
Social Media in Companies. Integrated Approach for a Social Media Strategy

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1 Introduction

For commercial enterprises, the emerging set of new technologies and forms of communication in social media are leading to a whole new channel of interaction with customers, partners and employees. Given that 39 % of the fastest growing companies in the US have implemented e.g. blogging compared to only 11.6 % of Fortune 500 companies (Barnes and Mattson 2008), it cannot be ignored that social media can offer businesses a competitive edge. Today the potential of customer contributions and recommendations for products and services is more highly valued than ever before. In fact, Gartner estimates the amount of money spent annually on enterprise social software—also referred to as “Enterprise 2.0” by McAfee (2006)—will reach 1.06 billion US dollars by 2012 (Gibson 2009, eWeek, 26, p. 16). By definition, concepts like microblogging and social networks require unique communications and knowledge in addition to traditional advertisement strategies.

The aim of this chapter is to give an introduction on social networks and to contain a non-industry specific framework for social media that assists in identifying touch points and business objectives.

The first part of this chapter characterizes social networks. Since online social networks are a key highlight of the social media landscape, theories, models and analytic methods of social network research have to be considered. In particular, this includes an analysis of social networks and the exchange of information within them. The transition of the existing concepts of relationship marketing combined with social media in an enterprise environment is investigated the main part of this paper. In conjunction with feasible measurements, a definition of contact points for

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the implementation of social software derived from relationship marketing paradigms is also provided here. Within this conjunction a model termed as social media management chain is developed.

2 Social Networks

In existing relationships, social networks are vital for the exchange of resources such as information, an essential concept of social media.

“When a computer network connects people or organizations, it is a social network. Just as a computer network is a set of machines connected by a set of cables, a social network is a set of people (or organizations or other social entities) connected by a set of social relations, such as friendship, co-working, or information exchange.” (Garton et al. 1997)

The term *social network* was coined by Barnes (1954; cited by Wasserman and Faust 1994), who described it as nodes representing social entities (e.g. individuals or departments of an organization), which in turn are denoted as actors. Social relationships are linked by ties including interactive, political and economical relationships between pairs of actors.

The real-world networks present in a wide range of application fields are described by Barabási (2003). These networks are established by nodes and directed or undirected links between pairs of nodes. In the case of undirected links, the degree of a node indicates the number of links connected to that node, whereas the concepts of in-degree and out-degree describe the same characteristic for a node in a network composed of directed links. A path in the network determines a sequence of nodes connected by links. The distance between two nodes is defined as the number of nodes on the shortest path connecting these nodes (Harary 1967).

Barabási and Albert (1999) used the term “scale-free networks” to describe large real-world networks. Scale-free networks, like the World Wide Web, consist of a few nodes with a comparatively high degree of termed hubs and a large number of nodes with a small degree resulting from the preferential attachment of links to nodes that already show a large number of incoming links. Social networks can be characterized as scale-free networks based on links between individuals within a community who know each other. Large interpersonal networks are scale-free since there are particular individuals in the network who are more favored by others and thus more frequently connected to due to specific social relationships (Lehel 2007, p. 36).

From the individual user’s standpoint, online interpersonal networks are established on social software platforms and focus on one individual, the focal person and his or her relationships with other individuals. These relationships with others are referred to as egocentric networks or personal networks, respectively (Haythornthwaite 1996; Wasserman and Faust 1994; Wellman 1999). Personal networks also represent role-based relationships in a particular social context, including close relationships such as friendships, affiliations and formal relationships (e.g. co-workers).

2.1 Social Network Analysis

Social network analysis (SNA) is an interdisciplinary research field that is based on the assumption of the importance of relationships among interacting units. The social network perspective encompasses theories, models, and applications which are expressed in terms of relational concepts or processes. Along with a growing interest and the increased use of network analysis, a consensus has arisen on the central principles underlying the network perspective. In addition to the use of relational concepts, the following aspects can be noted as relevant:

- Actors and their actions are viewed as interdependent rather than independent, autonomous units.
- Relational ties (linkages) between actors are channels for the transfer or “flow” of resources (either material or immaterial).
- Network models focusing on individuals view the structural network environment as a provider of opportunities for or constraints on individual action.
- Network models conceptualize structure (social, economic, political, etc.) as lasting patterns of relations among actors.

The unit of analysis in network analysis is not the individual person, but an entity consisting of a “collection” of individuals and the links between them. Network methods focus on dyads (two actors and their ties), triads (three actors and their ties) or larger systems (subgroups of individuals or entire networks) (Gretzel 2001; Wasserman and Faust 1994).

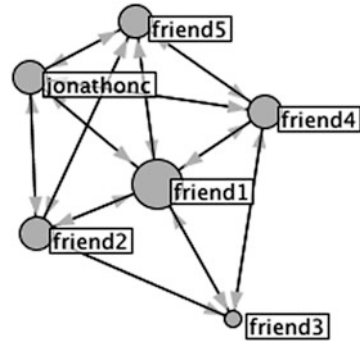
Wasserman and Faust (1994, p. 21) state that social network analysis can be characterized as a “generalization of standard data analytics techniques and applied statistics” since mathematical models are used to formalize metaphorical terms like popularity, social position and isolation. Mitchell (1969) defines three the levels, frequency, intensity and durability, to define the quality of interpersonal relationships, which are also subject to social network analysis. The social relationships of an interpersonal network can be visualized by a sociogram, a chart that plots the structure of interpersonal relations (Moreno 1937).

The vertices here represent actors and edges denote the ties between them. The two-dimensional sociogram shown in Fig. 1 presents a group of six individuals in an interpersonal network. Arrows indicate ties between these individuals. The size of each node depends on the quantity of degrees and in-degrees. There are a number of alternatives available when creating such illustrations with sociograms (e.g. computer-generated types with a three-dimensional perspective) thanks to further developments (Freeman 2000).

2.2 Information Exchange in Social Networks

Active ties between actors can be characterized by social interaction including the exchange of resources (e.g. information). Interpersonal relationships based on the exchange of information are defined by content, direction and strength attributes (Haythornthwaite 1996).

Fig. 1 Example of a sociogram (created with NetVis)



Information and knowledge are considered as content within the scope of their exchange in a social media environment. Haythornthwaite (1996, p. 326), for example, noted that “relationships can cover the sharing, delivery, or exchange of a wide variety of resources, including information.”

The direction of information exchange relationships describes the way information is transferred between pairs of individuals. If the information being considered flows in both directions, the underlying relation is referred to as undirected or symmetric. Otherwise it is referred to as directed or asymmetric.

The intensity of a relationship is indicated by its strength. In such, a relationship with frequent transfers of information is considered stronger than one in which information is rarely exchanged. Furthermore, the strength of ties refers to the cumulative strength of all of the different social relationships between two individuals which is also affected by the continuity of the relationships (Haythornthwaite 1996). A close relationship with frequent exchange of information denotes a strong tie that implies, e.g., a sense of trust between the respective individuals. By contrast, a loose form of contact generally equates with a weaker tie. Individuals who are linked to another person by strong ties are also likely to share a large number of strong ties to other people (Granovetter 1973). On one hand, those linked by strong ties to the focal person tend to have access to the same information and therefore do not represent sources of new information. On the other hand, Granovetter (1973) observed that weak ties are essential in order to establish connections between different interpersonal networks and thus obtain new information.

For the appropriate measurement and analysis of information exchange in social networks, primary characteristics such as cohesion, structural equivalence, prominence range need to be examined and is not subject of this paper.

One primary aspect of the measurement and analysis of information exchange in social networks is that of brokerage. Brokerage can be measured by the actor’s betweenness, which describes if an actor owns the role of an intermediary connecting clusters and cliques in the network. According to Burt (1992), these actors maintain an essential role in filling in the structural holes between clusters in the social network if these areas of the network have not yet been connected.

The outcome of this for the exchange of information in social networks is that an actor who has taken on the role of a broker is able to deliver information from one cluster to another, and thus maintain the control over the information flow, although he or she does need to be able to authorize the information disseminated to others, which is referred to as information legitimation, as in the case of e.g., digital rights management (Haythornthwaite 1996).

Range indicates the number of sources an actor has access to. It depends on factors like the size of an actor's personal network and access to other interpersonal networks. The range of an actor is determined by his or her direct and indirect ties with other actors in the available networks.

Analyzing information exchange relationships by measuring the aforementioned characteristics of social networks also reveals the information routes along which information flows between actors (Haythornthwaite 1996).

3 Relationship Marketing

Existing relationships with customers or other stakeholders have the potential of being expanded in online social networks or community platforms. Social media present a new situation and communication challenge for organizations, which subsequently call for a structured approach and integration. Relationship marketing recognizes the long-term value of relationships for organizations by continuously nurturing existing correlations throughout the entire life cycle, rather than focusing on the acquisition of new customers. Over time, the relationship-marketing initiative has developed procedures, strategies and key elements that can be adapted to multiple industries and situations (Payne and Rapp 2003). As Hougaard and Bjerre (2002, p. 40) note:

“Relationship marketing is company behavior with the purpose of establishing, maintaining and developing competitive and profitable customer relationship to the benefit of both parties.”

3.1 Customer Loyalty

Hougaard and Bjerre (2002) state that as a key success factor, customer loyalty has always been conventional wisdom in the development of superior market performance.

“Customer loyalty is the seller's perception of a consumer's positive attitude to the product manifested by rebuying.” Kunøe (1994; cited by Hougaard and Bjerre 2002, p. 109)

It follows that customer loyalty is a substantial intangible asset because it's the ultimate indicator of future sales and profits. Reaching this level in a customer-relationship implies attitude and behavioral dimensions. The economic value for an organization can be classified by three types. The ability to retain a customer for an

extended period of time can be described as a *lifetime economy*. An *efficiency economy* refers to the ability to create dyadic cost advantages for both parties during the customer life cycle, which leads to a vertical integration. Customer participation in and contribution to a supplier's value generation is characterized as a *value adding economy*.

3.2 Six-Market Model

One approach that addresses all of the stakeholders of an organization is the "six-market model" developed by Payne (Ballantyne et al. 2001). This holistic model accommodates a fast changing and complex business world with the idea of taking vital customer and vendor relations into consideration. Taking these vital relations into account is a requirement for fulfilling customer needs within a complex value creation process. This includes a strong focus on internal marketing and activities in core markets and results in the six-market model (Fig. 2).

Customer markets lie at the center of the six-market model and customers remain the primary target of marketing activities here. This modified approach shifts from transaction-oriented marketing to customer relationships, concentrating on long-term success. The main characteristics of transaction-oriented marketing are its focus on quick sales to new customers, a spotlight on product features and irregular communications with customers, as well as a limited scope of dedication to customer needs and product service. In contrast, the relationship marketing approach recognizes customer value, longevity, quality as a mutual goal, and frequent and persistent communications combined with strong attention to the preservation of existing customer relations. The relationship marketing ladder (Fig. 3) shows the difference in the emphasis of marketing activities to develop advocates of a company, product or service. Within a partnership, the organization stays extremely close to customers and actively encourages an ongoing dialogue about all aspects of its business, as it seeks to achieve a competitive advantage and superior business relationships (Charlesworth et al. 2007). Payne and Rapp (2003) argue that a high proportion of customers at the upper level provide long-term competitive advantages in successful customer relations. Generating such a high level of customer loyalty is difficult and demands excellent knowledge about individual customer needs and previously purchased products.

In addition, supplier and alliance markets have been identified as a field of activity for relationship development that makes it possible to keep up the pace with the changing trend of new correlations between organizations and suppliers. To reach a partnership level with suppliers, companies tend to integrate vendors in early stages of product development, and establish mutual values and bonus systems oriented on customer expectations along with a closed-loop communication process. The task within a relationship marketing initiative is to sell and support this perception of a vendor relationship both internally and externally.

The scope of the six-market model also comprises the recruitment market. This market has to be included since human resources and a skilled workforce have

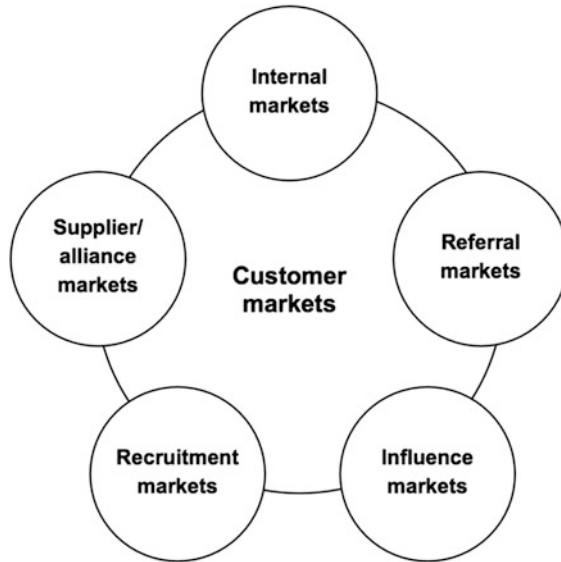


Fig. 2 Six-market model (Ballantyne et al. 1991, p. 21)

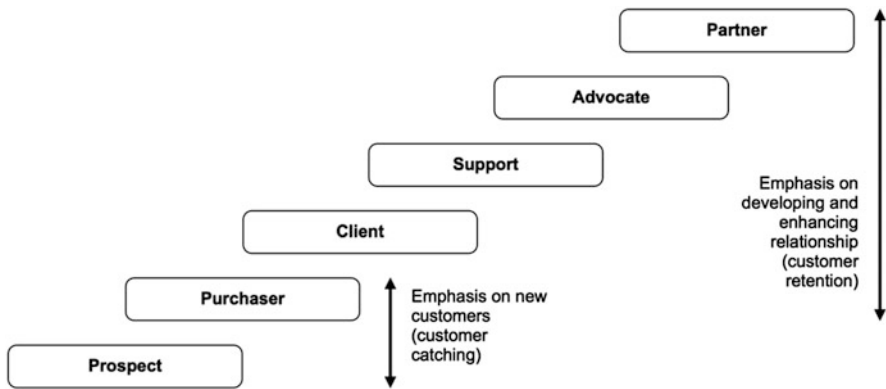


Fig. 3 Relationship marketing ladder (Payne 1994)

become essential for organizations, especially when it comes to customer service. Another cause for increased attention to this market is the demographic development and the continuous decline in the labor force of most industrialized countries.

Influence markets combine several relations of a company with its different stakeholders, which could affect the customer relationship. For example, companies on the stock exchange are facing a number of different stakeholders like analysts in addition to their customers or investors. Payne and Rapp (2003) claim that all market participants must be identified, integrated and resources allocated within a marketing plan, apart from public affairs and investor relation activities.

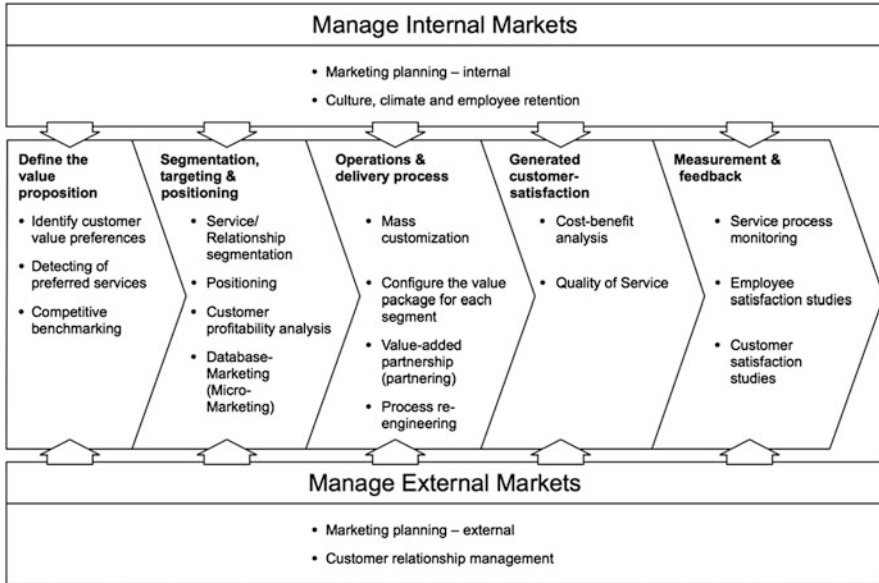


Fig. 4 Relationship management chain (Payne and Rapp 2003)

The six-market model also implements an internal view related to an internal marketing approach. Internal markets embrace that every individual and division of an organization is simultaneously internal supplier and customer. Referral markets have become more and more significant in recent years due to the fact that companies are using multiple distribution channels and participating in affiliate networks. The impact and potential of referral markets and internal markets need to be reviewed in a social media context. The six-market model allows an as-is analysis which considers every market.

3.3 Relationship Management Chain

The concept behind the relationship management chain (Fig. 4) by Payne and Rapp (2003) is based on the idea from Porter (1985) of linking all of the steps involved in a value chain. The focus of the relationship management chain is on how improved relations in business generate value creation. Like Porter's model and its "support activities", the relationship management chain also includes activities that influence every step. These "support activities" are the management of internal and external markets.

3.3.1 Management of External Markets

The management of external markets also includes non-customer markets and is a "support activity" that has an impact on every step within the relationship

management chain and includes the marketing planning process for external markets along with the customer relationship management and customer loyalty as described in Sect. 3.1. Key features of the marketing planning process for external markets are an as-is analysis of the current situation of an organization, and the definition of objectives and how they can be accomplished.

3.3.2 Management of Internal Markets

The management of internal markets implies the administration and coordination of an organization's own profit centers along with the management of all internal customer–supplier relations. In addition, this includes a marketing planning process to identify and quantify all of the needs of internal customers, and develop methods and systems that will support their objectives at a cost-efficient level.

3.3.3 Definition of Value Proposition

The concept behind the relationship management chain is to emphasize tangible and intangible customer values aside from the core product or service performed by a structured procedure of establishing relations. The definition of value proposition comprises three main topics as follows:

- Identification of customer value preferences encompasses an analysis of how the value of service and each service component is appraised by consumers in comparison to other marketing activities. This approach allows us to classify and evaluate the effect of each service component for different customers and the feasibility of the potential substitution of services.
- Detection of preferred services identifies the importance of subliminal service components and allows to measure a predisposition. This method also offers the possibility of grouping customers according to their common service preferences.
- Competitive benchmarking discloses the value of each service, product and brand component as perceived by customers compared with an immediate competitor.

3.3.4 Segmentation, Targeting and Positioning

After exposing key service features and their impact and value from a consumer viewpoint, patterns are retrieved from the customer groups. This includes the ability of customer segmentation if there is a wide range of preferences within the extracted groups. Following this segmentation process, target groups have to be defined, as well as how services can be positioned against those from competitors.

- Service/relationship segmentation is used to extract segments. A cluster can be described as a group of relatively homogeneous customers.
- Positioning refers to differentiating an organization, product or service in such that it can be successful within a specific market segment (Payne and Rapp 2003). The quality of relationships is an additional asset when positioning a product or service.
- Customer profitability analysis refers to an application of segmented reporting and breaks down the costs of customer groups. Beside the fact that customers

purchase different quantities of products, Payne and Rapp (2003) note a strong divergence between service investments among multiple customers and state that key accounts are not necessarily cost-effective.

- Database marketing and micro-marketing is used to generate personalized communications in order to promote value preferences and preferred services. The services and values defined in the first step of the relationship management chain can be tailored through micro-marketing to meet the needs and desires of micro-segments on a market.

3.3.5 Operations and Delivery Process

Skills and competencies are an advantage in a competitive environment (Evans et al. 1994). This means that flexible business processes have to be modeled and managed within the value added chain due to the need for more flexibility in product configuration and a better quality of service.

- Mass customization describes the process of delivering wide-market goods and services customized to satisfy a specific customer wish so that customers receive optimal goods and services.
- Configuration of the value package for each segment includes the configuration of a value package for each segment and takes different customer needs into consideration by defining specific features for the whole product environment (e.g. concrete reaction rates).
- Value-added partnerships (partnering) refers to the value of partnerships with suppliers and other external partners. The close collaboration with reliable partners is a key factor for benefiting from a broad spectrum of instruments like secure deliveries to plants (Palmen 2007).
- Process reengineering is the ability of an organization to verify and audit existing business processes including comparative studies with industrial best practices and referential processes.

3.3.6 Generated Customer Satisfaction

Another differentiating factor in a competitive business environment is customer satisfaction, which is tied in to the entire product environment. Maintaining customer relationships depends on meeting a customer's original expectations of a product and service.

- Cost-benefit analysis takes all intangible and tangible values for a customer into consideration along with all direct and indirect investments related with the purchase or use of the product. The analysis is part of consumers' selection procedure for products or services. Relationships or potential relationships also represent a value in a cost-benefit analysis.
- Quality of service considers services as often experienced at a subjective level, yet generated multi-dimensionally. Grönroos (1983) describes three dimensions—technical, functional and the overall corporate image—which influence customers' perception of service quality.

3.3.7 Measurement and Feedback

The relationship management chain is a closed-loop concept and includes measurement and feedback as its last steps in order to ensure ongoing improvement of all processes. Efforts in this step are geared towards enhanced customer satisfaction.

- Service process monitoring includes the whole production processes alongside the relationship management chain. Key elements which could have a negative impact on customers' perception of service quality must be identified.
- Employee satisfaction studies consider employee satisfaction at the levels of activity, salary, opportunity for advancement and contentment with the department head, as well as general satisfaction amongst coworkers and must be monitored (Smith et al. 1969). In addition to these levels, new elements like satisfaction with the overall work environment, a corporation's internal communication culture, satisfaction with management's performance and the corporate image have all emerged as relevant factors.
- Customer satisfaction studies reflect the external impression of an organization. Measuring customer satisfaction provides an indication of how successful an organization is at providing products and/or services to the market. Findings should ideally be matched with competitors to identify any voids.

3.4 Relationship Economics in e-Businesses

A comprehensive study conducted by McKinsey & Company in 1999–2000 (Kemmler et al. 2001) helped to achieve a new level of understanding in the area of relationship economics in e-Business. Internet companies have suffered from a fatal attraction of sorts. These companies were very successful at luring visitors to their sites, but not at getting them to buy products or turning occasional buyers into frequent consumers. Indeed, the more visitors these sites drew, the more money they lost. Only a small, but solid, group of leaders succeeded in becoming profitable by turning visitors into returning customers. At the time, traffic was usually tracked according to page-views, advertising impressions and unique users. However, the foundation of long-term profitability is a life-long customer value, i.e., the revenue customers generate throughout their entire lives minus the costs of acquiring, converting and retaining them (Hougaard and Bjerre 2002, p. 331). Figure 5 offers an overview of performance indicators developed alongside Click-Through-Rate (CTR) and the number of unique page visitors.

Measuring the repeat customer base experience can also be applied to the performance of web applications and is useful in terms of reporting (Wong 2008). According to Forrester analyst Jean Pierre Garbani, web application performance has to be monitored and managed at the granularity of each individual transaction, not from a silo such as a cloud, logical server, piece of code, database or infrastructural component.

Evans et al. (2004) have outlined the key components of a successful relationship that can be relevant to the online marketplace as follows:

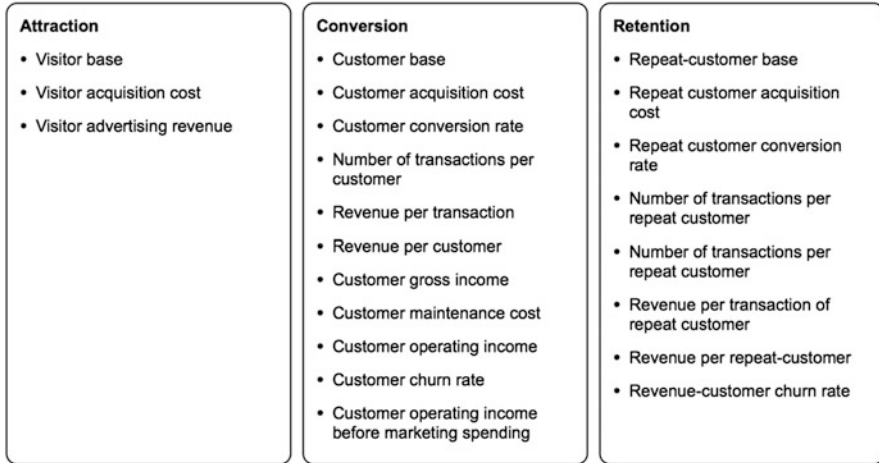


Fig. 5 Indicators in the e-performance scorecard (Kemmler et al. 2001)

- Trust—arises from an organization’s ability to keep its promises on its deliverables so expectations are met. Evans et al. (2004) describes trust as a process with different elements varying in its importance in the acquisition and retention phases, e.g., brand experience, satisfaction of customer expectations, verified payment systems, etc.
- Commitment—relationships rely on mutual commitment from both parties even though the required investment may pose problems (Charlesworth et al. 2007, p. 237).
- Loyalty—as described in Sect. 3.1, this has been a strategic focus for many marketers during the past few years. Performance indicators include measures such as RFM analysis and the lifetime value (LTV), which represents the present value of future cash flows attributed to a customer relationship.
- Mutual goals—as described in the relationship marketing paradigm, mutual goals should be identified to achieve satisfactions for both parties in the exchange process. As Evans et al. (2004) points out, these goals do not need to be the same.
- Social bonds with customers are built by marketers by viewing them as clients instead of just nameless faces. Ways are found to keep in touch with consumers and interact with them in order to pinpoint their changing needs and offer solutions.
- Structural bonds are predominantly related to buyer–supplier relationships and may also generate strong competitive advantages because customers increase their business with the seller to take full advantage of these value-enhancing linkages.
- Adaption takes the flexibility and configuration of organizational systems into consideration such as orders and distribution. These systems need to support mutual benefits and must be convenient for customers.

- Satisfaction, as described in the fifth step of the relationship marketing chain, must be gained initially during exchange processes and over the long term throughout the consumer life cycle.
- Cooperation in an e-business environment includes many forms such as survey participation, writing online reviews or customer involvement in new product development.
- Non-retrievable investments have no value unless there is a possibility of a long-term relationship.
- Attraction in business relationships can vary. From a consumer's perspective, attraction may stem from the status and prestige attached to a brand, its reliability or street credibility.

The description of the social media landscape demonstrates that new communities emerge, multiple conversations are conducted, knowledge is shared and information is exchanged. The categorization of social software by Lehel (2007) facilitates a better understanding of the different social software applications.

Requirements of enterprises that could be mapped to the application of social media are at hand such as the enforcement of relationship or establish knowledge. Social media fosters interaction, communication and information exchange by several services. Each type of social software provides particular features to achieve the different requirements. It is incidental that social media could be come an asset of value creation. The application of social media in adding value is subject for further consideration.

4 Social Media

Social interaction on the World Wide Web, including the behavioral and cultural patterns of the people using social software, can be described as social media. Social software represents a significant class of "Web 2.0" applications that can act as mediators for interpersonal communication and the exchange of information (Evans 2008, pp. 33–34). Online tools that people use to share content, profiles, opinions, insights, experiences, perspectives and other forms of media itself, thus facilitating conversations and interaction online between groups of people, can be described as social software. These tools include weblogs, message boards, groups, podcasts, microblogs, livestreams, bookmarks, networks, communities, wikis and video blogs (Solis 2007). Tepper (2003) asserts that the development of social software has been enhanced by a great increase in the number of individuals using social software. The implementation of these tools within a corporate environment is referred to as Enterprise 2.0.

A prominent characteristic of social software is the foundation of online social networks between users. Existing real-life personal networks of users form a basis for establishing networks on social software platforms. In such, online personal networks can represent a real-world context including social interaction by using social software and overlapping with interaction in the physical world. On the other hand, social software enables users to build entirely new relationships online.

Characteristics of these relationships depend on the kind of social software and available services. The services provided are for interpersonal or group communication use, the support of metadata management, information and user search functionalities, publications, sharing, subscriptions, commenting and collaborative classification. They ultimately allow individual users to link, exchange and organize information as pieces of content with selected contacts in a social network based on social software (Lehel 2007).

Since functional features and information models of social software reveal limitations from the individual user's perspective, the user-centered social software model proposes an integrated view on all available information by encompassing services for the acquisition of relevant information, controlled information dissemination to selected contacts and flexible metadata and semantic information relation management concerning the organization of distributed personal information.

5 Development of a Paradigm for Social Media in Business

This part presents a strategy blueprint for social media in business. Requirement of the described strategy is to outline a non-industry specific approach that utilizes latest social software for gaining competitive advantages. To encompass an advantage in competition, objectives of the relationship marketing initiative are implemented in this approach in addition to other features aiming on knowledge management and the support of interaction and communication of individuals.

The three-tiered strategy is structured as followed:

- I. Identification of Conversations
- II. Operationalization of the Social Management Chain
- III. Integration in Information Systems

5.1 Identification of Conversations

The six-market model is the starting point for identification of conversations and related activities in the social media space, assuming that all markets of the six-market model represent vital relations that can impact the business of an enterprise.

Identification of conversations concentrates on conversations in each market and an analysis of its author and readership termed as audiences. This also comprises the type of social media used in the existing conversations. All identified conversations need to be qualified as to its relevance (Evans 2008, p. 300). Identification of conversations is the first step that leads to an ongoing monitoring of the markets and its conversations. In addition disclose this first tier of the strategy objectives for future application needs of social media.

Enterprise information systems need to be considered for research of conversations and audiences, too. Information systems in the enterprise comprise multiple services and systems for content creation and management (e.g. ECM),

communication and collaboration (e.g. Groupware) and business operations (e.g. CRM, ERP). All these system are using own or consolidated data repositories.

Operationalization of business objectives with social media assumes detection and qualification of conversations in social media. The domain of social media implies multiple types of social software. Conversations are conducted in different types of social software and demand adapted research and monitoring systems. Nevertheless universal metrics can be applied to all types of social software. However metrics in social media are evolving as social media does. Evans (2008, p. 299) states that developing a solid metrics base for activities involves a combination of well-understood data along with over a period of time developed trends based on a wider range of available data.

1. Content Metrics

Content measures are aimed to reveal audiences and content in the social web. Contributors and detractors can be isolated. Collected metrics indicate how an individual, topic, organization, product or service is perceived. This leads to potential business objects such as prioritizing product improvements or scheduling a response to competitive moves (Evans 2008, p. 300).

Search engines are a first step to detect conversations, content and audiences on specific topics. Monitoring services offer search reports in regular basis on specific keywords. Search functions within community platforms enable also a search inside social networking services. Several blog search engines can perform comprehensive research and monitor conversations and dependencies (e.g. blogroll, trackback) in the blogosphere. Thereby these search services accommodate specific features of weblog-related technologies.

Conversations and audiences should also be identified in existing enterprise information systems. Enterprise search applications such as SharePoint Enterprise Search are able to integrate multiple data repositories of information systems (Hester 2007). Hence, enterprise search applications comprehend similar search functionalities like public search engines (e.g. Google) in addition to enterprise specific requirements such as people search.

2. Relevance Metrics

Influence and engagement are parameters of a conversation that determine its relevance. Dimensions of influence in relationships can also be described as driving forces of customer relationships (Hougaard and Bjerre 2002).

Dimensions of influence in the blogosphere are *function of topic* and readership. The *function of topic* describes the impact of a post within an associated domain and its higher degree of effectiveness (Finin et al. 2008). The influence of conversations can also be measured by on-site web analytics. Metrics are *time-on-site* and the *bounce rate* of referred visitors. *Time-on-site* is the difference between the time a visitor viewed the first and last page in a visit. This measure shows how long a referred visitor remained on a site and indicates the value of the conversation and source (Evans 2008). The *bounce rate* measures the percentage of landing page terminations compared with all landing page arrivals.

Engagement as a parameter of relevance metrics describes the interest level in a message, resource or product and the willing to pass it along. Ratings in e-commerce platforms, referrals in social networking service, “comment to post ratio” in the blogosphere, views, bookmarks and subscriptions indicate engagement.

Relevance metrics try to identify conversations that are being used as a part of the decision-making process from a sales perspective.

5.1.1 Recruitment Markets

Recruitment markets consider potential employees as a key resource for the enhancement of an organization (Michaels et al. 2001). The positive image of a company is significant for attracting potential workforce. With the evolving Web 2.0 employees and alumni started exchanging their views, comments and opinions of organizations (Twist 2004). These mostly uncontrollable conversations take place in the social media landscape, for instance in community platforms, social networks, blogs, etc. (Jäger 2008) and are also available for prospects, customers, suppliers, and competitors. On the other side enables Web 2.0 recruiters to perform a background check of applicants. Social networks for professionals (e.g. Xing) show insights of individuals, such as relations with employees of competitors, customers and partners. Key activities for recruitment markets is to identify Platforms, conversations or specific individuals in order to monitor the image and conversation about an organization. Social networking platforms can be located for background checks on applicants. Possible objectives for a social media initiative can be weblogs and feeds, or participation in relevant community platforms to create own conversations and awareness about the organization, its individuals and attractiveness.

5.1.2 Internal Markets

From a relationship marketing perspective are all individuals and divisions of an organization simultaneously internal supplier and customer, who are attached to the value chain. It follows that individuals and divisions are audiences that need to be identified. Social media in internal markets is aimed to improve communication, social networks, knowledge management and company-wide awareness on goals, strategy, values and mission. This includes the activities of Identification of relevant audiences (e.g. individuals, divisions, communities of practice and project teams), assessment of social software applications as facilitator for specific business objectives and social network analysis of already implemented social networks and information management systems, such as ECM.

5.1.3 Supplier and Alliance Markets

Supplier and alliance relationships are important. Organizations tend to integrate vendors from early stages of product development, establish mutual values and a closed loop communication process, considering customer expectations. The objective is to sell and support this perception of a vendor-relationship internal and external. Key activities for supplier and alliance markets is to identify and drive

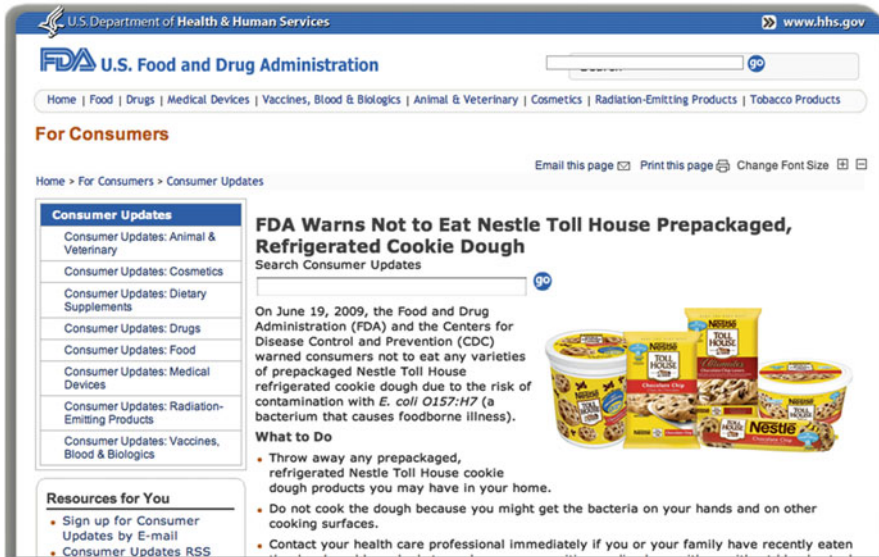


Fig. 6 FDA product notice for consumers (2009, FDA Warns Not to Eat Nestle Toll House Prepackaged, Refrigerated. . .)

conversations on mutual goals and values along with projects and products, affecting both entities. Social software can merge those conversations on joint platforms. Along with the evaluation of a joint social software platform that comprehends social networking services to connect counterparts along with unified collaboration, weblogs and wikis to transfer knowledge and support the relationship.

5.1.4 Influence Markets

Influence markets consider several relations respectively stakeholders that effect customer relationships. These stakeholders could be highly industry-specific in case of regulators or government agencies (e.g. FDA, BaFin).

Figure 6 shows a warning notice posted by the FDA relating to the contamination of a specific food product, in the section of consumer updates. In the mentioned case are consumers the assigned audience, and able to subscribe via a RSS feed to this website and receive updates on regular bases. This example shows how a government agency has utilized the weblog-related technology of feeds to communicate with its audience. Key activities for influence markets is to identify relevant conversation, sources and audiences in influence markets. Crises management should include social media for communication (e.g. corporate blog) (Eck 2007, p. 67).

5.1.5 Referral Markets

Referral markets consider multiple distribution-channels (e.g. wholesaler, distributor), existing customers and networks of experts as audiences that can leverage market coverage and brand awareness. Key activities for referral markets

is to identify relevant audiences and conversations that are engaged with the product, service or related subjects. Another objective is to integrate relevant audiences in communication strategy or existing affiliate marketing programs.

5.1.6 Customer Markets

Customer markets are the center of the six-market model and primary target of social media activities. As described in Sect. 3.2 is the emphasis of the relationship marketing ladder to convert prospects into loyal customers and advocates of a company, product or service. From this it follows that audiences in customer markets comprise all levels of the relationship marketing ladder including prospects, purchasers and clients. With the increasing number of weblogs become individuals (e.g. blogger) market participants since they are able to recommend a product or a service. Key activity for customer markets is the Identification of relevant audiences and conversations and use social media as an instrument to understand customer needs and drive conversations.

5.2 Operationalization of the Social Management Chain

The second tier of this strategy describes operationalization, in terms of implementation, execution and measurement of a social media initiatives in an enterprise environment. The approach is modeled in a “social media management chain” shown in Fig. 7. The social media management chain provides a framework that has been assumed by the relationship management chain (Payne and Rapp 2003) and adapted to the scope of social media. The described model posses supporting activities along with four steps of activities. Preconditions are the identification of conversations and objectives for each market.

The focus of the social media management chain is on how social media in business generate value creation. This presented model is an integrated approach and implies that all steps of the social media management chain are vital for a successful implementation of a social media strategy. Support activities of social media that affect value creation are the management of internal and external markets.

5.2.1 Management of Internal Markets

The management of internal markets is an evolving field for social media adoption. This stage implements the determined findings and objectives of the first tier in a social media plan for internal markets. All activities are focused on developing methods and systems that will support internal customers at a cost-efficient level. Management of internal markets is a “support activity” and affects every step of the social media management chain. The first step is the providing of suitable social software for all relevant audiences and their needs, for example weblogs for knowledge workers to generate information (McAfee 2006, p. 22). The generated information could support every step of the chain. Appropriate social software applications act as facilitator for defined business objectives. Social network

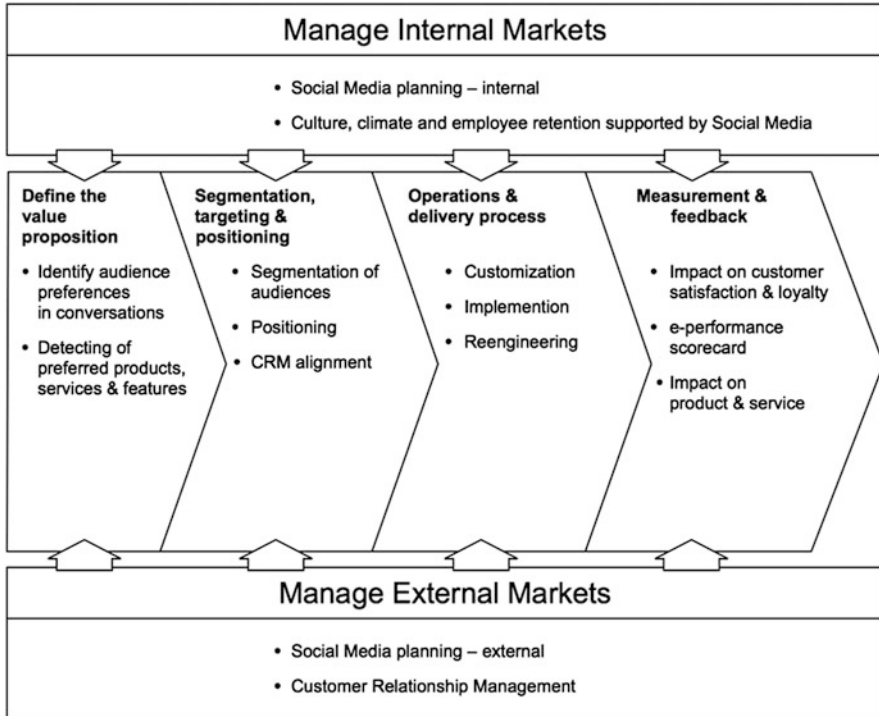


Fig. 7 Social media management chain

analysis can be utilized to detect “structural holes”, and improve information exchange and knowledge transfer.

5.2.2 Management of External Markets

Management of external markets includes also non-customer markets. As part of the first step of the social media strategy audiences and objectives in all external markets, such as influence markets, supplier and alliance markets, etc. have been determined. Nevertheless does each segment of the external markets demand specific objectives to address relevant audience and achieve defined business objectives. This leads to the development of individuals social media plans for external markets. Weblogs dedicated for crises management (e.g. product recall) enable organizations to endorse an open and transparent communication with market participants of external markets (Eck 2007, p. 67). Customer relationship management provides basic functionalities (e.g. campaign management, after-sales services, etc.) that can support social media initiatives. It is incidental that CRM is a supportive activity that affects all steps of the social media management chain depending on the level of integration.

5.2.3 Definition of Value Proposition

Definition of the value proposition within the social media marketing chain is the next iteration after determining relevant audiences and conversations in customer markets. Identifying of audience preferences in relevant conversations discloses how the detected audience appraises a product or service. Detecting of preferred services and features exposes conversations and its content on a more detailed level in terms of product feature or service. Findings can be used for mapping of features and services to specific audiences compared to the grouping of customers.

5.2.4 Segmentation, Targeting and Positioning

After evaluating key products, features and services the second step of the social media chain is dedicated for segmenting, targeting and positioning in terms of social media. Segmentation of an audience maps a specific product or service configuration to a corresponding audience based on the findings of the first step of the chain. Positioning describes the selection of the appropriate social media facilitator such as community platforms or blogs for engaging conversations. The alignment with a customer relationship management system considers the integrated approach of the presented social media strategy. This activity connects findings of the research phase in social media with existing data and knowledge on customer behavior and characteristics.

5.2.5 Operations and Delivery Process

The aim of the operations and delivery process is to actively encourage an ongoing dialogue with relevant audiences and preserve existing customer relationships as a competitive advantage. Customization describes the development of a tailored social media solution. The parameters of the solution have been defined in the prior steps of the social media management chain. Common goal of all customer-focused social media solutions is the enhancing of relationships as described with the relationship marketing ladder. Loyalty has also been identified as a competitive advantage. The design of a social media application hence should foster the lifetime economy, efficiency economy and value adding economy of customer relationships.

Implementation of a social media application comprises the technical deployment, integration in an existing information management infrastructure and the organizational integration. Organizational integration encompasses individuals and divisions that will contribute. Integration of social media in an existing technical infrastructure is subject of the third tier of the outlined social media strategy.

Reengineering is aimed to improve established social media implementations. With the evolving characteristics of social media are established applications, metrics and environments in motion. A defined reengineering step ensures an ongoing evaluation of implementations, platforms and processes.

5.2.6 Measurement and Feedback

The measurement and feedback step defines several parameters to make social media activities measurable. A closed-loop concept with a reengineering phase in the previous step ensures ongoing improvement.

Key performance indicators are the impact on customer loyalty and satisfaction. Rebuying a product or referring it is expressed as loyalty. Respective data can be captured through social media and analytical CRM. The e-performance scorecard reveals additional data points and cost–benefit analysis for measuring social media initiatives. The impact (e.g. quality, design) on a product or service by social media activities should be measured and reflects the engagement of social media activities with a product or service. This metrics describes the influence of generated feedback and interaction in the social media landscape on a specific product or service and is an indicator for a value adding economy.

5.2.7 Integration in Information Systems

The integration tier of the social media strategy considers the integration of social media in an existing information systems infrastructure. The management and analysis of thousands of users of social media applications excludes an efficient manual management. To integrate functionalities of external social media platforms and services in existing enterprise information systems the implementation interfaces is required. Most public social networks are already offering application programming interfaces (API) for a machine-readable access and are using standardized web services (e.g. del.icio.us) (Richardson and Ruby 2007, p. 28). Enterprise middleware is the touch point for the technical integration of social software on the enterprise side. This application server allows the connection with existing applications and systems such as Business Process Management and CRM. The common data exchange format used by web services of social software is XML (Dostal et al. 2007, p. 199). All major ERP, ECM and CRM systems support this data format that enables a data integration of social software in business operations.

Integration of social media in information systems is an extensive field of application. Efforts and costs for integration need to be included in an evaluation process for implementation of social software.

Conclusion and Prospects

“Markets are conversations” is the first assumption of the cluetrain manifest (Locke et al. 2001). Social Media is a vehicle for conversation within a market. Millions of customers, employees and individuals are using social media for conversations. As a result companies that want to participate, understand and drive their key markets need to participate in this area of conversation. Avoidance of conversations operated by social media in key markets will result in a competitive disadvantage cause customers and competitors won’t avoid it. Hence multiple organizations have started to use social media in their business.

Technology infrastructure like EAI and web services in addition to communication strategies of related areas such as the relationship marketing initiative and online marketing are at hand. Gainer of the evolving social media landscape will be organizations with the ability to adopt and integrate relevant areas of social media for their business quickly with a strong focus on business objectives within their strategy.

In addition are the company structures of public or commercial social media platforms to be considered. Many companies are financed by venture capitalist and are still searching for their business model such as twitter. The selection of partners within a social media strategy and the involved efforts for implementation must consider the fact that those companies and services can be fast substituted by other social media providers. However are other initiatives like OpenID and OpenSocial a perspective for universal interaction with multiple social media platforms.

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