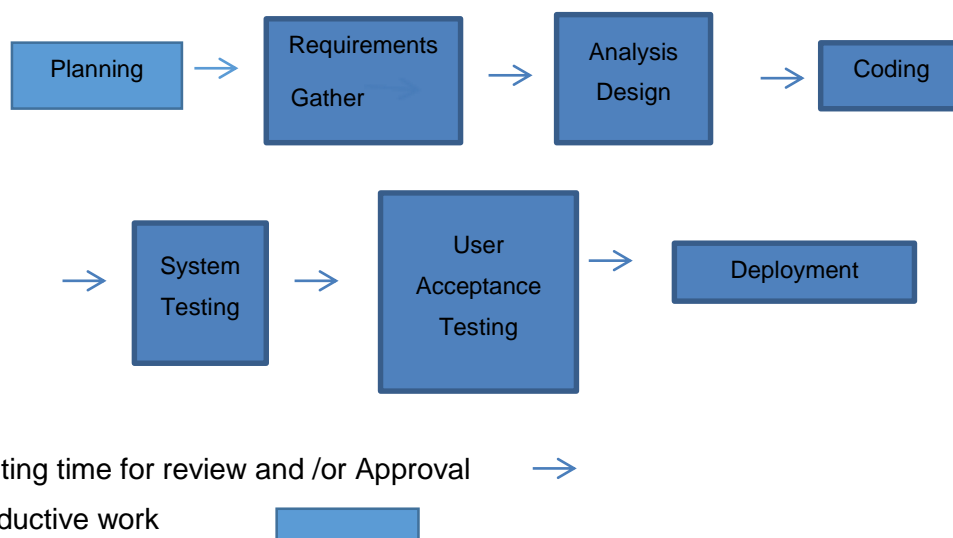


Figure 2. Traditional value stream

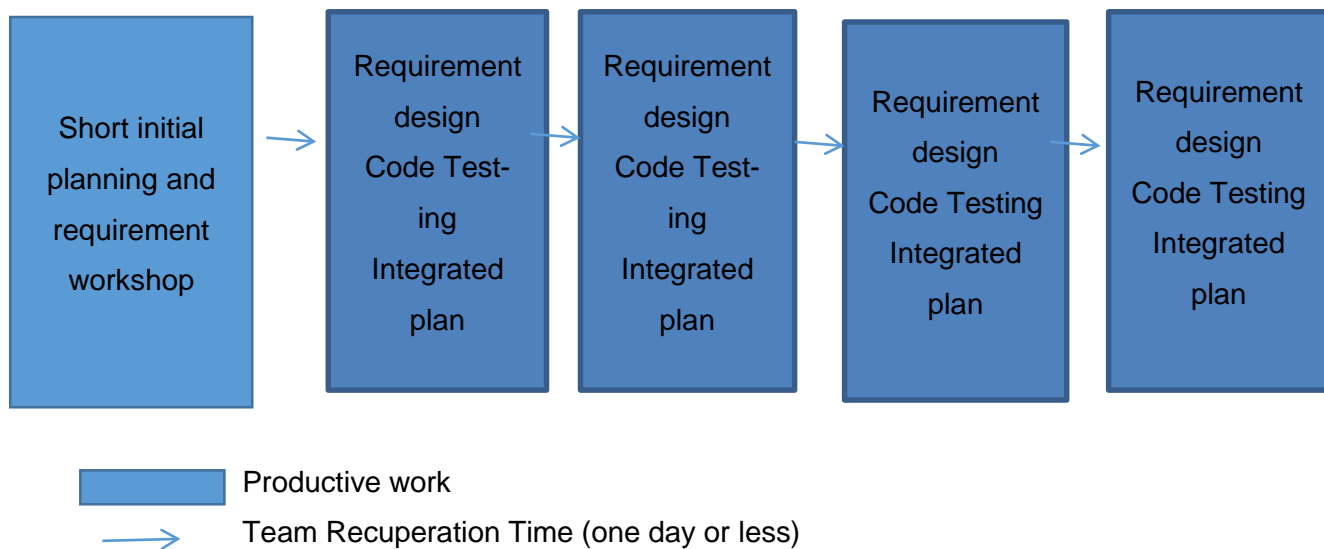


Figure 3. Scrum value stream

We see a difference in timeline with one of the team, figure 2 using a leaner life cycle while figure 1 using a longer life cycle.

Below you will see the difference between, figure 4 and 5 moving to a more adoptive project management process, unlike the sequential process used within the waterfall environment in figure 4. Scrum will look more of figure 5 in an environment where change is considered to be only constant. A project management and development process based on people's motivation and pride (Pham & Pham 2012, 13).

This may be one of the most powerful tenets of Agile and Scrum, where by the focus is to let the team decides for themselves how they would go about accomplishing their work by their own rather than having the project manager dictate to them on how to go about it. Scrum proposes a new software management framework which is based on project team's self-organization, motivation, ownership, and pride in their achievements (Pham & Pham 2012, 13).

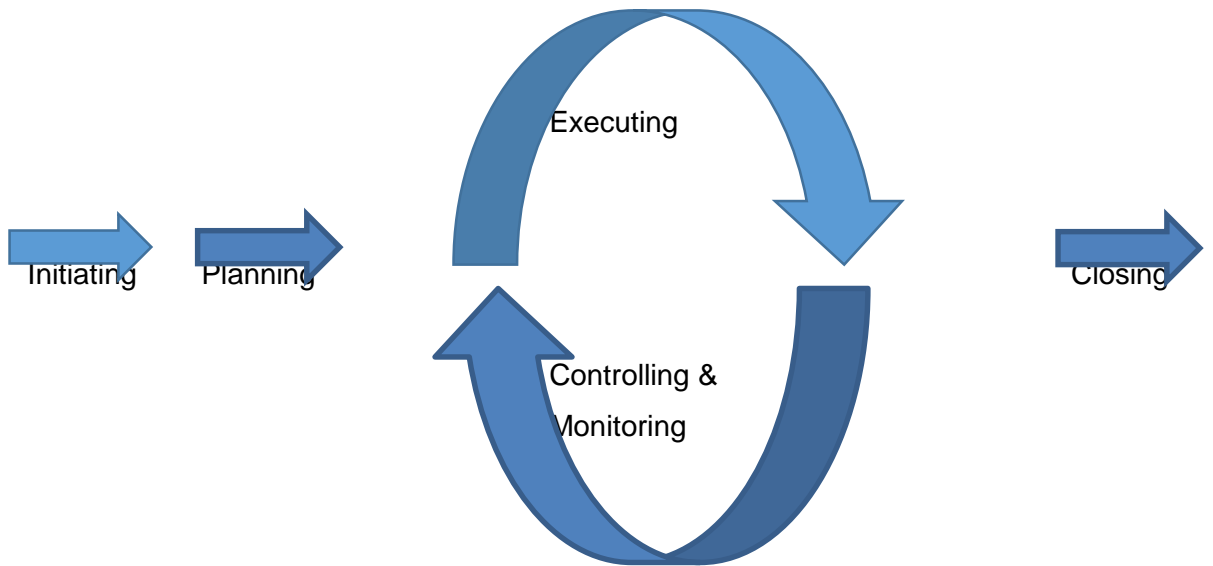


Figure 4. The traditional project management process.

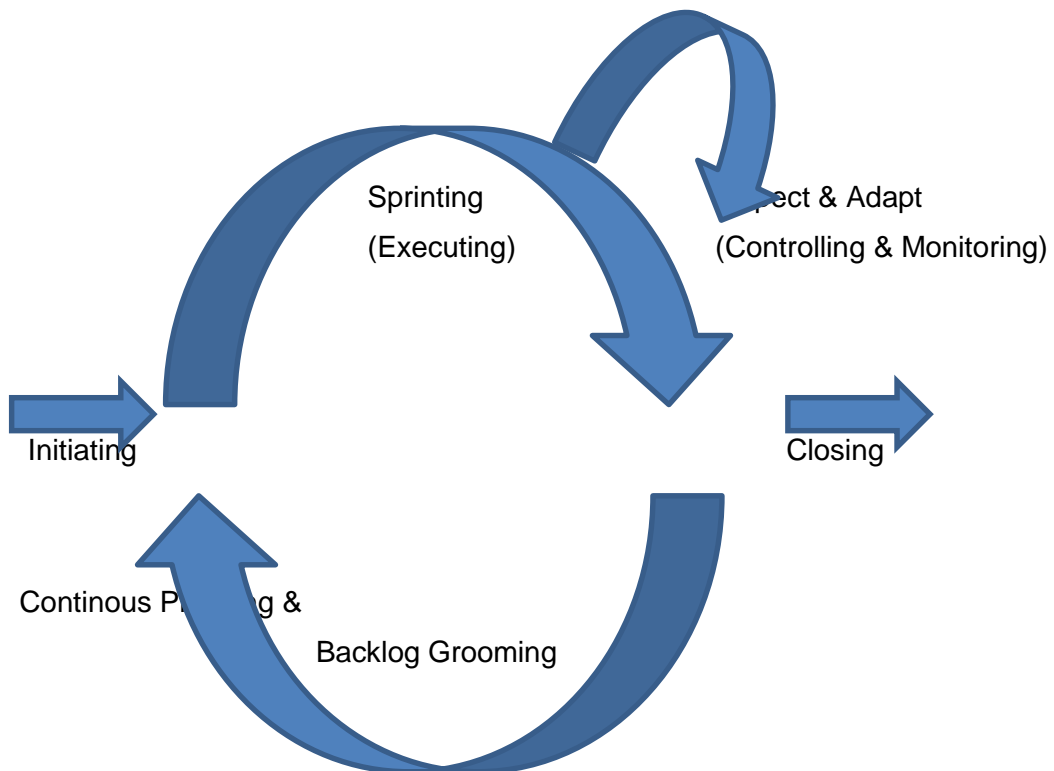


Figure 5. Adaptive project management framework with Scrum.

### **3 Research method**

#### **3.1.1 Qualitative research method**

Qualitative research is the development of a concept which helps us to understand social phenomena in natural (rather than experimental) settings, giving utmost emphasis to the meanings, experiences and views of participants (Slideshare 2012).

This research was conducted through interviewing three employees from Wolt namely, one of the co-founder who is responsible for the general operations of the company, the lead head of the product development unit, and the head of business operations. The co-founder gave a general idea of how the company was founded and how it is being managed. The head of operation discussed on how the day to day operations of the business is being carried out in making sure that food is being transported from point A to point B. While the lead head of product development explained how the products are developed, maintain and supported.

#### **3.2 Research question**

The purpose of this research is to perceive how project management is being used in the Information technology (IT) industry. The research scope was to test Wolt project management methodology and processes against some of the standard theories used in this thesis. The questions were structured on four different areas. The first part was focusing on structure of the company, management style in general and in particular the management of the two main operations of the company (business operation and the Information technology operation units). The second was how widespread and to what extent is IT project management concept is being used in the company. The third touched at the problems solve through the implementation of IT project management in the process of IT product development. The fourth area was focused on the challenges that were involved in using IT project management in product development. The need for this search is to explore how IT project management has helps in solving many problems in the IT industry. In the case of Wolt how is project management being use in the business operation and the IT operation units. Which of the project management methodology for instance scrum, waterfall, agile, Kanban can best fits product development processes in Wolt or none of the above.

### **3.3 Data collection process**

An interview was carried out twice, first with one of the co-founder Juhani and the head of business operation Janne who came in to reinforce how the day to day business operations of the company is being carried out. The main interview was done with the lead head of product development Toni for more than an hour. All the interviews were conducted in English at Wolt head quarter office in Helsinki on the same day. The questions for the interview had been sent to them two weeks before the interview was done. The primary data for the research was collected from these interview, as the company's website was the only mean by which secondary data was collected. I did ask for additional documentation from the interview but the response was that, the company does not have any yet since it is a new and small company. An acknowledgement was made that, the company does not keep any form of documentation with regards to project management processes and products development.

### **3.4 Data Analysis**

Qualitative data analysis is the range of processes and procedures whereby we move from qualitative data that has been collected into some form of explanation or interpretation of the people and situation that was investigated (SlideShare 2012).

This is data that cannot easily be reduced to numbers and it is related to concepts, opinion, values and behaviours of people in a social context. This report is focus on unstructured text basely a one on one interview with representative of Wolt. The idea of qualitative data analysis is to examine the meaningful and symbolic content of the qualitative data. The inquiry to this research is completely qualitative and an inductive approach is used in analysing that data. Where by emergent frameworks are used to group the data, which is to be used to look for pattern, relationships and connections.

The data collected has been organized, frameworks identified, sorted and used for descriptive analysis. The organize data has be transcribe and the frameworks identified through explanatory and exploratory means, structured, labelled and sorted through coding and modifying the frameworks.

The type of qualitative analysis use in this report is a mix of framework and narrative analysis.

## **4 Result**

This chapter will illustrate the details of the results gathered from the search. The research is based completely on a case study of Wolt and the information was gathered through interviews. The interpretation of the result is carried out through a framework analysis to illustrate the links between different patterns and concepts used during this search. The research questions are examined.

### **4.1 Interview**

It is a facts finding method. It helps in discovering the facts, knowledge and opinion by those who are developing, maintaining and running the software products. This process is carried out through a one to one discussion, observation to collect data. Interviews give the writer an opportunity to get first-hand information from a person who is totally involved in the complete process of product development. The responses from these interviews have to be well analysed and targeted to ensure that they are significant. The interview questions should be well targeted in order to produce the best result.

The interviewee was asked which methodologies and tools they use in project management at Wolt. Based on the findings a mix of Scrum and Kanban was used, nicknamed as Scrumban which is an improvement of both Scrum and Kanban. An informal and flexible process is being used with weekly planning from the Scrum model. The day to day activities and tasks are divided up, individual or teams might use scrum board or online board such as trello to follow activities of what is to be done on a weekly or at most monthly bases. The Kanban idea is to limit on how many different things an individual or a team has to do at the same time but not necessarily time box it for example a two weeks period.

### **4.2 Company management structure**

The company structure is similar to every other company with the board of directors who are mainly investors to the company. Top management positions including the CEO who makes the final decision in every important issue and the lead head of the two operation units (IT and business units). A significant difference between this particular company Wolt and others is that most of the top management positions are occupied by co-founders of the company. The management style of the company is considered flat, instead of the standard top to bottom management style of many other companies. Most decisions

are made at the various levels involve that is teams or unit unless a decision is not reach that is when top management gets involve to give the final verdict.

The company has few general rules that everyone follows but the cultural environment for the company is very flexible, with no strict rules and date lines to perform certain activities or tasks. Everyone works on a common space with few offices for private meeting or team work rooms. The quality of their products is most important rather than how fast it gets to the market. There is no hurry to launch products into the market. The company do not follow any particular methodology or way of doing things as its open to constant change so as to be able to develop the best IT products.

### **4.3 The use of IT project management**

This question tries to find out the extent or how widespread IT project management methodologies are being implemented in Wolt. Through these interviews the search found out that IT project management theories and method are widely acceptable idea in the company, a term that you can hear daily. Considering that this is a small and fast growing company, not every product development activity is consider a project. Out of five of the software products they develop only one out of the five was consider big enough to be call a project, which was the courier software application. This is their main app and it took them a lot of time and effort in producing this app. The company priority was to produce an app that would be the best in the market as compared to its competitor's apps.

### **4.4 Problem solve by project management**

The basic idea of project management implemented by many companies has usher in many improvements in software application development inconsequential of what methodology. In the case of this search, it gives and opportunity for a team to be form and task with a particular project. It ease up decision to be made after an in-depth communication has taking place within the group and various meetings held. In situations where important decisions are to be made, there is someone in the group call the lead head who makes the final decision.

There gains from IT project management can be emphasized on the quality of products. In the case of Wolt the Scrumban methodology use gives an opportunity for the company to put quality as the priority. The products are being tested several times and incremental improvements measures taken in line with the incremental build model product life cycle. The team ensures that there is an open and relax or informal environment which helps in



breeding new ideas and act as a catalyst for honest discussion with every member involve. The idea of retrospect from Scrum in looking back at what has been done so far with the necessary changes made which helps in improving the efficiency at which product development process is been carried out. Both the product life cycle and project life cycle are elements that are keenly followed and this helps in guiding the project team in implementing all the necessary project phases and processes, thus eliminating things that can hinder the development of a successful product. There is a constant update on the progress made by the team to the entire company and evaluations are made internally and externally.

#### 4.4.1 Communication

Communication is a key factor in the success of project management. It is one of the tools that is well exploited at Wolt. As discussed earlier the working environment and culture at the office encourage all forms of clear communication. There is a white board where the whole staff is inform of what the developers are working on, at what phase or stage the product is or if it is just a new feature that is to be added. There is a kind of road map of the progress of what is been done as shown below. This idea is to keep everyone working in the office inform on what is going on even if he or she is not directly involved in the process. Assuming the developers are just adding a feature to an application (app) like the merchant app.



Figure 6. Adding a new feature to an app



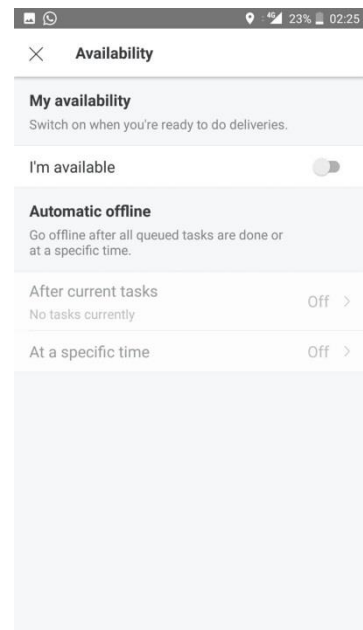
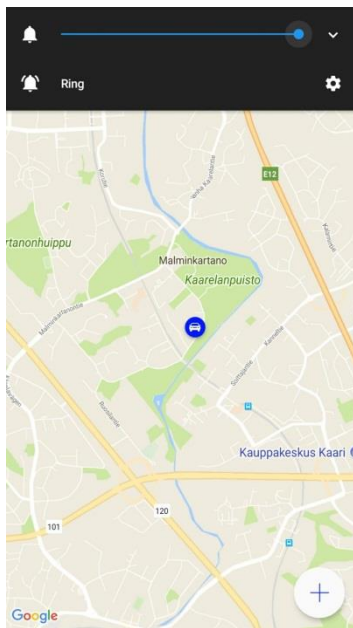
Figure 7. Communication road map

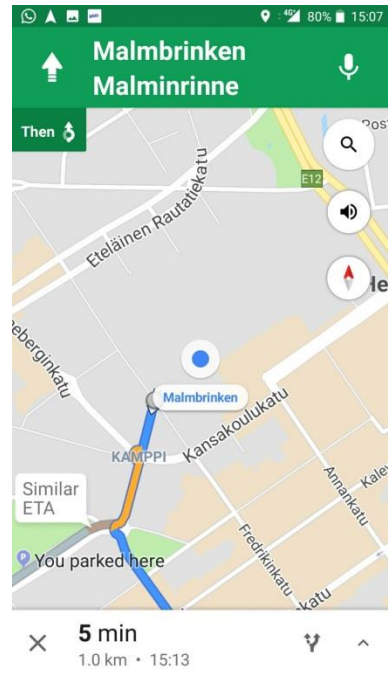
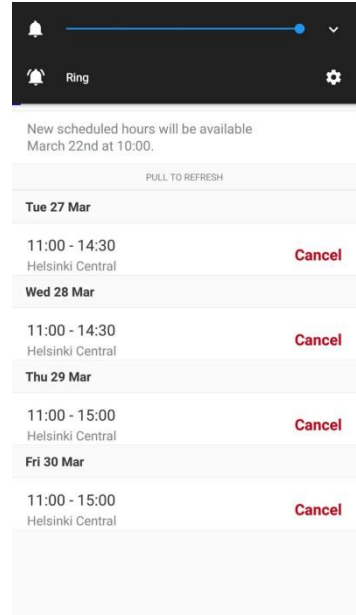
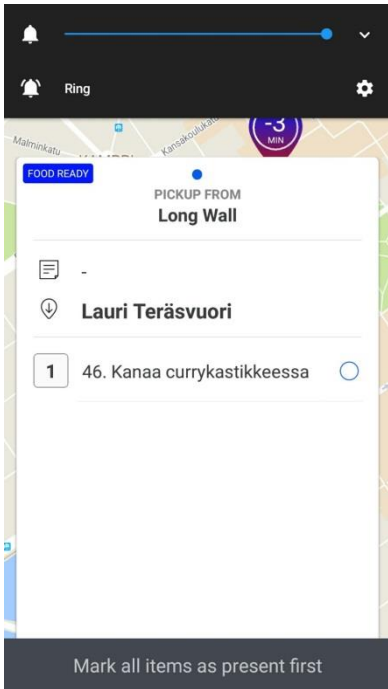
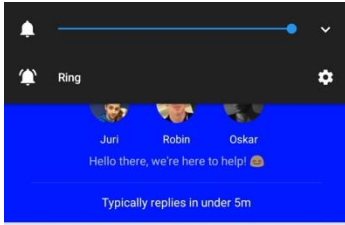
The office setting alone encourages communication; it is an open office space where everyone including designers, coder, developers, and engineers all on that same open space working together.

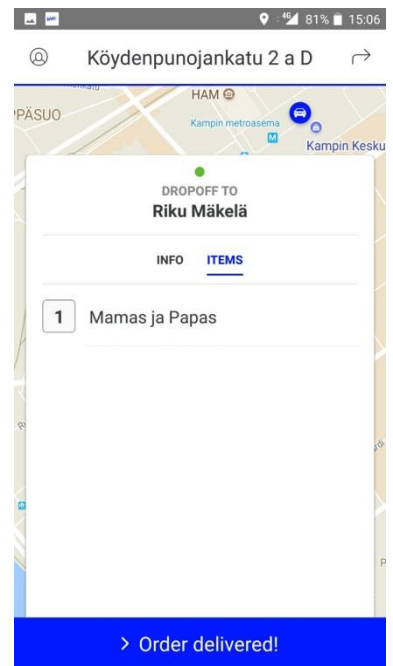
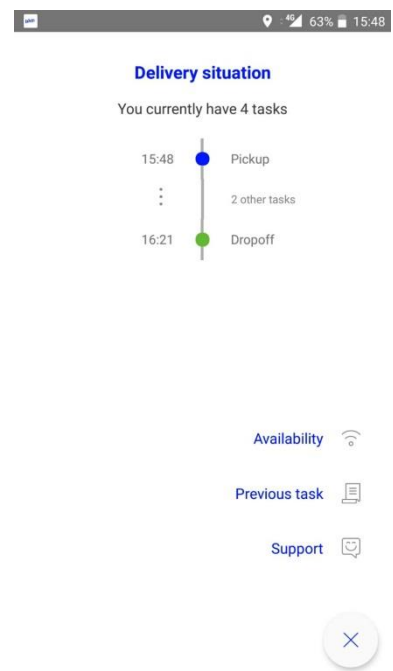
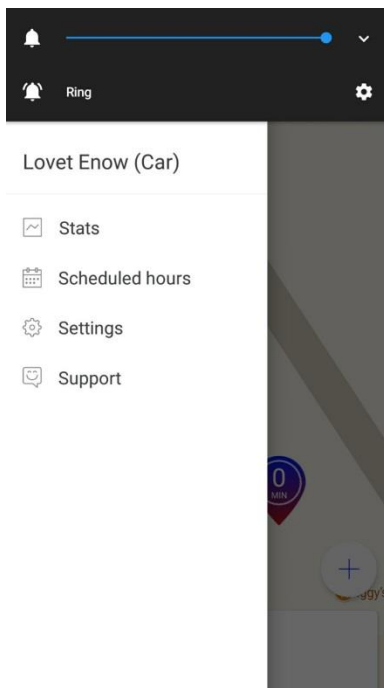
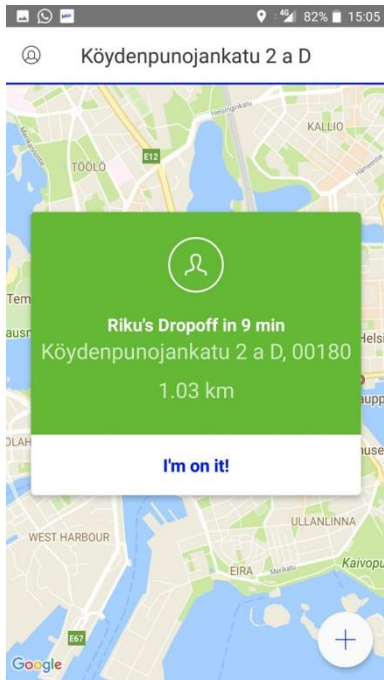
## 4.4.2 Quality

The quality of product is a priority to Wolt. The main reason while strict dateline are not set or strict protocol in their product development processes is because they value good quality rather than fast deployment of products. The quality of their products is what gives them their competitive edge over some of their competitors like Foodora, Ubereat. Even in the case of a simple alteration of any product, incremental improvements are being done and tested over and over both internally within the company by the IT team and externally by couriers before being deployed like in the case of the courier's app. This is in line with the progressive development of operation software idea from SDLC. Wolt has product five products iPhone operating system (iOS), android, web, courier app, merchant app and it has other internal supporting tools for example intercom use for customer service, payment integration tool and analytic tool. Some pictures of the courier software application during use can be seen below.

### Wolt courier app activities







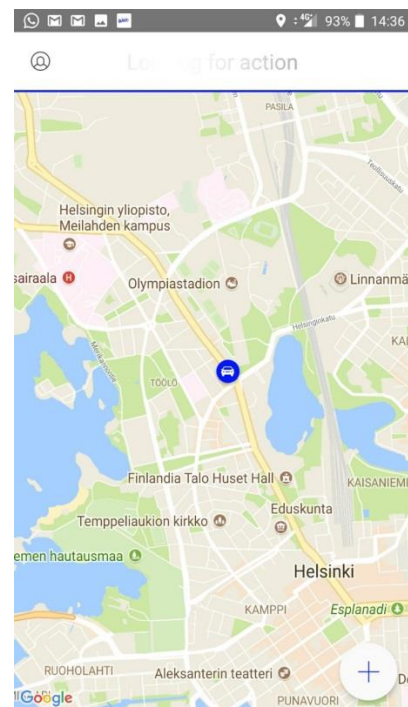
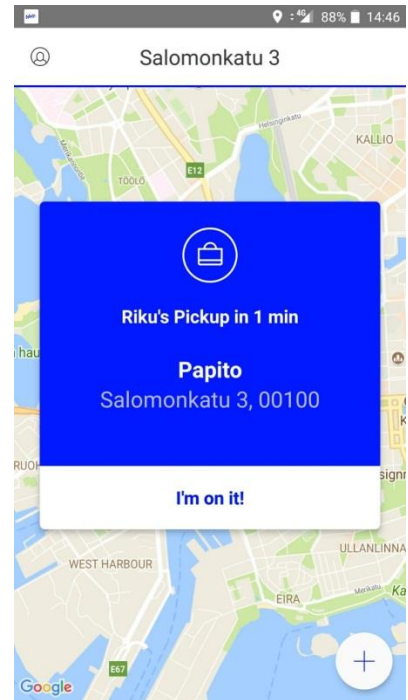
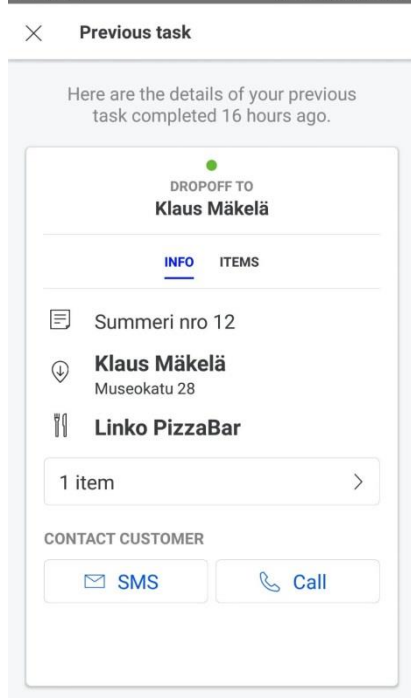
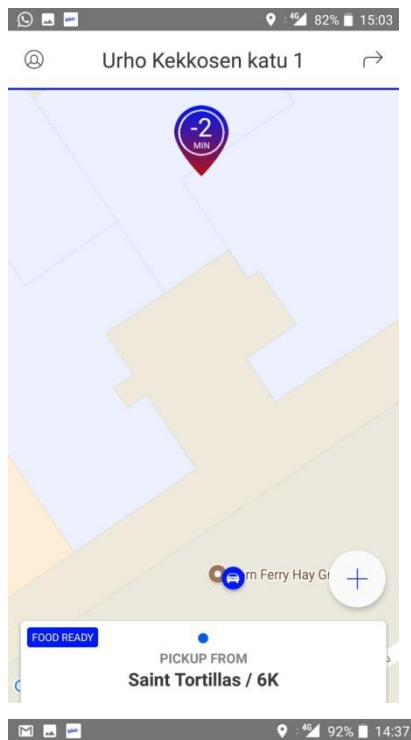


Figure 8. Pictures of some activities on the Wolt app

#### 4.4.3 Evaluation and feedback

The word retrospect is what came out most in the three interviews that came up from this search. This aspect of having a pause, reflect on what has been done so far, make the necessary changes and look forward on whether to continue the project or to stop the project or make major changes is an element that was borrow from Scrum. Having a candid

discussion on the nature of how things are going and laying down concrete measures is as important as the process itself. How the team felt and other stakeholders with respect to any project or product development was very necessary. The statement “how people feel about it” was the most used from the IT project management lead.

## **4.5 Challenges in using IT project management**

There are some challenges facing the company discovered by this search, with respect to coordination within the company as a whole. The food industry is 0.5% digital in any form (United State Data), this means the industry is greatly unexploited still outside of the delivery of Pizza (Toni 9 February 2018.)

### **4.5.1 Finance**

It is very challenging for small companies to get funding for their businesses these days. Every company needs finances in order to be able to carry out the daily operations of that company for example paying staff salaries. Wolt like most IT companies finds themselves in a very competitive industry and business environment. Selling the companies vision to investors to invest in the company is not an easy task. With thousands of IT start-ups companies all over the world, investors’ wants to put their money where their mouth is literally meaning invest in companies that would be profitable in the long run.

It takes a couple of years for a new company like Wolt to start making profit, but at the meantime needs to keep investing financially so as to be able to produce workable products. Wolt did raised 14million dollars in 2016 as investment from renowned investors like founder of skype Niklas Zennstrom, CEO of super cell Ilkka paanane and Nokia’s Chairman Risto Siilasmaa (Techcrunch 2016).

As of now Wolt has earn over 800,000 users in Helsinki, Finland. This is about 30% of the city population, who uses the Wolt app. Wolt is a rapidly growing company with her presence already in 8 other countries, including Denmark, Sweden, Estonia, Latvia, Lithuania, Finland and Georgia (Wolt 2018).

Expanding to new countries is a huge challenge as it requires lots of resources which are financial, human and technological. It is a huge task to raise the required fund needed for expansion. Due to the large unexploited market for delivery companies in Finland and

around the world, the need for new companies and those already in the industry to expand their services is paramount. Below is chart of some of the investments made into the delivery companies in 2016.

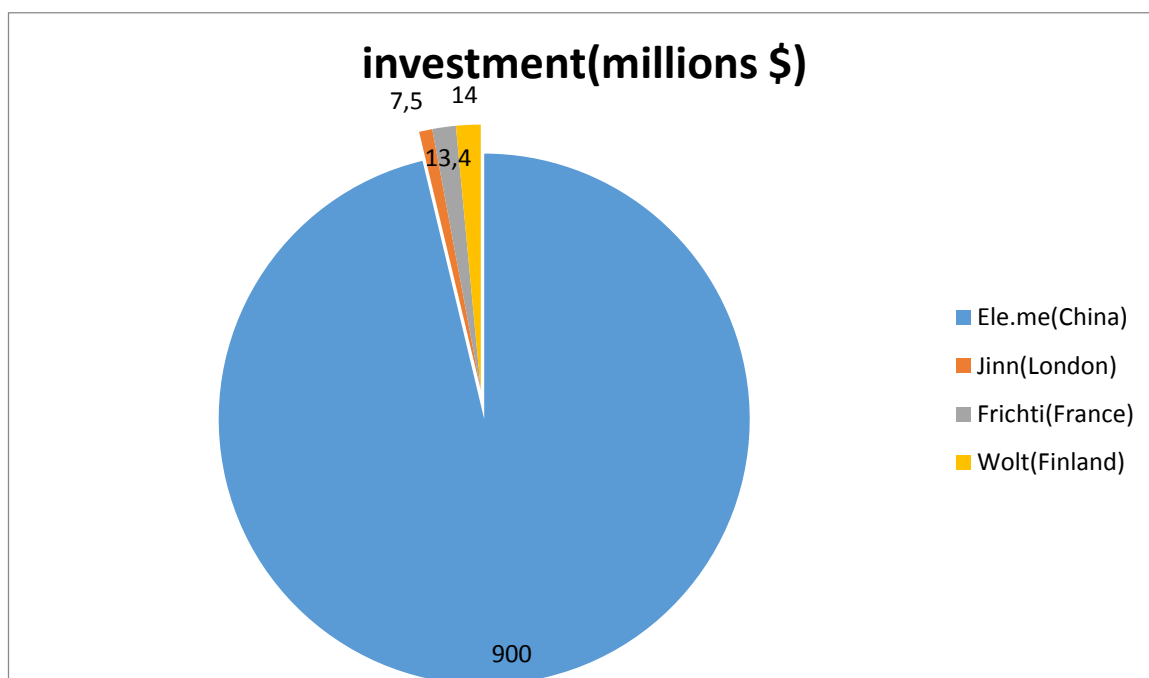


Figure 9. Investments made to some delivery companies in 2016

Investment has been booming in the Nordic region up from 846 million dollars from 2014 to 1.82 billion dollars in 2015. Helsinki though is falling short of its rivals, attracting 15.3% of Nordic funding in the second quarter of 2016 (Wired 2016).

Even though Finland is in recession still this has not affected the number of investors pouring in from the Nordic Hub. In the IT field there are three hot categories in Helsinki with huge acceleration in start-ups the Fintech, Virtual reality and gaming. Below is a chart of the top 10 start-ups in 2016 in Helsinki, including Wolt.

As the tech boom drives up there is potential for IT companies producing good quality products in the market to overcome their financial challenges. A Texas business man Tilman Fertitta has agreed to buy a food delivery start-up Waitr Inc for 308 million dollars (Bloomberg 2018).

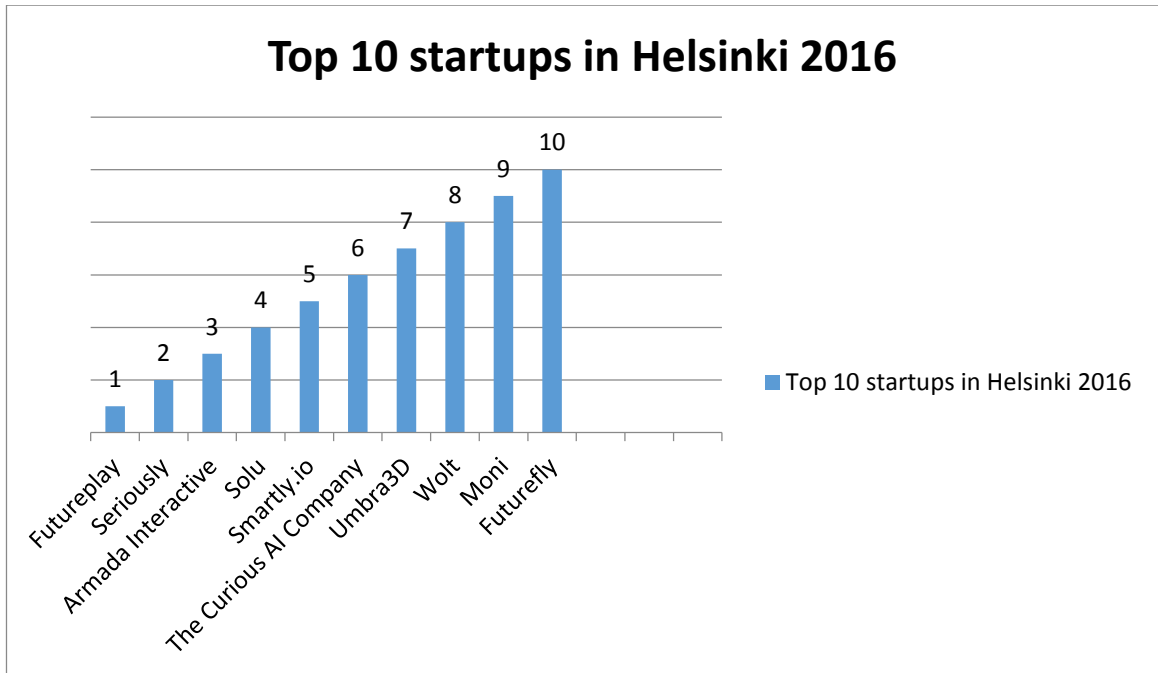


Figure 10. Top 10 hottest start-ups in Helsinki 2016

#### 4.5.2 Operation unit vs Information Technology unit

The operation and IT units are the only two existing units at the time of this search. Business project management and IT project management have so much in common, but neither of the units knew what kind of methodology or concept the other unit was using. They carried out separate projects concerning each particular unit, still they have a common philosophy or project management guide with some few rules that each unit must follow.

#### 4.5.3 Documentation

Throughout the search for information for this report, there was little or no documentation received from the company. The project management lead and team did not keep any written documents on how things are being done, the reason being that it is a small fast growing company that does not follow any specific project management methodology and makes frequent changes upon evaluation of any project or alteration of products. It should have been easier to investigate IT project management of the company and more substantial if a paper trail of documents were available on how things are done.



#### **4.5.4 Stakeholder**

Launching our products in different countries and cities implies we get to an agreement with the management and operators of those cities. Operating in any country has to be done legally and the rules and regulations adhered to. Also there are the issue of cultural difference and languages. Some adjustments needed to be made graphically and other wise so to enable the products to be attractive to those countries other than Finland. There are some technical issues in other countries for example you are not sure if a text message sent will be receive in some Baltic countries like in the Scandinavian countries.

#### **4.5.5 Employees**

This is fast growing company and they are hiring new employees all the time. These new employees will needs to settle down, get use to the way things are done in the company and learn how to work with the rest of the other employees and vice versa. This takes time and thereby, taking time away from the product development process. This in part increases the time period of when new products are to be finalized.

### **5 Conclusion**

Information Technology project management is a well-known topic by almost every company, implementing this theory into the process of development is something else. The still exist a grey line between IT and business project management and this research discovered that companies do not seem to focus on the few differences.

Project management methodologies is not something that is been use by every company. Some companies will follow a particular methodology for example agile, scrum etc. Most companies now a day have a project manager or project lead or a position with the same responsibilities but different name. Companies with project management insight seem to do better than those without any knowledge about project management. The use of IT project management varies from company to company depending on several reasons. The most significant being the size of the company, big companies invest more on projects and follow a very strict methodology of how things are to be done. Some even have a separate department for project management. Meanwhile small and medium size companies turn to be more flexible and can cherry pick parts from different methodologies. This aspect of being informal and less strict turns to be more advantageous for them.

It gives them the opportunity to be fast and they can try things and learn from their mistakes. Flexibility leads to better results because it gives them team power to reiterate, fine tune, test product repeatedly, evaluate and discuss ways to move forward.

Project management is a complex field and companies are still modifying different phases, processes and concept as time goes on. The idea of project management is advantageous for small size companies. Being small means being able to make decisions faster, being more flexible, and doing very few projects at the same time.

Wolt as a company is doing quite well in its product development process activities, but there is still room for improvement. One of the things this research found out that is a disadvantage to the company is the lack of documentation of the software development processes. This information is necessary to be archived for future use in product development because this will help in retrospect to see where their strengths and weaknesses where moving forward.

In conclusion no matter the size of the company, the resources or how long the company has been developing software products. All companies should have an idea of the different IT project management concepts and have a specific road map on how it is developing its software products in situations where the company is not following any particular methodology. Companies that strictly follow any written methodology or that which is created in house do not necessarily have any added advantage in software production more than those that do not.

Companies' needs to use the resources they have available in the best way possible within their giving business environment in order to produce products with the best quality to the market so as to satisfy the need of their end users.

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## **Attachment 1**

### **Interview questions**

1. Are you familiar with the word project management, if so how can you define it?
2. How can you explain your company's management culture and style?
3. To your understanding is there any difference between business project management and IT project management?
4. What kind of project management methodology do your company use and how?
5. Any reason why you think this methodology is better than the others and can you shortlist the others that you are familiar with and explain?
6. What are the benefits and challenges of IT project management?
7. Can you narrate examples of some of the successes and failures you have encountered managing projects?
8. How can you define IT project management processes?
9. Define IT project life cycle and IT product life cycle?
10. What makes Wolt Oy product development process different from other companies?
11. Do you develop all your products or outsource some of your work?
12. When developing your products what is your company's priority and why?
13. Can you elaborate the day to day process of product development from start to finish?
14. What is the most intriguing phase of project management and why?
15. Can you further explain any relevant information concerning the procedure, process, concept of project management that you have not yet talk about?