Social Customer Relationship Management (Social CRM)

Application and Technology

The Authors

Prof. Dr. Rainer Alt (✉)
Dipl. Wirt. Inf. Olaf Reinhold
Information Systems Institute
University of Leipzig
Grimmaische Str. 12
04109 Leipzig
Germany
Rainer.Alt@uni-leipzig.de
Reinhold@wifa.uni-leipzig.de

1 Customer Relationships and the Social Web

The interaction between Internet users is at the heart of the Social Web, which has seen a rapid growth in recent years. According to current estimations, more than 1.2 billion Social Media users exist worldwide (eMarketer 2012) with some 29.6 million in Germany (Destatis 2012). While a majority (74 %) of the German population was online in 2010 (Initiative D21 2011), more than half (64 %) of this share was also active in the Social Web (Faktenkontor 2011). This social activity combines a passive part (e.g., the consumption of content in forums) and an active part (e.g., the production of content by users) (Parker and Thomas 2012).

Although widespread end-user devices, such as PCs and laptops, constitute the primary access technologies, the diffusion of mobile technologies, in particular smartphones, is expected to foster a further growth of location- and context-specific postings. Indeed, two in five Social Media users already access these services via mobile devices (Nielsen 2011).

For businesses, the Social Web means a challenge in the area of customer relationship management (CRM). Social Web users not only share private information (Foster et al. 2010), but also use the Social Web to search for products or to share recommendations and experiences with friends or other users (Tripp and Grégoire 2011). From a CRM perspective, this represents a shift from the traditional indirect customer contact through sales representatives, customer advisors, and call center agents towards a direct customer contact with consumers. Remarkably, more credibility is attributed to the postings and opinions of other users than to corporate communication: in a survey among 4,230 German Internet users, a mere 22 % trusted corporate communications, whereas the majority (67 %) felt more inclined to believe information from private contacts (Faktenkontor 2011). On the one hand, the Social Web enables companies to learn about opinions, experiences, and developments which may be useful to develop and improve products. In addition, escalating discussions in the Social Web may have negative impact on a company's image and often come to corporate attention by accident. On the other hand, companies may communicate and interact directly with consumers, either in campaigns or for service purposes.

Currently, most companies lack a systematic strategy and organization for their Social Web activities, and establishing a profile page or membership on a social network is often regarded as sufficient. However, the Social Web is an additional communication channel to potential customers and requires the definition of company-wide policies, strategies, processes, and information systems (IS). Based on a collection of application examples, this paper motivates the main activities of Social CRM and the IS which are necessary to tap the potentials of interactive "one-to-one" relationships with many customers. For example, knowledge from the Social Web may enrich existing market data with insights from consumers, and ultimately also enhance the reach and the effectiveness of customer interaction. Thus, Social CRM activities have the potential to increase customers' identification with a company or a brand, to improve the information quality of campaigns with statements or classifications from other users and to make the interaction more interesting by employing appropriate location-based loyalty and incentive mechanisms. Overall, the Social Web is turning into a competitive necessity for CRM, particularly in sectors with end-customer contact.

2 Terminology and Examples

For the last six years, the term social customer relationship management (Social CRM) has emerged to describe measures that use Social Media technologies within the planning, implementation, and control of CRM activities (Ang 2011; Baird and Parasnis 2011; Computerwoche 2010; Hiller et al. 2010; Wang and Owyang 2010; Woodcock et al. 2011). Although Social CRM overlaps with other terms, such as social networking or Social Media Management, it focuses on leveraging the Social Web for CRM purposes (Gneiser 2010; Richter et al. 2011). Regarding terminology, Social CRM combines two fields:

- *Social media* which denote technologies used in the Social Web for social interaction. Among the examples are blogs, wikis, chats, forums, sharing platforms, podcasts, and forms of micro-blogging. These in turn use Web 2.0 technologies, such as Ajax, Really

Table 1 Application examples for Social CRM

Social CRM case	Application examples
Information and decision stage	
Identification of customer trends	Based on opinions and needs in the Social Web, the shirt manufacturer Spreadshirt collects suggestions for T-shirt themes and forwards them to its partners for design and distribution.
Modification of product offering	The coffee company Tchibo obtains insights on customer needs and suggestions for new products and services via their community platform Tchibo Ideas.
Insight in product usage	The manufacturer of hand tools Fiskars uses the Social Web to disseminate information on possible applications of its products via brand ambassadors (Fiskateers) and to receive feedback for future development of their products.
Sales and transaction stage	
Communication of offers	The computer manufacturer Dell uses the reach of social networks and microblogs (e.g., Facebook, Twitter) to advertise special offers to interested subscribers.
Promotion of user recommendations	Reisen.de is a travel portal that gathers customer opinions and ratings on travel offers in its community and makes this information available to users during product selection.
Channel for customer interaction	At J & P Cycles employees can contact potential customers of their motorcycle parts and accessories via live chat in specialized communities and forward them to the sales or service departments. The idea is to contact potential customers when they need advice.
Additional sales channel	Spreadshirt enables customers that aim to sell their shirt designs to establish a Facebook store. It offers a specific app that supports the integration in Social Media.
Customer service and after sales stage	
Support of customer contact	Via access codes in the wrapping paper of Cadbury candies, customers can participate in games on a community platform. Cadbury remains in contact with the customer even after sale.
Response to customer feedback	Hilton Hotels monitor negative and highly positive reviews on the TripAdvisor community, in order to respond to them directly on an individual basis and to initiate internal improvements.
Channel for customer interaction	Deutsche Bahn customers can direct requests (e.g., on delays, ticket machine operation, complaints) to a service team via Twitter. The dialogues are then also available for other users.
Answering of customer requests	In 2010 Dell established a Social Media command center, which allows employees to track customer communication on the Social Web ('Activity streams'), to take requests and forward them to the responsible contact person.
Improvement of customer service	To enhance the quality and responsiveness of their customer service, the mobile network provider GiffGaff enables customers to participate in the solution of support requests. The user's motivation is stimulated by awards and discounts.
Involvement of partners	SAP offers a community in which users can find experts and discuss problems and solutions. The platform is open to employees and partners, as well as to customers, students, or potential buyers.

Simple Syndication (RSS), and micro-formats (Koch and Prinz 2009). Well-known examples of general Social Media platforms are Facebook, Xing, and Twitter. The interplay between the user relationships enabled by Social Media technologies makes up the Social Web.

- *CRM* which is a customer-oriented concept that applies information technology (IT) to develop and maintain long-term profitable customer relationships (Hippner 2006). CRM systems support customer acquisition, care, and interaction in the areas of marketing, sales, and service. They comprise operational, analytical, communicative, and collaborative/cooperative system components (Schubert 2009).

Linking both terms opens a broad spectrum of potential applications areas. For example, many interactions in operational CRM, such as campaigns, offers, requests, or complaints may now occur via Social Media and even involve suggestions from other users. For analytical CRM the postings and discussions in Social Media are important knowledge. Individualized or anonymized data obtained from Social Media platforms support the definition of target customers and product recommendations. From the perspective of communicative CRM, the Social Web represents an additional interaction channel which requires the inclusion in the multi-channel-management activities. Existing or specialized call or service centers are challenged to integrate Social Media in their processes and to exploit the collaboration potentials among or with consumers. A closer view on the application spectrum is provided in **Table 1** which shows examples along the customer activity cycle (Vandermerwe 2000), i.e. whether Social Media are mainly used before, during, or after a purchase.

3 Task Areas of Social CRM

The application examples illustrate the two main purposes or task areas of Social CRM: exporting or extracting customer knowledge from the Social Web (monitoring and mining) on the one hand and using the Social Web as a channel for interaction on the other (proactive and reactive interaction). Such an integrated view on Social CRM leads to five task areas (Reinhold and Alt 2012). A *Social Media platform* is the basis for the interaction between many

Fig. 1 Components of an integrated Social CRM architecture
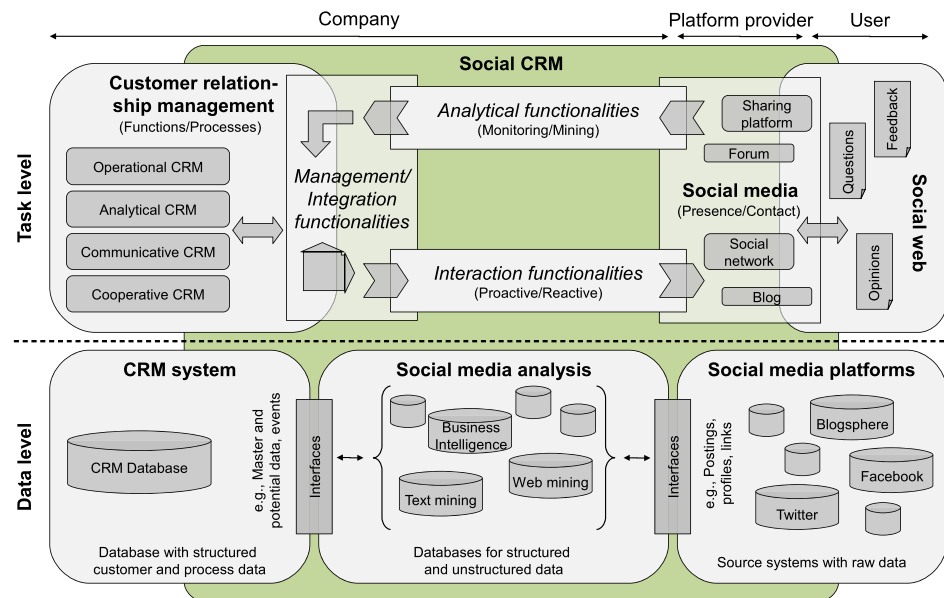
users (e.g., employees, customers, partners, dealers, fans, sponsors) who contribute opinions, experiences, requests, and the like. This textual content represents the "raw data" for Social CRM. Companies can both operate their own platforms (e.g., as a forum) or use external services, such as Facebook. With minimal investment and implementation effort, the latter are suitable to establish a direct contact with prospects and/or customers. Already by monitoring Social Media platforms manually, it is possible to extract marketing relevant information about consumer sentiments, behavior, and reactions.

Nevertheless, managing a high number of contacts and a regular manual screening of Social Media platforms implies considerable effort. A*nalytical functionalities* aim at more automation: Monitoring focuses on automatically identifying and retrieving company-relevant information from the Social Web. Using keywords in a predefined vocabulary (e.g., names of customers, products, companies), postings are first identified and used for CRM purposes. More interpretation comes with mining functionalities which aim at identifying sentiments and the context of content. Compared to structured database-supported forms of representation and storage, the unstructured content in the Social Web features a strong variance regarding wording, terminology, context, and user preferences. Thus, the automatic extraction and interpretation of knowledge from

unstructured data requires a formalization of domain-specific knowledge in ontologies and profound skills in the areas of text and web mining, artificial intelligence, or the modeling of knowledge.

Interaction functionalities are a third task area of Social CRM. They realize the proactive or reactive contact to Social Media users, e.g., the posting of messages on Social Media platforms for campaigns or answers to service requests. Information from the Social Web may enrich the existing descriptions for products and the like by evaluations or suggestions from other users. These possibilities require a close alignment of the task areas, which is usually the domain of *management functionalities.* These offer a comprehensive view on Social CRM activities and define for example manual and/or automated reactions in specific (critical) situations. One core element is data integration, which goes back to documented and standardized interfaces to connect the contents of different Social Media platforms. Currently, many platforms provide Social Media RSS feeds for the extraction of content or advanced programming interfaces (API) for bi-directional integration.

Figure 1 illustrates the interconnection of these task areas (see also **Table 2**) in an integrated Social CRM architecture (see **Fig. 1** and **Table 2**). On the data level, multiple data bases reflect the differences in data quality between the

unstructured Social Web and the structured CRM information. Thus, a direct transfer of data from Social Media platforms (e.g., regarding identity, validity, structuredness) into the CRM data base should be avoided and requires intermediary data-bases (e.g., sentiment or web-mining) with mechanisms for the further use of Social Media data in campaigns and the like.

4 Tools in Social CRM

Depending on the structure of the task areas within a Social CRM solution, several IS support the technological implementation of an integrated architecture. While the first step is to manually observe community presence and interact with individuals, more potential of Social CRM relies on the use of software tools for the task areas. As shown in **Table 3**, various categories have emerged on the market (Sarner et al. 2011). The coordination of Social Web activities (e.g., the administration of sources and activities across multiple platforms) is the domain of Social Media management or Social Media monitoring tools. The latter also aim at the automation of monitoring tasks and support statistic and semantic analysis of content and/or relations. Additional analytical functionalities come with tools for social search, social network analysis, or business intelligence (BI). More differentiated automatic analyses of content and sentiments, however, require the combination

Table 2 Tasks and objectives of Social CRM

Task areas	Description and objectives
1. Social Media	• Social Media services, such as forums, wikis, and communities for information distribution and collaborative creation of information • Objective: Establishing of a Social Media presence, networking with prospects/consumers/customers
2. Analysis	• Analytical techniques for monitoring and mining, e.g., evaluation, filtering, search, aggregation, enrichment, transformation, or rule-based object generation • Objective: Identification of relevant contents, actors, and services on the Social Web, description of dependencies on the Social Web and interpretation of contents from Social Media
3. Management	• Management functionalities, such as moderation, process management, reputation management, data integration, evaluations, or privacy management • Objective: Strategic and operational management of Social Media channels and activities, integration between systems and ensuring the responsiveness of a company in the Social Web
4. CRM	• Link to CRM functions, such as lead, contact, campaign, or service management • Objective: Functionalities for CRM process planning, execution and control, use of information from Social Media information (e.g., contact data, postings) in CRM activities (e.g., analysis, campaigns)
5. Interaction	• Interaction techniques, such as content delivery, dialogue development, publication, dissemination, recommendation, alarm, or notification • Objective: External communication and support of dialogue implementation on the Social Web, proactive and reactive communication with Social Media users

Table 3 Tools for Social CRM

Tools	Functional description	Examples of systems
Business Intelligence	Storage and analysis of structured and unstructured Social Media data (e.g., interests of Facebook fans, product mentions in postings) in connection with existing information in a data warehouse	SAS (2), MicroStrategy (2)
Community Management	Creation and management of communities or forums, as well as the provision of services to external interested parties	Lithium Technologies (1; 2; 3; 5), GetSatisfaction (1; 3; 5)
CRM	Integration and use of Social Media data within a CRM system (e.g., for team communication, master data completion, or process initiation)	Cosmic (2; 3; 5), Salesforce (2; 3; 4; 5)
Social Media Management	Management of profiles on several platforms, and simplified communication via posting schedulers or multi-platform dispatchers	Media Funnel (2; 3; 5), Cisco Social Miner (2; 3; 4)
Social Media Monitoring	Analysis of Social Media content (e.g., opinions, sentiments), core topics or active users (e.g., influencers)	Overtone (2; 3), Sysomos (2; 3), Gigya (2; 3; 5)
Social Network Analysis	Analysis of connections between postings and tracking of authors across several Social Media, with identification of core topics, relationships, and the impacts of individual contents on discussions	Kxen (2), Cyram (2), Sprout Social (2; 3; 4)
Social Search	Blog search by keywords or topics; navigation through Social Web offerings and identification of relevant content areas	Social Search (2), Yahoo Pipes (2)

Legend related to task areas: 1 = Social Media; 2 = Analysis; 3 = Management; 4 = CRM; 5 = Interaction

with advanced text mining technologies (Tuzhilin 2012).

Most Social Media analysis tools are encapsulated stand-alone solutions and restricted to their specific fields of application (Koch et al. 2007; Rappaport 2010). As this represents an important limitation for the integrated nature of Social CRM, an increasing integration of functionalities and convergence within the task areas of Social CRM may be observed since 2010 (e.g., Hofer-Shall et al. 2012; Kasper et al. 2010; Sarner et al. 2011). Existing tool providers in the Social CRM field are extending their portfolios by purchasing additional components (e.g., Salesforce has acquired Radian6) or are adding functionalities from

other areas to their products (e.g., Microstrategy has integrated Facebook interfaces to link social data with data warehouse; Teradata has adopted the eCircle digital messaging solution).

5 Outlook

Social CRM exploits the Social Web for customer relationship management. For the first time, businesses have the opportunity to establish a direct and interactive link to prospects and customers. From a strategic point of view, Social CRM extends existing CRM concepts and calls for new responsibilities as well as tasks to implement the integrated process from an organizational perspective. Regarding technology, Social CRM aims at automating monitoring, interaction, and management tasks. In sum, Social CRM is a promising concept which has the potential to shift classical "one-to-many" customer communication towards an individualized "one-to-one" interaction with many customers. Companies may extract knowledge from "the customer's voice" in the Social Web and use this to tailor campaigns, mailings, or postings to target groups.

However, current applications still concentrate just on parts of the entire Social CRM architecture and the software market comprises a large number of providers. A consolidation can be expected in the near future, which might lead to a stronger integration of operational, analytical, and communicative CRM with Social CRM. Existing CRM tools will be enhanced with functionalities for the Social CRM tasks and current Social CRM stand-alone solutions will become more integrated in best-of-breed architectures. Although Social CRM is currently still in an early stage of development, initial analyses by market researchers have yielded positive experiences for CRM users (van der Meulen and Pettey 2012; Band et al. 2012). Ultimately, opportunities and risks will not only be determined by finding suitable scenarios, but also by answering the question how beneficial Social CRM measures are for the consumers themselves (Baird and Parasnis 2011).

To date, the Social Web activities of many users have been driven by soft factors, such as interest, fun, or self-manifestation. With growing supply and rising commercialization, however, there is a risk that users will demand a greater share of the profits or insist on restricting their Social Web activities to private purposes. Legal regulations are of foremost importance to deal with issues, such as data protection, privacy, and data security requiring special attention when businesses capture and use Social Media data. In addition, the question about the validity and truth of information from the Social Web prevails. Inaccuracies, mistakes, and intentional manipulations affect not only the market perception but also influence the usefulness of Social Web activities.

Acknowledgements

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