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The Implementation of a Cloud-based CRM for a Small Enterprise

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Markus Lindevall
Degree Programme in Business
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Laurea University of Applied Sciences **Abstract**
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The topic of this thesis is the implementation of a cloud-based Customer Relationship Management (CRM) system in a small enterprise. The target company is BPS Consulting Finland Oy, an IT consulting firm, and the CRM system reviewed here is the cloud-based SAP Hybris Cloud for Customer. The author works as the main executor of the project and system expert. The report reviews theory about customer relationship management, the functionalities and benefits of the SAP CRM system, the project management method of SAP as well as the actual implementation project in its different phases, results and conclusions.

The resources utilized during this thesis mainly consist of SAP's own materials and the know-how about the CRM system configuration and customization and the implementation of SAP's project management method, gained through the certification training by the author. The thesis was conducted as a project-based development assignment, the documentation about the project being the end-product. The CRM system was scoped to include only the sales module, which consists of customer and partner data maintenance, sales lead and opportunity management, comprehensive reporting possibilities and a light Outlook integration.

The end result for this implementation project was successful: BPS gained an improved view on accounts and sales, the reporting at team meetings became easier and data management was clarified. No major changes occurred with the project scope and the only issue about the project execution was the stretched project timeline which grew from the original three months to five months. The solution adoption went smoothly and the users have been content and enthusiastic about the new system. The company's internal expertise about SAP's CRM systems grew throughout the project. So it can be stated that deploying the CRM was a successful decision from the management and the implementation brought benefit to the company in multiple ways.

Keywords: Customer Relationship Management, CRM, implementation project, sales

Laurea-ammattikorkeakoulu **Tiivistelmä**
Tietojenkäsittelyn koulutusohjelma
Liiketalouden ammattikorkeakoulututkinto

Lindevall, Markus

Pilvipohjaisen CRM:n käyttöönotto pienyrityksessä

Vuosi 2017 Sivumäärä 35

Tämän opinnäytetyön aiheena on pilvipohjaisen asiakkuudenhallintajärjestelmän eli Customer Relationship Management (CRM) -järjestelmän käyttöönottoprojekti pienyrityksessä. Kohdeyrityksenä on IT-konsultointialalla toimiva BPS Consulting Finland Oy ja käyttöönotettava asiakkuudenhallintajärjestelmä on pilvipohjainen SAP Hybris Cloud for Customer. Projektin pääasiallisena toteuttajana ja järjestelmäasiantuntijana toimii allekirjoittanut. Opinnäytetyössä käydään läpi asiakkuudenhallintaa, SAP:n asiakkuudenhallintajärjestelmän toiminnallisuuksia ja sen hyötyjä yritykselle, SAP:n projektinhallintamallia sekä itse käyttöönottoprojekti eriteltynä alkutilanteesta sen eri vaiheisiin, tuloksiin ja loppupäätelmiin.

Opinnäytetyön lähteinä käytettiin pääasiassa SAP:n omia materiaaleja sekä sertifioinnin kautta saamaani tietotaitoa järjestelmän konfiguroinnista ja kustomoinnista sekä SAP:n projektinhallintamallin toteuttamisesta. Opinnäytetyö toteutettiin projektimuotoisena kehitystyönä, jonka dokumentoinnin voidaan katsoa olevan työn lopputuote. Asiakkuudenhallintajärjestelmän käyttöönotto rajattiin sisältämään vain myynnin osuus eli asiakas- ja yhteistyökumppanidatan ylläpito, myyntivihjeiden ja -mahdollisuuksien hallinta, kattavat raportointimahdollisuudet sekä kevyt Outlook-integraatio.

Lopputulos käyttöönottoprojektille oli onnistunut ja positiivinen: BPS:llä saatiin parempi näkyvyys asiakkuuksiin ja myyntiin, tiimipalaverien raportointi helpottui ja datan hallinta selkeytyi. Projektin laajuuteen ei tullut suuria muutoksia projektin aikana ja ainoana negatiivisena puolena toteutuksessa oli aikataulun venyminen kolmesta noin viiteen kuukauteen. Järjestelmän omaksuminen sujui hyvin ja käyttäjät ovat olleet tyytyväisiä ja innostuneita uudesta järjestelmästä. Projektin kautta yrityksen sisäinen osaaminen SAP:n asiakkuudenhallintajärjestelmistä on kasvanut. Voidaan siis todeta, että asiakkuudenhallintajärjestelmän käyttöönotto oli onnistunut päätös johdolta ja että toteutus on tuonut hyötyä yritykselle monella eri tavalla.

Asiasanat: Asiakkuudenhallintajärjestelmä, CRM, käyttöönottoprojekti, myynti

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1 Introduction

Managing customer relationships is essential in order for a business to thrive in the modern world. Sales, marketing and customer service departments are most often the first touch-points for customers and the work of these departments or teams is enhanced by a customer relationship management system, abbreviated CRM.

The implementation of a cloud-based CRM called SAP Hybris Cloud for Customer, a software solution provided by SAP, is examined and explained in this thesis. The focus is on a project-based implementation for a small enterprise, BPS Consulting Finland Oy, including the detailed description of project phases, business processes, and the benefits and disadvantages of a CRM, with an emphasis on the sales component of the SAP solution.

The sources and knowledge for this development project are gained from official study and certification material offered in SAP Hybris Cloud for Customer certification courses and e-books, as well as from literature related to customer relationship management.

1.1 Background of the thesis

The topic of this thesis originates from the need at BPS Consulting Finland Oy to manage their customer relationships and sales more simply and effectively. This need was recognized at BPS a long time ago, but due to having limited expertise in the customer relationship management area and scarce time for internal projects, no solution had been implemented to replace the company's existent way of managing their customer relationships and sales.

During the Spring of 2016 I got certified in SAP's state-of-the-art customer relationship management solution called SAP Hybris Cloud for Customer and was assigned to implement the CRM at BPS. The reason for this decision from the management was that BPS is currently moving their focus towards the newest solutions provided by SAP. At the end of May 2016, I passed the certification, enabling me to work independently with the solution and implement the CRM system for our company. The starting point and requirements for the implementation, including the explanation of abbreviations and different terms, will be described in more detail in the following chapters.

1.1.1 Description of BPS Consulting Finland Oy

BPS Consulting Finland Oy is a small but experienced family-owned consulting company that focuses its operations primarily on Finland, Hungary and the Baltics. BPS is an official SAP Value Added Reseller (VAR) and Service Partner that conducts business mainly in three areas:

implementation projects, small-scale development of SAP systems and maintenance work with long-lasting partnerships with the company's customers. The company was founded in 1998 and is located in Espoo, Finland. There are approximately 10 full-time employees in the company, including the management. Sales revenue was approximately 1,1 M€ in 2015.
BPS utilizes its network, a wide range of external consultants and developers who are experts in different modules of SAP, many with nearly two decades of experience in the field, in small, daily assignments as well as large-scale projects. (BPS Consulting Finland Oy 2016)

1.1.2 Defining the starting point

At the starting point of this project BPS had no clear and effective system to maintain their customer data and handle sales operations. All the relevant data was held in different customer folders on the company's server and irregularly documented on Excel documents or personal OneNotes. The data on accounts, sales leads and opportunities was lacking in detail and it was challenging to find information quickly when it was needed. It was troublesome to measure for example how many opportunities there were during the quarter, how valuable in total the quotes during the previous year had been or what their success rate was. Next steps in the sales process were occasionally forgotten or deadlines missed due to the lack of order in documentation. This lead BPS to reconsider how they wanted to manage their sales and customer relationships and consequently the management decided to deploy SAP's cloud-based CRM, Cloud for Customer.

1.2 Abbreviations explained

1.2.1 SAP

SAP is one of the world's leading business software providers specializing in enterprise resource planning (ERP), business intelligence (BI) and other related solutions and services, such as customer relationship management (CRM), that help companies in over 25 different industries to run their business processes and customer relations better. SAP origins from German "Systemanalyse und Programmentwicklung", that is in English often turned into Systems, Applications & Products in Data Processing. The German multinational software corporation is headquartered in Walldorf, Germany, and has offices in 130 countries with customers all over the world ranging from leading brands like Adidas and Coca-Cola to the NHL, NFL, NBA and to Nordic corporations like ABB, Wärtsilä and Konecranes.

1.2.2 CRM

Customer relationship management, abbreviated CRM, is a common term for the technologies, systems, strategies and practices that are used to compile, manage and analyze custom-

er related data, the target being the improvement of business relationships with customers and growth in sales. CRM software helps sales and marketing teams and organizations with the recording of customer interactions like emails, phone calls, social media usage, etc. In addition, CRM software commonly offers the automation of numerous workflow processes and tasks in marketing, sales and customer service departments, and provides managers with the ability to track sales performance and productivity based on the information stored in the system.

CRM tools with marketing automation capabilities can automate repetitive tasks to enhance marketing efforts to customers at different points in the lifecycle. For example, when a new user logs into a webstore for the first time, she receives a pop-up message about the latest discounts or an email that includes a coupon.

Sales force automation, also known as sales force management, is intended to hinder duplicate efforts between a salesperson and a customer, or the efforts inside a sales team. A CRM system helps in achieving this by tracking all interactions between all parties automatically.

Customer service departments and contact centers can be assisted by a CRM system that for example automates some of the personnel's tedious every-day tasks like categorizing and prefilling information on customer requests, or integrates with the customer service agent's desktop tools to decrease the time of calls and to simplify their service processes.
(SearchCRM 2014)

1.2.3 SAP Hybris Cloud for Customer (SAP C4C)

SAP Hybris Cloud for Customer, abbreviated SAP C4C, is the cloud-based customer relationship management solution offered by SAP since June 20, 2011. (Accenture 2015) Its predecessor, SAP CRM, is a robust on-premise solution for companies that have decided not to make the move on to the cloud yet. SAP C4C was developed to offer companies a solution with which they can engage their customers seamlessly across all communication channels and deliver the best customer experience – in person, on the phone, online, on social media and via mobile devices. SAP C4C is designed to bring its whole portfolio of CRM solutions – SAP Cloud for Sales, SAP Cloud for Service and SAP Cloud for Social Engagement – to customers as an integrated SaaS CRM system. SaaS stands for Software-as-a-Service, which means a service, that is hosted on the cloud, to enable consumers to access software applications over the internet. The objective of SAP Cloud for Sales is to boost sales effectiveness, while the main purpose of SAP Cloud for Service is for the customer service team to be able to respond to customer requests better, and SAP Cloud for Social Engagement helps the marketing and social media team to engage customers using social media channels like Twitter and Facebook and integrate these channels with your business.

(S4HANATraining 2016)

SAP C4C enables sales personnel to obtain a transparent view of their customers and utilize real-time analytics and predictive insight to improve the way they interact with them. With SAP C4C, all the capabilities of the software are available on all devices – they can be used on web browsers and also via mobile applications that are available on all operating systems. In addition, limited usage is available with the mobile applications even offline.

SAP Hybris Cloud for Customer helps to maintain customer relationships in an easy but meaningful manner. From the 360-degree customer view sales personnel are able to find out who the main contact person of the account is, who are the biggest influencers in decision-making and which products or services the customer would most likely be interested and in what kind of a sales pipeline.

Collaboration is very important to modern sales teams, because working together is simply more effective than everyone working for themselves or, in the worst-case scenario, against their teammates. Not one person can handle as much information, insight and as many contacts as a well-coordinated team can. (inc.com 2016) SAP Hybris Cloud for Customer answers the need for cooperation in sales organizations – it offers a direct chat option on the browser as well as messaging through SAP's collaboration tool called SAP Jam and the Feed. The latter ones can also be used via their respective mobile applications.

Figure 1: SAP Hybris Cloud for Customer solution overview

SAP Hybris Cloud for Customer delivers a great user experience with its modern user interface designed for the 21st century, taking a big step away from the rigid SAP GUI (Graphical User Interface) that is currently broadly in use on most on-premise SAP solutions. The solution is also very extensible and effortless to modify and customize by key users and even personalize individually by end-users.

The integration opportunities are vast, as SAP offers pre-built integration with applications like SAP ERP, SAP CRM, SAP JAM, InsideView, Xactly, and more. In addition mashups with many other applications are made simple to implement, diminishing the need for large-scale integration projects that might end up requiring lots of resources, both time and capital.

The Cloud for Customer offers an extensive set of possibilities for reporting and analytics. Predictive analytics includes such tools as the deal finder through lead scoring and deal closing through the spiral of influence. Real-time analytics introduce configurable dashboards, custom reports and forecasting possibilities. These also allow for the 360-degree view of accounts.
(S4HANATraining 2016)

There are 13 different industry-specific solutions available for the Cloud for Customer, including Automotive, Banking, Chemicals, Healthcare, High Tech, Higher Education, Information Management and Consulting (IM&C), Insurance, Oil and Gas, Professional Services, Public Sector, Retail and Utilities. This is lacking from the SAP ERP's industry solution list that holds industry-specifics setups currently for 25 industries.
(SAP.com)

1.3 Business case for implementing CRM at BPS

The situation with sales and customer relationship management at BPS before the decision to implement a CRM system was unorganized and ineffective. There was no clear or effective system to maintain customer and sales data and handle sales-related operations. All relevant data was held in different places like employees' OneNotes, Excel sheets or personal notebooks and it was very difficult to gather information related to specific sales cases or monthly reporting. Data on accounts, sales leads and opportunities was also lacking in detail – mostly this was related to pricing or contact information. The biggest challenge was to find information about a certain sales case or account quickly when it was needed. In addition, it was troublesome to report and measure sales metrics like opportunity win rates, average deal size per customer or total sales during a certain time period.

A comparison about a simple sales case during the starting point and the time after the CRM implementation will be described in chapter 6 (Results, Evaluation and Conclusions) to broaden the view on the changes that the CRM brought to the company.

1.4 What benefits does a CRM bring to a company?

Comprehensive customer relationship management helps companies through people, processes and technologies to understand and measure customer behaviour and value to the

company. The knowledge gained through this helps to improve the targeting of marketing, to specify customer profiling and segmentation, to discover more sales leads, to increase the likelihood of successful sales and the share of wallet from customers (share of wallet = a marketing term referring to the amount of the customer's total spending that a business captures in the products and services that it offers) (Investopedia), to improve the cooperation of sales and marketing teams and customer service and to increase customer satisfaction. (Crementum 2012)

2 CRM functionalities of SAP Hybris Cloud for Customer

2.1.1 Marketing

The SAP Cloud for Marketing functionalities focus on enabling the marketing team to work comfortably without the need to use many different systems and software to reach their main goals: assisting the sales motion of the company and raising awareness about the company's products with current and new customers. The following table presents the core functionalities and so-called work centers, utilized with the Cloud for Customer's marketing capabilities: (S4HANATraining 2016)

Marketing Funds	Assigning and tracking the planned and actualized marketing budgets
Campaigns	The whole campaign management process (including e.g. channel determination, assigning target groups and forms, executing campaigns and tracking responses)
Target Groups	Defined subsets of customers or prospects, each of these group are to be targeted with appropriate campaigns
E-Mail Execution	Enabling the sending of personalized e-mail messages directly from the SAP Cloud for Customer system to the addresses on the corresponding target group
Lead Generation	The recording of data originating from campaigns, trade fairs or other marketing activities. The generated leads can be edited and converted to follow-on items such as opportunities, accounts or contacts, in order to drive the sales motion.

Table 1: SAP Cloud for Marketing module, standard functionality overview

The SAP Cloud for Marketing functionalities are included partly in the SAP Cloud for Sales module and partly in the SAP Cloud for Social Engagement module. The Cloud for Sales module is explained further in the next chapter. The Cloud for Social Engagement includes social media handling for Facebook and Twitter: monitoring social media channels in order to detect keywords and understand brand-level trends and buzz, as well as getting a list of important

posts or messages, real-time message responses, capturing social profile and history data, and social media analytics.

2.1.2 Sales

The SAP Cloud for Sales module is designed to make sales people more efficient. Functionalities like maintaining account and contact information, creating leads and converting them into opportunities, maintaining one's calendar and schedule with the help of different activities like phone calls, e-mails, appointments and tasks, and sending out sales quotes and sales orders are all available in the Sales module. The module also includes the core marketing functionalities provided in the SAP Hybris Cloud for Customer solution. The following table explains some of the core elements of the Cloud for Sales module in more detail:
(Accenture 2015)

Account and Contact	Creating and maintaining account and contact information in order to have a broad view on the customer and enable the sales team to deliver the right impact in each activity with customers
Lead	Capturing information from prospects or current customers that can later lead to sales
Opportunity	Accelerating the sales process by easily tracking activities, collaborating with the sales team and having a broad view on all things related to the opportunity like for example the worth of the sale, expected closing date and probability
Sales Quote	Creating and sending quotes either for approval or directly to the customer, depending on the internal approval process
Sales Order	Creating and sending sales orders either for approval or directly to the customer, depending on the internal approval process. Utilizing the sales orders functionality often requires integration to the back-end ERP (Enterprise Resource Planning) system.

Table 2: SAP Cloud for Sales module, standard functionality overview

2.1.3 Customer service

The way a company handles their customer service can also be enhanced via SAP Hybris Cloud for Customer's Cloud for Service module. This module can be utilized as a large-scale ticket-

ing system – customer service personnel can collaborate with field agents to better serve their customer's needs, track the progress of tickets and the queue of tickets assigned to them. The following table explains some of the main functionalities of the Cloud for Service module in more detail:
(Accenture 2015)

Incoming Communications	Communication can happen via multiple configured communication channels, for example e-mail, social media accounts, phone calls and live chat
Processing	Processing includes automatic steps applied by the system (for example text analysis or real-time customer lookup) and manual steps performed by the customer service representative. These steps are taken to further clarify and categorize the customer's issue and help solving it.
Resolve Issue	From simple to complex cases, ease of use is critical for customer service representatives
Response	Responding to customers can be done either through the original communication channel or switching to a new communication method, depending on the issue
Close	The ticket is completed by the customer service representative; individuals, managers or teams can use analytics to review whether they are meeting their own performance goals or benchmarks, or to review

Table 3: SAP Cloud for Service module, standard functionality overview

3 SAP Hybris Cloud for Customer Implementation (in theory)

3.1 Introduction

The implementation of SAP Hybris requires the contribution from various sources: all project stakeholders, management and the project team from both vendor's and customer's side. According to a CRM buyer's guide by Crementum (Crementum 2012), there are three key elements in a successful CRM implementation project: people, processes and technology. This means that all the people working directly with customers in the company should support the CRM deployment – from CEO's to each customer support or sales person. All the business processes of the company should be gone through and if needed, even build them up from scratch in order to successfully benefit the company's customers and the relationships with them. As for the technology, the company needs a suitable CRM system that supports these business processes. In the following chapters the technical and security related matters about the SAP Hybris Cloud for Customer system will be covered and a closer look at the preferred SAP project management methodology called SAP Launch will be taken.

3.1.1 Technical requirements of SAP Hybris Cloud for Customer

Connecting to SAP Hybris Cloud for Customer happens either through a web browser or an application on a mobile phone or a tablet. Each individual web address is called a tenant and they are connected to via a unique URL. This will be covered in the following chapter.

The UI framework of SAP Hybris Cloud for Customer is mainly HTML5. All the business user features and functionalities are available in HTML5, while most administrator features and functionalities are only available with the Silverlight plugin.

To run SAP Hybris Cloud for Customer, users need Microsoft Windows 7 or 8.1 or higher operating system version - recommended browsers are Internet Explorer (IE10 or IE11), Google Chrome 46, and also Firefox 40 is supported. MAC Operating System with Safari 8 or Firefox 40 browsers, and Apple iPad and iPhone with iOS 8.0 and Android phones with Android 4.4 or higher version can also run the application.
(S4HANATraining 2016)

3.1.2 Subscriptions, Tenants, Hosting and Licensing

For each SAP Hybris Cloud for Customer productive tenant that is purchased by a customer, one test tenant is permitted at any given time to support the initial implementation and post go-live application lifecycle management using change requests, when larger changes to the solution are required. These test tenants are located on a different system than the productive tenant. Additionally, permanent test tenant subscriptions can be purchased. These are recommended for integration and implementation projects that include a lot of custom development with an SD (Software Development Kit). It is advised by SAP to purchase one test tenant for each additional tenant the customer wants to have available in their permanent CRM landscape. The additional test tenants reside on the same system as the original test tenant. Each SAP Hybris Cloud for Customer solution is purchased with the minimum of 10 user licenses that can then be used on the productive tenant. This does not include the project team members, who's users should be deactivated after the Go-Live support has successfully been transferred to SAP, as instructed by SAP Best Practices in their educational material.

SAP Hosting Services has three data centers in which tenants are established on systems. These are located in Newtown Square, PA, USA; St. Leon-Rot, Germany; and Sydney, Australia. A single system hosts many tenants for multiple customers, but a private edition subscription can be purchased. The private edition subscription entitles the customer to a system with no other customer tenants on it. When hotfixes, upgrades and new releases are applied

by SAP Hosting, they are applied to a system, thereby affecting all tenants on the system. A maintenance schedule is also defined on a system level.
(S4HANATraining 2016)

3.2 Information security with a cloud-based service

Data security is a primary concern for companies using a cloud-based system since the company doesn't physically control the storage and maintenance of its data. If the cloud provider goes out of business or is acquired by another company, a company's data can be compromised or lost. Compatibility issues can also arise when data is initially migrated from a company's previous system to the cloud. Finally, cost may be a concern, since paying subscription fees for software can be costlier than on-premises-based models.
(SearchCRM 2014)

Conversations about cloud security often lead to questions about physical security and data location, network security, backup & recovery, operational compliance, confidentiality & integrity and data portability. However, according to Verizon Data Breach Investigations Report, 86% of all security breaches were accomplished by the use of stolen login credentials, making secure enforcement of employee passwords and single sign-on policies “a must”.
(Verizon 2016)

The location of the datacenter where the data is physically stored in is a significant factor when making the decision about choosing a cloud-based service. The strictness of European regulations, and especially regulations in Germany (Germany’s Federal Data Protection Act which is known as Bundesdatenschutzgesetz or BDSG. The laws were reformed significantly in 2009 to cover a range of data protection-related issues), can help build trust when deciding on a geographical storage location for customers’ data.
(SAP Blogs 2013)

3.3 Project management methodology

SAP Launch is the project management methodology used in this SAP Hybris Cloud for Customer implementation project. SAP Launch was chosen as the methodology for the project because it is designed to guide successful implementations of SAP’s cloud-based solutions and is recommended specifically for the Cloud for Customer solution. Other methodologies utilized in SAP implementation projects are ASAP (Accelerated SAP) and SAP Activate. ASAP methodology has been utilized for years for SAP’s on-premise solutions and many elements of the Waterfall-model can be found in it. SAP Activate was designed for the implementation of SAP’s newest technologies and solutions, like SAP S/4HANA, but this topic will not be covered in this thesis. Similar to the ASAP methodology, SAP Launch is also a Waterfall-type project

management methodology. It includes four phases; Prepare, Realize, Verify and Launch. Next, the phases will be briefly described in theory, and later on during the thesis the realization of these phases will be described in more detail according to the notes taken about the implementation project.

3.3.1 Project Phase 1: Prepare

The project kick-off takes place in the Prepare phase. Kick-off meetings are held, project scope and the solution scope will be agreed on by all the stakeholders of the project. In this phase, all the major issues and possible concerns are taken into account, as well as integration scenarios are defined. Integrating SAP Hybris Cloud for Customer with other SAP or possibly even 3rd-party solutions will always have a significant effect on the project, as integration affects the schedule, resourcing and budgeting aspects of the projects greatly. The earlier the integration scenario specifications are made and resourcing and other aspects are taken care of in the project planning, the better the end-result will be. The data migration requirements, as well as the solution design, including all the functionalities and capabilities that are required for the solution, will also be gone through in the Prepare phase.

3.3.2 Project Phase 2: Realize

The primary focus in the Realize phase is on the solution configurations and development, as agreed when creating the solution design in the previous phase. The configurations will be gone through with all the stakeholders in the project. During this solution walkthrough, the required functionalities are checked in order to confirm that they are ready for testing to begin. As integration and data migration are essential parts of the project, the project team will go forward with them as well during the Realize phase. Data migration means converting the so-called master data after exporting it from legacy systems (systems that were previously used by the customer for which the new CRM is now developed for), and then importing the data to SAP Hybris Cloud for Customer through the solution's ready-made master data migration templates. There are numerous templates for different types of master data, related to for example customers, products, pricing, contacts, leads and opportunities. Integration setup includes the development of interfaces between the integrated systems, and in some scenarios it also includes implementing data conversion tables.

3.3.3 Project Phase 3: Verify

The Verify phase is the testing phase, where the testing of all functionalities, new developments and integrations occurs. This end-to-end testing covers all the things that were planned to be implemented during the Prepare phase. Integration setup, interface testing and data migration are finalized during this phase, and the master data is checked with its related

use-cases, like customer data with sales-related transactions, to confirm that the data isn't missing anything important and is applicable in all situations.

Cutover planning, meaning the planning of the change from the legacy system to the new system and how the operating of the solution will be conducted from this point onwards, is done during solely the Verify phase, while the solution adoption begins already in the Realize phase and is continued during the Launch phase. Solution adoption stands for helping, preparing and educating the customer and especially the key users, who will be mainly responsible for the education and assistance of the end-users when the solution has been taken into live use, with the usage of the new system. Many elements of the Waterfall project management methodology may be seen in the SAP Launch methodology and these stack at the end each phase, but especially the Verify phase, as the finalization of the most critical components of the project is required in order to move on to the Launch phase.

3.3.4 Project Phase 4: Launch

During the Launch phase, the most important step is to setup the Productive tenant and load all the master data and various changes with all the integrations in to the new tenant. The cutover is executed from the legacy system to the new system as planned in the Verify phase and solution adoption is finalized. The post go-live support (go-live meaning the first time that a computer system can be used, after all the tests on it have been completed) (MacMillanDictionary) for key users is arranged and handover to the support team is conducted. SAP recommends the latter, because at this point the customer and its key users should be comfortable with the solution and only in technical questions or in case of errors there would be need to contact SAP, as other issues would be handled by the customer's support organization. Further development of the solution would be managed by the SAP partner company that carried out the implementation, if needed.
(SAP Blogs 2016)

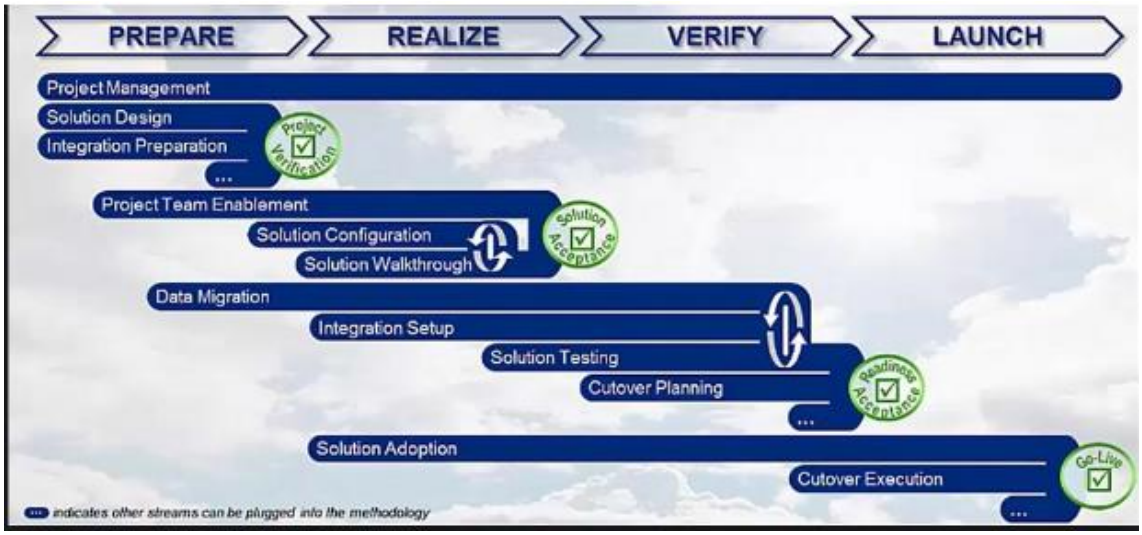

Figure 2: SAP Launch methodology – project phases (SAP Blogs 2016)

3.3.5 Quality Gates (Q-Gates)

At the end of each project phase in the SAP Launch methodology, a checkpoint called Quality Gate or Q-Gate exists. The Q-Gates are executed during the implementation in order to ensure project success while tracking the high-level progress of the project. The following table describes the meaning of each Q-Gate:

Project Verification	All stakeholders agree to the scope to be delivered during the implementation of the SAP solution. When necessary, a change order is executed.
Solution Acceptance	All stakeholders agree that the business scenarios demonstrated in the solution meet the requirements to be delivered by the project and that all configuration questions have been addressed.
Readiness Acceptance	All stakeholders agree that the systems, data and people are ready to execute the cutover from legacy system(s) to the new system(s).
Go-Live	All stakeholders agree that the cutover is complete and the organization is prepared to use and support the new solution.

Table 4: SAP Launch methodology, Quality Gates (S4HANATraining 2016)

4 The Project

4.1 First phase: Prepare

After the decision to go for SAP Hybris Cloud for Customer as the CRM system to be implemented for BPS, the first things on the agenda were planning a schedule, picking the project team members, agreeing on the project scope, creating a SWOT analysis and, of course, purchasing the solution from SAP.

The project was given an approximate timeline of 3 months – each of the four phases (Prepare, Realize, Verify and Launch) was planned to be finished inside 3 weeks. As the project was internal, this left a realistic amount of time for each phase and all the included activities in order to achieve the best result, while not taking up too much resources from working on other projects and assignments.

The project team consisted the CTO (Chief Technology Officer) and the COO (Chief Operating Officer) of BPS, one of my colleagues and me. The following table describes the roles and responsibilities of the team members in the project:

Person	**Role**	**Responsibilities**
Markus Lindevall	Application Consultant	Setting up the system, creating users, authorization roles, making user interface changes, testing, user training and creating manuals
COO	Project Manager	Overseeing the project, defining the specifications and required functionalities for the system, testing
CTO	Technical Lead	Acquiring the system, overseeing the project
Colleague	Key user	Testing

Table 5: Roles and responsibilities of the project team members

The Prepare phase also included the creation of administrators in the test tenant that was acquired at the beginning. Service agents are created and the initial user that was provided with the tenant by SAP is locked and made obsolete. These service agents are a user type that act as the administrator users. Administrators set up and configure the system and are responsible for the implementation project.

4.1.1 Project scope

The scope of this implementation project of SAP Hybris Cloud for Customer included the implementation of the Cloud for Sales module. The Cloud for Sales module includes all the func-

tionalities that BPS needed from their CRM at the time of the project – account and contact information management, sales lead and opportunity management, sales cycles and phases, sales activity management, dashboards and reports, partner management, and the integration to Microsoft Outlook. Account and contact information management combined with the sales lead and opportunity management and different reports make it easier to keep a broad but detailed view on customer data and the company's sales pipeline. Sales cycles with pre-defined sales phases and phase-specific activities help the sales process to stay on the right track, making sure that required steps are taken to improve the chances of successful sales or keeping the customer happy. Partner management enables BPS to maintain the data of the company's partners and external consultants, in order to keep track of their availability and participation in the sales process and related projects and assignments. The Microsoft Outlook add-in helps organizing the calendar with the activities on the CRM system, while also syncing contact information, appointments and different tasks between the software. In addition to these functionalities, Target Groups were added to the project scope because they help gathering contact or account groups for different marketing campaigns that will be conducted in the future.

The project scope does not include any other marketing functionalities like marketing campaigns, as these were planned to be implemented later in the future. The Cloud for Sales module includes various functionalities that were also left out of the project scope. These are for example competitor and product data management, sales quotes and sales orders, versatile product pricing options and sales territory management. Other SAP Cloud modules (Service and Social Engagement) are not a part of the project scope.

4.1.2 SWOT analysis

The SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis was conducted at the end of the Prepare phase. The target for the analysis was to point out strengths, weaknesses, opportunities and threats that the implementation and use of SAP Hybris Cloud for Customer brings to BPS compared to the time before the CRM. The analysis was drafted by me and the COO of BPS and is demonstrated by the following figure and then explained in more detail.

STRENGTHS	WEAKNESSES
- Data stored in one place - Personalization and targeting of sales - Transparency of sales → better decision-making - Improved customer relationships	- Investment of capital and workforce - Relevant and good quality data challenging to maintain - Interruptions in use - Not the best of breed system within some categories
OPPORTUNITIES	**THREATS**
- 360-degree view of the customer - Marketing capabilities - Simplified reporting	- Low user adoption - Data on the cloud (question about who owns the data and where it is located) - Pricing changes from vendor

Figure 3: SWOT analysis about the implementation of the Cloud for Customer

Implementing a CRM system for BPS solved a lot of issues and has proven to be good a decision. On the SWOT analysis we identified the following as strengths: data will be stored in one place – not on the account representatives' OneNotes, Excel sheets or possibly only in their memory. The personalization and targeting of sales to different customers will become easier, as the CRM broadens the view on the customer and saves all the sales-related data that is entered on the system. In addition, the transparency of sales increases and enables better decision-making, for example whether it is smart to continue sales activities with a certain customer or if it is profitable to work with them in long term or offering them discounts or selling certain technologies. These things help meeting the customer's needs more effectively and efficiently, making interactions faster and easier and, consequently, increasing customer satisfaction and the likelihood of repeated sales.
(Salesforce 2007)

Implementing and using a CRM requires investing resources, both capital and workforce, and this is by far the biggest weakness compared to the time before the system. Maintaining relevant and good quality data is challenging as it calls for commitment and accuracy from the CRM users. Improper or missing data will negatively affect especially reporting, but other sales activities as well. Although SAP is a very reliable vendor, downtimes may still occur – interruptions in the use of the CRM affect the user experience and solution adoption. In addition to these issues that we classified weaknesses, SAP Hybris Cloud for Customer is not the "best of breed" system when it comes to some functionalities. For example, comparing the email marketing capabilities of the C4C with MailChimp, an email campaign designer and marketing platform, the SAP solution is lacking in user experience while MailChimp has a smoother email template designer, it is more adaptable and also very affordable.
(Mailchimp)

Opportunities brought by the new CRM solution include simplified reporting, new marketing capabilities and 360-degree view of the customer that was difficult to achieve when pieces of information about an account were stored in different places and gathering all that information was very time-consuming and more often than not was still lacking in some parts.

The most notable threats when acquiring and implementing the CRM is possibly a low user adoption. This means that employees are not willing to learn and use the new system, and if experiences with the solution are not good enough, the system will become almost obsolete. A common question when it comes to cloud solutions is the question about where the data is stored and who it is really owned by. However, inside the EU and especially Germany (where the data center of the Cloud for Customer systems for Europeans is located) the regulations are extremely strict and data security and administration is highly reliable. Additionally, a prominent threat is a possible pricing change from the vendor that would be unexpected and in the worst case scenario would cause the abandonment of the solution.
(SAP Blogs 2017)

4.2 Second phase: Verify

In the Verify phase the system configuration begins. In the first step, the administrator sets up the desired countries that define the system languages and country-specific details. For BPS the main language used on the CRM is English and as the company is Finnish, the United Kingdom and Finland were the countries of choice. In the second step, the implementation focus is selected. SAP Cloud for Customer is the only option here, as it is the only solution that was purchased. Scoping of the solution is the third step in the implementation process that is guided in the system. The administrator selected all scoping elements except the Service and Industry elements, as these were originally not inside the project scope. The selected elements were: Marketing, Sales, Business Performance Management, Communication and Information Exchange, Administration, Compliance, General Business Data, Built-in Services and Support, and Partner Channel Management. All of these elements also included sub-elements. A vast range of elements was selected, because it is planned that in the future the use of the solution will be extended in the company and the management didn't want to restrict the capabilities of the system early on, as large-scale changes to the solution scoping might cause problems with the already implemented functionalities, especially if any customization or programming has been done.

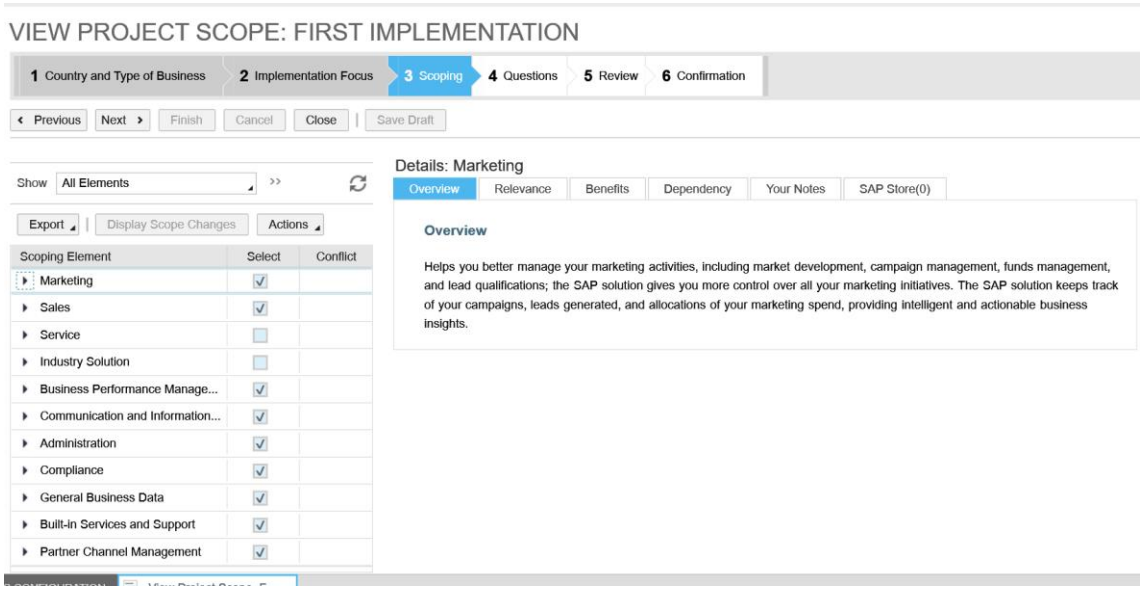

Figure 4: View of the implementation process guided by the system

The fourth step consists of Scoping Questions that include business-critical, detailed questions related to each selected scoping element. For example, a question in the Sales – New Business – Opportunities section is stated in the following manner: "Do you want to use a multiple step approval process for opportunities?". Dozens of these questions are answered in the fourth step and the selections that are made during this step will automatically modify the system configuration after finishing the guided implementation process.

The fifth step, Review, lets the administrator download the Executive Summary of the solution proposal, "an executive summary containing your company profile information and complete descriptions of the business areas, work centers, and business packages you selected", the Solution Proposal, "a comprehensive report containing your company profile information and complete descriptions of the business areas, work centers, and business packaged you selected", and the Notes Summary, "a summary of all the notes you made during scoping". Additionally, in this step the administrator may name the implementation project and assign the presumed start and end dates. After the Review phase is closed, the sixth phase, Confirmation, ends the guided implementation process and loads the selected functionalities into the system.

The most work on this project was done with the guided Activity List. The Activity List includes different phases that each contain critical tasks that require action during the project. These phases are Prepare, Fine-Tune, Integrate and Extend, Test and Go-Live. When the administrator(s) is done with the Activity List, having closed all the activities in the project scope, the Implementation Project will be set in the Live-mode, meaning that the system is ready for productive use. The Fine-Tune phase requires the most attention, because various

business-critical configurations are done during this phase. For example, the Fine-Tune settings for Accounts include how the accounts should be classified in the system, or what payment terms are specified for accounts, or what kind of customer groups accounts can belong to.

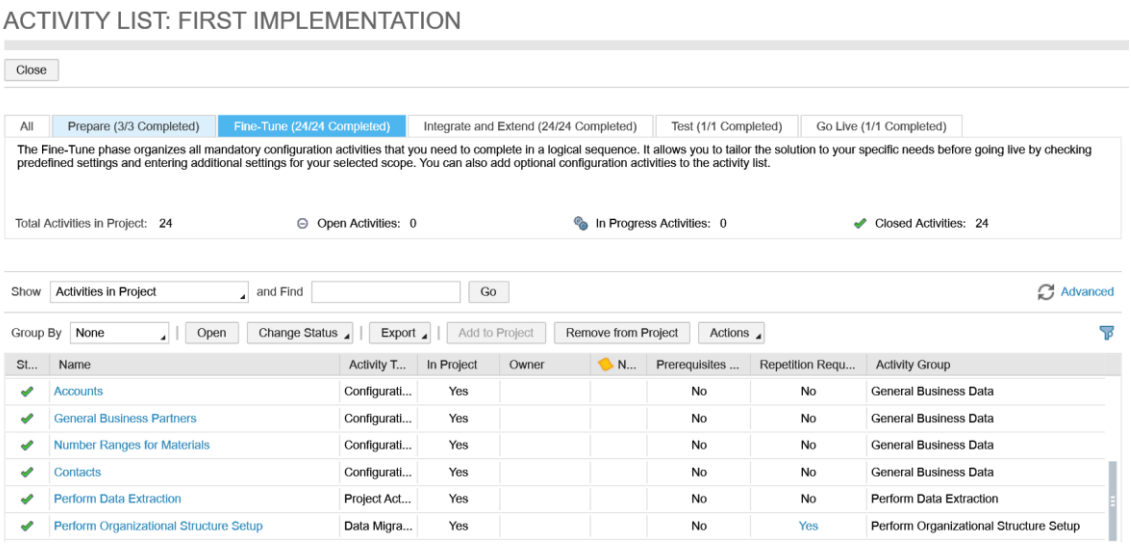

Figure 5: The guided Activity List

After the Fine-Tune phase in the Activity List is configured, the next assignment on the to-do-list for the administrator is the creation of employees. When finishing creating an employee, the system creates a business user for the employee. The business user name and password act as the credentials, but the employee name is displayed in all the business related data, for example as the owner of an account. The access rights of business users are controlled and restricted with the use of business roles. These are created and assigned to users by the administrator.

The administrator goes through the solution walkthrough with the managers – this enables the planning of testing and solution adoption. During this phase it was decided that we use data migration templates to migrate account data into the system, so the administrator downloaded the correct template from the system and instructed his colleague about filling the template with relevant information on the assigned columns. These templates are based on Excel and are easy to work with. Additionally, the administrator downloaded the Outlook integration tools and set up the integration with his own Outlook in order to test the functionalities. After this, Solution Acceptance was conducted with the managers and the project moved to its third phase, Verify.

To demonstrate what the business user view looks like, please see the figure below – the HTML5 view of the SAP Hybris Cloud for Customer. The red line marks the area for Work Centers like Customers and Sales. After clicking on a Work Center, Tabs related to that certain

Work Center are displayed below it (marked by the black line). For example, below the “Customers” Work Center there are Tabs “Accounts”, “Contacts”, “Individual Customers”, “Target Groups”, “Sales Intelligence” and “Account Hierarchy”. Irrelevant Work Centers and Tabs can be hidden or restricted from business users through their user-specific authorization settings or business roles. The Toolbar, which is located on the left hand side of the screen (marked by the blue line), contains shortcuts to the most common functions that the user is authorized to use, for example the calendar, quick search, creating an account or a lead, setting up an appointment or taking notes of a sales call. Panes are located on the right hand side of the screen (marked by the green line).

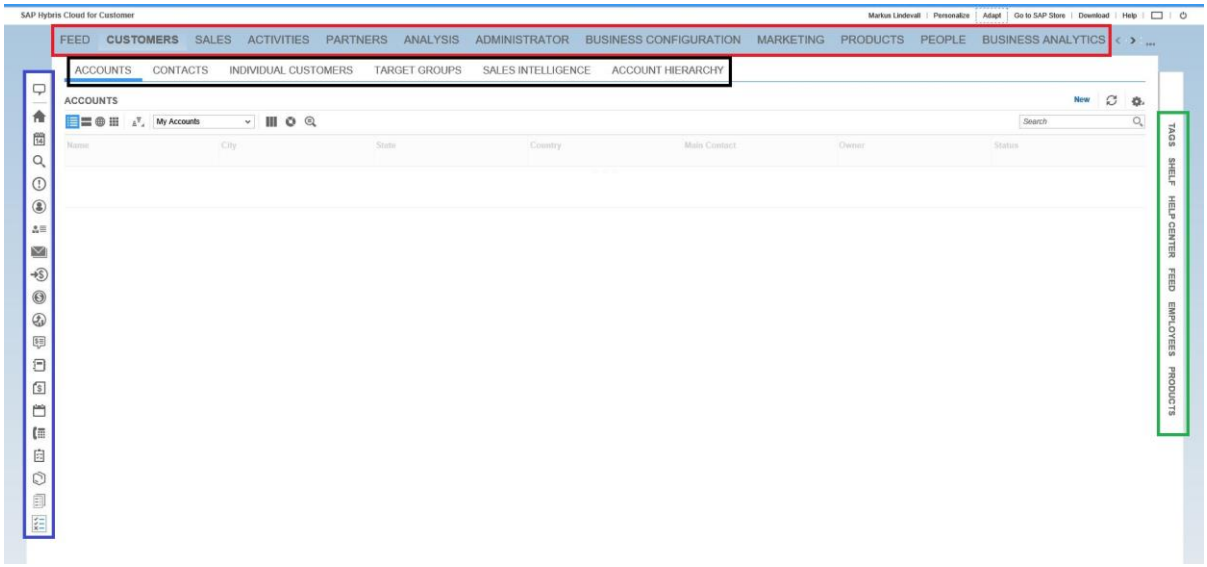

Figure 6: HTML5 view of the SAP Hybris Cloud for Customer

4.3 Third phase: Realize

In the Realize phase, a testing plan was defined and all the main functionalities that were required, were also tested. During testing, some issues came up that were then checked and solved by the administrator. The issues required searching for information on SAP’s Wiki and Help pages, but the few errors that came up were easily fixed. Most of the improvement ideas that came from testing were related to the translation and adding of business terms. For example, when creating a sales lead, the sources from which the lead came from, can be defined when creating or when modifying the lead. The original options for the Source drop-down-list were changed to the following: Campaign, Event, Partner, Social Selling and Sales Representative.

Additionally, along with testing came suggestions about removing unnecessary fields and sections from different Work Centers and Tabs and making some fields compulsory. This was done by editing the Master Layout that controls what users in a certain business role can see

in the assigned Work Centers. Hiding fields and assigning other fields compulsory makes using the solution simpler and enhances data quality, as the user can't fill out data in the wrong field or can't proceed in creating for example a new contact without their phone number or email address. The configuration of User Interface (UI) changes and Language Adaptation consisted of these tasks.

Data migration was finalized in this phase by migrating the pre-filled templates into the system and verifying that the data was adequate. This is done only to test the migration functionality and the quality of the migrated data, as it is to be done again in the Launch phase. The administrator also configured some reports and dashboards for preliminary testing, but most of the standard report and dashboard options were utilized which made this a very small part of the project.

Cutover planning and scheduling was initialized in the middle of the Verify phase. The cutover or "go-live" schedule was exceeded due to a large amount of customer work which was not related to this internal CRM project. The delays caused by these large amounts of customer work during the whole project timeline, slowed up the project by nearly two months. This was not declared as a critical issue, because internal resources were already defined as a risk at the start of the project.

At the end of the Verify phase, the productive tenant is requested from SAP. The productive tenant is a copy of the test tenant from the configuration point of view, but lacks for example the business data like accounts and sales leads that were created in test system, business users and roles, and most UI changes and Language Adaptations.

4.4 Fourth phase: Launch

The cutover execution is the main point of the Launch phase. It consists of setting up the new productive tenant, checking all configuration settings, creating the service agents, employees, maintaining business users and assigning business roles to them, and migrating the already tested data through migration templates. In addition, the reconfiguration of UI changes, language adaptation, reports and dashboards, has to be conducted.

The solution adoption is finalized in this phase and user trainings are held. When arranging user trainings and testing sessions, it is important to use the test tenant as the productive tenant should only be used for real business processes and not testing. Users were taught to create and maintain data, to examine their dashboards and appropriate reports, and to modify and change their personal user interface and settings. The Outlook integration was de-

clared troublesome, and so it was left out to be tested more before taking it into productive use.

In the following chapter, the results, evaluation and conclusions about the project will be described in more detail.

5 Results, evaluation and conclusions

Almost immediately after the project was taken into productive use, positive results were evident. The management reported an improved view on sales and accounts, and were very glad about the first reports that came out from the CRM to prepare with and utilize in team meetings. The personalization and targeting of sales and marketing was improved and the transparency of sales enabled better decision-making. Users were enthusiastic about the modern User Interface and the ease of use of the system, but also some feedback was received about some functionalities that hadn't been covered thoroughly in the training. Very few errors or problems were faced after the go-live, and these were fixed easily. Outlook integration didn't function as well as users would've wanted, so it was left out for administrative testing before going back to productive use. Solution adoption was overall successful.

Most of the account data and sales leads and opportunities were now stored in one place which made it much easier to carry out sales tasks related to different accounts and sales cases. Reports and dashboards give a lot of insight about customers and sales history, but as the productive use had just begun and no legacy sales data was imported to the new CRM system, the 360-degree view was and will be lacking for some time before enough data is generated in the system.

The timeline of the project was extended by nearly two months due to large projects on the customer front, but as no major changes in the project scope occurred and no critical errors or unsolved issues came up, the project can be declared successful. Most work was done on the solution configuration and the UI changes and language adaptations.

5.1 A sales case comparison

To enhance the perception received about the differences between the customer relationship management at BPS, the following comparison was created about a simple sales case that includes a sales opportunity to an existing account that has not been contacted in half a year.

5.1.1 The sales case before the CRM system

The account representative at BPS receives the sales opportunity via a phone call from the customer. Key pieces of the opportunity were gathered quickly on a piece of paper during the call. It is not clear to the account representative where this sort of information should be recorded, so at the end of the day he mentions about to the opportunity to his manager, who requests that he would check the latest related sales cases and sales history for the customer. This proves to be a difficult task because the requested data is in most cases not very well maintained, and urgent customer assignments plus a project closing to its go-live phase take up most of the time from the account representative who later in the week has already forgot about the case. A week later when time allows, he remembers the opportunity and starts acting on it. He coordinates the process and forms a work load estimation and sends it as an offer to the customer. The customer is not very happy about the delay with the offer but despite this decides to accept. After the acceptance of the offer, detailed information is not recorded anywhere and causes trouble with reporting in the next monthly team meeting.

5.1.2 The sales case when the CRM system is used

The account representative at BPS receives the sales opportunity via a phone call from the customer. The account representative opens the CRM on his laptop's browser and clicks on the New Opportunity button on the Toolbar, names the opportunity, selects the account and the primary contact, source, expected value, start and end dates, sales phase, probability, notes and anything that comes up during the phone call. After the call, he can modify the opportunity and publish it to the sales forecast that is then shown to his manager and all the account team members. Involved parties and attachments, as well as appointments and tasks can be added to the opportunity to make it very clear to everyone in the team what the case is about, what should be done in what timeframe and what is the expected value of the opportunity. The account representative then discusses with the team and sends out the work load estimation as an offer to the customer quickly, because the contribution through the CRM system helped him gain the required information about the assignment in question. The work load estimation is then added as an attachment to the opportunity and when the offer is accepted, the opportunity is set as Won. The sale will then be displayed on the correct reports and in the account view of the customer. The gained revenue can then also be recorded to help gain better insight about this particular sales case.

5.2 Conclusion

Defining the difference between the current and former ways of handling sales cases is challenging, because the cases vary a lot, especially during the time before a CRM system was utilized. Consequently, not a lot of emphasis in this thesis was put on comparison.

As described at the beginning of this chapter, the project was successful, users were happy and positive results could be identified already very early on. BPS gained valuable internal expertise on the cloud-based CRM solution and customer relationship are improved due to the capabilities and insight provided by the CRM.

References

Accenture. 2015. SAPSA C4C. Accessed 5 Jan 2017.
http://www.sapsa.se/wp-content/uploads/2015/11/Accenture-SAPSA-2015-C4C.pdf

BPS Consulting Finland Oy. 2016. Accessed 5 Nov 2017.
www.bps.fi/en

Crementum. 2012. CRM ostajan opas. Accessed 15 Feb 2017.
http://www.crementum.fi
(http://content.crementum.com/crementumcom-a3alw/pages/5f1c2397b61ee2118cb6984be17c38f7.html)

Forrester Case Study. 2014. The Total Economic Impact of SAP Cloud for Sales. Accessed 18 Dec 2016.
http://www.anbietercheck.de/Marketing-und-Vertrieb/Software/SAP-Deutschland-AG-Co-KG/,65,2471?tab=whitepaper-detail&id=401

MacMillanDictionary. Definition of Go-Live. Accessed 23 Jan 2017.
http://www.macmillandictionary.com/dictionary/british/go-live_1

Mailchimp. Accessed 14 Feb 2017.
https://mailchimp.com

Inc.com, Five ways to build a collaborative sales team. Accessed 1 Dec 2016.
http://www.inc.com/matthew-bellows/build-a-collaborative-sales-team-five-ways.html

Interoute, definition of Saas. Accessed 30 Nov 2016.
http://www.interoute.com/what-saas

Introduction to SAP Cloud for Customer. Accessed 18 Jan 2017.
http://www.slideshare.net/JoseAHernandez2/introduction-to-sap-cloud-for-customer

Investopedia, definition of Share of Wallet. Accessed 18 Feb 2017.
http://www.investopedia.com/terms/s/share-of-wallet.asp

Salesforce. 2007. Definition of Personalization. 14 Feb 2017.
http://searchsalesforce.techtarget.com/definition/personalization

SAP Blogs. 2013. Cloud Security at SAP. Accessed 23 Jan 2017.
https://blogs.sap.com/2013/08/07/the-1-2-3-of-cloud-security-at-sap/

SAP Blogs. 2016. SAP Launch methodology overview. Accessed 22 Jan 2017.
https://blogs.sap.com/2016/03/09/sap-launch-methodology-an-overview/

SAP.com. Solutions by Industry. Accessed 8 Feb 2017.
http://www.sap.com/solution.html#solutionsbyindustry

SAP Finland. Cloud for Customer Engagement. Accessed 13 Nov 2016.
http://go.sap.com/finland/product/crm/cloud-customer-engagement.html

SAP Hana on Demand. About SAP Hybris Cloud for Customer. Accessed 12 Nov 2016.
https://cp.hana.ondemand.com/dps/d/preview/b2e0ad40625244b8a480851d032112f1/1605/en-US/frameset.html

SCN SAP Wiki. SAP Cloud for Customer modules. Accessed 8 Dec 2016.
https://wiki.scn.sap.com/wiki/display/CRM/SAP+Cloud+for+Customer++-+Sales,+Service,+Marketing,+and+Social

SearchCRM. 2014. Definition of CRM. Accessed 23 Nov 2016.
http://searchcrm.techtarget.com/definition/CRM

S4HANATraining. 2016. SAP Hybris Cloud for Customer. Accessed 1 Feb 2017.
http://www.slideshare.net/s4hanatraining/sap-c4c10-sap-hybris-cloud-for-customer

Verizon. 2016. Data Breach Investigations Report. Accessed 13 Feb 2017.
http://www.verizonenterprise.com/verizon-insights-lab/dbir/2016/

Figures

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