# 3 Evaluation of Existing Applications

After building the foundation on related work on personalized mass email communication, this section will evaluate existing systems available in the market.

## 3.1 Application Categories and Their Relation with The Thesis

There are three different application categories that are related with this thesis, and focusing on email communication directly or indirectly. Followings section will give a brief description of those are these product types, and their relation with this thesis:

### 3.1.1 Customer Relationship Management (CRM)

A CRM application helps to manage customer relationships effectively, which is a topic studied both by academia and industry in recent years. Such applications play an important role in the marketing where organizations use more customer oriented instead of product or brand oriented marketing strategies. Therefore, each customer’s economic value is different to the company, and organizations’ customer relation strategies require adapting their customer offerings and communication strategy personalized according to individual customer (Reinartz et al., 2004).

One of the reasons why this thesis considers CRM applications to evaluate is its communication aspects of a company with their clients. Another reason is, as it is mentioned at section 2.3, the adequate amount of personalization in emails is crucial on response rates, and people’s increased daily interactions with digital world make the true authentic personalization more rare. To achieve such a level of personalization requires getting know each recipient very well by considering not only the recent conversation, but also earlier conversations, and all the information that might be extracted from those conversations helping to build a relation with respondents. Since a CRM system aims to keep track of each customer history regarding a product or a brand, such a data store could be leveraged to add adequate amount of personalized information to a email conversation.

### 3.1.2 Help Desk

Another application that focuses on a company and its relation with their clients is help desk applications. It’s main purpose to provide information and support related to a company’s products and services to their customers. As a part of knowledge acquisition, help desks supports both sides of the communication in a way that while customers or end users find the knowledge they need, and the people who provide help by making the knowledge available and reusable (Halverson et al., 2004).

Reusing the existing knowledge requires to structure the captured knowledge. This is where it makes the relation with this thesis. Because, a help desk application provides a workflow where both parties develop a communication where person who needs assistance describes his/her problem while people who provide help identify the problem by looking earlier cases or asking questions to clarify the initial question. This also requires the cooperation of assistants while providing help to a problem at which one person might have previous experience to guide other assistants. As a result, a help desk application is similar to a mass email communication where a researcher initiate an open ended questionnaire, extracting information from the coming replies, and organize them according to the answers that researcher seeks for. In addition, respondents might also come up with some questions to clarify things, where existing answers can easily be reused. Having such a email conversation with large groups require great amount of effort from a researcher’s side, where he might assign tasks to distribute the efforts to other researchers to deal with the large size of the group.

### 3.1.3 Email Marketing

Organizations and marketers use email marketing for several reasons. Some of those purposes are brand and customer loyalty building, acquiring or converting customers, advertising the brand or the product, solicit sales or donation, communicating for promotional offers and even educational purposes. At the end, these approaches can be group under following categories Eley and Tilley (2009):

\_ **Educational Communication:** An educational message is given in the form of newsletter, avoiding sale push, but it might still consist some content indirectly by encouraging recipients. For example, free monthly newsletter which contains tips about digital photography, and photography accessories used in the tips might be linked to an online shopping website.

\_ **News and Updates:** To notify the customers about important updates or changes to a business. For instance, release of a new product, changes on contact details or major changes on a company’s website

\_ **Direct Sales Messages:** Emails sent by others consists marketing ads, and clear message on offers.

\_ **Housekeeping:** Emails such as subscription confirmation messages or welcome emails. These messages are often system generated automated messages. However, they can be used to promote a message as well like offering a discount code a long with the registration confirmation email. Since these categories consists communication with large group of people, this thesis also evaluates existing tools in the market for email marketing including its technical aspects.

## 3.2 Methodology

The analysis examined two products from the categories of CRM, help desk, and email marketing. Selection of the products depends on the several product comparison websites including Toptenreviews.com1, Softwareshortlist.com2, as well as from the suggestions of Stanford HCI group members3. In addition to those websites and suggestions, their demo or trial version availability were also considered, since some of the products required fee before using them. After the products were shortlisted, the last filtering was done by getting their web traffic rankings from Compete.com4, Alexa5, and Google Trends6. Finally, trial accounts were created on those application, and a scenario is simulated to get the full insight from them.

## 3.3 Results

Evaluation of the products will be done according to their category. A brief description of the products will be presented. This description will mainly focus on the features, which are related to support email communication as explained in section 3.1. After that each category will be concluded with a comparison matrix of the selected products.

### 3.3.1 CRM Applications

SugarCRM and Highrise are the two CRM applications that are analyzed in this thesis. Table 3.1 shows a summary of their features, and the following paragraphs give an indepth exploration for these products.

**SugarCRM** SugerCRM comes in three different deployment versions. These are onpremise, Software as a Service (SaaS), and the free community edition. It has a clean User Interface (UI) with a single navigation menu. Its calendar view can be synchronized with Outlook’s calendar or any platform, which supports iCalendar7. It provides email management right in the application, and integrates with several platforms like Outlook and Gmail or an Internet Message Access Protocol (IMAP) based email server. Users can archive emails in the SugarCRM by adding a unique email address into TO, Carbon Copy (CC), or Blind Carbon Copy (BCC) fields. This address can also be used to link email recipients information including email attachments with SugarCRM by simply forwarding the emails, therefore it removes the additional effort to import them into SugarCRM and reduces dependency on a platform. SugarCRM also comes with build in email client. Even though, its inbox view only provide basic functionalities, its email creation view goes a little further to support email marketing by providing custom variables that can be embed into an email’s content, and can be replaced with actual values available in SugarCRM. For example, a placeholder for first name will be replaced by contact’s actual first name while email is being sent (See figure 3.1).

Initiated email marketing can be monitored to track response rates, generated leads, and unsubscribed contacts. Marketing target lists also can be imported from third-party lists. SugarCRM also let users save an email as a HyperText Markup Language (HTML) template to use it again within email composer. Finally, it offers a mobile version to let access most of the application features on smartphones and tablet devices (SugarCRM Inc., 2013).

**Highrise** Another SaaS is Highrise8 offering several purchasing plans with 30 days trial period. It has a simple UI like SugarCRM, but also provides quick access buttons to add a task or a contact. Task management differentiates it from SugarCRM since there is no calendar view, but a task view in Highrise. These tasks can be synchronized with iCalendar as well. In addition, user can create tasks from emails by using one of the unique email addresses for several time slots provided by Highrise, and adding them into BCC, CC, or simply simple forwarding an existing email creates a task in Highrise. Contact information can be imported from Outlook or uploading a vCard9 file. It provides all the basic contact information fields including the social accounts, however it does not offer custom field creation on those profiles. An email, including its attachments, can also be linked to a contact profile by simply forwarding it to the provided unique email address. If a user does not exist in Highrise when an email from him/her forwarded to link, a contact profile is created using available information in that email. Adding tags to the contact profiles also makes it easier to organize contacts and browsing in them. Highrise does not offer any email composer to do email marketing as in SugarCRM. Therefore, user will depend another product to do simple campaigns. Provided activity view helps users to keep track of their or other users’ recent actions within Highrise. Lastly, it offers options to customize the look and feel of the application by provided color schemes (37signals LLC, 2013).

### 3.3.2 Help Desk Applications

The two help desk applications investigated in this thesis are Zendesk and Kayako. Table 3.2 provides a comparison matrix of their features, and the details are in the following paragraphs.

**Zendesk** Cloud-based customer service software Zendesk 10 provides a nice and clean UI. Zendesk has more than 30,000 businesses from a wide variety of industries. Zendesk offers one-on-one support via many different communication channel including website, email, phone, and social platforms like Facebook and Twitter. Hence, support request coming from those platforms can be turned in to a support ticket. Those support tickets can be group under categories, and further classification can be done via tags for each ticket. Those feature also help to find related archived resolved tickets, so they can be reused for new tickets. Thanks to the automated process coming with macros a combination of actions can be done with one click like setting status, priority, type of a ticket, and assign it to another person with a predefined comment for the ticket. A ticket can be merged with another one, or copied to the forum to make it available to public, which helps to create a knowledge base. Customer ticket history and basic personal information are kept in the system. However, it does not support to add additional fields to customers’ profiles. In addition to the desktop version, Zendesk has a mobile version for smartphones or tablet devices. Therefore, support team has no dependency on a device. Lastly, provided analytics view by reports give an overview of customer satisfaction and performance of the support team (Zendesk Inc., 2013a,b).

**Kayako** Kayako’s11 complete solution for customer support is named as Kayako Fusion. It comes as software and SaaS. Comparing with Zendesk, its UI seems more complicated. Kayako has been had more than 30,000 clients since ten years. Kayako does not have social platforms integration like Zendesk, therefore support tickets are generated over website, email, and phone. Tickets can have custom types, statuses, priorities, and tags. Similar to Zendesk, it also supports macros to assign tickets into a department, owner, type, priority, and provide canned responses for tickets with a click. Kayako also keeps basic customer information if they are registered to the system. Registered customers can also support to build a knowledge base in a forum-like environment by contributing others questions a long with support team. Kayako does not have any native app for mobile platforms like Zendesk. Finally, it has a analytics view to keep track of tickets report measuring customer satisfaction and support team performance (Kayako Inc., 2013a,b).

### 3.3.3 Email Marketing Applications

MailChimp and Constant Contact are the selected two email marketing applications to analyze in this thesis. Table 3.3 shows their features side by side to give a overview, and the details are provided in the upcoming paragraphs.

**MailChimp** MailChimp12 comes as SaaS, and offers fixed cost monthly plans or pay as you go plan. A long with its intuitive UI, it offers a drag and drop functionality on the email content creation. It supports email marketing process from designing the sign up form, so users can add all the desired fields, and apply branding to it. The recipients’ list can be filtered out with several conditions like campaign name, location, or ratings assigned by application’s user. There are different levels of access privileges to MailChimp. Hence, a person who has "Admin" account can grant permissions different type of permissions allowing different access levels to MailChimp. This allows separation of tasks in mail marketing. For instance, while managers manage recipients list, author team can focus on emails’ content, and design (The Rocket Science Group LLC, 2013a). To design a email content, users can pick one of the available templates provided by MailChimp or create their own HTML templates with its drag and drop editor (See figure 3.2).

Template editor also provides a photo editor, and authors can add comments to give feedback on the content and design of the templates. Created templates can be previewed as if they are viewed in software or an online email client, and a mobile browser (The Rocket Science Group LLC, 2013b). As in the SugarCRM, MailChimp allows you to use placeholder, called merge tags, in the email content. Therefore, send out emails can be personalized with information specific to the recipients. However, it provides more different type of placeholders then SugarCRM, and it is possible to add a conditional logic to it. For example, in listing 3.1, a custom discount message will be shown in the email depending on the US state of recipients.

MailChimp offers auto-response based on a triggering event. These events can be a link clicked in the email, being on a specific date like birthday of a contact, or scheduled dates. Finally, there exists a analytics dashboard where users can track the amount of opened emails, or the click rates of the links in the emails (The Rocket Science Group LLC, 2013d,e).

**Constant Contact** Another email marketing SaaS is Constant Contact Email Marketing13, whose purchase plan depends on amount of contacts you have, but there is a free 60 days trial period as well. It offers drag and drop content creation like MailChimp with a clean UI. It has quite many templates to pick amount and start customizing it. However, users can embed sign up forms into websites or Facebook. Recipients list can be imported from several sources including Excel, Outlook, and Gmail. In addition, recipients can be group under sublists which can also be merged into each other easily. An option is available to remove duplicate contacts from the lists or clean recipients who unsubscribed from the list. Users can track opens, clicks, forwards, and social platform shares of their email campaign. On the other hand, it does not offer any sophisticated email variables to be replaced by actual content from the application (Constant Contact Inc., 2013a,b).

## 3.4 Conclusion

In conclusion, aforementioned applications in three different categories support email communication in several ways:

\_ Contact User profiles kept in CRM applications can help researcher to know their respondents better to identify basic attributes like name, gender, address, and phone numbers. However, those fields were limited with fixed fields in those applications.

\_ Importing contacts information from other popular software, e.g. Outlook, can ease the time to create recipients list for email communication. Again as SugarCRM and Highrise supports, importing an email into the system by just forwarding it to a specific email address can make researchers life easier to in the same way. Providing such flexibility will reduce the dependency on a platform, therefore while researchers continue to use their email clients that they are familiar with, they can switch to other platform when it is necessary.

\_ Both CRM applications provides a module to create tasks, so this can be helpful to remind researchers what is the next high priority thing to do about a email campaign. This can be a task showing what is next to do in an email campaign initiated by researcher. For instance replaying the email in which respondent has asked clarifying question at our initial campaign.

\_ Both CRM applications support archiving of emails by simply forwarding to a unique email address provided by them, and linking those emails to the users’ profile. This can be helpful to see important conversation happened with respondents at earlier time, so it can provide content or opinion about how to initiate upcoming conversations with those people. However, forwarding an email is an additional step, which require additional effort and time.

\_ Reusability of earlier emails are important not to write them again. As we have seen, SugarCRM also allows saving emails as a template to reuse again. However, there were no filtering mechanism or similar functionality, but just remembering the given name of the template to help users find the corresponding template to reuse.

\_ It is not always the case that a researcher initiate an email communication. It might be the case that a high amount of email can be dropped into the researchers inbox. For example, students attending a course may ask questions regarding with their homework. In that scenario, it is probable many repetition of the same question will happen. Help desk applications provides ticketing system for customer related issues, which is also applicable to the mentioned homework scenario. Therefore, existing email replies can be reused for further recipients.

\_ Both help desk applications supports tagging or grouping of incoming emails, which can be helpful two identify conversations belonging to each other in a situation where a researcher initiated more than one campaign. However, there was no visual representation of the state of the communication of a support ticket, but just status labels like "resolved" or "assigned".

\_ Another feature of help desk softwares was a support ticket can be shared or assign anyone from the support team. Hence, this will decrease the answering time of those tickets. This can be also useful in a mass email communication to share the responsibility to reply or extract information from incoming emails.

\_ Email marketing application MailChimp provides variable placeholder where users can add into email content and its variable will be replaced with actual value. Such a feature can helpful in personalized mass email communication, where it is difficult to add recipient specific personalized information into emails. However, there were no attached information regarding those variables to show users in which state of the communication they are extracted, and again they were created separately in an additional view where users are away from the actual emails where they can extract information.

\_ MailChimp also provided different type of permissions to leverage in a email marketing task. For instance, while an author can create the email content, a viewer can just follow the reports to see what is the success rate of an initiated campaign. Such functionality can also be helpful in mass email communication, where some users can extract the information from emails, others can reply the emails.

\_ Both email marketing and helpdesk applications provide analytics report to keep track of the success of a campaign or support team. That is a useful function in a mass email communication as well to get a quick overview of the state of the communication.

As it is mentioned above, there are many useful features that can be helpful to ease a mass email communication. However, there is no one specific application doing all the mentioned features, or doing them in a way to support their main purposes, which are CRM, help desk, and email marketing.

In the next section, an initial prototype will be introduced to support the workflow of a personalized mass email communication.