Nelli Piikkilä

Developing a Practical Tool to Help Small and Medium Sized B2B Enterprises Choose a Suitable CRM System

Helsinki Metropolia University of Applied Sciences

Master of Engineering

Business Informatics

Thesis

27.11.2016

Helsinki Metropolia University of Applied Sciences

Author	Nelli Piikkilä
Title	Developing a Practical Tool to Help Small and Medium Sized B2B Enterprises Choose a Suitable CRM system
Number of Pages	84 pages + 5 appendices
Date	27 Nov 2016
Degree	Master of Engineering
Degree Programme	Business Informatics
Instructor	Thomas Rohweder, Principal Lecturer

Customer relationship management is important for every company. Customer relationship management software can be a vital tool for handling customer data in small and medium sized enterprises. In the market, there are several different customer relationship management software solutions and vendors, so it can be hard for a company to find suitable solution for them. The use of the customer relationship management software can vary a lot in different companies although they might be in the same business or industry. Accordingly, choosing the right type of customer relationship management system to fit the company's needs is challenging in general an especially for small and medium sized enterprises with limited resources.

The objective of this thesis was to help companies to choose the suitable customer relationship management software for their use. In the thesis, a recommendation table was built, which the company can use to choose customer relationship management software solutions to meet their needs based on the industry, the customer relationship management software characteristics and guidelines for choosing the customer relationship management software. The recommendation tool takes into consideration alternative system characteristics and the operating context of the company.

The recommendation table is an Excel sheet where the company can cross-reference their needs of characteristics and guidelines when choosing the customer relationship management software. The recommendations are based on professional and academic literature. Only 16 different customer relationship management software solutions were investigated in the study based on the characteristics and classifications that were done first. In the market there are over 200 customer relationship management software solutions available.

The recommendation tool was piloted with three companies in different industries. The results were analysed and the recommendation tool was corrected based on the findings of the piloting. In conclusion, the next steps should be identified choosing the software and also improving the recommendation tool was created in this thesis.

Keywords	Customer Relationship Management, Small and Medium Sized Enterprises

Contents

Index of Figures

Index of Tables

1 Introduction

1.1 Context of the Thesis

This Master's thesis' idea is to help SME's (small and medium-sized companies) that need help with choosing a new CRM tool (Customer Relationship Management tool) for the use of the company. When a company is suffering of old-fashioned customer register for example in Excel sheets, or don't have the register at all, and their contact information is not properly ordered and all the customer data is sprinkled to all around the company, it is time to realize that they are definitely in need of a new CRM tool for handling these issues.

CRM tool can help business by creating offers to customers based on their past behaviours and demographics characteristics or by giving service representatives information of customer profitability and on how customers generate profits. In addition, it can help change the appearance of a Web site based on customer profiles and preference information. CRM tools are used for all three of these different purposes, but it would seem that effective CRM efforts need to address all three CRM components, at least to some degree. (Goodhue, Wixom, Watson, 2002)

Loyalty of customers cannot be forced or bought; customers must be won based on positive experiences. There are examples of how much customers are worth in different kinds of businesses. Table 1. "Customer value for industry" presents the customer value for different industries (all the prices have been converted from dollars to euros and rounded).

Table 1. Customer value for industry

Industry	**Time Period**	**Customer Value**
Loyal coffee shop customer	1 Year	1530 €
Typical supermarket shopper	10 Years	54620 €
Pizza restaurant patron	Lifetime	8740 €

Loyal credit card customer	Lifetime	13110 €
Typical automobile purchaser	Lifetime	163850 €
Loyal luxury car owner	Lifetime	349550 €

(Strauss, Seidel 2005, page 5)

The right CRM solution can give the business keys to handle ideal prospects and to drive them as loyalty customers. CRM is valuable for different kinds of customer service from full call centers to smaller customer services or self-help pages that let customers help themselves. Additionally, insight about customer service issues can be shared and added to a knowledge base so that agents can help customers even faster. Even if the customer base is small, a CRM tool can give valuable business insight, streamline processes and virtually connect employees to collaborate as a team in real time. (Salesforce.com websites)

There are several CRM providers on the market, but still there are only two main types of CRM solutions to choose from, depending on need and budget: the On-premises and the Cloud-based (SaaS) solution. The On-premises solution requires the up-front purchase of servers or datacentre equipment and the installation of a CRM software. The IT side of it requires middleware in the form of IT staff, ongoing maintenance and updates and in some cases, building up the software is required. SaaS-solution doesn't require as much internal IT work and it is basically easy to take in use, but there is not necessary any possibility for customization and updates are done according to the vendor's own schedule which can be hard to change. (Salesforce.com websites)

When teams work closely together, even when they are not physically together, or the Sales team is often on the road and a patchwork of apps, that are called CRM but are not really connected as a single database or "system of record", is used, the company is truly in need of a CRM tool. Other signs that a company needs a CRM tool are that deals are falling through the cracks because things are in spreadsheets and notebooks, the business is growing more quickly than it is prepared to and there are service issues in customer service. Usually, it is not possible to find customer data to make decisions fast at this point and the IT department is buried with maintenance requests. (Salesforce.com websites)

CRM tool can help an enterprise store and manage prospect and customer information, such as contact info, accounts, leads, and sales opportunities, in one central location. Instead of being mired down in yellow sticky note reminders or buried in spreadsheets and Google Docs, a company can move leads through the sales team quickly and easily, as a team. A CRM tool gives a business a quick way to score and route leads, track opportunities and activities, gain visibility into deal stages and business health for both prospects and customers. (Salesforce.com websites)

With a CRM tool, an enterprise can handle the record of its ongoing relationship with those contacts, whether they're a customer or a potential customer. A CRM tool has five different customer relationship tasks: for new customers, the New Customer Management, for stable customers the Retention Management Narrowly Defined, for endangered customer relationships as result of a complaint incident the Complaint Management, for endangered customer relationships for other reasons the Switching-Prevention Management and for customer relationships that are not attractive the Relationship Dissolution Management. (Salesforce.com websites; Strauss, Seidel 2005, page 6-8)

Traditionally CRM tools are bought to support sales, customer service and marketing. Nowadays customers are moving more and more to the internet and social media which has to be considered when choosing the CRM system. Customers have more choices than ever before and insist on the flexibility to conduct business anytime, anywhere and through any device or media. CRM tools have evolved into SCRM (Social Customer Relationship Management), which is catalysed by social technologies and utilizes the power of the cloud. It's no longer about technologies - the future of CRM will be social, transparent and customer-centric. To meet heightened customer expectations, companies must shift their business focus from the efficiencies of supply chain management to the effectiveness of demand chain management by directing their efforts toward identifying, acquiring and retaining profitable customers. (Wong 2011, page xiii)

Customers are searching for information on the internet and like to handle their shopping and customer service online as well, they are commenting on companies, their products and services multi-threaded and can also participate in products or services design (Crowd Sourcing) with the company. Customer database also needs the customers' experience and opinions about the organization, its products and services with the traditional customer classification (relation life cycle model, RFM-model, geographic and demographic segmenting). Because of this CRM is moving to a new phase called CEM

(Customer Experience Management), in which multiple terminals and service channels have to be taken into account. “Social CRM” is something in which B2B-companies can join their own organization’s internal actions with the CRM concept and also encourage customers to participate in these actions. (Ampiiri 2011)

1.2 Business Challenge, Objective and Expected Outcome of the Thesis

The CRM software is a vital tool for most companies. Companies are using CRM tools for different purposes. Usually SME’s have different kind of needs in comparison to large corporations but on the market, there are still solutions that suite both. SME’s are not that eager to pay for large work expenses that might come up when needing to implement or integrate CRM tools or they are may not have enough resources to do that.

The business challenge of this Thesis is that many different vendors who offer CRM software with varying characteristics exist. Not only do the characteristics of CRM systems differ, but so do the needs of companies using them. The financial sector needs different features than for example the construction sector. Still, there are many characteristics that every CRM tool should have. Accordingly, choosing the right type of CRM system to fit company needs is challenging in general and especially so for SME’s with limited resources.

The objective of this Thesis is to develop a practical tool to help SMEs choose a suitable CRM system for their needs. As the need for the CRM and resources varies in different SMEs, this tool will be developed to choose the most suitable versions of CRM tools for the company.

The expected out-come is to create a tool which helps CRM selection and takes the alternative system characteristics and operating context of the company into consideration. The tool itself is a recommendation table in which there are suggestions about specific CRM tools for different company types and the characteristics these company types need and how much effort they can put into the acquisition of the tool. The recommendation table will be piloted with a few different types of companies.

2 Research Design

2.1 Project Plan

The objective of the Thesis is to research different kinds of CRM software and find the suitable tools for different kinds of SMEs with a practical tool. The research of the Thesis is started by studying literature about CRM tools and their characteristics and getting familiar with the needs of different kinds of companies. The Thesis research plan is presented in Figure 1. “Research design in all phases”.

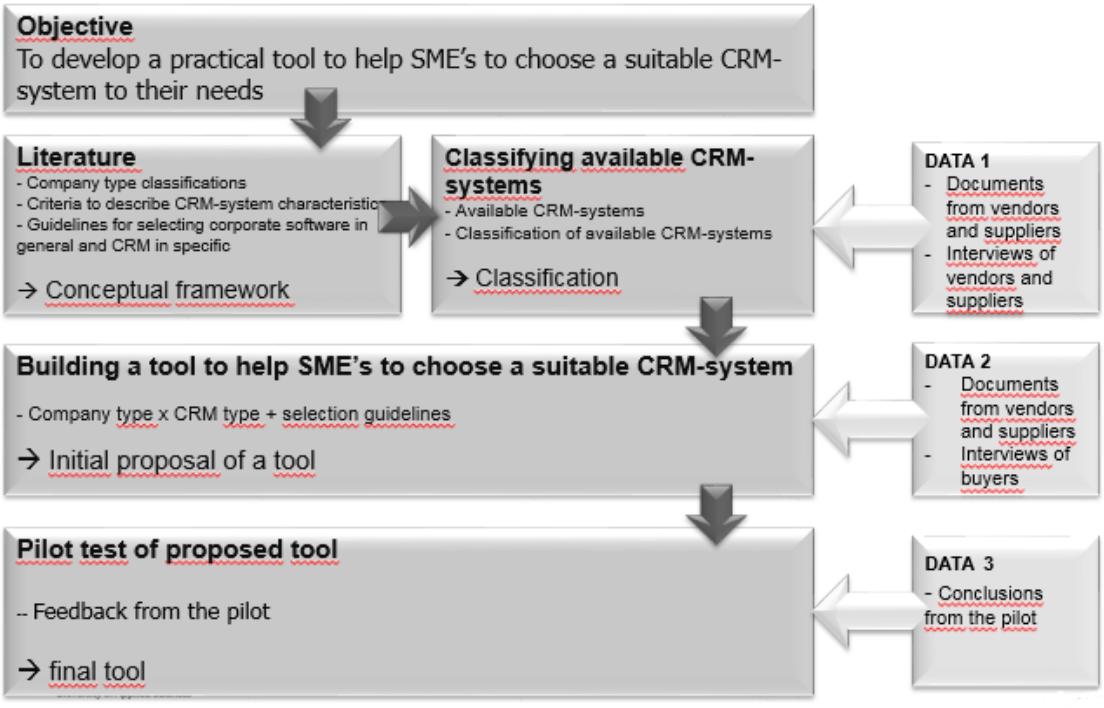


Figure 1. Research design in all phases

The conceptual framework is built by studying literature. The study about the company classifications includes different classifications, where the classification of companies has is built to support the Thesis. In criteria to describe CRM system characteristics, there is a study about different CRM tools, how much customization is possible and how much effort does the company need to make the customization. Guidelines for selecting corporate software is done by researching the selection need in general and specifically with a CRM system. The outcome of the Literature phase is the Conceptual framework of this Thesis.

Classification of the CRM systems is carried out by studying the available CRM systems with vendors' documentations and by trying to interview the suppliers about them. The classification itself is done with the different CRM tools' characteristics that are made into a table to make the characteristics easier to classify. The outcome is a classification table, in which the characteristics are compared to existing CRM tools.

The next phase is to build a recommendation table by combining the needs of companies and the classification to the amount of resources the company has to have when taking the CRM tool into use. This will be done by studying vendors' materials and characteristics and combing them to the needs of the companies. Some interviews of possible buyers in different company sectors will be presented to help get to know what they need. The outcome is the proposal tool, the recommendation table.

In the last phase, the tool will be tested by piloting it with different types of companies. With the piloting results, the tool will be improved. The outcome will be the final tool.

2.2 Data Collection Approach

The data collection in Data 1 phase is done mainly with the marketing materials and vendors documents about the CRM tools. The plan was to have a few interviews of vendors and suppliers on Data 1 phase. However, only one usable email-conversation with a vendor was elicited as it was very hard to get any interviews, when a purchase was not going to be made and no company was represented. Only one Finnish vendor was eager to share information about their product. Many vendors also have free versions with restricted testing periods available. This opportunity was used in several cases. The data collection design is presented in the Table 2. “Data 1, data collection plan”.

Table 2. Data 1, data collection plan

	Content	**Data source / informant**	**Outcome**
DATA 1 Classifying available CRM-systems using criteria as identified earlier	- Available CRM-systems - Classification of available CRM-systems	1. DOCUMENTS - Marketing materials of CRM-tools - Vendors and suppliers documents 2. (INTERVIEWS) - Product Managers and Supervisors - Vendors and suppliers	Summary of CRM classification conducted

In the Data 2 phase, the data collecting was carried out similarly to Data 1, i.e. mainly by studying marketing materials of CRM tools and vendors' documents. Some interviews were done anonymously only taking the company type and interviewee's position in the company into account. In the interview, the needs of the CRM tool and the needed main characteristics were inquired. In Data 2 phase, the data was collected from different vendors and the amount of different tools to include in this study was decided. All the characteristic were added to table with different tools so that it would be easier to compare different tool characteristics. With the help of this table, the recommendation table was built. In Table 3. "Data 2, data collection plan" presents the data collection plan of the Data 2 phase.

Table 3. Data 2, data collection plan

	Content	**Data source / informant**	**Outcome**
DATA 2 **Building recommendation template**	- How does the classification connect to customer needs - Recommendation table - Which (type) CRM system to choose in specific company contexts	1. DOCUMENTS - Marketing materials of CRM-tools - Vendors' and suppliers' documents 2. INTERVIEWS - Buyers / customers	Summary of proposed tool to help companies choose a suitable CRM system to their needs

Piloting the recommendation table was done with three different company representatives and the feedback from was the main data source in the Data 3 phase which is presented in Table 4. "Data 3, data collection plan". The recommendation table was corrected based on the feedback, so that the result is the final tool.

Table 4. Data 3, data collection plan

	Content	**Data source / informant**	**Outcome**
DATA 3 Pilot / feedback on proposed tool	- The final recommendation table	1. RESULTS - Feedback from the pilot	Summary of pilot / feedback based corrected tool

The data collection plans were followed as planned at first, so there were no significant changes to the plan during the process. The only changes made were on Data 2 phase when choosing the CRM tools for the Thesis as initially 25 different tools were planned to be taken into account, but when doing the actual research, it was soon noticed, that the amount is far too high and it was reduced to 16 CRM tools.

3 Conceptual Framework

3.1 Company Type Classifications

When classifying companies in different types, it was first found out, that different classifications have been done already. In the Thesis two common classifications standards, GICS (Global Industry Classification Standard) and Standard Industrial Classification TOL 2008, are studied. Both standards were studied by doing a literature review. With these two standards in mind, the classification for this Thesis is done by examining the outcome of the Thesis and by analyzing which kind of industries might the recommendation tool help the most.

3.1.1 GISC – Global Industry Classification Standard

GICS was developed jointly by Morgan Stanley Capital International (MSCI) and Standard & Poor's in 1999. GICS is a four-tiered, hierarchical industry classification system and it consists of 11 sectors, 24 industry groups, 68 industries and 157 sub-industries as presented in Figure 2. “Hierarchy of GICS”. GICS was developed to get an efficient investment tool to capture the breadth, depth and evolution of industry sectors. The GICS classification structure is reviewed on annual basis through an open consultation. (MCIS.com)

Figure 2 Hierarchy of GICS (MCIS.com)

In GICS, the companies are classified quantitatively and qualitatively. Each company have a principal business activity and the revenues are a key factor in determining which is the company's sub-industry in the GICS classification. Every company can be assigned to only one sub-industry in the GICS classification. Earnings and market perception are also important for classification purposes and relevant information is taken into account in the annual review process. (MCIS.com)

GICS is used by market participants across all major groups involved in the investment process: asset managers, brokers (institutional and retail), custodians, consultants, research teams and stock exchange. The GICS methodology is widely accepted as an Industry analytical framework for investment research, portfolio management and asset allocation. (MCIS.com)

The use of GICS vary. It is used on market investing by investors, identifying and analysing a customized group of companies by market participants, comparing companies

outside of the local markets and attracting capital into local markets when comparing stocks within same industry by investors, strategists and analysts and it helps market participants determine whether stock movements are locally based or part of a broader global trend. For making seamless global comparisons by industry, the GICS structure is meant to accurately represent the global equity markets. (UNM.edu)

GICS classification is relevant for this Thesis, as it is a ready system for company classification and it is easy to use. In the Table 5. “Global Industry Classification Standard (GICS)” the GICS structure is presented by Sector and Industry Groups. Industries and Sub-Industries are not presented in the table, so that the study of the industries would be on high level, but still it has been important to study also the lower groups for classifying companies in the Thesis.

All the Industry Groups are divided to Industries and all the Industries to Sub-Industries and all of them have their Sub codes. For example, the Sector 35 “Health Care” has Industry Group 3510 “Health Care Equipment & Services” under it. There is also an Industry 351030 “Health Care Technology” under which there is the Sub-Industry 35103010 “Health Care Technology”. Sub codes inherit all the earlier digits from Sector, Industry Group and Industry, so that there are four two digits in Sector, four at Industry Group, six digits at Industries and eight digits at Sub-Industries. The structure of GICS is presented in Table 5. Global Industry Classification Standard (GICS).

Table 5. Global Industry Classification Standard (GICS)

Code	**Sector**	**Sub code**	**Industry Groups**
10	Energy	1010	Energy
15	Materials	1510	Materials
20	Industrials	2010	Capital Goods
		2020	Commercial & Professional Services
		2030	Transportation
25	Consumer Discretionary	2510	Automobiles & Components
		2520	Consumer Durables & Apparel
		2530	Consumer Services
		2540	Media
		2550	Retailing

30	Consumer Staples	3010	Food & Staples Retailing
		3020	Food, Beverage & Tobacco
		3030	Household & Personal products
35	Health Care	3510	Health Care Equipment & Services
		3520	Pharmaceuticals, Bio Technology & Life Sciences
40	Financial	4010 4020 4030 4040	Banks Diversified Financials Insurance Real Estate
45	Information Technology	4510 4520 4530	Software & Services Technology Hardware & Equipment Semiconductors & Semiconductor Equipment
50	Telecommunication Services	5010	Telecommunication Services
55	Utilities	5510	Utilities

(MSCI 2014)

A company that is focused to many markets or produces many kinds of products is not so easy to classify by GICS. In addition, it can be difficult to find and individual company with primary drivers of value identical to the whole industry. For the investor, the GICS classification can be imperfect when seeking potential companies. For analysing the markets on the other hand, it would be useful to have also other aspects involved. (Fidelity.com)

In this Thesis, only some parts of the GICS classification is used to identify different industries. The whole GICS is a useful way of classifying companies for analysis, but the point of this Thesis is not to analyze the industries, but rather to classify the SMEs for analyzing CRM tools. So, the whole GICS is not so efficient for the purpose of this study. Some of the industries are also not so common to be classified as an SME.

The parts of GICS that were taken notice of when classifying companies in this Thesis were:

- Commercial & Professional Service
    - on Sector 20 the Industry Group 2020
- Energy, Utilities, Oil & Gas
    - a mix from Sector 55 Utilities and Sector 10 Energy, Industry Group 1010 Energy, Industry 101020 Oil, Gas & Consumable Fuels
- Financial Services including insurance and real estate
    - the 40 Financials Sector
- Healthcare & Pharmaceutical
    - the 35 Health Care Sector
- Entertainment & Media
    - The 25 Consumer Discretionary Sector Industry Group 2540 Media
- Programming & consultancy & Telecommunications
    - Includes only Sector 50 Telecommunication Services from GICS and other two sectors are from TOL 2008 that is represented on next chapter.

3.1.2 Classification of Economic Activities (Standard Industrial Classification TOL 2008)

Statistics Finland's Classification Services maintain and publish national classification recommendations. Several of them are based on international standards confirmed by EU directives. TOL 2008 is a revised statistical standard industrial classification that has been introduced in Finland in 2009 and it replaced the previous TOL 2002. The TOL classification was thoroughly revised in the early 1990s. Some updates were made to it in 2002, which is why it was referred to as TOL 2002 in Finland and now after latest renewals, TOL 2008. (Statistics Finland ; Standard Industrial Classification TOL 2008)

TOL 2008 is based on the European Union's classification of economic activities, NACE Rev. 2 (Regulation (EC) No 1893/2006 of the European Parliament and of the Council). The term NACE is derived from the French Nomenclature statistique des activités économiques dans la Communauté européenne. Every EU-country has their own statistical service based on NACE, such as TOL 2008 in Finland. NACE is based on the United Nations' classification of economic activities, ISIC (International Standard Classification of All Economic Activities). NACE's three- and four-digit levels can be combined ISIC

classes and the main and two-digit levels are equal to ISIC classes. (Standard Industrial Classification TOL 2008)

During the past 15 years, many economic structures and procedures have been changed in technology industries, but also the biggest changes done are that services have become specialized industries of their own. This has happened especially within information and communications technology services in which the volume of outsourcing is growing continuously. The statistics have to be reviewed when social and economic structures change which is why the revised standard industrial classification TOL 2008 was introduced. (Statistics Finland)

Industry classification consists of five hierarchy levels:

I. Level with characters (letters) in which main classes are marked with letters,
II. Two-digit level in which all classes are marked with two-digit codes,
III. Three-digit level in which all classes are marked with three-digit codes,
IV. Four-digit level in which all classes are marked with four-digit codes,
V. National five-digit level in which all classes are marked with five-digit codes.

TOL 2008 follows NACE Revenue 2 in one- to four-digit levels. The five-digit level is described based on Finnish national needs. (Standard Industrial Classification TOL 2008; Statistics Finland)

TOL 2008 is used in different economic territories such as production and employment statistics and the national economy's accounts statistics. It is used to describe economic activities such as data collection- and description-frame. The TOL 2008 classifications' first and second levels are presented in Table 6. "Standard Industrial Classification (TOL 2008)" (Standard Industrial Classification TOL 2008; Statistics Finland)

Table 6. Standard Industrial Classification (TOL 2008)

A	Agriculture, forestry and fishing	01	Crop and animal production, hunting and related service activities
		02	Forestry and logging
		03	Fishing and aquaculture
B	Mining and quarrying	05	Mining of coal and lignite
		06	Extraction of crude petroleum and natural gas

		07	Mining of metal ores
		08	Other mining and quarrying
		09	Mining support service activities
C	Manufacturing	10	Manufacture of food products
		11	Manufacture of beverages
		12	Manufacture of tobacco products
		13	Manufacture of textiles
		14	Manufacture of wearing apparel
		15	Manufacture of leather and related products
		16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
		17	Manufacture of paper and paper products
		18	Printing and reproduction of recorded media
		19	Manufacture of coke and refined petroleum products
		20	Manufacture of chemicals and chemical products
		21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
		22	Manufacture of rubber and plastic products
		23	Manufacture of other non-metallic mineral products
		24	Manufacture of basic metals
		25	Manufacture of fabricated metal products, except machinery and equipment

		26	Manufacture of computer, electronic and optical products
		27	Manufacture of electrical equipment
		28	Manufacture of machinery and equipment n.e.c.
		29	Manufacture of motor vehicles, trailers and semi-trailers
		30	Manufacture of other transport equipment
		31	Manufacture of furniture
		32	Other manufacturing
		33	Repair and installation of machinery and equipment
D	Electricity, gas, steam and air conditioning supply	35	Electricity, gas, steam and air conditioning supply
E	Water supply; sewerage, waste management and remediation activities	36	Water collection, treatment and supply
		37	Sewerage
		38	Waste collection, treatment and disposal activities; materials recovery
		39	Remediation activities and other waste management services
F	Construction	41	Construction of buildings
		42	Civil engineering
		43	Specialised construction activities
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	45	Wholesale and retail trade and repair of motor vehicles and motorcycles
		46	Wholesale trade, except of motor vehicles and motorcycles
		47	Retail trade, except of motor vehicles and motorcycles

H	Transportation and storage	49	Land transport and transport via pipelines
		50	Water transport
		51	Air transport
		52	Warehousing and support activities for transportation
		53	Postal and courier activities
I	Accommodation and food service activities	55	Accommodation
		56	Food and beverage service activities
J	Information and communication	58	Publishing activities
		59	Motion picture, video and television programme production, sound recording and music publishing activities
		60	Programming and broadcasting activities
		61	Telecommunications
		62	Computer programming, consultancy and related activities
		63	Information service activities
K	Financial and insurance activities	64	Financial service activities, except insurance and pension funding
		65	Insurance, reinsurance and pension funding, except compulsory social security
		66	Activities auxiliary to financial services and insurance activities
L	Real estate activities	68	Real estate activities
M	Professional, scientific and technical activities	69	Legal and accounting activities

		70	Activities of head offices; management consultancy activities
		71	Architectural and engineering activities; technical testing and analysis
		72	Scientific research and development
		73	Advertising and market research
		74	Other professional, scientific and technical activities
		75	Veterinary activities
N	Administrative and support service activities	77	Rental and leasing activities
		78	Employment activities
		79	Travel agency, tour operator and other reservation service and related activities
		80	Security and investigation activities
		81	Services to buildings and landscape activities
		82	Office administrative, office support and other business support activities
O	Public administration and defence; compulsory social security	84	Public administration and defence; compulsory social security
P	Education	85	Education
Q	Human health and social work activities	86	Human health activities
		87	Residential care activities
		88	Social work activities without accommodation

R	Arts, entertainment and recreation	90	Creative, arts and entertainment activities
		91	Libraries, archives, museums and other cultural activities
		92	Gambling and betting activities
		93	Sports activities and amusement and recreation activities
S	Other service activities	94	Activities of membership organisations
		95	Repair of computers and personal and household goods
		96	Other personal service activities
T	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	97	Activities of households as employers of domestic personnel
		98	Undifferentiated goods- and services-producing activities of private households for own use
U	Activities of extraterritorial organisations and bodies	99	Activities of extraterritorial organisations and bodies
X	Industry unknown	00	Industry unknown

(Standard Industrial Classification TOL 2008)

The main weakness of TOL 2008 is the same as that of GICS, as every company can belong only to one class which might be hard to determine if the company has multiple business models. Another weakness is that it is updated less frequently than GICS. As the business environment is in constant change, the need for updates could be annual. What is positive, is that on the Statistics Finland web-pages, it is easy to get to know also the lower levels as there are comprehensible explanations about every industry.

In this Thesis, the parts for classifying companies that are in accordance to TOL 2008 include:

- Activities of membership organisations
    - On level S Other services activities
        - 94 Activities of membership organisations
- Car & motor vehicle industry
    - Level C Manufacturing
        - 29 Manufacturing of motor vehicles, trailers and semi-trailers
- Construction
    - Level F Construction
- Food products and beverages
    - Level C Manufacturing
        - 10 Manufacture of food products
        - 11 Manufacture of beverages
- Hotel & Restaurants
    - Level I Accommodation and food service activities
        - 55 Accommodation
        - 56 Food and beverage service activities
- Manufacturing of textiles & furniture
    - Level C Manufacturing
        - 13 Manufacturing of textiles
        - 31 Manufacturing of furniture
- Programming & consultancy & Telecommunications (GICS, TOL 2008)
    - Includes the Telecommunications from GICS
    - From TOL 2008 level J Information and communication
        - 60 Programming and broadcasting activities
        - 62 Computer programming, consultancy and related activities
- Public Sector
    - O Public administration and defence; compulsory social security
- Retail, Wholesale
    - Level G Wholesale and retail trade; repair of motor vehicles and motorcycles
        - 45 Wholesale and retail trade and repair of motor vehicles and motorcycles
        - 46 Wholesale trade, except of motor vehicles and motorcycles
        - 47 Retail trade, except of motor vehicles and motorcycles

- Transportation & Logistics & Storage
    - H Transportation and storage

3.1.3 Classification of Companies for CRM system

New industries and services are popping up frequently. Rising company types in Finland include health tourism, game-industry, ICT consultation and construction industry, in which nowadays every carpenter, plumber or painter are sole proprietors. Outsourcing is something that is growing in every industry.

In this Thesis, both Standard Industrial Classification (TOL 2008) and Global Industry Classification Standard (GICS) are used and mixed since neither of them answered the needs of this study completely. Both classifications are mainly for industry level analysis and for investors but in this Thesis the analysis focuses on CRM tools, not different industries. Although the CRM tool would be useful for every industry, this Thesis focuses on those that can easily be seen to use CRM tools and companies that are SMEs. In some industries, it is harder to find SMEs in Finland, for example in Mining. In two different classifications like GICS and TOL 2008 there are overlaps, but when using these two together, a decent number of companies that use CRM tools for different purposes can be found.

Classification of companies and reasons why these have been chosen for this Thesis:

- Activities of membership organisations (TOL 2008)
    - These organizations usually have a membership base, in which CRM tool is needed.
- Car & motor vehicle industry (TOL 2008)
    - Manufacturing was too big an industry level to be used as a whole, as motor vehicle manufacturing might use CRM tools differently than Food products and beverages manufacturing.
- Commercial & Professional Service (GICS)
    - There are different areas from office services to human resources that can be acquired or offered by a third party and for handling that, the CRM tool can be effective.
- Construction (TOL 2008)

    - In construction industry, more and more outsourcing happens and subcontractors are used, so a CRM tool is practical for handling all the participants.
- Energy, Utilities, Oil & Gas (GICS)
    - This is a large industry in which there are also many smaller companies for specific purposes. Quite a different industry than most of the others in this Thesis.
- Entertainment & Media (GICS)
    - A growing business in which there are lots of small competitors that need to take care of their customers.
- Financial Services (GICS) incl. insurance, real estate
    - In comparison to most industries, Financial services are more strict about the safety of customer information, so they need a liable system and usually on-site, not in cloud.
- Food products and beverages (TOL 2008)
    - This industry implements different kind of manufacturing than big motor vehicles and has a different kind of customer base, so the need for a CRM tool varies.
- Healthcare & Pharmaceutical (GICS)
    - As in the financial sector, the customer sensibility is important in healthcare and pharmaceutical industry.
- Hotel & Restaurants (TOL 2008)
    - Service industry where a lot business to business sales are used and there are lots of SME's.
- Manufacturing of textiles & furniture (TOL 2008)
    - There are a lot of small entrepreneurs in this industry and they have various customer bases.
- Programming & consultancy & Telecommunications (GICS, TOL 2008)
    - These industries were put together because from the CRM tool point of view, they might share the same kind of needs for the tool.
- Public Sector (TOL 2008)
    - Mainly, there are no SMEs in the public sector. However, there are still some in correctional services, school administration and research activities. These are usually covered by the state budget, so the need for a CRM tool might be different and have more regulations than in private industry.

- Retail, Wholesale (TOL 2008)
    - These are industries that mainly do business to business trading and their customers are typically bigger companies or concerns.
- Transportation & Logistics & Storage (TOL 2008)
    - This category includes industries from taxi transportation (which is mainly run by SMEs) to railways and aviation to water transport, which have many companies as customers.

3.2 Criteria to Describe CRM system Characteristics

CRM system characteristics can be classified in many perspectives. They could be classified for example by the use of characteristics: operational, analytical and collaborative, but in this case, the use of CRM systems might change in the future, so the criteria would need constant updating. Another way of determining criteria would be by aspects such as reliability, responsiveness, accessibility, safety, courtesy, consideration, communication, recognising the customer and competence, but all the emotions are hard to measure. (Businessballs web-page)

This Thesis' criteria describing CRM system is built mainly with a more technical aspect in mind, by at first figuring out the answers to questions like: How much implementation and integration work does a specific CRM system need? Are there ready modules to choose or is all the customization done by the company? Is there any possibility to make customizations? How will the CRM system be used? Does the company have resources to use on IT cases? Is there a need to have the CRM system running quickly or is there time to make changes? These problems lead to making three different categories of CRM systems, based on the characteristics shown in Table 7. "CRM types".

Table 7. CRM types

CRM type	**Characteristics**
Light version	robust system, no customization, existing modules
Medium version	system with little customization and existing modules
Heavy version	fully customizable system

Light version of CRM system is a robust system in which no customization can be done, but only modules that already exist or can be bought as add-ons are possible to use. Usually it is very easy to implement and start to use right away, but its possibilities to be integrated into existing systems are not so good. Light versions are mainly ready-to-use cloud-based versions.

The medium version of a CRM system has existing modules to choose from, but some customization can also be done. The implementation may need some work and the CRM system might not be possible to be integrated into every system in the company. This might be the most common CRM system to be chosen.

A heavy version of a CRM system is fully customizable. All open source systems belong to this category, as they can be fully customized with proper IT knowledge that the company may have or can be outsourced from another company or provided by the supplier. Furthermore, this category includes all of the ruling systems such as SalesForce and Microsoft Dynamics, as those have many customizable modules to choose. Heavy versions can be hard to implement, but it is possible to integrate them to almost every systems in the company.

3.3 Guidelines for Selecting Corporate Software in General and CRM in Specific

Generally, when selecting the ideal software system, a company should make sure that the new software will automate many tasks, enabling staff to operate more efficiently. The software should also grant enhanced access to the company's information. Choosing CRM system for the company mainly follows the same guidelines that choosing any

kind of other system does, but there are a few specific things about CRM which is why selecting software is discussed on a general level at first and after that, specific features of choosing CRM system are considered. (Blackbaud web-pages)

3.3.1 Guidelines for Selecting Corporate Software in General

When choosing new software for the company, one of the main goals is to increase accountability and effectiveness. The new software should free up time for the staff and not increase time used for specific tasks. The need to purchase new software may vary from time to time and it is a smarter choice to pick a software that can be expanded with new features in the future if needed. The new software should save money in the long run. (Unitedway web-pages)

The new software should simplify data storing and provide the company a means of analysing and acting based on its valuable information. Options for obtaining software to the company's use include either purchasing or subscribing to existing software or developing a new software product. In this Thesis, developing new software was not taken into account as there are already so many CRM systems on the market. Confidentiality is something to take into account, especially when choosing cloud-based systems, in which the data is installed to another company's servers. Alternatively, the system can be installed on-site to the company's own servers. In this case the company is responsible for all the data in the system. It is important to plan data security before purchasing the software. (Blackbaud web-pages ; Unitedway web-pages)

To select the right software, the company should evaluate the defined data collection, analysis, reporting and storage needs. Furthermore, the need for new hardware or software or should be determined as well as possible user constraints. The company can get familiar with vendors and available software through the vendors' advertising. Most vendors also provide information on their web sites, promotional materials and software demonstrations. (Unitedway web-pages)

The price of the system is usually one of the main selection criteria when choosing specific software. Comparing costs and listing expense items like purchase price, maintenance costs, training costs, customization costs and upgrade costs should be done before purchasing anything. It is also a good idea to compare the system features with other similar systems. The company has to decide beforehand how much customization

they need to the system and what kind of configuration they need. Integrations must be planned and the need for future expansion determined. (Unitedway web-pages)

3.3.2 Guidelines for Selecting CRM Software

When selecting the CRM software, similarly to selecting any other software, the company should first recognize the need. The main value is the customers. Forget plain Excel sheets, as well as heavy implemented systems (unless they are truly in place). All the core processes must be taken into consideration on marketing, sales and customer service. Many CRM vendors are focusing too much on possession of customer information and forgetting for example marketing, where the need for telemarketing and email-marketing can be different. (Ampiiri 2011)

If the company does not have enough resources when selecting the CRM software, impartial consultant hiring would be a good choice for making the processes, competitive bidding and requirement specifications, which is a key thing when buying new CRM software. Getting to know the target customers is important and so is the development of social media. (Ampiiri 2011)

The CRM software should be made a part of the corporate strategy, so that the company should evaluate its internal structures and workflows regarding the company strategy and its aims. When choosing the CRM software the company should define the goals, that they want to achieve with the new CRM tool. An interdisciplinary project team should prepare the definitions for both business and IT-side. (Hubspot.net)

Optimizing all processes goes hand in hand with a successful CRM project. The CRM project can be highly complex, if there is need for several features and integrations to present to other systems. Both users and customers have to be taken into account, so all the processes might be complex, as well. User-oriented software only displays the data that is relevant to current users, but when trying to find a solution for growing the business, the future use and customer goals need to be figured out, too. (Hubspot.net)

Being able to access the CRM software on mobile devices is not a luxury, but an essential function for sales and service employees. Mobile use will be the most growing technological development in the coming years, so it should be taken to consideration when starting the project for choosing the CRM. However, there are also industries in which

mobile use is not necessary or may even be forbidden, like finance industry and banking. (Hubspot.net)

The integration into the IT environment and the implementation method should be defined at the beginning of the CRM project. In addition, the need of analysis features and reporting should be taken to consideration as well as possible specific customizations to the business. Technological leadership in industry is one of the competitive aspects. The technological aspect is also important to consider; the company must decide whether all the maintenance and updates should be carried out internally or is it easier to have a cloud-based solution which is maintained and updated by the vendor. (Hubspot.net)

There are three kinds of CRM software on the market for different purposes. Operational CRM products are made for improving customer service, online marketing and automating salesforce and they are used for marketing, selling and automating service-processes. Analytical CRM products are for building data warehouses, improving relationships and analyzing data and they are mainly used for customer information and behavior analysis. Collaborative CRM products are used for building online communities, developing business to business customer exchanges, personalizing services and they are used for communication with customers by email interfaces, databases, call centers, internet marketing and customer contact. (Abendajo 2003)

With these aspects, the Thesis guidelines for choosing CRM software are built as Table 8. “Guidelines for selecting CRM” shows.

Table 8. Guidelines for selecting CRM

Guidelines
Price
Is the use operative, analytical or collaborative
How much effort and resources are needed
Easy to implement and integrate to current systems
Customizations needed or possible and scalability
Functionalities and user interface
Own server or SaaS
Security and liability
User training, services and support
Mobile use and social media

Explanations for these areas of the Guidelines:

- Price: Price is the one of the main aspects for many SMEs. This includes the purchase price and as well as maintenance, updates and possible other new IT systems or servers that will be needed.
- Is the use operative, analytical or collaborative: This controls which kind of features are needed from the CRM software.
- How much effort and resources needed: Guidelines for the company's own IT expertise and how much effort they are able to put into the project. This also includes open source solutions that might need more effort from the IT team than ready packets.
- Easy to implement and integrate to current systems: This could be essential for companies that already have many different systems in use and need to integrate those with the CRM software.
- Customizations needed or possible and scalability: This gives guidance to how much customization is needed for example to interface and reporting.
- Functionalities and user interface: When choosing ready modules, it is important to get to know all the existing functions and whether or not the user interface is easy to use.
- Own server or SaaS: This guideline is needed when deciding whether to control the system and maintenance internally or is there need to get the system running quickly and should maintenance and support be purchased from the supplier.
- Security and liability: An important aspect for example for healthcare and financial industries, but also to others.
- User training, services and support: Is there need to purchase training, services and support at the same time as the CRM system or can they be arranged internally.
- Mobile use and social media: In the future all customer relations will be taken care of mainly by mobile devices and in social media, so these guidelines will be important to validate at the beginning of the CRM project.

3.4 Conceptual Framework

In this Thesis, the classification of CRM systems is done on three levels: by the company-type, system characteristics and guidelines for choosing the CRM software. All three of these levels are connected to each other. By cross-referencing all different guidelines, the potential CRM software for the company use is to be found in Figure 3. “Conceptual framework”.

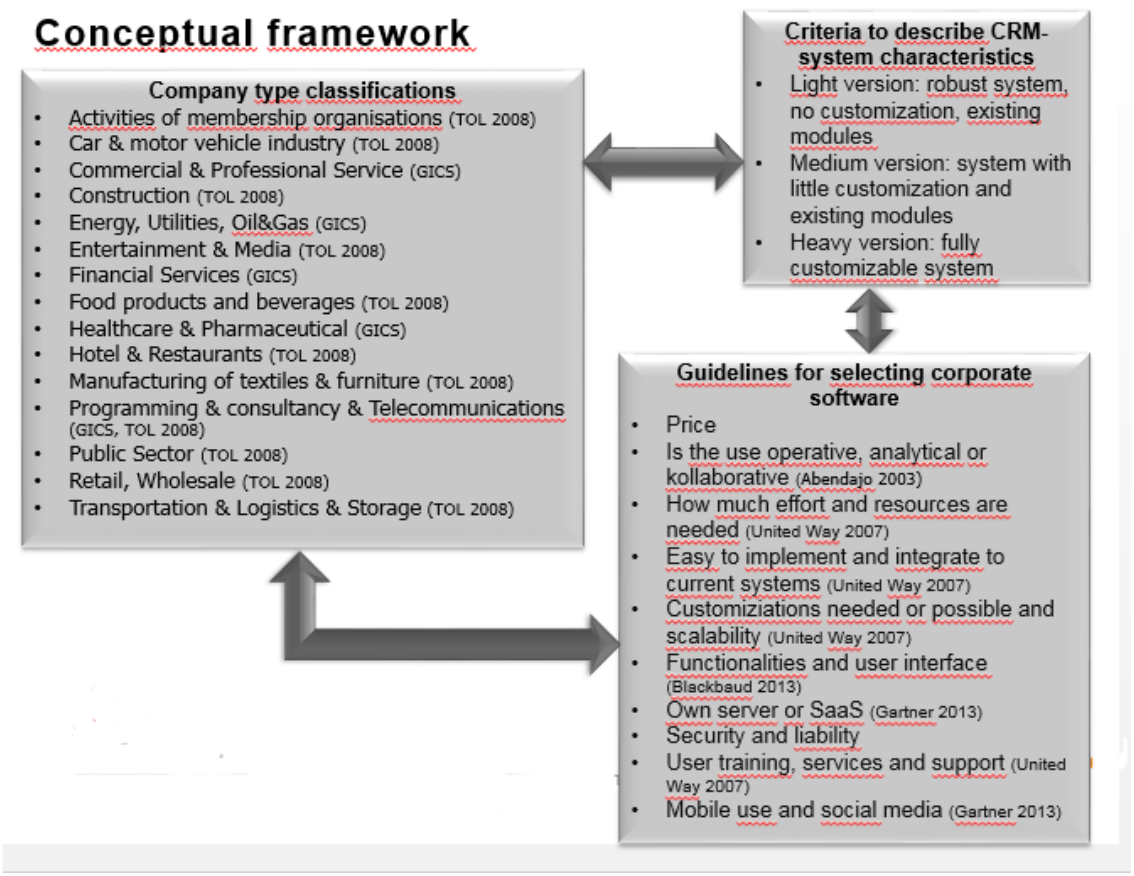


Figure 3. Conceptual framework

In the conceptual framework, it is possible to find all the variations and contexts. This determines the guidelines for this research and organizes all the aspects that can be found from marketing, sales, customer-service and IT. The conceptual framework is based on literature. In this Thesis, the aim is to verify the results also in real business.

4 Classifying Available CRM Systems

4.1 The Available CRM Systems on the Market

Many smaller SMEs are using Excel sheets as a CRM tool. For example, three sheets can be used: the customers might be in the first sheet, second is for actions and the third for materialized contacts. This could be the easiest choice for a solo entrepreneur for their first CRM system. But when the business starts growing and new employers are found, the need for a real CRM tool might become stronger. (Ahonen 2015)

There are cheaper solutions of CRM tools available. Usually, the making of sales campaigns, a traditional dashboard and customer possession are included in these tools. Almost every CRM vendor have a free version with a trial period from 14 to 30 days, which is helpful when making a longer-term investment. In better versions, also user support, sales analytics and reporting possibilities and in many cases better hardware, like extra storage are included. The most expensive versions are clearly designed for international businesses, which is shown by for example regional targeting and the possibility to use multiple currency units. Furthermore, social media tools and mobile use are upcoming trends in the CRM industry. (Ahonen 2015)

On the market, there are available open source CRM systems, that can be taken into use for free; the system itself does not cost a penny, but implementation, customization and integrations can add the costs if the company does not possess enough IT-knowledge. Using open source systems may include costs because of modules that can be offered both in payable systems and in free systems. Open sourced systems can also be customized by the company itself if needed. This can be done either by the company or a third party. In this Thesis, three open source CRM systems are observed.

The CRM software are divided to on-site systems, that are installed to the company's own servers and to SaaS systems which are cloud-based systems installed in the vendor's own net server. One thing that eases up the SaaS version implementation is that it doesn't need implementation. SaaS versions are usually browser versions and all the updates are made by the vendor, but normally it is harder to make any customization in those systems. Traditionally installed client server systems have hidden costs because of hardware, maintenance, backups, personnel and software/hardware updates.

Most vendors display their prices and pricing models on their web pages. When the prices are not visible, it might be a struggle to get information from vendors, if the one who is asking is not a potential buyer. The only one of the vendors who were asked about pricing answered by email. In this Thesis, a few CRM software with no pricing information are included, but still there are many other features to combine these software with other systems.

4.1.1 vTiger

vTiger is an open source software, which is meant for starting businesses that already possess knowledge of databases and Web servers. The software fills up the company's basic needs such as automatization of sales, billing, project management and marketing. The company's willingness to save money might also be the reason to choose the free solution. For a company that employs only few people and doesn't trust commercial vendors' support, this might be great solution. (Ampiiri 2011 ; Ahonen 2015)

Table 9. vTiger editions

Sales Edition	**Support Edition**	**Ultimate Edition**
18 €/user/month	18 €/user/month	27 €/user/month
Contact Management	Contact Management	Sales Edition and Support Edition features
Document Management	Document Management	Project Management
Workflow Automation	Workflow Automation	Inventory Management
24h support (Phone, email and chat)	24h support (Phone, email and chat)	
Sales Pipeline Management	Case Management	
Leads & Opportunities	Knowledge Base	
Web-to-Lead Forms	Web + Email to Ticket	
Advanced Reporting	Reporting	
Mass Email Campaigns	Service-Level Agreements	
10 000 Emails / Month		25 000 Emails / Month
Quote Builder	Business Hours	

Sales Forecasting	Support Insights	
Twitter Integration	Customer Portal	
Invoicing	Twitter Integration	
Payment Processing	Make, receive, log & record phone calls	
Multiple Currencies	Custom modules and records.	
Autoresponder Campaigns		

(vTiger.com website)

vTiger also offers the extra services Kickstart, Migration and Email Marketing Plans on request. The descriptions of the extra services are described in Table 10. “vTiger extra services”.

Table 10. vTiger extra services

Extra services	**Description**
Kickstart Service	For a business that needs to set up their CRM tool quickly and are not able to do it by themselves, there are also some meetings and training for the new users
Migration Service	For business that needs to migrate data from old CRM tool to vTiger
Email Marketing Plan Service	For business that needs to send more than 10 000 to 25 000 emails per month

(vTiger.com website)

A starting firm that has IT-knowledge can handle their CRM needs with the free open source solution and save money, but it is more recommended for bigger SMEs to use the commercial solutions.

4.1.2 Pipedrive

Pipedrive is for SMEs that want to exercise systematic salesmanship. Pipedrive is meant for businesses that need the CRM tool basically for selling. The tool can be used as a basic confident sales tool also for bigger organizations. The user can get announcements in Facebook-style. (Ahonen 2015)

Pipedrive has a simple data import and export function from a spreadsheet, Highrise, Zoho or Sugar CRM. Imports and exports are also possible from other tools with customization and additional payment. The main features are shown in Table 11. “Pipedrive features”. (pipedrive.com website)

Table 11. Pipedrive features

Pipedrive
11 €/user/month
Timeline view
Sales reporting
Customize everything
Mobile apps
Reliable and safe
Google Apps integration (Google Contacts, Google Calendar, Google Drive)
Smart email BCC (work email to integrated to Pipedrive)
Google Maps integration
Powerfull API
Multi-language and multi-currency

(pipedrive.com website)

Pipedrive has many ready integrations filling up the needs of the customer, for example GoogleApps, Yesware, MailChimp, Zapier, PandaDoc, GoogleMaps, Pipedrive Outlook Sync, SnapADDY, RightSignature, ecquire, dapulse, SupportBee, NiftyQuoter, Survicate, BedrockData, quoteroller, Flow XO, Userlike, Woopra, Intellibook, Leadfeeder, Talkdesk, ProjectVision, Kixie, Plecto, PieSync, Proposify, Gravity Forms, Drip, Acuity, ActiveDemand, Webmerge, Aircall, FormsByAir, Wishpond, Datananas, Prospect.io, Happyfox, Dataiku, Argo, Blitzen, LeaDroid and Front. (pipedrive.com website)

4.1.3 Highrise

Highrise is intended for small companies for saving customer data. The users of Base-Camp can easily add this tool to their use. Highrise is not easy to integrate to Google's own services. An organization can share contacts with your team, track tasks & set reminders, manage communication, track new business deals, add files to deals and projects, attach emails to deals, projects or contacts, reply to important emails, add tasks to people, companies, or projects, add notes and comments, shared contacts and companies, search and filter all your contacts, tag contacts for easy organization and custom data fields for people and companies. There are three different editions of Highrise: Basic, Plus and Premium that are shown in Table 12. "Highrise Editions". (Ahonen 2015 ; pienyrityskonsultit.fi website; highrisehq.com website)

Table 12. Highrise Editions

Basic	**Plus**	**Premium**
22 €/month	45 €/month	90 €/month
maximum 6 users	15 users	40 users
10 deals	20000 contacts	30000 contacts
5000 contacts	unlimited deals	unlimited deals
5GB storage	15GB storage	30GB storage

(highrisehq.com website)

Highrise has integrations with many third-party tools via the API interface. Examples include MailChimp, Tracks, Zapier and Wufoo. The tool also has data import and export functions. Highrise has also an iPhone application for mobile use. (highrisehq.com website)

4.1.4 Zoho CRM

Zoho CRM is a comprehensive service, a SaaS-software, in which there are tools from email-marketing to accounting, so the CRM is only one part of the whole system for the SME sector. Zoho CRM is tightly working with Google and a speciality of it seems to be an easy direct communication with customers. The project management features are included as a standard, but the tool selection is not all that wide. Zoho CRM is a tool for marketing reporting, high-end reporting and import/export functionalities for a company that uses Google-products and office tools a lot and needs multiple tools for CRM. For a

smaller company, it is a tool for other than sales, as well. (Ahonen 2015 ; lodgianlocator.com 2010)

Developers, CRM Project Managers and System Integrators are the target audience of Zoho CRM. It is easy to use for support organization, but using it for sales organization for example to importing a customer as a prospect to a real customer, as a sales pipe to a real customer project, can be hard and needs a lot of programming and research. An adding business risk is that the client relationship is mostly with USA. (pienyrityskonsultit.fi websites ; Ampiiri 2011)

Zoho CRM can be used for free when there are only three users or less. The system has also some other restrictions of features with the free edition and it does not work if some of the users have other editions in use. If an organization needs more than the free edition, there are three different versions to choose from: Standard, Professional and Enterprise as shown in Table 13. “Zoho CRM Editions”. (lodgianlocator.com 2010 ; zoho.com/crm websites)

Table 13. Zoho CRM Editions

Standard	**Professional**	**Enterprise**
11 €/user/month	18 €/user/month	32 €/user/month
Free Edition features	Standard Edition features	Professional Edition features
Sales forecasting	Email integration	Territory management
Reports and dashboards	Social CRM	Custom modules
Document library	Google AdWords integration	Custom applications
Roles and profiles	Workflow automation	Custom buttons
Mass email	Inventory management	Workflow approval processes
Call center connectors	Macros	Time-based actions
100 000 records	Unlimited records	Multiple currencies

(zoho.com/crm websites)

All the Zoho CRM Editions have: mobile features as access customer emails, locate prospects anywhere across the globe, manage inventory, work offline, log phone calls, add voice notes, check in, view customer location in Google Maps, collaborate using

feeds and attach files from Zoho Docs. Zoho CRM provides API for integrating CRM modules with third-party applications such as: accounting, ERP, e-commerce, self-service portals and others. There are also third party integrations for example to: MailChimp, Contactology, Gmail, Coconet, GoogleDocs, GoogleApps, ConstantContact and Zopim. (zoho.com/crm websites)

4.1.5 Base CRM

Base CRM is mainly for telecommunication and analytics about telecommunication. There is a possibility to save tele-conversations to the system. Base CRM works native on mobile devices and it is easy to integrate for example to Googles services or to Dropbox. Base CRM is a good choice for a company that needs functional customer service in CRM as a turnkey and with wide integrations. With this choice, the company needs to be well able pay for the CRM which is expensive and has Apple-kind of luxury. (Ahonen 2015)

For different kinds of businesses, there are three different editions that are shown in Table 14. “Base CRM Editions”.

Table 14. Base CRM Editions

Starter Edition	**Professional Edition**	**Enterprise Edition**
23 €/user/month	68 €/user/month	114 €/user/month
Good for basic sales tracking and customer management	Complete CRM and reporting	Suitable for all-in-one sales platform
Up to 5 users	Growing businesses	Data driven enterprises

(getbase.com websites)

The Base CRM is a kind of complete CRM, but possibly not very suitable for a starting business that does not yet know what they want to achieve with CRM system.

4.1.6 Insightly

Insightly is targeted for Google-using SMEs. It is a bit like Zoho CRM but a much clearer packet. It is easy to integrate to social media and email-systems. Insightly counts as a Google-system but can be integrated also to Office365. The project management is strong with the system. There are many restrictions on different features. (Ahonen 2015)

There is a free version for Insight up to two users. There are also four different commercial versions as shown in Table 15. “Insightly versions”. The key integrations of Insightly are email, GoogleApps and Office 365. (insightly.com websites)

Table 15. Insightly versions

Basic version	**Plus version**	**Professional version**	**Enterprise version**
11 €/user/month	26 €/user/month	45 €/user/month	90 €/user/month

(insightly.com websites)

The main features of Insightly are presented in Table 16. “Insightly features”.

Table 16. Insightly features

Insightly
Powerful CRM
Project Management Integrated
Sales Opportunities
Social CRM
Business Overview
Report and Go Mobile with the solution that works for you

(insightly.com websites)

Insightly is a great solution also for businesses that are just starting to use the CRM system and the solutions are not very expensive even if there are more than two users.

4.1.7 Sugar CRM

Sugar CRM is an open source system for an organization with 10+ employers. It can be integrated both to Outlook or Gmail (and to other systems), which makes it an impartial solution of its technology and there are also a bunch of social media tools. For its users, it offers ways to handle and direct accounts, handle email-marketing and create campaigns. Most of the features can be taken to use without coding, although customization is possible. Sugar CRM requires knowledge on databases and web servers, especially when implementing. (Ahonen 2015 ; Ampiiri 2011)

There are three different versions to choose from: Sugar Enterprise, Sugar Professional and Sugar Ultimate in Table 17. “Sugar CRM Editions”. The price of the product includes internet and email support and updates, as well. For open source based Sugar CRM, there is the web-page sugarforge.org on which users can load enlargements conducted by other users or publish their own enlargements for other users. (sugarcrm.com websites)

Table 17. Sugar CRM Editions

Sugar Professional	**Sugar Enterprise**	**Sugar Ultimate**
36 €/user/month	59 €/user/month	136 €/user/month
Sales automation and forecasting	Sugar Professional functionality	Sugar Enterprise functionality
Marketing lead management	Revenue Line Item Level Opportunity Tracking Forecasting	
Support automation	Product Level Quotes	
Call center automation	Advanced Workflow	
Reporting & Dashboards	Role-based Views	
SugarCRM Mobile	100 Concurrent Customer Self-service Portal Users	
Cloud or on-premise deployment	SQL-Based Reporting Access	
15GB storage	60GB storage	250GB storage
Unlimited Studio customizations		

Unlimited online support	12x5 (hours/days) Email and Phone Support	24x7 support
Support for MySQL and SQL Server (On-Site)	Support for Oracle and DB2 (On-Site)	Assigned Technical Account Manager
Minimum annual subscription starts at 4366 €/year, including 10 user licenses.	Minimum annual subscription starts at 7094 €/year, including 10 user licenses.	Up to 5 sandbox instances (On-Demand)

(sugarcrm.com websites)

There are also features that can be found in each Edition like in Table 18. “Sugar CRM features”.

Table 18. Sugar CRM features

Marketing	**Sales**	**Service & Support**	**Integrations & Management**	**Productivity**	**Data & Analytics**
Campaign Management	Performance Management	Multichannel Contact Center	ERP	Content Management	Data Enrichment
Marketing Automation	CPQ	CTI integration	Accounting & Financial Management	Web Conferencing Management	Business Intelligence
Email Marketing	Proposal and Contract Management	Voice of the Customer	Integration Platforms and Cloud Services	Enterprise Collaboration	Analytics
Marketing Analytics	eCommerce	Field Service		Email & Calendar	
Social Management	Relationship Intelligence	Social Service		Location Based Services	

Data Enrichment	Analytics	Service Analytics		Business Process Management	
	Social Sales	Knowledge Management		Learning	
	Content Enablement				
	Partner Enablement				

(sugarcrm.com websites)

Sugar CRM includes integrations to Microsoft Office tools, case management, reporting of mistakes and tracking, sales forecast and offers and deals. The tool also offers the user's possibility to handle workflow, access, security and quality control. (lodgianlocator.com 2010)

4.1.8 SalesForce

SalesForce is the market leader in Europe. It is SaaS-system especially for businesses with CRM based sales and marketing. It suites sales-oriented, solvent organizations, that know what they are doing and want to invest in and measure customer relations development professionally, for businesses that need limitless acclimatization. SalesForce needs much more coding at implementing than easy-to-use systems that are mainly ready to use. One minus is that the customer data is stored abroad. (Ahonen 2015 ; Ampiiri 2011)

SalesForce's parts can be classified as: sales; service and support; partnership management; marketing; contents; analytics and real-time work. It is customizable and it is scaled with the company's business. The system has streamlined processes, mobile CRM (for Android and iOS) and integrated email & easy collaboration. (lodgianlocator.com 2010 ; Salesforce.com websites)

Especially for small business, Salesforce offers many solution-packages including sales, customer service, and marketing software solutions, many built specifically for the needs of small businesses. Even better, they are integrated to work as one complete CRM solution. Salesforce offers an extendable set of tools — from pre-integrated business apps on the AppExchange to point-and-click tools to build and customize your own apps — that gives you just what you need, when you need it. SalesforceIQ has five different editions with different features shown in Table 19. “SalesForce Editions”. (Salesforce.com websites)

Table 19. SalesForce Editions

Starter	**Professional**	**Enterprise**	**Unlimited**	**Performance**
27€/user/month	70€/user/month	135€/user/month	270€/user/month	315€/user/month
Up to 5 users	any size team	any size team	any size team	any size team
Automatic data capture	Account and contact management	Professional features	Enterprise features	Unlimited features
Customizable sales tracking for one list	Opportunity tracking	Workflow automation	Unlimited customizations	Single console view for Inside Sales
Intelligent follow-up reminders	Lead management	Enterprise territory management	Unlimited custom apps	Access to new contacts and accounts
Contact autocomplete	Task and event tracking	Profiles and page layouts	Multiple sandboxes	Auto data cleansing
Shared address book	Customizable reports and dashboards	Custom app development	Additional data storage	Goals
Sent-email notifications	Mobile access and administration	Integration via web service API	24/7 toll-free support	Coaching, and rewards for teams
Seamless collaboration	Chatter — company social network	Salesforce Identity	Access to 100+ admin services	Integrated knowledge base

Smart mobile apps	Outlook Side Panel and sync	Salesforce Private AppExchange	Unlimited online training	Live Agent web chat
Chrome extension	Role permissions	Report history tracking**	Sales Data***	Additional sandboxes
Webinars and live trainings	Case management	Approval automation**	Sales Cloud Engage***	
	Campaigns**	Sales Data***		
	Quotes and orders**	Sales Cloud Engage***		
	Collaborative forecasts**			
	Mass email**			
	Sales Data***			
	Sales Cloud Engage***			

(Salesforce.com websites)

SalesForce is one of the more expensive CRM softwares in this Thesis, so for an SME the price can be a criterion to skip SalesForce. SalesForce's cheaper versions are lacking many features.

4.1.9 Microsoft Dynamics

Microsoft Dynamics CRM is a Microsoft-family CRM that supports sales productivity and marketing effort with community analysis, business information and campaign possession. It can be used as a cloud-solution or a local server solution or combination of these two. It is the market leader in Finland and it is a good choice for a Minimum 5 Employee Company if the organization uses other Microsoft-products, as well, and when a powerful CRM system is needed. It is easy to integrate with the Outlook and SharePoint-services, which might be a crucial criterion when choosing a CRM. The social media analytics is a feature that not many other systems offer. Microsoft Dynamics CRM is a good alternative to SalesForce. (Ahonen 2015 ; Ampiiri 2011)

Microsoft Dynamics is built with separate modules that are shown in Table 20. “Microsoft Dynamics features”. These modules are sales, marketing, customer services, extended relationship management (XRM) and every module is focused in this part of the business. (Technologica webpages)

Table 20. Microsoft Dynamics features

Sales	**Customer service**	**Marketing**	**XRM**
Mobile work	Multi-channel services	Campaign possession	Microsoft Social Engagement
Customer possession	Unified Service Desk	Possession of leads	Yammer
Utilizing social media	Service request possession	Possession of marketing resources	Some-customer service
Cooperation of sales	Data bank (YKK)	Some-marketing	
Sales analysis	Some-customer service	Marketing analysis	

(MS Dynamics websites)

There are three different editions available: Sales productivity, Professional and Enterprise shown in Table 21. “Microsoft Dynamics Editions”.

Table 21. Microsoft Dynamics Editions

Professional	**Sales productivity**	**Enterprise**
54,78€/user/month	71,70€/user/month	168,63€/user/month
Workflows and seal of approvals	Includes Microsoft Dynamics CRM Online Professional Add-on to Office 365 and Office	Microsoft Dynamics CRM Online Enterprise includes
Sales automatization	365 Enterprise E5	Microsoft Dynamics CRM Online Professional
Customer services automatization	Office Suite 2016	Parature Enterprise
Sales campaigns	Online-meetings	Microsoft Dynamics Marketing Enterprise

Reports and personal dashboards	Instant messaging and Skype	Microsoft Social Engagement
Integrations through network	Cloud-solution management of telephone calls	
Mobile use	PSTN Conferencing	
Adaptability and expandability	Advanced email and calendars	
	Advanced security features	
	Analysing tools	
	Mobile use	
	Work management	

(MS Dynamics websites)

The implementation process might be laborious because Dynamics is designed particularly as a retail-business CRM system and tailoring it to other needs might be hard. For a successful project a Microsoft partner is usually needed for organizational tailoring and for prescribing the service environment. Microsoft Dynamics CRM can either be deployed on-premises or used on-demand as a service. The second option does not require the purchase of either software licenses or hardware to install the application, but only the payment of a monthly fee. (Ampiiri 2011 ; Technologica webpages)

4.1.10 SuperOffice

The SuperOffice company cannot itself define for whom the SuperOffice would be suitable and the system is a bit out of date, although the user interface is very clear. All basic features are included and it can be integrated to Microsoft products. The software can be installed to the company's own servers or it can be used as SaaS. There are plenty of add-ons and all the malleability is based on them. An alternative to Dynamics because of Microsoft compatibility but otherwise it is hard to find SuperOffice's place. (Ahonen 2015)

SuperOffice CRM includes Company & contact management, Calendar & activity management and Documents, emails & mailings. There are five different editions for different kinds of businesses: Standard CRM for those who need the basic CRM, Marketing for

the marketing professional, Sales for the sales person, Service for the customer service agent and Complete CRM for those who need everything together. These editions are shown in Table 22. “SuperOffice Editions”. (Superoffice websites)

Table 22. SuperOffice Editions

Standard	**Marketing**	**Sales**	**Service**	**Complete**
44€/user/month	55€/user/month	55€/user/month	55€/user/month	65€/user/month
Contacts	Includes STANDARD feature set	Includes STANDARD feature set	Includes STANDARD feature set	Includes STANDARD feature set
Calendar	Campaign management	Forecasting	Tickets	MARKETING, SALES and SERVICE feature sets
Email	Campaign tracking	Pipeline management	Prioritizing	
Mobile CRM	Email templates	Quote management	Social integration	
Segmentation			Knowledge base	
Reporting				

(Superoffice websites)

SuperOffice CRM Online is a hosted cloud service (software as a service). After the user logs in, they will be asked to install a SuperOffice plugin called WebTools for document and email integration. That is all the user needs to do to start using SuperOffice. (Superoffice websites)

4.1.11 Lumoflow CRM

The Finnish Lumoflow CRM is intended for customer experience management (CEM). Lumoflow combines agile teamwork, community and content management tools to an easy-to-use and reduced service. File management, task lists, brainstorming, blogs and forums. SaaS-solution. (Ampiiri 2011 ; Lumoflow websites)

Lumoflow includes features such as: applications for web browsers and mobile, feeds for sharing, commenting and a like-button as in Facebook, conversations for creating a dialogue and sharing experience, task lists for pointing tasks and performing them in time, group work for cooperation in data protected group, answers for questions and finding classified answers, blogs for efficient communication and informing, events to organize network events, files for sharing, iterating and managing files, targets for leading cooperation in network, profiles for browsing user profiles in network, network for managing growing network and companies for participants over organizer. Lumoflow has two editions, one for work groups and one for bigger networks. These editions are shown in Table 23. “Lumoflow editions”. (Lumoflow websites)

Table 23. Lumoflow editions

Work groups	**Bigger networks**
17 €/user/month	65 €/moderator/month
Unlimited projects	Unlimited projects
Secure network	Secure network
All features and integrations	All features and integrations
Disk space daily backups	Disk space daily backups
Full customer service	Full customer service
Confirmed service level	Confirmed service level

(Lumoflow websites)

Lumoflow CRM can be good a choice for companies that have need for social media tools. It is easy to use and suites businesses that are taking their first CRM system to use.

4.1.12 CiviCRM

CiviCRM is a free CRM tool for companies. It is an open source program so it must be implemented to the company’s own servers. Its abilities are to follow-up on the internet and accept donations; make event-design and possession; make email campaigns and arrange and track financiers and members. (lodgianlocator.com 2010)

Many organizations will find out they don't need a programmer to configure their CiviCRM system to meet their needs. It is amazing how much can be done using only the standard user interface to set their options, adjust their dropdown fields, and turn features on and off. If a company needs custom programming, CiviCRM's open source license will allow the freedom to find the right programmer to tailor the company's installation specifically to its needs. (CiviCRM Homepage)

The main features in CiviCRM are: Contacts, Membership programs, Accounting Integration, Case Management, Events, Email Marketing, Contributions, Advocacy Campaigns, Peer-to-peer fundraisers and Reports. (CiviCRM Homepage)

4.1.13 Office Interactive

With a monthly fee, Office Interactive offers editable solutions, which vary from community properties to marketing support and to customer solutions. Users can share and do co-work by documents and other data using the company's email program with the Co-operation tool. The Sales feature offers users a possibility to use automated sales-data; the system is able to change emails and web-data and conduct data. The Customer tool allows all of the company's communication, billing and other important information to to be directed to one place. Office Interactive has six different parts with different features shown in Table 24. "Office Interactive features". (lodgianlocator.com 2010)

Table 24. Office Interactive features

Email Marketing	**Social Marketing**	**Website Manager**	**Direct Marketing**	**Marketing Automation**	**Marketing Intelligence**
Drag-and-drop UI	Multi-channel social media posting	Complete WISIWIG Website Management	Campaign creation at the click of a button	Status based follow-up and multi-touch point drip campaign setup	Data visualization for key marketing and sales stats

Reduced data entry	Brand, reputation, and keyword monitoring	Blogging, Social Media, and SEO Management	Drag-and-drop list and label creator	Multi-channel (email, social media, content & direct mail) automation	Easy-to-use rule creation to manage and funnel demand-based leads
Custom templates and personalized campaigns	Fans and followers tracker	Site Search, Survey, Polls, Web forms	Print ready personalized letter generator	Lead ratings and easy-to-use lead touch point measurements	Map-based data visualization for enhanced geo-marketing intelligence
Automated, personalized follow-up emails based on status	Social analytics	Photo Gallery Manager	Automated direct mail creation	Centralized sales and marketing calendar	Call and meeting log
Open, unsubscribe and click tracking		Embedded videos		Auto lead data entry	Social connection monitoring from one centralized social media dashboard
Smart E-mail		Built-in Google Analytics		External contact database and list import	Lead touch point frequency and response monitoring
				Drag-and-drop list	360°calendar for in-

				and label creation	stant over-view of all email, so-cial, content and direct marketing
				Voice to Text	

(websites of Office Interactive)

Beside the free edition of Office Interactive, there is also an edition with monthly fee as shown in Table 25. “Office Interactive editions”.

Table 25. Office Interactive editions

Free edition	**Edition with monthly fee**
3 users or less	90 users
5000 contacts	50000 contacts
No need to On-Boarding	On-boarding
No need to Training	Training
0 €/month	3042 €/month
	4406 € onetime fee for On-Boarding and Training

(websites of Office Interactive)

The free edition of Office Interactive is a comprehensive tool for a starting business. It also has great features for social media use.

4.1.14 Siebel Demand

Siebel Demand is a web-based tool that has been created by Oracle and it can handle a great mass of users. It is order-based and it is meant for sales, customer service and marketing companies. This tool has real-time analytics and it is able to intensify sales. Furthermore, it is easy to find customer data and create and analyse campaigns with Siebel Demand. It has a mobile-app with which users can handle customer data when

they are not in the office. Other features include web support and built-in integrated Oracle Applications. (lodgianlocator.com 2010)

Siebel CRM delivers transactional, analytical, and engagement features to manage all customer-facing operations. With solutions tailored to more than 20 industries, Siebel CRM delivers comprehensive on premise and on-demand CRM solutions that are tailored to industry requirements and offer role-based customer intelligence and prebuilt integrations. Siebel CRM is available in many different modifications tailored to the specific needs of specified industries and covering completely the management of the following processes: sales, service, contact centre, marketing, customer loyalty management and partner management in the following market verticals shown in Table 26. “Siebel Demand editions”. (Technologica webpages)

Table 26. Sieble Demand editions

Sales	**Marketing**	**Commerce**	**Service**	**Social**	**Siebel CRM Technology**
Siebel Sales	Siebel eMail Marketing	Siebel Dynamic Catalog	Siebel Contact Center	open integrated framework for Social Media	Siebel Application Deployment Manager
Mobile and Handheld	Oracle Marketing Analytics	Siebel Product and Pricing Analytics	Siebel Contact Center and Service Analytics		Siebel Application Response Measurement
Sales Analytics	Siebel Web Marketing	Siebel Dynamic Pricer	Siebel Field Service		Siebel CRM Desktop
Microsoft Exchange Server	Siebel Events Management	Siebel Product and Catalog Management	Siebel Help Desk		Oracle Fusion Middleware Siebel Best Practice Center

Partner and Channel Management	Siebel Loyalty Management	Siebel Quote and Order Lifecycle Management	Siebel Mobile Solutions		Siebel Handheld
Siebel Partner Analytics	Siebel Campaign/Dialogue Management		Siebel Warranty Management		Siebel Remote and Mobile Web Client
Siebel Partner Portal	Siebel Marketing Resource Management		Oracle CRM Call Center On Demand		Siebel Server Sync
Siebel Partner Manager					Siebel Task-Based UI
					Siebel Test Automation
					Siebel Wireless

(Oracle webpages)

With each of these editions Oracle Siebel provides out-of-the-box functional solutions, while many system modules are modified to the requirements of a specific industry. Oracle Siebel CRM is recommended to different kind of industries like automotive, consumer goods, industrial manufacturing, life sciences, media and entertainment, travel and transportation, communications, financial services, healthcare, high technology, public sector, retail and utilities, based on the features and editions, that the company will take in use. Based on the specific feature, the Oracle Siebel modules are grouped in seven groups in Table 27. “Sieble Demand modules”.

Table 27. Sieble Demand modules

Sales	**Offers and Orders**	**Pricing Management**	**Marketing and Loyalty Systems**	**Customer Service**	**Self-Service and e-invoicing**	**Partners Management**
Sales	Quote and Order Lifecycle Management	Advanced Pricing	Marketing Resource Management	Siebel Contact Center	E-Commerce	Partner Portal
Mobile and Handheld	Dynamic Catalog	Dynamic Pricer	Campaign/Dialogue Management	Siebel Field Service	iStore	Partner Manager
Quote and Order Capture	Product and Catalog Management	Deal Management	Loyalty Management	Siebel Help Desk	E-Support	Partner Analytics
Sales Analytics	Dynamic Pricer		eMail Marketing	Siebel Mobile Solutions	Self-Service E-Billing	
Collaboration - integration with Micoroft SharePoint	Product and Pricing Analytics		Events Management	Siebel Contact Center and Service Analytics		
Siebel Server Sync for Microsoft			Web Marketing	Oracle CRM Call Center		

Exchange Server				On Demand		
Partner and Channel Management			Marketing Analytics			

(Technologica webpages)

The price information was not added to Siebel Demand information, as it was too hard to figure out the price tag from the licensing price-list on the Oracle homepage.

4.1.15 Valueframe CRM

ValueFrame CRM is an industry-independent tool for customer and sales management. It suites businesses that exercise salesmanship for a whole sales organization or only for a single salesperson. The main industries to use ValueFrame are architectural firms, communications, consulting business, IT-business, accounting firms, accountants, advertising agencies, engineering and other kind of CRM and sales management businesses. It is a browser-based SaaS-tool that works with a browser or a mobile device. Valueframe CRM's main features are presented in Table 28. "Valueframe CRM features". (Valueframe webpages)

Table 28. Valueframe CRM features

Features
34 €/user/month
Customer register
Contact register
Sales follow-up activity
Sales target tracking
Offer up
Group calendar
Mass comunications (emails and textmessages)
Mailing lists
Sticker stools
Staff register
Mobile user interface
Implementation 1000 € - 2900 € as consulting work

(Valueframe webpages ; Service manager of Valueframe CRM)

The main integrations on Valueframe CRM are visitor tracking with Snoobi-integration and web-leads, mobile synchronization, email-integration (Postiviidakko and e-maileri). Valueframe CRM is recommended to architectural firms, communications, consulting, IT-industry, accounting firms, auditors, advertising agencies and engineering. (Valueframe webpages)

4.1.16 Visma Severa

Visma Severa is a Finnish product, which is a good choice for an organization that has lots of project work and records working hours (for example advertising agencies, firms of solicitors). Visma Severa is a SaaS-model product. It supports SalesForce automation, project management, employee scheduling, automated invoicing and 360° reporting. Visma Severa has six different modules that are shown in Table 29. “Visma Severa modules”. (Ampiiri 2011)

Table 29. Visma Severa modules

CRM & Sales	**Project Management**	**Resource Management**	**Time & Expenses**	**Invoicing**	**Reporting**
Customer and contact details	Milestones, schedule and financial targets	Any sized projects and tasks	Timesheet for reporting time and costs	Progress billing linked with project phases	Customer and project profitability
Activities and notes	Workflow management and resource planning	Resource allocation per employee	Time recording directly on calendar activities	Timesheet invoicing based on reported (or approved) time and expenses	Sales reports and forecast
Classification and segmentation	Access anywhere	Utilization per department	Stopwatch for real time capturing	Flat rate linked with project phase	Resource utilization
Sales pipeline and forecast	Extranet for customer communication	Capacity per role or knowledge area	Travel and other cost reimbursement	Recurring invoicing e.g. monthly service fees	Time reports to payroll
Proposal creation		Employee scheduling	Project cost and budget analysis	Collective invoicing with	Invoicing and revenue reports

				many jobs on same invoice	
Project and invoice history		Group calendar with timeline view	Direct link to billing		

(Visma Severa webpages)

There are three different editions available for Visma Severa which shown in Table 30. “Visma Severa editions”.

Table 30. Visma Severa editions

Professional	**Business**	**Enterprise**
Recommended for 1-10 users	Recommended for 10-50 users	Recommended for midsize and large organizations
30€/user/month	160 €/month + 17 €/user/month	Contact sales with pricing
290-1450€ setup & training	1450-2900€ for implementation	
Manage clients, projects and billing in one system	Includes everything in Professional edition, PLUS:	Includes everything in Business edition, PLUS:
Manage projects	Team calendar	Organizational hierarchy in reporting
Track customers	Employee scheduling	Custom graphic reports
Track time	Task lists	Full sandbox environment for testing and training
Create invoices	Recurring billing	Dedicated account manager
Web access	Customized setup & training	Customized configuration and roll-out
2h QuickStart training	Phone and email support	

(Visma Severa webpages)

Visma Severa is a more expensive version to be chosen as the first CRM system, but it is easy to use and easy to implement, so if the need is acute, it is a good solution for companies.

4.2 Classifying Available CRM Systems as Identified in Chapter 3

The criteria to describe CRM system characteristics were prepared first, as there were only three categories as shown in Table 31. “Classification of CRM system characteristics”. There were four Light versions as described in chapter 3.2, six Medium versions and six Heavy versions.

Table 31. Classification of CRM system characteristics

Light version	**Medium version**	**Heavy version**
Pipedrive	Sugar CRM	vTiger
Highrise	SuperOffice	CiviCRM
Lumoflow	Zoho CRM	SalesForce
Office Interactive	Base CRM	Microsoft Dynamics
	Insightly	Siebel Demand
	Valueframe CRM	Visma Severa

Light versions are mainly alike as they are all SaaS-versions and they are compact packets, with no or little customization possible. These are CRM systems to be bought as they are and they do not need specific IT-skills. Medium and Heavy versions were harder to classify. CRM systems in Heavy versions are mainly either open source systems that need more effort on implementing and integrating. It is possible to customize them in many ways. There are bigger players on the market that can also be customized and need effort in implementation and integrations. All the CRM systems that were left after these categorizations were put to Medium versions.

In Table 32. “Classification of guidelines to choose a CRM system” the classification of the CRM software based on the guidelines that were described in chapter 3.3 is shown. The categorization was mainly easy because it could be based on the information that was gained about every CRM system. Some CRM systems could fit into every category and some did not fit into any, but some compromises were made to be able to somehow categorise every CRM system.

Table 32. Classification of guidelines to choose a CRM system

Guideline	**CRM-software**
Low price	CiviCRM vTiger Lumoflow CRM Insightly Pipedrive Zoho CRM
Medium price	Office Interactive SuperOffice Visma Severa Valueframe CRM Base CRM Highrise Sugar CRM
Operative use	Siebel Demand Visma Severa CiviCRM SuperOffice Valueframe CRM vTiger Microsoft Dynamics Highrise Pipedrive SalesForce SugarCRM Office Interactive
Analytical use	Siebel Demand Microsoft Dynamics Base CRM Highrise SalesForce Zoho CRM
Collaboritive use	Microsoft Dynamics Lumoflow CRM

	Insightly SalesForce Zoho CRM SugarCRM Office Interactive
Little effort needed	Siebel Demand Visma Severa CiviCRM SuperOffice Valueframe CRM Lumoflow CRM Insightly Base CRM Highrise Office Interactive Pipedrive
Easy implementation	Visma Severa SuperOffice Valueframe CRM Lumoflow CRM Insightly Base CRM Highrise Zoho CRM Office Interactive
Much ready integrations	Siebel Demand SuperOffice Vauleframe CRM Microsoft Dynamics Base CRM Pipedrive SalesForce Zoho CRM SugarCRM
Ready modules, no customization	Visma Severa

	SuperOffice Valueframe CRM Microsoft Dynamics Lumoflow CRM Insightly Base CRM Highrise Pipedrive SalesForce Office Interactive
Everything can be customized	Siebel Demand CiviCRM vTiger SugarCRM
Easy to use and great interface	SuperOffice Lumoflow CRM Insightly Office Interactive
On-site servers	CiviCRM SuperOffice vTiger Microsoft Dynamics SugarCRM
SaaS	Siebel Demand Visma Severa SuperOffice Valueframe CRM Microsoft Dynamics Lumoflow CRM Insightly Base CRM Highrise Pipedrive SalesForce Zoho CRM

	Office Interactive
Servers and services in Europe (those, that are known)	Siebel Demand Visma Severa CiviCRM SuperOffice Valueframe CRM vTiger Microsoft Dynamics Lumoflow CRM Insightly SalesForce Office Interactive
Only service and support	CiviCRM Lumoflow CRM SugarCRM
Both training and service and support	Siebel Demand Visma Severa Valueframe CRM vTiger Microsoft Dynamics SalesForce Office Interactive
Mobile use	Siebel Demand SuperOffice Valueframe CRM Base CRM Highrise Pipedrive SalesForce Zoho CRM
Social media	SuperOffice vTiger Microsoft Dynamics Lumoflow CRM Insightly

	SalesForce Zoho CRM SugarCRM Office Interactive
Open source	CiviCRM vTiger SugarCRM

Along the classification process, some little changes were made to the original plan as some of the guidelines were divided to pieces like Price to Low price and Medium price. When dividing the guidelines, it was noticed that any CRM systems could not be found for some of the divided categories. For example, dividing the User training, services and support category to “Only training”, “Only service and support” and “Training, service and support”, no CRM system that would fit into the category “Only training” could be found. Therefore, that category was left out.

The third classification process was to categorise the CRM systems by every industry as shown in Table 33. “Classification by industries”. The classification was done based on chapter 3.1.3 “Classifications of companies”. This was the hardest classification process, as CRM vendors would see that their products could suit almost every industry, but still some of them have straightforward knowledge on their products’ target industries.

Table 33. Classification by industries

CRM-software	**Industries**	**Criteria**
vTiger	Commercial & Professional Service Entertainment & Media Programming & consultancy & Telecommunications *	Needs database and webserver knowledge, basic needs such as automatization of sales, billing, project management and marketing, good as a company’s first CRM tool
Pipedrive	Car & motor vehicle industry Commercial & Professional Service	The CRM system is for systematic salesmanship, basically for selling

	Food products and beverages Manufacturing of textiles & furniture Retail, Wholesale	
Highrise	Activities of membership organisations Commercial & Professional Service Construction Entertainment & Media Hotel & Restaurants Programming & consultancy & Telecommunications Transportation & Logistics & Storage	The CRM system is good for small companies for saving customer data
Zoho DRM	Commercial & Professional Service Financial Services Programming & consultancy & Telecommunications * Public Sector Retail, Wholesale	The CRM system is directed to developers, CRM Project Managers and System Integrators and for use in sales
Base CRM	Activities of membership organisations Commercial & Professional Service Entertainment & Media Programming & consultancy & Telecommunications Public Sector	The CRM system is used on telecommunication and analytics about telecommunication
Insightly	Activities of membership organisations Entertainment & Media Hotel & Restaurants	The CRM system is for Google-using SMEs, to integrate to social media and email-systems

	Programming & consultancy & Telecommunications	
Sugar CRM	Car & motor vehicle industry Commercial & Professional Service Entertainment & Media Food products and beverages Programming & consultancy & Telecommunications * Retail, Wholesale	Open source CRM system, an organization of up to 10+ employers. Great social media tools. Suites handling and directing accounts, handling email-marketing and creating campaigns. Knowledge of databases and web servers is required especially when implementing.
SalesForce	Car & motor vehicle industry Energy, Utilities, Oil & Gas Financial Services Food products and beverages Healthcare & Pharmaceutical Hotel & Restaurants Manufacturing of textiles & furniture Retail, Wholesale Transportation & Logistics & Storage	For a business with CRM based sales and marketing. Sales-oriented, solvent organization. Needs much more coding at implementation than easy-to-use systems.
Microsoft Dynamics	Commercial & Professional Service Entertainment & Media Financial Services * Healthcare & Pharmaceutical * Public Sector Retail, Wholesale	For sales productivity and marketing effort with community analysis, business information and campaign possession. Social media analytics. Designed

	Transportation & Logistics & Storage	for retail-business, tailoring to other needs might be hard.
SuperOffice	Car & motor vehicle industry Construction Energy, Utilities, Oil & Gas Food products and beverages Healthcare & Pharmaceutical * Hotel & Restaurants Manufacturing of textiles & furniture Retail, Wholesale Transportation & Logistics & Storage	The CRM system is suited for marketing, sales and service
Lumoflow CRM	Activities of membership organisations Commercial & Professional Service Construction Energy, Utilities, Oil & Gas Entertainment & Media Financial Services Programming & consultancy & Telecommunications Public Sector	The CRM system is for file management, task lists, brainstorming, blogs and forums. Agile teamwork, community and content management tools for easy-to-use and reduced service.
CiviCRM	Activities of membership organisations Commercial & Professional Service Entertainment & Media Financial Services * Programming & consultancy & Telecommunications	An open source CRM system to follow-up on the internet and accept donations; make event-design and possession; make email campaigns and arrange and track financiers

	Public Sector	and members. Contacts, Membership programs, Accounting Integration, Case Management, Events, Email Marketing, Contributions, Advocacy Campaigns, Peer-to-peer fundraisers and Reports.
Office Interactive	Car & motor vehicle industry Construction Energy, Utilities, Oil & Gas Entertainment & Media Food products and beverages Healthcare & Pharmaceutical Hotel & Restaurants Manufacturing of textiles & furniture Retail, Wholesale Transportation & Logistics & Storage	A CRM system for community properties, marketing support and customer solutions. Cooperation-tool. Sales feature. Customer-tool. Marketing features.
Siebel Demand	Activities of membership organisations Car & motor vehicle industry Commercial & Professional Service Construction Energy, Utilities, Oil & Gas Entertainment & Media Financial Services Food products and beverages	Can handle a great mass of users. Order-based and meant for sales, customer service and marketing companies. Customer-facing operations. Solutions tailored to more than 20 industries like automotive, consumer goods, industrial manufacturing, life sciences,

	Healthcare & Pharmaceutical Hotel & Restaurants Manufacturing of textiles & furniture Programming & consultancy & Telecommunications * Public Sector Retail, Wholesale Transportation & Logistics & Storage	media and entertainment, travel and transportation, communications, financial services, healthcare, high technology, public sector, retail and utilities
Valueframe CRM	Commercial & Professional Service Financial Services Programming & consultancy & Telecommunications * Public Sector	Is aimed to architectural firms, communications, consulting business, IT-business, accounting firms, accountants, advertising agencies, engineering
Visma Severa	Commercial & Professional Service Financial Services Programming & consultancy & Telecommunications Public Sector	A CRM system specially for advertising agencies and firms of solicitors

In the Table 33. the basic criteria why the CRM tool is classified under this industry are also shown. Some CRM systems would fit into many or all industries. In these cases, a star * marks the ones that are most suitable for the industry to help building the recommendation table.

4.3 Summary of CRM Classification Conducted

Classifications are done based on the material that was available when doing the research. The classifications might not connect to the vendors' or real users' view perfectly as the use of CRM tools itself was minimal when writing this Thesis. The idea was mainly

to analyze the features but not get too familiar with the tools. Some of the CRM software were hard to categorize but for some it was easier to find the suitable category.

Describing the CRM software by specific classifications was attempted in this Thesis, but in some cases, it was found to be hard. In the source material, there were so many different ways of describing CRM software and based on that information it was hard to find combining features for the classification. Some CRM systems were easier to describe based on classifications than others.

The classification of industries seemed to be the hardest classification process as there are so many different needs in different industries. Some CRM systems are primarily designed to meet the needs of specific industries. These systems could be categorized to those industries. However, in the case of every industry, there was need to have at least three different CRM tools to recommend; one for every characteristics-based classification.

5 Developing a Tool to Help SME's Choose a Suitable CRM System

5.1 Building the Recommendation Template

First, the structure of the recommendation table was planned. The easiest way for companies to start the selection process is to first choose their industry. So, the industry was placed to top of the table. The second thing to do is to determine the desired criteria of the CRM system characteristics such as Light version, Medium version or Heavy version. The criteria of the CRM system characteristics have been placed below the industry on the table so that there are three choices for every industry.

The third step of the guidelines for choosing the CRM software was then set to the left side of the table, where cross-reference between the guidelines and industry based characteristics can be made. When building the table, the guidelines were re-analysed and the possibility of dividing many of them to smaller units was discovered. The price section was divided to low price and medium price as normally companies do not specifically look for expensive software. Most divided guidelines could be split up comprehensibly, but the guideline "User training, services and support" was divided only to two categories,

“Only services and support” and “Training, services and support” as no CRM system that offers only training was found.

Table 34. Recommendation table structure

		Industry 1.			Industry 2.		…
	Light version	Medium version	Heavy version	Light version	Medium version	Heavy version	…
1. Guide-line to choose CRM-soft-ware							
2. Guide-line to choose CRM-soft-ware							
…							
…							

The recommendation table structure is shown in Table 34. “Recommendation table structure”. The recommendation table itself is too big to include in the Thesis, but it will be included in pieces so that every aspect will be represented.

5.2 The Recommendation Table for Choosing CRM Software

The recommendation table was filled so that each guideline has its industry in three characteristics versions as is shown in Table 35. “The recommendation table”. Some of the fields were left empty, as no suitable CRM software to fill up the needs could be found. In some cases, there would have been several possible options to choose from, but some of the classification criteria on CRM systems based on industries were emphasized which helped significantly when placing the CRM tools on the table. All the fields

were filled up with only one recommended CRM system to help the user. In any case, it took a lot of time to go through all the guidelines and classifications to find the necessary CRM tools.

Table 35. The recommendation table

		Industry 1.			Industry 2.		…
	Light version	Medium version	Heavy version	Light version	Medium version	Heavy version	…
1. Guide-line to choose CRM-soft-ware	Recom-mended tool X	Recom-mended tool Y	Recom-mended tool Z	…	…	…	…
2. Guide-line to choose CRM-soft-ware	Recom-mended tool A	Recom-mended tool B	Recom-mended tool C	…	…	…	…
…							
…							

The recommendation table is presented in the appendixes in five pieces with three industries in each as it was hard to include the whole recommendation table to this Thesis and there were no available ways of linking the table to the Thesis. The first appendix (Appendix 1) is for the following industries: Activities & membership organizations; Car & motor vehicle industry and Commercial & Professional service. The second appendix (Appendix 2) is for the following industries: Construction; Energy, Utilities, Oil & Gas and Entertainment & Media. The third appendix (Appendix 3) is for the following industries: Financial services; Food products & beverages and Healthcare & Pharmaceutical. The fourth appendix (Appendix 4) is for the following industries: Hotel & Restaurant; Manufacturing of textiles & furniture and Programming & Consultancy & Telecommunications. The fifth appendix (Appendix 5) is for the following industries: Public Sector; Retail, Wholesale and Transportation & Logistics & Storage.

5.3 Summary of Proposed Tool to Help Companies to Choose Suitable CRM System to Their Needs

The building up and filling the fields for the recommendation table took a lot of time as it needed corrections and the needs and tool descriptions required checking all the time. As there are so many CRM software to choose from, some of the fields are filled with intuition based on current knowledge of CRM systems. Because the recommendation table itself is so large and hard to handle, there are recommendations to make it better in the conclusions of the Thesis.

6 Piloting the CRM Selection Tool

6.1 Piloting with Consulting Company

There are 11 CRM software that suite the Programming, Consultancy and Telecommunications industry: vTiger*, Highrise, Zoho CRM*, Base CRM, Insightly, SugarCRM*, Lumoflow CRM, CiviCRM, Siebel Demand*, Valueframe CRM* and Visma Severa. All of the CRM systems marked with a star * are the most suitable ones for the industry and they were emphasized when filling the fields while building up the recommendation table. The Consulting Company was asked to use the recommendation table to choose the CRM software that would suite their company's need based on the guidelines and characteristics provided.

The Consulting Company that piloted the recommendation tool declined to choose any CRM system, commenting that the company is way too small (less than 3 people) and they have so few customers that a CRM system is not timely for them now and might not be later either. Their Customer Relationship Management is handled with homespun ways so that the service is provided on customer needs with tailored presentations and using traditional ways to handle established relationships. For this company, CRM is more like thinking and brainstorming than technics or systems.

A small company has to plan far ahead when deciding which actions make sense and which do not. Mainly, the company must have perspective on what contributes to business and what requires too much effort and costs compared to the benefits and what could be even disadvantageous. In addition, the company's set of values creates rules for the CRM, as CRMs are more than only customer registers or tools.

In this Thesis, the very small companies with very few customers have not been considered very thoroughly, but they still need some kind of a CRM. Mainly the CRM system used in these cases is an Excel sheet which is not one of the tools in the recommendation table. If it was desired to make the recommendation table suitable for wider use among the smaller SMEs, as well, it would be a good idea to include the Excel sheets. In this case, much more familiarizing with the business in every industry would be required in order to know what the aim and guidelines to choose the best CRM system for smaller companies are.

6.2 Piloting with Construction Company

There are five CRM software that suite the Construction industry: Highrise, SuperOffice, Lumoflow CRM, Office Interactive and Siebel Demand. The most suitable CRM software was not marked as there are so few options. The Construction Company was asked to use the recommendation table to choose the CRM software that suites the needs of the company or imagined needs based on the guidelines and characteristics provided.

The Construction Company had investigated CRM tools in the year 2015 as the database they used was getting out of date. In the light of their investigations, they ended up updating the database interface and database itself to be used as a customized tool. This was because on the field, they did not find any suitable CRM tools for their use. The database in use is more like an ERP tool (Enterprise Resource Planning) than a CRM tool, but at the moment it is enough for the company.

On the market, there are CRM systems targeted to construction companies, but those tools cover all the features needed from the start to the end in construction projects. The company that piloted the recommendation table is more of a renovation company whose projects are small renovations or modifications. So, the CRM systems have too many features for the piloting company. In company's point of view, other CRM systems also had too many features. Even though the recommendation tool was found to be easy to

use and understandable, it did not suite the company's needs as they are more likely to expand their own database to CRM use rather than purchasing a CRM tool already on the market.

6.3 Piloting with Transportation Company

There are six CRM software that suite the Transportation, Logistics and Storage industry: Highrise, SalesForce, Microsoft Dynamics, SuperOffice, Office Interactive and Siebel Demand. The most suitable CRM software was not marked as there were so few options. The Transportation Company was asked to use the recommendation table to choose the CRM software that suits their company's needs or imagined needs based on the guidelines and characteristics provided.

The piloting transportation company had not even thought of purchasing a CRM system for their use. So, imaginary guidelines for choosing the CRM system were used when piloting. The main criteria for the CRM system were affordable price and ease of use. The potential users of the system spend a lot of time on the field, so the possibility to use the system on mobile devices was considered a benefit.

The company uses a Toggle Time Tracker & Employee Timesheet Software that could need integration into the CRM tool. The pricing of the transportation varies a lot for all customers, which was an aspect that should somehow be handled with the CRM software. With the guidelines, the most common match in the recommendation table was the Highrise CRM system, but as investigating the possibility to implement it, it was found to cover some needs, but for example integrating it to Toggle could have been difficult.

6.4 Summary of Pilot / Feedback Based Corrected Tool

All the piloting companies were asked to test the recommendation table based on their needs or imaginary needs on their industry, if a specific company did not see any benefit of a CRM software. All the piloting companies understood the effort that had been put to the recommendation tool, but it did not suite their purposes so well that they could consider purchasing a CRM system based on it.

More investigation on the CRM system would be needed before taking it to use, but the recommendation tool gives some guidelines to choosing one. The recommendation tool was corrected a bit with the help of the answers gained from the piloting, but still the CRM is done in every piloting company based on an Excel sheet in the future. As the consultancy company's pilot shows, the CRM is more of a way to communicate with the customers in SMEs and is not connected to the tool with which it is done.

7 Conclusions

7.1 Summary

The whole project took a lot of time as classifying the CRM systems had so many phases. At the beginning, there were 25 different CRM systems to investigate, but the amount had to be reduced as not enough information could be found on all of them. The project would have needed more CRM systems involved as there is are blank spots in the recommendation table, where any suitable CRM systems could not be found to fill them.

The most difficult part was to get information from vendors in cases in which all the data needed could not been found on webpages or other vendor materials. As there was no intention of buying any specific CRM system, the vendors' answers were left out. Getting to know the CRM systems included in the project better would have required much more usage of the specific tools and material about them.

The CRM systems could have been divided also to smaller groups as now the CRM systems are shown as averages. There are so many differences between the lower price range tools and the most complete ensembles that they could also have been validated. This outcome is more like an average result of the specific CRM systems.

7.2 Practical Next Steps

The next steps on choosing a CRM system is for a company to meet the vendors and get to know the specific CRM software better. The company that is choosing the CRM tool should have thorough plans on the implementation project and integration and make

a full requirement of specifications before choosing and taking the new tool in use. After choosing the tool, it can take a long time to have it running depending on how thorough specifications were done.

In order to develop this recommendation tool into a more selling version, the next step would be to make a database for the tool and make a nice interface for it and market it to consultants who are selling CRM tools. The easiest way to build the database is to have three tables one of which is for industry, one for guidelines and one is for characteristics. Building up the tables and database could have maybe helped also the work in this project as now it was done with manual search.

The vendors of different CRM software are usually selling the tools also to bigger companies or corporations in which the expectations might vary a lot. To make this recommendation tool meet the bigger company expectations can be hard.

7.3 Evaluation of the Thesis

The evaluation of the thesis is done based on four criteria of trustworthiness of qualitative research: credibility, transferability, dependability and confirmability, to illustrate the quality of the research, presented by Shenton (2004). For the qualitative research findings to make sense, credibility to prove the quality of work is needed, so that it is not based on coincidence. The Table 36. “Credibility of the project” represents how the credibility components are fulfilled in this thesis, based on definition by Shenton (2004).

Table 36. Credibility of the project

Measures of credibility	**Applicability in this research**
Adoption of appropriate, well recognized research methods	Qualitative research method was used in studying professional and academic literature. Quasi-qualitative data gathering used in semi-structured interviews and with handling the results of the interviews.
Development of early familiarity with culture of participating organizations	The researcher of this study did not belong to same organization as the inter-

	viewees, so the organizations were studied first through literature and with their organizational information on the companies' webpages.
Random sampling of individuals serving as informants	Not applied. Only targeted interviews were conducted.
Triangulation via use of different methods, different types of informants and different sites	Interview data was used. Interviewees were chosen from the organizational level that was most useful for this study.
Tactics to help ensure honesty in in-formants	Semi-structured interviews were made by telephone calls, so that every doubts and background questions could be answered at once, without leaving any suspicions on answers.
Iterative questioning in data collection dialogues	Semi-structured interviews were held in a flexible way in an iterative manner with pre-determined questions.
Negative case analysis	Not applied.
Debriefing sessions between researcher and superiors	Master thesis seminars and face-to-face sessions attended with the thesis supervisor.
Peer scrutiny of project	Not applied as such, as the thesis was not done based on any specific company needs. The thesis was reviewed by the piloting companies before piloting without receiving comments.
Use of "reflective commentary"	Not applied.
Description of background, qualifications and experience of the researcher	Not applied.
Member checks of data collected and interpretations/theories formed	The piloting organizations were offered a possibility to provide feedback on the thesis before the piloting.
Thick description of phenomenon under scrutiny	Provided in the chapters 1.1 "Context of the thesis" and 1.2 "Business challenge", objective and expected outcome of the

	thesis and in the literature review in chapter 3 “Conceptual framework”
Examination of previous research to frame findings	A review of existing CRM software conducted and documented in the literature review in chapter 4 “Classifying available CRM systems of this thesis”.

Transferability in the qualitative research corresponds on how the findings of the research can be applicate to other areas of study. It can be measured through describing how the data collection has taken place. Table 37. “Transferability of the project” presents how the transferability is fulfilled in this thesis, based on definition by Shenton (2004).

Table 37. Transferability of the project

Measures of transferability	**Applicability in this research**
The number of organizations taking part in the study and where they are based	One organization participated in an interview with the vendors and three organizations participated in piloting and in interviews on the company's needs of CRM software. All organizations were located in Finland.
Any restrictions in the type of people who contributed data	The data was collected solely from the persons who were either vendors of the CRM software or possible purchasers of the CRM software.
The number of participants involved in the fieldwork	1 interviewee on vendor side 3 interviewees in the interviews collecting data about the needs of the company purchasing CRM software 3 piloting organizations
The data collection methods that were employed	Semi-structured interviews
The number and length of the data collection sessions	4 interviews, each 60 minutes on average.
The time period over which the data was collected	August-September 2016 (information from vendors and collecting the needs from CRM software purchasers) October-November 2016 (piloting the recommendation tool)

Dependability in the qualitative study reveal how much the findings of the research are corresponding the real state of the area of study. It tells how subjective the researcher is and gives different angles on the research. Table 38. "Dependability of the project" shows how dependability is fulfilled in this thesis based on definitions by Shenton (2004).

Table 38. Dependability of the project

Measures of dependability	**Applicability in this research**
The research design and its implementation, describing what was planned and executed on a strategic level	Description can be found in the chapter 2 Research design.
The operational detail of data gathering, addressing the minutiae of what was done in the field	The data gathering practices are described in the chapter 2.2 Data collection approach and those practices were followed in practice.
Reflective appraisal of the project, evaluating the effectiveness of the process of inquiry undertaken.	Addressed in the chapters 5.3 “Summary of proposed tool to help companies to choose a suitable CRM system to their needs” and 6.4 “Summary of pilot / feedback based corrected tool” and 7.1 “Summary”

In the qualitative research, the confirmability refers to how much the interpretations of the research are getting support from other researches (objectivity) and triangulation. It also proves that the findings are done based on the study, not by researcher’s views or assumptions. The components of confirmability based on definitions by Stenton (2004) and how these are fulfilled in this thesis are presented in Table 39. “Confirmability of the project”.

Table 39. Confirmability of the project

Measure of confirmability	**Applicability in this research**
Triangulation to reduce the effect of investigator bias	Interviews and feedback from the piloting were used as a method to confirm the perceptions received from different data sources.
Admission of researcher's beliefs and assumptions	Discussed in the chapters 6.4 "Summary of pilot / feedback based corrected tool" and 7.1 "Summary".
Recognition of shortcomings in study's methods and their potential effects	Discussed in the chapters 6.4 "Summary of pilot / feedback based corrected tool" and 7.1 "Summary".
In-depth methodological description to allow integrity of research results to be scrutinized	Description of research method and data analysis described in the chapter 2. "Research design". Description of conceptual framework described in the chapter 3 "Conceptual framework".
Use of diagrams to demonstrate "audit trail"	The research project is illustrated in the chapter 2 "Research design".

Majority of the items outlined by Shenton (2004) were fulfilled on satisfactory level in this study. Based on the evaluation it can be assumed that this study has reached an appropriate level of trustworthiness. The objective of this thesis was to develop a practical tool to help SMEs choose a suitable CRM system to their needs. The tool was built with information that was received from literature, other materials and interviews. It was proved to be functional as a recommendation tool, but the benefits of the tool to the companies were analysed separately. The tool itself would need much more development so that it could work for every industry and would take every difference between different CRM software and size of the companies into consideration.

In the beginning the outcome was described to be a tool to help CRM selection which takes into consideration alternative system characteristics and company operating context. The outcome is mainly the same as planned. Alternative system characteristics are taken into consideration in many aspects and company operating context is taken into

account by getting to know different industry standardisations and making own classifications based on them. The piloting group is rather is small, so that it does not give so much perspective on the usefulness of the tool, but with this reference group, the recommendation tool seems to be working although any of the companies are not going to act on the recommendations.

References

1 REALIZING BUSINESS BENEFITS THROUGH CRM: HITTING THE RIGHT TARGET IN THE RIGHT WAY ; Dale L. Goodhue, University of Georgia - Barbara H. Wixom, University of Virginia - Hugh J. Watson, University of Georgia ; 2002 ; http://misqe.org/ojs2/index.php/misqe/article/viewFile/28/23 //read 1.3.2016

2 Complaint Management The Heart of CRM, Bernd Strauss-Wolfgang Seidel, American Marketing Association, Thomson South-Western, ISBN: 0-324-20264-4 ; 28.2. 2005

3 http://www.salesforce.com/eu/ //read 15.4.2016

4 CRM in Action (Maximizing Value Through Market Segmentation, Product Differentiation & Customer Retention), Dr. Ken K. Wong, U21 Global Graduate School/University of Toronto, iUniverse, Inc. Bloomington, ISBN: 978-1-4502-7988-8 (pbk) and ISBN: 978-1-4502-7989-5 (ebk), Printed in United States of America, iUniverse rev.date 1/21/11

5 CRM-järjestelmistä ja sellaisen valinnasta ; Ampiiri ; 7.11.2011 ; Digitaalisen markkinointiviestinnän ja asiakasjohtamisen blogi ja palvelut ; http://ampiiri.com/2011/01/07/crm-jarjestelmista-ja-sellaisen-valinnasta/ //read 1.3.2016

6 CONSULTATION ON POTENTIAL CHANGES TO THE GLOBAL INDUSTRY CLASSIFICATION STANDARD (GICS®) STRUCTURE IN 2015 ; MSCI, S&P Dow Jones Indices ; 2.6. 2014; https://www.msci.com/resources/pdfs/GICS_Consultation2015.pdf //read 10.3.2016

7 Introducing the 11th GICS Sector: Real Estate ; MSCI, S&P Dow Jones Indices ; 2016 MSCI INC. ALL RIGHTS RESERVED ; https://www.msci.com/gics //read 10.3.2016

8 Global Industry Classification Standard (GICS) ; Standard&Poors ; August 2006 ; http://www.unm.edu/~maj/Security%20Analysis/GICS.pdf //read 10.3.2016

9 The limitations of sector classification systems ; By Fidelity Learning Center https://www.fidelity.com/learning-center/trading-investing/markets-sectors/limitations-sector-classification-systems //read 15.9.2016

10 Standard Industrial Classification TOL 2008 http://www.stat.fi/meta/luokitukset/toimiala/001-2008/index.html //read 6.5.2016

11 Revised standard industrial classification will be introduced in 2009 ; Standard Industrial Classification TOL 2008 ; http://www.stat.fi/til/tol2008_en.html //read 15.9.2016

12 Customer relationship management ; Alan Chapman ; Businessballs ; http://www.businessballs.com/crmcustomerrelationshipmanagement.htm //read 15.9.2016

13 Selecting Software for Your Nonprofit ; Blackbaud ; October 2013 ; https://www.blackbaud.com/files/resources/downloads/WhitePaper_Selecting-Software.pdf //read 20.9.2016

14 Managing Agency and Community-change Initiative Data: Guidelines for Software Selection ; 2007 ; United Way of America ; http://studio.unitedway.org/CIL-resources08/files/program%20outcomes/Managing%20Agency%20and%20Community-change%20initiative%20data%20guidelines%20for%20software%20selection.pdf //read 7.10.2016

15 Guidelines for Choosing Your CRM Software ; Gartner (2013): CRM survey ; http://cdn2.hubspot.net/hub/427188/file-2238450923-pdf/Downloads/Paper/CRM_Buyers_Guide_EN.pdf?t=1423149380385 (Gartner (2013): CRM survey) //read 2.10.2016

16 Classifying and selecting e-CRM applications: an analysis-based proposal, Management Decision, Vol. 41 Iss: 6, pp.570 - 577 ; Dotun Adebanjo 2003 (E-Business Division, University of Liverpool Management School, University of Liverpool, Liverpool, UK) http://www.emeraldinsight.com/doi/pdfplus/10.1108/00251740310491517 //read 1.3.2016

17 Suuri CRM-vertailu: Paras asiakastietojärjestelmä edullisesti ; Mikael Ahonen ; 2015 ; http://vinkkisolutions.com/fi/arkistot/960 //read 10.3.2016

18 vTiger webpages ; https://www.vtiger.com/ //read 14.4.2016

19 Pipedrive webpages ; https://www.pipedrive.com //read 14.4.2016

20 Pienyrityskonsultit webpages ; http://www.pienyrityskonsultit.fi/6-erilaista-pienyrityksen-ratkaisuvaihtoehtoa/ //read 6.5.2016

21 Highrise webpages ; https://highrisehq.com/ //read 14.4.2016

22 Luettelo CRM Työkalut ; 26.7.2010 ; http://www.lodgianlocator.com/luettelo-crm-tyokalut/ //read 10.3.2016

23 Zoho CRM webpages ; https://www.zoho.com/crm/ //read 14.4.2016

24 Base CRM webpages ; https://getbase.com/ //read 14.4.2016

25 Insightly webpages ; https://www.insightly.com/ //read 14.4.2016

26 Sugar CRM webpages ; http://www.sugarcrm.com //read 15.4.2016

27 Technologica Microsoft Dynamics webpages ; http://www.technologica.com/en/products/deployment/customer-relationship-management/microsoft-dynamics-crm_en //read 28.4.2016

28 Microsoft Dynamics webpages ; http://www.microsoft.com/fi-fi/dynamics/default.aspx //read 15.4.2016

29 SuperOffice webpages ; http://www.superoffice.com/crm/ //read 15.4.2016

30 Lumoflow CRM webpages ; https://lumoflow.com/ //read 27.4.2016

31 CiviCRM webpages ; https://civicrm.org/ //read 27.4.2016

32 Office Interactive webpages ; https://www.officeinteractive.com/ //read 28.4.2016

33 Technologica Oracle, Siebel Demand webpages ; http://www.technologica.com/en/products/deployment/customer-relationship-management/oracle-siebel-crm_en //read 28.4.2016

34 Oracle, Siebel Demand webpages ; http://www.oracle.com/us/products/applications/siebel/overview/index.html //read 28.4.2016

35 Valueframe CRM webpages ; http://www.valueframe.fi/tuotteet/asiakkuudenhallinta_crm/ //read 28.4.2016

36 Email conversation with Valueframe Service manager 18.10.2016

37 Visma Severa webpages ; http://severa.visma.com/en/solution/financial-management/ //read 28.4.2016

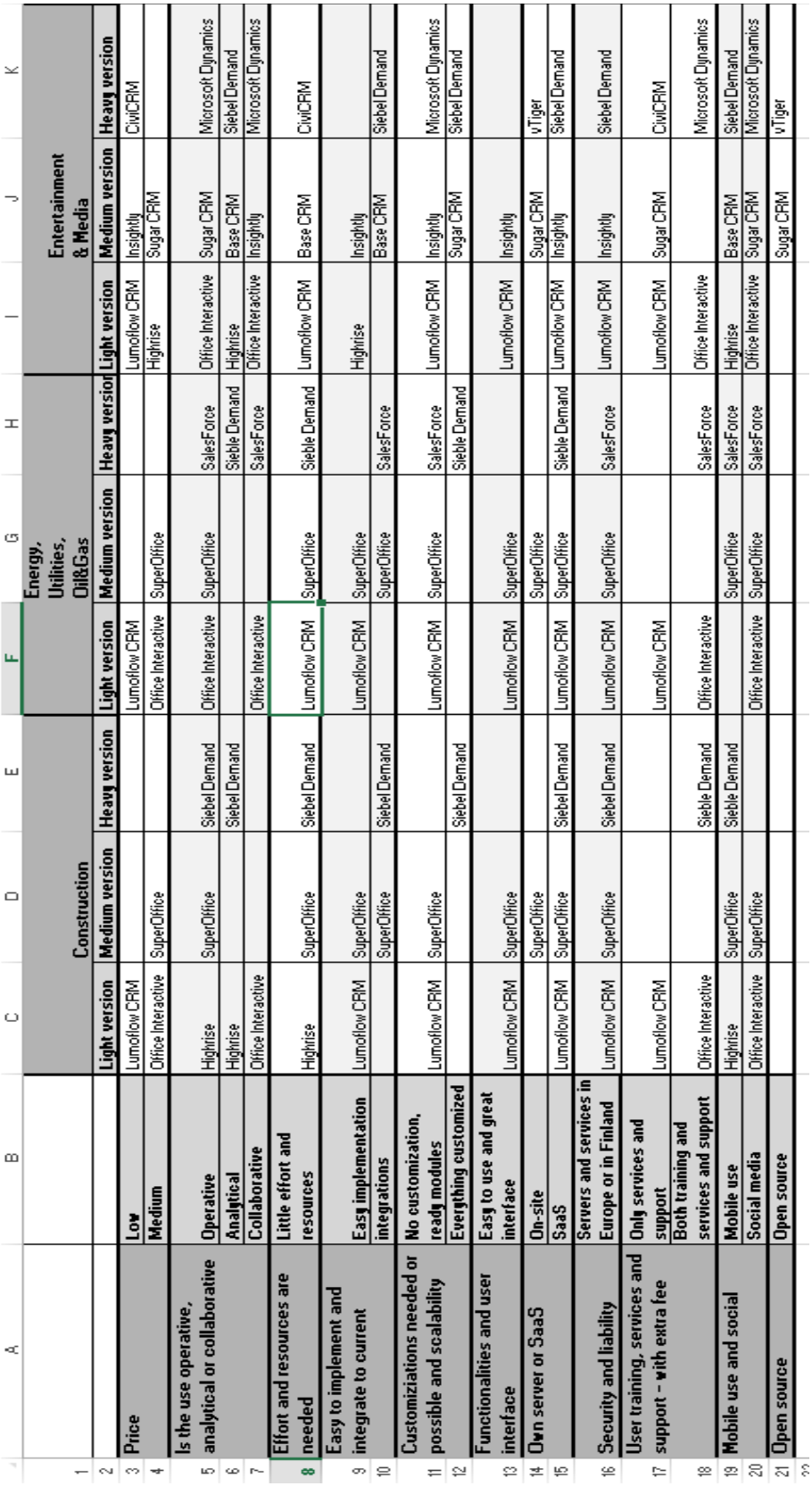
38 Visma Severa webpages ; http://severa.visma.com/en/visma-severa/ //read 28.4.2016

39 Shenton, A. K., 2004: Strategies for ensuring trustworthiness in qualitative research projects. Education for Information, Vol. 22, pp. 63-75.

The recommendation table for Activities & membership organizations; Car & motor vehicle industry and Commercial & Professional service

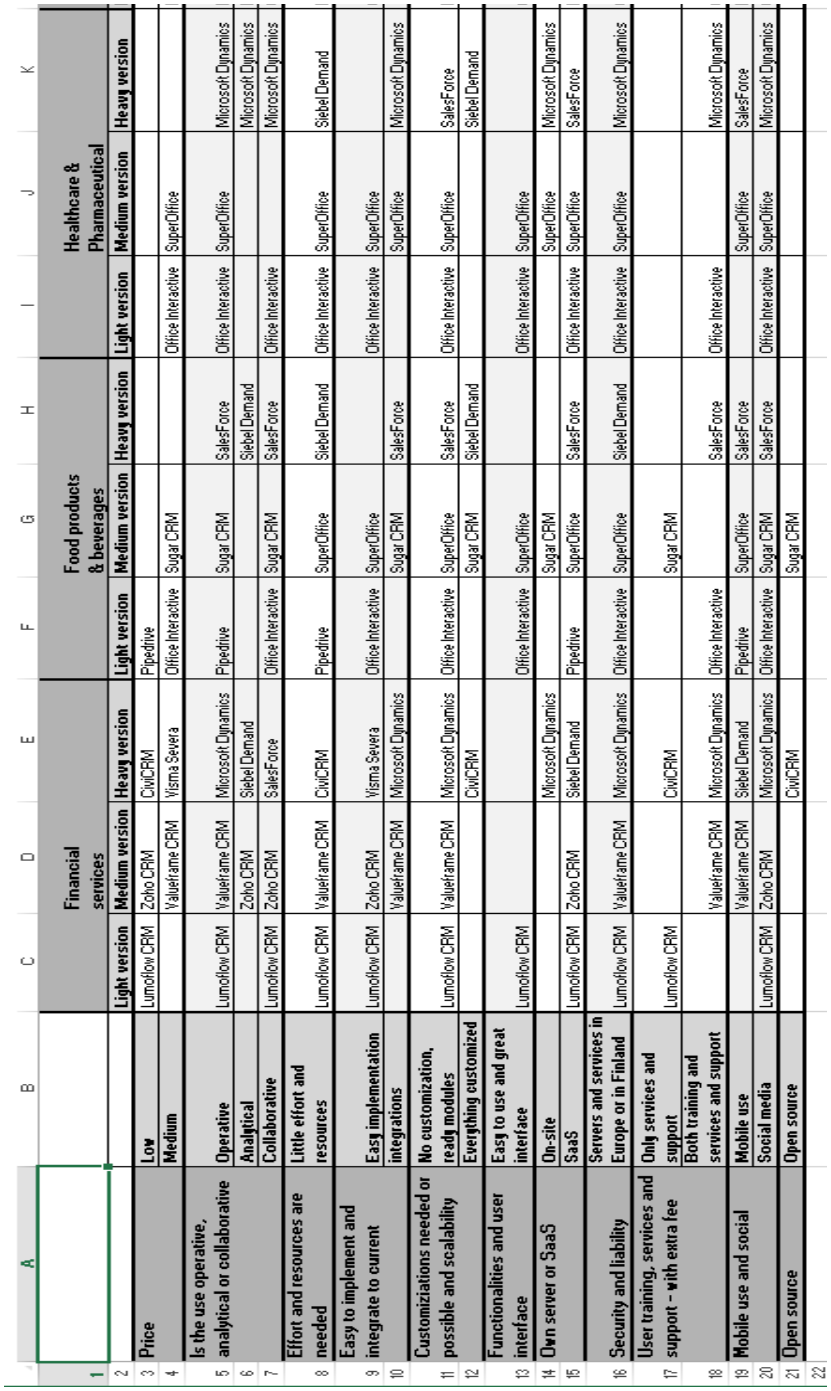
			Activities & membership organizations		Car & motor vehicle industry			Commercial & Professional service		
		Light version	Medium version	Heavy version	Light version	Medium version	Heavy version	Light version	Medium version	Heavy version
Price	Low	Lumoflow CRM	Insightly	CiviCRM	Pipedrive			Lumoflow CRM	Zoho CRM	vTiger
	Medium	Highrise	Base CRM		Office Interactive	SugarCRM		Highrise	Valuefram CRM	Visma Severa
Is the use operative, analytical or collaborative	Operative	Highrise		CiviCRM	Pipedrive	SugarCRM	Siebel Demand	Highrise	SugarCRM	vTiger
	Analytical	Highrise	Base CRM	Siebel Demand			Siebel Demand	Highrise	Zoho CRM	Microsoft Dynamics
	Collaborative	Lumoflow CRM			Office Interactive	SugarCRM	SalesForce	Lumoflow CRM	SugarCRM	Microsoft Dynamics
Effort and resources are needed	Little effort and resources	Highrise	Insightly	CiviCRM	Pipedrive	SuperOffice	Siebel Demand	Pipedrive	Valuefram CRM	Visma Severa
Easy to implement and integrate to current	Easy implementation	Highrise	Base CRM		Office Interactive	SuperOffice		Lumoflow CRM	Base CRM	Visma Severa
	Much ready integrations		Base CRM	Siebel Demand	Pipedrive	SugarCRM	SalesForce	Pipedrive	Zoho CRM	Sieble Demand
Customiziations needed or possible and scalability	No customization, ready modules	Highrise	Base CRM		Pipedrive	SuperOffice	SalesForce	Lumoflow CRM	Valuefram CRM	Visma Severa
	Everything customized			Siebel Demand		SugarCRM	Siebel Demand		SugarCRM	vTiger
Functionalities and user interface	Easy to use and great interface	Lumoflow CRM	Insightly		Office Interactive	SuperOffice		Lumoflow CRM		
Own server or SaaS	On-site	Lumoflow CRM		CiviCRM		SugarCRM			SugarCRM	Microsoft Dynamics
	SaaS	Lumoflow CRM	Insightly	Siebel Demand	Pipedrive	SuperOffice	SalesForce	Highrise	Zoho CRM	Sieble Demand
Security and liability	Servers and services in Europe or in Finland	Lumoflow CRM	Insightly	CiviCRM	Office Interactive	SuperOffice	SalesForce	Lumoflow CRM	Valuefram CRM	vTiger
User training, services and support – with extra fee	Only services and support	Lumoflow CRM		CiviCRM		SugarCRM		Lumoflow CRM	SugarCRM	CiviCRM
	Both training and services and support			Siebel Demand	Office Interactive		SalesForce		Valuefram CRM	Visma Severa
Mobile use and social	Mobile use	Highrise	Base CRM	Siebel Demand	Pipedrive	SuperOffice	SalesForce	Pipedrive	Zoho CRM	Sieble Demand
	Social media	Lumoflow CRM	Insightly		Office Interactive	SugarCRM	SalesForce	Lumoflow CRM	Zoho CRM	vTiger
Open source	Open source			CiviCRM		SugarCRM			SugarCRM	vTiger

The recommendation table for Construction; Energy, Utilities, Oil&Gas and Entertainment & Media



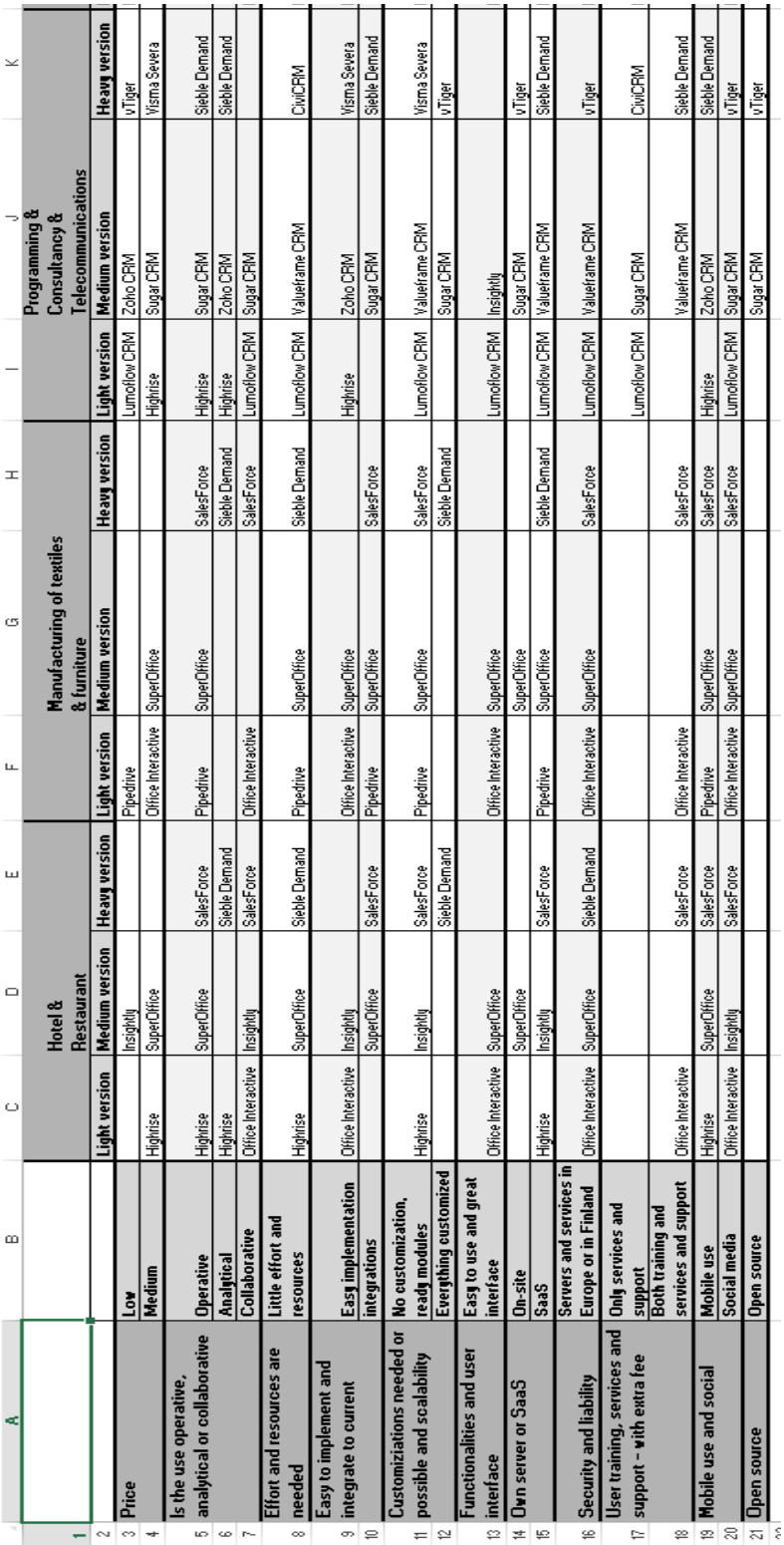
		Construction			Energy, Utilities, Oil&Gas			Entertainment & Media		
		Light version	Medium version	Heavy version	Light version	Medium version	Heavy version	Light version	Medium version	Heavy version
Price	Low	Lumoflow CRM			Lumoflow CRM			Lumoflow CRM	Insightly	CiviCRM
	Medium	Office Interactive	SuperOffice		Office Interactive	SuperOffice		Highrise	Sugar CRM	
Is the use operative, analytical or collaborative	Operative	Highrise	SuperOffice	Siebel Demand	Office Interactive	SuperOffice	SalesForce	Office Interactive	Sugar CRM	Microsoft Dynamics
	Analytical	Highrise		Siebel Demand			Sieble Demand	Highrise	Base CRM	Siebel Demand
	Collaborative	Office Interactive			Office Interactive		SalesForce	Office Interactive	Insightly	Microsoft Dynamics
Effort and resources are needed	Little effort and resources	Highrise	SuperOffice	Siebel Demand	Lumoflow CRM	SuperOffice	Sieble Demand	Lumoflow CRM	Base CRM	CiviCRM
Easy to implement and integrate to current	Easy implementation	Lumoflow CRM	SuperOffice		Lumoflow CRM	SuperOffice		Highrise	Insightly	
	integrations		SuperOffice	Siebel Demand		SuperOffice	SalesForce		Base CRM	Siebel Demand
Customiziations needed or possible and scalability	No customization, ready modules	Lumoflow CRM	SuperOffice		Lumoflow CRM	SuperOffice	SalesForce	Lumoflow CRM	Insightly	Microsoft Dynamics
	Everything customized			Siebel Demand			Sieble Demand		Sugar CRM	Siebel Demand
Functionalities and user interface	Easy to use and great interface	Lumoflow CRM	SuperOffice		Lumoflow CRM	SuperOffice		Lumoflow CRM	Insightly	
Own server or SaaS	On-site		SuperOffice			SuperOffice			Sugar CRM	vTiger
	SaaS	Lumoflow CRM	SuperOffice	Siebel Demand	Lumoflow CRM	SuperOffice	Sieble Demand	Lumoflow CRM	Insightly	Siebel Demand
Security and liability	Servers and services in Europe or in Finland	Lumoflow CRM	SuperOffice	Siebel Demand	Lumoflow CRM	SuperOffice	SalesForce	Lumoflow CRM	Insightly	Siebel Demand
User training, services and support - with extra fee	Only services and support	Lumoflow CRM			Lumoflow CRM			Lumoflow CRM	Sugar CRM	CiviCRM
	Both training and services and support	Office Interactive		Sieble Demand	Office Interactive		SalesForce	Office Interactive		Microsoft Dynamics
Mobile use and social	Mobile use	Highrise	SuperOffice	Sieble Demand		SuperOffice	SalesForce	Highrise	Base CRM	Siebel Demand
	Social media	Office Interactive	SuperOffice		Office Interactive	SuperOffice	SalesForce	Office Interactive	Sugar CRM	Microsoft Dynamics
Open source	Open source								Sugar CRM	vTiger

The recommendation table for Financial services; Food products & beverages and Healthcare & Pharmaceutical



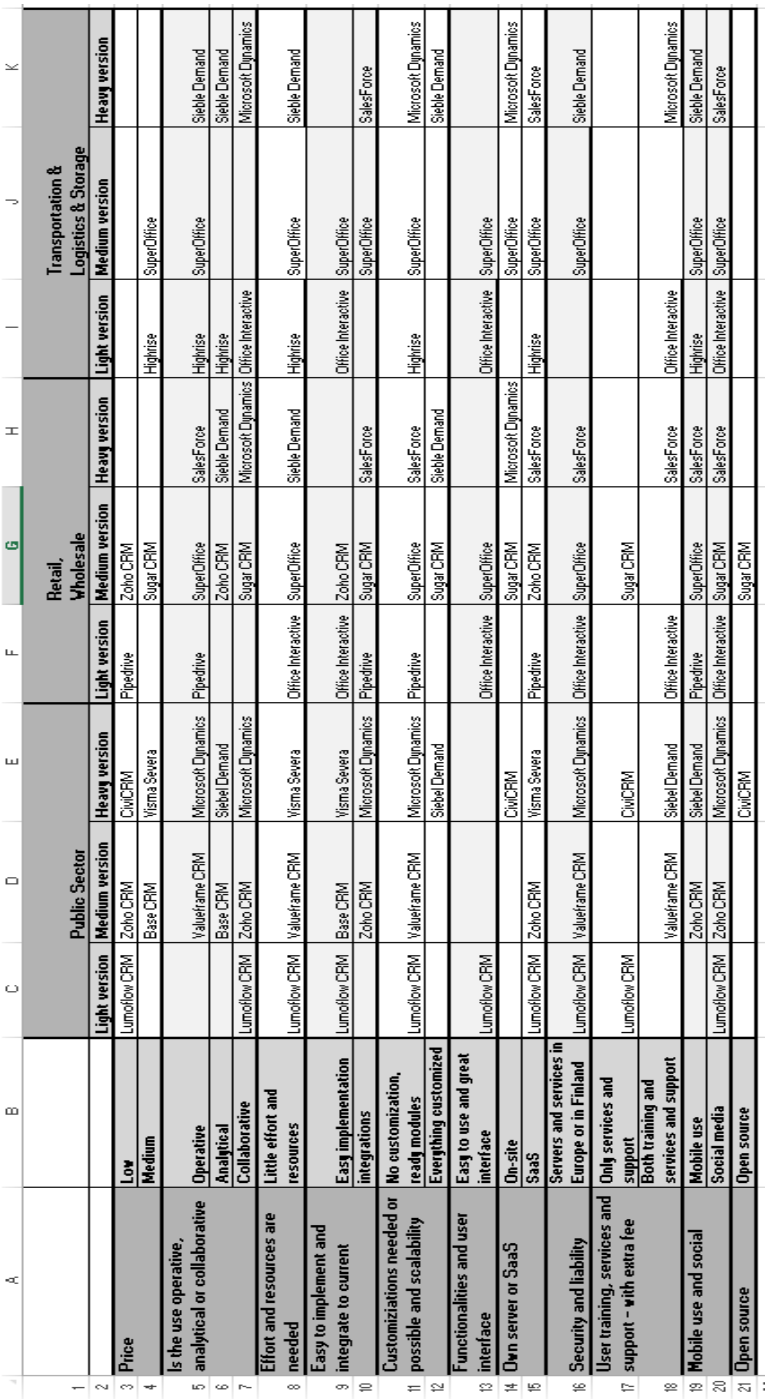
		Financial services			Food products & beverages			Healthcare & Pharmaceutical		
		Light version	Medium version	Heavy version	Light version	Medium version	Heavy version	Light version	Medium version	Heavy version
Price	Low	Lumoflow CRM	Zoho CRM	CiviCRM	Pipedrive					
	Medium		Valueframe CRM	Visma Severa	Office Interactive	Sugar CRM		Office Interactive	SuperOffice	
Is the use operative, analytical or collaborative	Operative	Lumoflow CRM	Valueframe CRM	Microsoft Dynamics	Pipedrive	Sugar CRM	SalesForce	Office Interactive	SuperOffice	Microsoft Dynamics
	Analytical		Zoho CRM	Siebel Demand			Siebel Demand			Microsoft Dynamics
	Collaborative	Lumoflow CRM	Zoho CRM	SalesForce	Office Interactive	Sugar CRM	SalesForce	Office Interactive		Microsoft Dynamics
Effort and resources are needed	Little effort and resources	Lumoflow CRM	Valueframe CRM	CiviCRM	Pipedrive	SuperOffice	Siebel Demand	Office Interactive	SuperOffice	Siebel Demand
Easy to implement and integrate to current	Easy implementation integrations	Lumoflow CRM	Zoho CRM	Visma Severa	Office Interactive	SuperOffice		Office Interactive	SuperOffice	
			Valueframe CRM	Microsoft Dynamics		Sugar CRM	SalesForce		SuperOffice	Microsoft Dynamics
Customiziations needed or possible and scalability	No customization, ready modules	Lumoflow CRM	Valueframe CRM	Microsoft Dynamics	Office Interactive	SuperOffice	SalesForce	Office Interactive	SuperOffice	SalesForce
	Everything customized			CiviCRM		Sugar CRM	Siebel Demand			Siebel Demand
Functionalities and user interface	Easy to use and great interface	Lumoflow CRM			Office Interactive	SuperOffice		Office Interactive	SuperOffice	
Own server or SaaS	On-site		Microsoft Dynamics			Sugar CRM			SuperOffice	Microsoft Dynamics
	SaaS	Lumoflow CRM	Zoho CRM	Siebel Demand	Pipedrive	SuperOffice	SalesForce	Office Interactive	SuperOffice	SalesForce
Security and liability	Servers and services in Europe or in Finland	Lumoflow CRM	Valueframe CRM	Microsoft Dynamics	Office Interactive	SuperOffice	Siebel Demand	Office Interactive	SuperOffice	Microsoft Dynamics
User training, services and support - with extra fee	Only services and support	Lumoflow CRM		CiviCRM		Sugar CRM				
	Both training and services and support		Valueframe CRM	Microsoft Dynamics	Office Interactive		SalesForce	Office Interactive		Microsoft Dynamics
Mobile use and social	Mobile use		Valueframe CRM	Siebel Demand	Pipedrive	SuperOffice	SalesForce		SuperOffice	SalesForce
	Social media	Lumoflow CRM	Zoho CRM	Microsoft Dynamics	Office Interactive	Sugar CRM	SalesForce	Office Interactive	SuperOffice	Microsoft Dynamics
Open source	Open source			CiviCRM		Sugar CRM				

The recommendation table for Hotel & Restaurant; Manufacturing of textiles & furniture and Programming & Consultancy & Telecommunications



		Hotel & Restaurant			Manufacturing of textiles & furniture			Programming & Consultancy & Telecommunications		
		Light version	Medium version	Heavy version	Light version	Medium version	Heavy version	Light version	Medium version	Heavy version
Price	Low		Insightly		Pipedrive			Lumoflow CRM	Zoho CRM	vTiger
	Medium	Highrise	SuperOffice		Office Interactive	SuperOffice		Highrise	Sugar CRM	Visma Severa
Is the use operative, analytical or collaborative	Operative	Highrise	SuperOffice	SalesForce	Pipedrive	SuperOffice	SalesForce	Highrise	Sugar CRM	Sieble Demand
	Analytical	Highrise		Sieble Demand			Sieble Demand	Highrise	Zoho CRM	Sieble Demand
	Collaborative	Office Interactive	Insightly	SalesForce	Office Interactive		SalesForce	Lumoflow CRM	Sugar CRM	
Effort and resources are needed	Little effort and resources	Highrise	SuperOffice	Sieble Demand	Pipedrive	SuperOffice	Sieble Demand	Lumoflow CRM	Valueframe CRM	CiviCRM
Easy to implement and integrate to current	Easy implementation integrations	Office Interactive	Insightly		Office Interactive	SuperOffice		Highrise	Zoho CRM	Visma Severa
			SuperOffice	SalesForce	Pipedrive	SuperOffice	SalesForce		Sugar CRM	Sieble Demand
Customiziations needed or possible and scalability	No customization, ready modules	Highrise	Insightly	SalesForce	Pipedrive	SuperOffice	SalesForce	Lumoflow CRM	Valueframe CRM	Visma Severa
	Everything customized			Sieble Demand			Sieble Demand		Sugar CRM	vTiger
Functionalities and user interface	Easy to use and great interface	Office Interactive	SuperOffice		Office Interactive	SuperOffice		Lumoflow CRM	Insightly	
Own server or SaaS	On-site		SuperOffice			SuperOffice			Sugar CRM	vTiger
	SaaS	Highrise	Insightly	SalesForce	Pipedrive	SuperOffice	Sieble Demand	Lumoflow CRM	Valueframe CRM	Sieble Demand
Security and liability	Servers and services in Europe or in Finland	Office Interactive	SuperOffice	Sieble Demand	Office Interactive	SuperOffice	SalesForce	Lumoflow CRM	Valueframe CRM	vTiger
User training, services and support – with extra fee	Only services and support							Lumoflow CRM	Sugar CRM	CiviCRM
	Both training and services and support	Office Interactive		SalesForce	Office Interactive		SalesForce		Valueframe CRM	Sieble Demand
Mobile use and social	Mobile use	Highrise	SuperOffice	SalesForce	Pipedrive	SuperOffice	SalesForce	Highrise	Zoho CRM	Sieble Demand
	Social media	Office Interactive	Insightly	SalesForce	Office Interactive	SuperOffice	SalesForce	Lumoflow CRM	Sugar CRM	vTiger
Open source	Open source								Sugar CRM	vTiger

The recommendation table for Public Sector; Retail, Wholesale and Transportation & Logistics & Storage



		Public Sector			Retail, Wholesale		Transportation & Logistics & Storage		
		Light version	Medium version	Heavy version	Light version	Medium version	Heavy version	Light version	Medium version	Heavy version
Price	Low	Lumoflow CRM	Zoho CRM	CiviCRM	Pipedrive	Zoho CRM				
	Medium		Base CRM	Visma Severa		Sugar CRM		Highrise	SuperOffice	
Is the use operative, analytical or collaborative	Operative		Valueframe CRM	Microsoft Dynamics	Pipedrive	SuperOffice	SalesForce	Highrise	SuperOffice	Sieble Demand
	Analytical		Base CRM	Siebel Demand		Zoho CRM	Sieble Demand	Highrise		Sieble Demand
	Collaborative	Lumoflow CRM	Zoho CRM	Microsoft Dynamics		Sugar CRM	Microsoft Dynamics	Office Interactive		Microsoft Dynamics
Effort and resources are needed	Little effort and resources	Lumoflow CRM	Valueframe CRM	Visma Severa	Office Interactive	SuperOffice	Sieble Demand	Highrise	SuperOffice	Sieble Demand
Easy to implement and integrate to current	Easy implementation integrations	Lumoflow CRM	Base CRM	Visma Severa	Office Interactive	Zoho CRM		Office Interactive	SuperOffice	
			Zoho CRM	Microsoft Dynamics	Pipedrive	Sugar CRM	SalesForce		SuperOffice	SalesForce
Customiziations needed or possible and scalability	No customization, ready modules	Lumoflow CRM	Valueframe CRM	Microsoft Dynamics	Pipedrive	SuperOffice	SalesForce	Highrise	SuperOffice	Microsoft Dynamics
	Everything customized			Siebel Demand		Sugar CRM	Sieble Demand			Sieble Demand
Functionalities and user interface	Easy to use and great interface	Lumoflow CRM			Office Interactive	SuperOffice		Office Interactive	SuperOffice	
Own server or SaaS	On-site			CiviCRM		Sugar CRM	Microsoft Dynamics		SuperOffice	Microsoft Dynamics
	SaaS	Lumoflow CRM	Zoho CRM	Visma Severa	Pipedrive	Zoho CRM	SalesForce	Highrise	SuperOffice	SalesForce
Security and liability	Servers and services in Europe or in Finland	Lumoflow CRM	Valueframe CRM	Microsoft Dynamics	Office Interactive	SuperOffice	SalesForce		SuperOffice	Sieble Demand
User training, services and support - with extra fee	Only services and support	Lumoflow CRM		CiviCRM		Sugar CRM				
	Both training and services and support		Valueframe CRM	Siebel Demand	Office Interactive		SalesForce	Office Interactive		Microsoft Dynamics
Mobile use and social	Mobile use		Zoho CRM	Siebel Demand	Pipedrive	SuperOffice	SalesForce	Highrise	SuperOffice	Sieble Demand
	Social media	Lumoflow CRM	Zoho CRM	Microsoft Dynamics	Office Interactive	Sugar CRM	SalesForce	Office Interactive	SuperOffice	SalesForce
Open source	Open source			CiviCRM		Sugar CRM				