Benefits of Social Media in Business-to-Business Customer Interface in Innovation

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ABSTRACT

The aim of this research is to explore social media and its benefits especially from business-to-business innovation and related customer interface perspective, and to create a more comprehensive picture of the possibilities of social media for the business-to-business sector. Business-to-business context was chosen because it is in many ways a very different environment for social media than business-to-consumer context, and is currently very little academically studied. A systematic literature review on B2B use of social media and achieved benefits in the innovation context was performed to answer the questions above and achieve the research goals. The study clearly demonstrates that not merely B2C's, as commonly believed, but also B2B's can benefit from the use of social media in a variety of ways. Concerning the broader classes of innovation –related benefits, the reported benefits of social media use referred to increased customer focus and understanding, increased level of customer service, and decreased time-to-market. The study contributes to the existing social media –related literature, because there were no found earlier comprehensive academic studies on the use of social media in the innovation process in the context of B2B customer interface.

Categories and Subject Descriptors

J.1 [Administrative Data Processing]: Business
J.4 [Social and Behavioral Sciences]: Economics
K.6.1 [Project and People Management]: Management techniques

General Terms

Management, Measurement, Performance

Keywords

Social media, Web 2.0, B2B, Business-to-business, Benefits, Challenges, Measurement, Customer interface, Marketing, Innovation

1. INTRODUCTION

Despite the growing amount of company experimenting and academic studies, social media is still new to many businesses. Its real opportunities and benefits are not well understood in many business contexts, such as the B2B context, and despite the grown

recent interest in the use of social media in B2B marketing applications, the adoption of social media in B2B innovation is still currently quite low (e.g. [45]). In addition, in B2B environment, currently the innovation perspective seems clearly lacking in academic research and well-reported case studies, which would enable companies to better adopt social media.

Despite the relative novelty of social media in business and lack of academic research, social media has already been demonstrated to open many new opportunities for the B2B sector due to its features that can enhance communication, interaction and collaboration, which can bring significant benefits to organizations. For instance, social media can be utilized to identify new business opportunities and new product ideas, to support marketing activities, to deepen relationships with customers and to enhance collaboration not only inside but also between companies and other parties [31][34][46][5].

Concerning the challenges related to adoption, according to for instance a recent survey, lack of understanding of the possibilities of social media in innovation, difficulties in assessing its financial gains and lack of suitable case evidence are among the most important reasons for B2B- companies not adopting social media in their innovation [45]. Thus, academic studies utilizing case material are needed in researching the above areas to improve the understanding of social media in B2B context, as well as to enable companies to better adopt new social media practices.

On the basis of available literature, it can be presumed that the challenges, benefits and useful approaches of social media in B2B sector are at least somewhat different from those of B2C companies [31][46]. It has been a relatively common assumption (e.g. [25][46]) that it is much more difficult to utilize social media in business-to-business innovation and customer interface for instance because of the many significant differences in the business-to-business products, markets and product development. Concerning the above reasoning, thus, we find a clear need for research of social media in the specific context of business-to-business, even if some practices might be transferrable from B2C's to B2B's. In addition, since major part of the recent existing very few B2B social media studies discuss social media from merely the marketing perspective, there is clearly a need for innovation related research.

Utilizing social media tools can lead to significant benefits for the company, but without a set of concrete objectives and related measurable results, there is no certainty that social media process is efficiently employed [51]. Setting useful objectives for social media efforts that are based on business goals, as well as followingly evaluating and measuring the benefits helps organization to keep on track on its position, communicate its position internally and externally, confirm priorities and direct the progress of its activities [54][12].

Even though the adoption of social media tools in organizations has spread in last few years [39], evaluating and measuring the benefits of social media approaches has not been much investigated. Organizations are spending more and more on social media applications, but there is no clear view or consensus on what should be strived for with social media efforts and how to evaluate the benefits of social media [34]. Also, social media is a large umbrella term for various very different types of approaches with different purposes and benefits, and the various approaches are often utilized in very different ways. This should also be taken into consideration when evaluating and measuring the benefits, but a large part of existing benefit-exploring studies either discuss social media as a very broad concept, or discuss individual social media case studies from a very narrow perspective. In this study, we try to get a more comprehensive picture of the benefits with making a review to existing B2B research on the benefits of social media in the customer interface of the innovation process, while maintaining the more concrete insights from individual cases.

Evaluating and measuring social media benefits is a very topical issue in general social media research, and it has been a subject of many studies in recent years (e.g. [34][51]). However, there are only few studies that discuss the various different benefits and the evaluation of benefits of social media from the perspective of B2B companies. According to a study of Finnish Business and Policy Forum EVA B2B companies typically see social media as something belonging consumer business, and that it has little or nothing to offer in improving the effectiveness of business between business companies [37]. This highlights the importance of evaluating and measuring the benefits that specifically B2B companies can gain from social media.

The aim of this research is to explore social media and its benefits especially from B2B innovation and related customer interface perspective, and to create a more comprehensive picture of the possibilities of social media for the B2B sector. We also examine the challenges of evaluating social media benefits in this context. In this way, we hope to enable managers to better understand the broad possibilities of social media in B2B context, to set realistic objectives and to create related measures for social media, and to hopefully help companies to adopt social media in a faster and more planned manner.

2. DEFINITIONS OF WEB 2.0 AND SOCIAL MEDIA

Although the concepts Web 2.0 and social media are often used synonymously, it is useful to differentiate them from each other [40]. The concept Web 2.0 can be defined as technologies that enable users to communicate, create content and share it with each other via communities, social networks and virtual worlds, making it easier than before. They also make it easier to have real life experiences in virtual worlds and to organize content on the internet with content aggregators [46]. Such tools and technologies emphasize the power of users to select, filter, publish and edit information [66]. Social media can be defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user generated content" [40]. Furthering this, social media are often referred to as applications that are either fully based on user-created content, or in which user-created content or user activity have a significant role in increasing the value of the application or the service.

Social media are certainly not a unified and well-defined set of approaches, and despite some broad common characteristics

described above, their benefits and measurement should be analysed in more detail considering the specific social media types and the context of use [34][68]. Indeed, not all social media are the same [8][52]. From a technology perspective, the platforms vary and, along with that, so do the rules of utilization and functionality (e.g., Twitter tweets/posts can be no more than 140 characters). In turn, there is variation in how people use these platforms and/or associated applications (e.g., bloggers tend to post at most once per day, and their posts tend to be up to one page in length).

Social media can be used as an umbrella term, under which various and very different types of cultural practices take place related to the online content and people who are involved with that content [50]. A large number of generic different types of social media –related applications can be identified [67][17][21], such as wikis, blogs, microblogs (e.g. Twitter), social networking sites (e.g. LinkedIn, Facebook), social content communities (e.g. YouTube), mashups, and virtual social worlds (e.g. Second Life).

3. SOCIAL MEDIA OBJECTIVES AND ROLES IN THE CUSTOMER INTERFACE OF B2B INNOVATION

When social media benefits are tried to be understood properly, we should first understand some essential social media objectives and specific roles can play in achieving those objectives. In addition, when beginning social media activities in business, it is necessary to make clear what the objectives of the company for operating in social media environment are.

The question is not whether to blog or tweet, but what objectives need to be achieved and also which set of tools with their corresponding metrics can best achieve them [34]. It is impossible to evaluate the success and benefits of social media without knowing what the actual objectives are [60][27]. Activeness in social media itself is not an actual useful objective, because the activeness without a purpose doesn't necessarily bring value to an organization [10], or the value might turn out to be even negative due to e.g. information leakages, or inferior handling of received feedback. Social media objectives also need to be aligned with the goals of the firm to focus on those social media activities that will best facilitate the needs of its business [43].

3.1 Customer roles in the innovation process phases

In the strategic management literature and quality management literature five main roles have been identified for customers in value creation: resource, co-producer, buyer, user and product [47][41][26].

In several studies in the innovation management literature, the authors have found it useful to divide the innovation process into three parts, especially regarding the viewpoint of innovation process -related customer roles, analyzing them accordingly: the (fuzzy) front end (phases before product concept), the product development phase (phases between concept and launch), and the commercialization (phases during / after launch) phase [53][29][20][49]. Thus, we find it necessary to analyze the social media benefits in the customer interface of the innovation process in more detail from the perspective of the different customer roles and the different innovation process phases. We have not been able to find earlier B2B- related studies that have carried out such analysis, and will take this into consideration in our own analysis.

In the first innovation process phase customers can be regarded as a *resource*, i.e. the source of ideas or need –related information, in

the second phase customers can be regarded as *co-creators* (or co-producers), and in the final phase customers can be regarded as *buyers* and/or *(end)users* [53][15][29][7], or as *product. Co-creation* can include for example validation of product architectural choices, design and prioritization of product features, specification of product interface requirements and establishment of development process priorities and metrics with customers [53]. When regarding the customer's role as a *buyer*, the focus is on converting potential customers into actual customers [47]. Customers as *users* role suggests that companies can receive valuable contributions in product testing and product support from customers [47][53]. Regarding customer as *product* implies that the ultimate outcome of the innovation process or the following transformation process is change in behavior or condition of the customer, that is the customer both experiences transformation activities and becomes the final stage of the transformation process [47]. These roles bear a very close resemblance to the afore-described three main phases of the innovation process, and support the division of the innovation process accordingly in the context of this study. This enables us to better analyse the different roles and benefits of social media in the creation of new customer insights, understanding and knowledge in more detail than has been achieved so far.

According to Nambisan, of the above roles, three (resource, co-producer, user) are most relevant for specifically the innovation process [53]. We originally intended to use these roles in the case analyses, but we noticed soon that merely these roles were not able to capture the essence of existing social media use and benefits in B2B's. Many cases highlighted the additional above-mentioned role of customers as buyers, so we decided to include this role in the analysis.

The possibilities of social media in the customer interface varies significantly in the different phases of the innovation process, because 1) the patterns of interaction between a firm and its customers vary with the roles the customers are playing in the development process [41][48][49], 2) the knowledge creation activities vary depending on the nature of knowledge to be created, e.g. knowledge acquisition about product from different sources or knowledge conversion of factual knowledge about a product to experimental knowledge about is usage in specific context [53], and 3) customer's motivation to participate or be involved in the innovation process varies greatly depending on the innovation process activity, for example there are different motivations to participate in the actual product development activities than there are in participating in product support.

Social media can provide new possibilities and novel types of business benefits concerning all the above mentioned innovation process phases and the related customer roles. However, the role and objectives of social media can be presumed to have different generic emphases in B2B's compared to B2C's, which is briefly explained next. This explains for instance that many B2C practices used in the customer interface are not transferrable easily, or even at all, to B2B's.

3.2 Generic Social Media Objectives in Business-to-Business Customer Interface

As mentioned earlier in this paper, doing business in B2B's differs from doing business in the B2C sector. This should mean that also the social media objectives differ. When considering the objectives of improving business processes, the generic objectives can be partly the same in B2B and B2C companies, for example to enhance co-operation by connecting all parties together [31][46] or to shorten reaction time in customer support [10].

From the customer interface perspective, while the B2C objectives are often concerned with understanding the customers' needs as larger entities (whole markets or larger customer segments), the B2B objectives are commonly focused on deepening and on timewise extending the personal relationships with the generally relatively few customers that a B2B company has [6][46][37], to enhance the company's credibility in business relationships, or to improve the responsiveness [42].

Social media objectives for innovation, for example a higher level of product innovation [51] can be related to both B2B and B2C companies but the objective might be reached differently. When B2C companies usually have a large number of customers, the goal may be for instance to have plenty of product ideas from customers as a large crowd, without aiming to understand each and every customer's detailed needs. Contrary to this, in B2B companies the role of individual customers or sometimes even one single customer, and their better understanding, can be very important.

To successfully set targets for social media use and to evaluate the social media activities the objectives must be first understood and clarified [10].

4. EVALUATING AND MEASURING THE BENEFITS OF SOCIAL MEDIA IN CUSTOMER INTERFACE

Social media benefits have been studied from a variety of perspectives. Concerning the benefits of social media in customer interface, there are studies that consider individual social media – related approaches, such as wikis (e.g. [63]), blogs (e.g. [62]), virtual worlds (e.g. [44]) or customer communities (e.g. [4]), in the customer interaction and the creation of understanding about customer needs. The clear majority of existing studies on the roles of social media in the customer interface are case study based, they view the benefits from merely individual social media approaches' (such as wikis) perspective, and they do not specifically address the perspective and the benefits of B2B companies. Although social media benefits in customer interface of B2C companies and from consumers' point of view are relatively well understood, several studies point out that B2B companies do not yet fully understand the potential of social media and find it difficult to evaluate and measure the benefits of social media (e.g. [45][37]).

4.1 Evaluating and measuring social media benefits

Often the evaluation and measurement might be quite challenging, especially in the case of applying novel technologies which are not thoroughly understood yet, or aiming to facilitate complex processes such as innovation and product development, which in addition to their complexity involve long time periods between the investment decision and its actual impacts. The above types of challenges cannot, still, justify not evaluating or measuring the impacts of social media efforts. Sometimes the task might, however, require even novel approaches and ways to measure and evaluate the impacts, as seems to be the way with social media [34].

Evaluation of social media benefits can be done at different levels: process, output and outcome [11][54]. Process measures evaluate the effectiveness of the transfer of inputs to outputs, e.g. % products developed on time and turn-around time for support requests [57]. Outputs are the results or deliverables of the process, for example number of new members that have joined a

LinkedIn Group can be an output of social marketing process [34][36]. Outcomes can be divided into financial outcomes and non-financial outcomes [10]. Financial outcomes are ultimately either increased revenue or cost reductions, that can be measured for example by revenue premium of brand equity, increases in the sales value, decreases in the technology costs, savings in the costs of customer support services, cost reduction from reduced input from employees, decreased cost impression by leveraging social media channels [2][51][35][31][10]. Non-financial outcomes are everything else, for example three times increase in brand mentions, 37 % increase in positive sentiment, more than 50 % customers interacting with each other [51][56][10]. Even though the traditional ROI- type of measures are strived for, e.g. traditional marketing metrics with narrowly defined ROI tend to lead to social media campaigns that maximize short-term benefits for the brand (or the manager!), without worrying too much about customer motivations and the long term.

Regarding innovation, perhaps due to the complexity of the issue, as well as the fragmented and various approaches proposed, many organizations tend to focus only on the measurement of innovation inputs and outputs in terms of spend, speed to market and numbers of new products, and ignore the processes in-between [18][1]. In addition, Adams et al. [1] make a point that there is an over-reliance on financial measures rather than process measures, a similar reliance on for instance codified knowledge such as patents to the exclusion of more intangible measures such as tacit knowledge, and furthermore, an over-reliance on quantitative or dichotomous yes/no measures instead of measuring the quality of actions and results.

Concerning marketing, in a similar fashion, non-financial measures are increasingly seen as needed [3], and many authors have criticized the mere use of financial indicators in determining marketing performance (e.g. [9][24][14]). Non-financial measures such as customer satisfaction [38][64] and customer loyalty [22] have attracted wide attention.

4.2 General challenges in evaluating and measuring social media benefits

A fundamental challenge for companies using or planning to use social media is that although they recognize the need to be active in social media, they do not truly understand how to do it effectively, what performance indicators they should be measuring, and how they should measure them [33]. A related challenge is that managers may be "naïvely optimistic" about social media, and without proper means to adjust their beliefs, they may either give up on their social media efforts or continue efforts that involve random adjustments without real-life data support [34].

One generic challenge is that the social media environment is highly dynamic and rapidly evolving, which may be difficult for managers to realize [34]. Due to the novelty of social media concepts and approaches, and also the unpredictability of e.g. engaging customers in a company's social media efforts, suitable measures can enable managers to adjust their beliefs, actions and strategies, and thus learn efficiently about social media possibilities and benefits (e.g. [34][23]).

Another important challenge concerning the evaluation and measuring is that social media is still new to the business world, and companies have to experiment with which approaches work and which do not [52]. Thus, when experimenting, it might be difficult to evaluate what really works, what should be expected as a result, and what is a good or sufficient result.

5. RESEARCH APPROACH

A systematic literature review was performed using the following databases Scirus, ABI, Emerald, ScienceDirect and EBSCO with the following search term combinations: impact and social media, impact and social media and B2B, value and social media, value and social media and B2B, value of social media, measurement and social media and B2B, measurement of social media, ROI and social media, ROI and social media and B2B, ROI of social media.

A total of 414 of articles were found as a result, of which 43 were selected for more detailed analysis on the basis of their relevance. In addition, we made searches concerning individual Web 2.0 - related tools, such as wikis, blogs, Twitter, LinkedIn, etc. in the specific context of B2B, using various combinations of search terms and above research databases. We searched and discovered some additional references by searching forward and backward referencing of the most relevant discovered articles. Three authoritative blog articles and five books were used as additional sources to extend the literature review to cover more B2B examples that were relatively scarcely presented in the existing academic literature. The blog articles were chosen by performing a search of Top 5 authoritative blogs for each category based on Technorati ratings of authority. The categories used in the search were social media, B2B social media, innovation, and B2B innovation. A total of 16 authoritative blogs were identified and blog posts were scanned using the before mentioned categories.

6. RESULTS

Through literature review we were able to find more than twenty studies or cases that reported benefits of using social media in the customer interface of business-to-business companies. There were eight journal articles, out of which almost all, seven were peer-reviewed academic ones. We were also able to find five authoritative books, one authoritative research report, and three blog articles which brought additional understanding to this little academically studied and reported area. Despite the so-far relatively few academic studies, we believe that the analysis of the more than twenty authoritative sources does bring new broader understanding of the wide usefulness of social media in the specific context of B2B companies, and their customer interface.

In addition to the results represented in Table 1, some studies described social media benefits in B2B companies on a general level of broad "social media", but did not state clearly what the benefits were from any recognizable social media approaches, and to what degree the reported benefits were even attributable to the companies' social media efforts distinguished from other business development investments, for example traditional marketing campaigns. Because we wanted to understand specifically how certain social media approaches contributed to benefits, these were decided not to be included in the resulting table.

The results of the literature review are summarized on Table 1. The table illustrates the customer interface –related benefits in using certain social media applications in different phases of innovation process from B2B companies' perspective. Those academic sources mentioning benefits in B2B context are indicated by symbol (1), symbol (2) indicates identified B2B benefits found from authorative blogs, books and white papers or other reports as sources of information, and symbol * is used to indicate that innovation process phase where the benefits are realized is not explicitly described. Customer roles in innovation process phases are indicated by the following symbols: (R) resource, (C) co-producer, (B) buyer, and (U) user.

We were able to find social media –related benefits of the above four customer roles. Benefits were found in almost all the individual categories of the resulting table (Table 1). However, in the front-end phase, three approaches lacked concrete case evidence on benefits in academic literature. We did find social media cases also in these categories, however, that did not explicitly state the context or applicability to include B2B, or this context could not be clearly concluded from the case material. Concerning the development phase of innovation process, customers did not always operate as co-creators, but also as resources, which contrasted to the categorization implied by Nambisan [53]. In our literature analysis, we were not able to find the fifth type of customer role cases with "customer as product", which was mentioned in Section 3.1.

Majority of the reported benefits were qualitative, non-quantified benefits of using social media, such as better feedback, increased customer service, gaining more detailed information about prospects and increased knowledge transparency. However, in almost half of the cases, the benefits were tried to be quantified at least on the general level (as outputs), such as more than 14 000 ideas from customers, and with more than 89 000 comments on the created product ideas. Interesting further output-related benefits dealing with the core of social media, the increased enabling of interaction, included benefits such as over 1 000 employee-customer interactions being recorded, and more than 50 % of the customers starting interaction with each other. Actual outcome- related reported benefits were quite few, including benefits such as improved solving time of customer problems by 22 %. Especially rare were instances that tried to quantify actual financial benefits gained from social media, including benefits like increased customer interaction with 75 % lower costs. Despite the need and will to be able to show even ROI- related benefits for social media use, only one B2B –related case reported attempts of calculation of ROI on using social media in the customer interface [51].

7. DISCUSSION AND CONCLUSIONS

We were able to find useful application areas and benefits of social media in a large variety of different application areas in the B2B companies' customer interface. In this way, the study clearly demonstrates that not only B2C's but also B2B's can benefit from the use of social media in a variety of ways. This contributes to the existing social media –related literature, because there are no found earlier academic studies on the use of social media in the innovation process in the context of B2B customer interface, evaluating in a more comprehensive way the benefits of social media, in addition to the few academic studies focusing on individual related cases and examples.

Despite the B2B -related special characteristics often believed to negatively affect the usability and benefits of social media and restricting the use in the B2B customer interface, such as the commonly relatively small amount of customers compared to B2C's, according to the results, in all shown cases the studied B2B's have benefited from social media in the customer interface in a variety of ways. In several cases, the B2B's seemed to benefit quite considerably from social media. In addition, the B2B companies benefiting from social media represented different types of industries (e.g. software, ICT, pharmaceuticals, consulting and various types of B2B services) with different business logics and models, and their size varied from small to very large companies like Cisco and Dell.

Concerning the above, the usability of social media seems to be generalizable also more commonly to different types of B2B's,

not only e.g. ICT and software companies, which are among the most often referred companies as social media exploiters in B2B sector. Furthermore, concerning the generalizability of found examples of social media use, we believe that many of the found generic or B2C- related examples of using social media in the customer interface, e.g. virtual product testing [44][30], are generalizable to B2B context, but this will be studied in more detail in further studies.

Major part of reported benefits was output- related benefits, but they did not directly address the actual business –related outcomes. This is understandable, since it is quite difficult to measure which are the actual effects of social media investments and separate these from e.g. other investments, internal changes and changes in the business environment. In addition, the complex causal chains from social media use to financial savings or gains are, like in the case of complex customer interface –related processes such as marketing and innovation always is, very difficult to describe and verify. Even though some studies reported outcome- related benefits, it is difficult to analyse how believable the studies are, because the related causal chains and the separation of social media investments from other possible explanations were generally not reported in any useful way to allow the objective evaluation of the reliability and validity of reported benefits. Despite the difficulty, future studies should at least attempt to report and analyse how the benefits are arrived at.

From the standpoint of the innovation process, the studied B2B's were able to derive social media and customer interface -related benefits in all three major phases of the innovation process, as well as many marketing –related tasks, such as B2B prospecting. Most of the reported cases and benefits seemed to focus on the later phases of the innovation process, mostly the commercialization phase, while the front end included relatively few cases with observed benefits. Some potential reasons for lacking social media approaches in the front-end can be due to their typically open nature (e.g. Twitter), which makes it either difficult or even impossible to carry out ideation or knowledge exchange because of relevant challenges related to information security and especially the ownership of knowledge (cf. [55]).

The applications from which the benefits were derived included almost all the major types of social media, including blogs, microblogs, wikis, mashups, social networking tools and online communities. However, we were not able to come up with reported B2B- cases and related benefits in the category of virtual worlds. We did find some cases that reported social media use and benefits on this category on a generic level (e.g. [59][44]), but it was not possible to say explicitly whether the cases and examples referred to B2C or B2B- companies, or even whether the results would have been generalizable to business-to-business context.

Concerning the broader classes of innovation –related benefits, the reported benefits of social media use referred to increased customer focus and understanding, increased level of customer service, and decreased time-to-market. Many examples reported benefits related to the core of B2B customer relationships, the deepening of customer relationships, such as increased customer interaction with and between customers, but no direct benefits were found that directly addressed the potential benefits concerning the timewise extensions of customer relationships. Still, future research should be carried out to understand better in which different specific ways and in which specific contexts social media can actually deepen and extend customer relationships.

Table 1. Benefits in using social media applications in different phases of innovation process from B2B companies' perspective.

Apps	Front end	Development phase	Commercialization
Blogs		Obtaining customer feedback and customer need data more favorably than by traditional marketing methods, also in the case of anonymous blogs it is possible to receive unfiltered (candid and uncensored) information from customers [62] (1) [5] (1) (R)	Cisco achieved 75 % cost savings and increased customer interaction by virtual product launches through blogs [6] (2) (B). Real time user feedback concerning products [62] (1) (U), Hinda Incentives blog has increased traffic to the company website by about 15 %, in addition 1 000 visits a month with subscribers from at least 30 different customers to the blog. [13] (2) (B)
Microblogs		Obtaining real time and honest feedback [28] (2) (R)	Faster communications with customers [42] (1)* (U), Twitter increased brand exposure as cost effectively as newsletter and more effectively than other media, Think Big event marketing campaign on Twitter resulted in increase of Twitter followers from 0 to 1540 in 1 day, 15 % of traffic to the blog and promotional pages from social media, with an effect of nearly 5 % to ticket sales (B), Twitter in CorePurpose marketing resulted in converting contacts to customers at a higher rate in 1 year than traditional marketing strategies in first 7 years of operation [61] (2) (B)
Wikis	Quicker capture of ideas, also enable asynchronous distributed brainstorming [63] (1) (R)	GoodWater Inc achieved 85 % ROI in investing blogging, Wiki and social networking platform for internal collaboration. By means of the wikis, over 400 product features were described as a response to customers' requests [51] (1) (R)	Sharing ideas on commercialization and obtaining feedback from customer [63] (1) (U), OSIsoft improved the solving time of customer problems by 22 % by sharing customer service info using Wikis [37] (2) (U)
Mashups	Mashups in improving customer enhancement requests. [56] (2) (R)		Mashups in improving, customer service and product trials. Significant savings in product deployment. [56] (2) (U)
Social / professional networking tools			Gaining more detailed information about prospects [42] (1) (B), enhanced B2B prospecting [31] (2) (B), Over 300 customers have joined the GoodWater social network, over 1 000 employee-customer interactions being recorded, with more than 50 % of the customers started interacting with each other [51] (1) (U)
Online communities	Dell: IdeaStorm box gathered more than 14 000 ideas from customers, with more than 89 000 comments, of which Dell has implemented over 400 ideas [31] [58] (2) (R). RidgidForum community's product ideas lead to product enhancements for RIDGID Branding [31] (2) (R).	Reducing time-to-market and NPD budgets by engaging customers as innovation agents [16] (1), LabVIEW Idea Exchange helped R&D to prioritize product ideas submitted by customers [31] (2) (C). TechSmith received hundreds of product development ideas with over 700 actively engaged users [65] (2) (C), The SAP Community Network has more than 2 million users participating in sharing and co-creating knowledge on SAP's products and services. [19] (1) (C), Innovation contest by Bombardier aimed at identifying new interior designs for trains resulted in 2 232 participants, 4 298 designs, 26 617 ratings and 8 562 comments. [32] (1) (R) (C)	Better customer care through peer support and feedback [42] (1) (U). RidgidForum community's value to customers has lead to measurable benefits in customer loyalty. [31] (2) (B) (U)

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