

Social Media Analytics in Customer Service: A Literature Overview

An Overview of Literature and Metrics Regarding Social Media Analysis in Customer Service

Volker Stich, Roman Emonts-Holley and Roman Senderek

Institute for Industrial Management, RWTH Aachen University, Campus-Boulevard 55, 52074 Aachen, Germany

Keywords: Social Media Analytics, Web Analytics, Key Figures, Social Media, Social Networks, Metrics, KPI, Key Performance Indicators, Balanced Scorecard.

Abstract: The main problem with social media analytics is not the abundance of measurable metrics but the lack of a coherent structure or overview that describes and organizes metrics in order to make them useful for the customer service of organizations. Thus, this paper aims to organize and categorize key performance indicators (KPI) for social media on the one hand and provide a literature overview about social media in customer service on the other hand. The KPI are grouped into six categories *customer experience, customer interaction, customer activation, customer satisfaction, reach and finance* and the literature is evaluated by three criteria. The three criteria are: *social metrics, multidimensional variables and evaluation of financial benefit*. Our evaluation identifies a research gap in the social media applied in customer service. The first results concerning the researched KPI show that a large amount of metrics is available, but only a few of them are actually currently applied by companies to evaluate their customer service.

1 INTRODUCTION

Nowadays, companies are trying to use social media to reach their customers more effectively. On the one hand the application of social media can be cheap and easy to implement (every company is able to use most social media channels (facebook, twitter, etc.) for free. On the other hand it is difficult to evaluate and analyze the actual effects of this effort, i.e. estimating the impact of a specific measure is not trivial. In this paper we will consolidate and connect different already existing approaches of analyzing and clustering data related to the application of social media in the customer service. We will evaluate which key figures are useful for customer service and therefore should be used to estimate the value of a company's social media activity. We want to emphasize that we will conduct a literature overview and start to categorize the useful key figures regarding social media in the customer service. A balanced scorecard will not be the result of this paper because that would go beyond the restrictions of this paper. This paper aims to set the theoretical framework for future research in social media analytics for customer service

The paper is structured as follows: First, we will

shortly discuss whether a similar overview of the existing approaches has already been given before. If so, what makes our paper different? Chapter two explains the applied method of research and presents the results. The third chapter discusses and reviews these results critically. In the critical review of our research we conclude that it is near impossible to gather every available variable. The final chapter summarizes the paper and indicates further research perspectives. For further research we recommend developing a method based on the research of this paper. This method should include the theoretical framework for a comprehensive balanced scorecard regarding customer service for social media.

Comparison to Related Work

There are already several literature overviews which social media metrics or KPI exist and how they can be used for specific industries (tourism, libraries, etc.) (Leung et al., 2013, Michaelidou et al., 2011) or certain social media channels (Eysenbach, 2011, Haustein et al., 2014). In addition to that some paper group metrics and KPI, but lack an application focus (Peters et al., 2013, Michaelidou et al., 2011).

But so far, none of these papers provide a summary of measurable key figures for the use of social media

in the customer service sector. Therefore, metrics to measure social media impact in customer service will be summarized and analyzed in this paper for the first time.

2 RESEARCH IDEAS AND RESULTS

In order to gather as many existing studies on the topic of social media impact as possible, the following research method was applied:

1. Find articles or books related to the following key words (in English and German) as well as combinations of them:
 - a. social media
 - b. social network
 - c. analysis
 - d. metrics
 - e. key figures
 - f. key performance indicators (KPI)
 - g. return of investment (ROI)
 - h. compass
 - i. radar
 - j. balanced scorecard
 - k. influence
 - l. controlling

This research was done with the help of different online databases, mainly *Google Scholar*, *EBSCOHOST* and *Web of Science*. Our initial database search identified 323 titles from which we selected 111 for abstract review, after removing evidently irrelevant titles. By reviewing abstracts, we selected 182 articles for full-text review. 24 of those went into Table 1 where we put them through the following steps:

2. Import all files into a database. Read and skim every file (study, essay, review), extract and note its general idea and purpose
3. Categorize the literature by topics or described metrics. Following this step, the used literature was divided into these three research approaches:

Social Media: This research approach contains literature that deals with the use of social media in general.

Customer Service: Sources that specifically deal with customer service are categorized in this approach.

Balanced Scorecard: This category contains papers and studies that consider a wide array of variables

and target dimensions. These contributions are mainly focused on measurement of key figures of different types.

After this categorization, all sources were rated, which lead to step four:

4. Rate the sources by the following three criteria:

Social Metrics: This criterion describes if and how detailed the studies and essays cover social metrics, i.e. if there is a scientific approach to define and measure key figures related to social media.

Multidimensional Variables: This criterion checks if the article uses one or multidimensional objectives to evaluate the social media metric (multidimensional variables are combined metrics).

Evaluation of Financial Benefit: This is one of the most interesting and important criterion for organizations: We evaluate whether the article deals with impact of social media regarding financial aspects.

To understand the key words used in the literature we found, and how a balanced scorecard works, we visualized it (Figure 1).

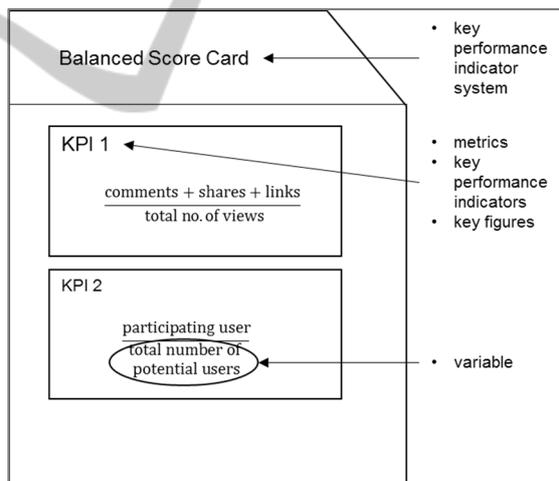


Figure 1: Difference between BSC KPI and variables.

Figure 1 depicts the difference between key words used synonymously in literature. A balanced scorecard (BSC) or key performance indicator system is a tool companies can use to evaluate performance of different types. For that to work there are different KPI (key performance indicators) also called metrics or key figures which inherit different variables. The KPI present numerical values which are incorporated in the BSC. For the calculation KPI are weighted depending on their impact.

In the following paragraphs we will discuss the ten most cited sources, which can be found in Table 1.

Bock, who holds the position of Head of Social Media Marketing and Service Internet at Telekom Germany GmbH, significantly supported the construction of the social media based customer service portal *Telekom helps*. His paper explains the use and implementation of this specific social media customer service in great detail. However, the approach has a strong reference to the specific application at Telekom Germany GmbH and therefore is only partially transferable to other companies. For the implementation of the described social media strategy, Bock proposes a SWOT analysis and various key performance indicators (KPI), but does not describe a coherent social media monitoring system. On a financial level BOCK does consider the costs, but fails to take the financial value of the social media measures into account (Bock, 2012).

Another important source is the work published by Weinberg (Weinberg et al., 2012). She looks at the contribution of social media from a marketing-oriented point of view and gives an overview of adequate strategies for different social media channels. Approaches to social media monitoring are discussed in this paper, but they are not transferred into business-relevant metrics. A number of tools for social media analysis, even some free of charge, are explained. The need for a multi-dimensional target system is recognized and discussed for the potential development of a social media ROI. (Weinberg et al., 2012).

One of the most promising approaches that can be attributed to both strategy development in the field of social media and the definition of a social media ROI is provided by Blanchard (Blanchard, 2011). His work presents a social media program with different approaches to the assessment of social media value and is based on a very detailed structure. Subsequently he tries to convert this program into actual quantifiable metrics. Blanchard argues that a social media ROI can be determined on the basis of the financial impact (Blanchard, 2011). In order to achieve this, social media costs are set in relation to changes in sales and profits, opportunity costs and changes in the social media monitoring indicators such as the number of Twitter *followers*. Although this is by far the most comprehensive approach, some questions remain unanswered, because Blanchard's approach is based on linear and independent causal relationships, i.e. the calculation is still based on a number of assumptions (Blanchard, 2011).

A very good overview of the previously established measurement approaches and their calculations can be found in the works of Owyang and Lovett (Owyang and Lovett, 2010). However, the authors describe a more general approach to the problem without adding a superordinate theme to the metrics they describe (Owyang and Lovett, 2010).

A different but also very comprehensive consideration of possible social media metrics provides Sterne in his post (Sterne, 2010). He explains his definitions and calculations by pointing out that every company should define its own personalized KPI. But he does not develop a multi-dimensional target system or determines a financial contribution to the value, which weakens the overall use of the paper. Nevertheless STERNE does point out the complexity of the effects of social media use, and explains that these cannot be quantified in his opinion (Sterne, 2010).

In her book, Kelly first describes the development of the social media monitoring for various marketing-oriented perspectives. She describes figures for customer service, in particular customer loyalty. While she discusses the calculation of ROI for sales-related social media, insights about customer service related financial measurements are lacking (Kelly, 2012).

A paper that focuses on the financial value of a fan or follower was published by Sponder (Sponder, 2011). His calculation provides a low accuracy and can only be considered as a rough estimate. To control the use of social media, Sponder describes various scorecard approaches that only focus on the practical usage, but neglects the repercussions on other business sectors.

In his study of call centers Jaiswal concludes that it is mainly operational KPIs that are measured in call centers, whereas evaluation of service quality is often neglected (Jaiswal, 2008).

Furthermore, Feinberg questions efficiency metrics, as these have little impact on customer satisfaction (Feinberg et al., 2000). Accordingly, he recommends measuring the quality of service from a customer point of view.

Kim and Kim (Kim and Kim, 2008) uses company performance, customer, process and infrastructure in their BSC. Profitability and value of an organization are considered in the company's performance. The customer perspective considers customer loyalty, customer satisfaction and customer value. The procedural level considers all activities associated with the acquisition of new customers, customer retention and expansion of existing business relationships. The infrastructure perspective is

divided into four subcategories: IT, human capital, strategic direction and corporate culture (Kim and Kim, 2008).

- IV. Customer activation
- V. Reach
- VI. Finance

Table 1: Literature overview.

Research approach Social Media	Social Metrics	Multidimensional Variables	Evaluation of financial benefit
BOCK, 2010	◐	◐	◐
ASSMANN U. ROBBELN, 2013	◐	◐	◐
BACK ET AL., 2012	◐	◐	◐
DORFEL U. SCHULZ, 2011	◐	◐	◐
WEINBERG ET AL., 2013	◐	◐	◐
BLANCHARD, 2012	◐	◐	◐
FIEGE, 2012	◐	◐	◐
OWYANG U. LOVETT, 2010	◐	◐	◐
LOVETT, 2011	◐	◐	◐
WERNER, 2013	◐	◐	◐
STERNE, 2010	◐	◐	◐
KELLY, 2012	◐	◐	◐
HOFFMAN U. FODOR, 2010	◐	◐	◐
ETLINGER, 2012	◐	◐	◐
SPONDER, 2011	◐	◐	◐
Research approach Customer service			
ANTON, 1997	◐	◐	◐
FEINBERG ET AL., 2000	◐	◐	◐
CHEONG ET AL., 2008	◐	◐	◐
JAIWAL, 2008	◐	◐	◐
IRRGANG, 2009	◐	◐	◐
DIN EN15838	◐	◐	◐
Research approach Balanced Score Card			
KAY, 2003	◐	◐	◐
KIM ET AL., 2003	◐	◐	◐
KIM U. KIM 2008	◐	◐	◐



Figure 2: categories for social media metrics.

The overview in table 1 shows that none of the examined papers considers all three aspects of social media metrics and impact equally. We researched further and checked each article for the specific key figure and compared them individually to each other.

We specifically looked at sources that contained a conclusive number of metrics relevant to social media and summarized the metrics and key figures in the Tables of the following chapter. To gain a better understanding of the number of metrics it was necessary to categorize the key figures in different groups, which will be explained in the respective paragraph.

We subdivided the social media metrics for customer service into a total of six categories:

- I. Customer experience
- II. Customer interaction
- III. Customer satisfaction

Though customer experience is rarely considered as a separate construct in the marketing literature and is often included in the measurements for satisfaction (Parasuraman et al., 1985, Parasuraman et al., 2001, Verhoef et al., 2009), we believe that customer experience needs to be accounted for evaluating the success of applying social media in the customer service. This can be underlined by the contributions of Holbrook and Hirschman (Holbrook and Hirschman, 1982) and Berry et Al. (Berry et al., 2002).

The second category customer interaction focuses on the level customers engage themselves in the communication process. Here the included measurements shed light on the engagement customers' exhibit by communicating concerning a topic via social media. Our construct is thereby related to the customers' engagement value by Kumar et Al. (Kumar et al., 2010).

Closely related but focused on the activity level of customers in taking on responsibilities for the company we set up customer activation as a measurement for the success of the social media use in customer service. An actual benefit of the social media application can only be reached if customers actively participate and create contents themselves. Thus we follow here the reasoning by Kellogg et Al. who even before the emergence of social media already argued that customer participation is central to the service success (Kellogg et al., 1997). Newer literature like Kärkkäinen stresses the importance of considering the level of interaction as a measure for

the success of the so called “social Customer learning” (Kärkkäinen et al., 2012).

Finally we consider the classic concept customer satisfaction according to the service dominant logic (Parasuraman et al., 1985, Anderson et al., 1997). It has been proven that customer satisfactions positively affects customer loyalty and thus repurchase rates (Flint et al., 2011). We consider the concept of customer satisfaction as the overall evaluation based on the total purchase and consumption experiences with a service over time (Fornell et al., 1996).

Adding up the four aforementioned dimensions customer experience, customer interaction, customer activation and customer satisfaction we can describe the customer perspective fully. However we need in future to evaluate our concepts and to determine whether these concepts are sufficiently disjoint and not correlated.

Furthermore we consider finance related metrics as an important factor to determine the success of the social media use. Since these metrics are however difficult to measure and many repercussions of social media cannot be detected by financial measures we accept that it could give us only limited insights. Going back to the discussion whether there is an ROI for social media (Etlinger et al., 2012, Kelly, 2012, Spillecke, 2013) we argue that it can give us only limited insights and needs to be combined with the aforementioned customer perspective,

Finally we see reach as an important indicator for the success of social media application in the customer service. As long as a social media supported customer service does not achieve a sufficient reach, no positive impact on the customer service performance can be expected. However reach does not translate immediately in service transactions (Hanna et al., 2011, Kietzmann et al., 2011). Thus reach must be combined with our other dimensions.

2.1 Customer Experience

The first category **customer experience** contains the following metrics (Table 2):

84% of companies believe that the extraction of information on customers, their needs and expectations as well as their perception of products is the most valuable result of social media used in customer service (Etlinger et al., 2012). That is why we chose four metrics which deal specifically with customer sentiment of a subject, idea or product. Customer and user perception can be measured by

semantic analysis tools, which examine the customer comments on its positive or negative word content. Up to this day, special cases such as irony or rhetorical questions are not yet able to be recognized, which is why future improvements are necessary (Sterne, 2010, Lovett, 2011).

From the customer service’s perspective, measuring success in terms of customer satisfaction is of particular importance. The perception of service quality by the customer is also crucial for its future behavior: A customer who is satisfied with the customer service is most likely willing to pay a higher price for a product or service. It is also very likely that a satisfied customer recommends the company and its customer service to other potential new customers, which is crucial for a company’s public image.

2.2 Customer Interaction

The second category **customer interaction** contains seven metrics (Table 3):

Customer interaction is a very important metric for social media because the classic Shannon-Weaver-Communication-Model (Kuhlmann and Sauter, 2008) is replaced with *Many-to-Many Communication* in a social media context (Neeb and Wörnle, 2011). Communication is the key word on which we evaluated the metrics we used in this category. All the metrics deal with communication between company and user or user and user. The interaction between customers and company contains highly valuable information on how customers see a brand, what they think about the company, the product and the company’s services. If a customer approves of these company qualities, it is likely that he forms a stronger brand loyalty, because he will be able to identify himself with the values of the company and is therefore likely to keep on using this specific company’s products and services.

2.3 Customer Activation

The use of social media exchanges between different customers in the form of so-called *digital word of mouth* is becoming more and more important (Altobelli and Schwarzenberger, 2013, Bock, 2012, Esch et al., 2012). This is because a customer’s recommendations and experiences can be read by a large number of people worldwide, who always need to be thought of as potential future customers. High **customer activation** therefore provides organizations with the chance to let customers participate in the performance process and to

outsource tasks (also called externalization) (Bruhn and Meffert, 2012) The outsourcing of tasks means that a customer can, for example, provide so-called *customers help customers services* (Dimitrova et al., 2011) and therefore becomes part of the customer services tasks. The measurement of customer activation can shed light on opportunities of such externalization. The metrics of this category can be found in Table 4.

2.4 Customer Satisfaction

The third category **customer satisfaction** contains the four measurable metrics which can be found in Table 5.

Customer satisfaction is a key determinant of customer loyalty, which in turn can affect the companies' economic success and the ROI (Bruhn and Meffert, 2012). This category focuses on customer service requests. The four metrics we chose deal with effectiveness, efficiency rating and utilization of customer service. Specifically, the resolution of customer requests is examined individually by the KPI *Issue Resolution Rate*, *Resolution Time* and *Social Service Level* in this category. These three metrics should give an excellent overview of the customer service itself.

An increase in the benefit for the customer in terms of customer satisfaction will lead to an increase in the value of the company. ANDERSON even measures this metric specifically: An increase in customer satisfaction by one percentage increases the return on investment (ROI) by 2.31 percentage points. A reduction of one percentage though causes a decrease of the ROI by 5.08 percentage points (Anderson and Mittal, 2000). This means: an increase of any of the variables mentioned in this category implies a certain increase for the ROI of that company.

2.5 Finance

In addition to strengthening the relationship between customers and businesses, generating more sales is always a fundamental goal of social media use in the field of external corporate communications (Etlinger et al., 2012). The financial metrics (Table 6) provide information about the company's profitability. The costs for social media marketing tools are easy to calculate, but revenues generated by social media are rarely precisely quantifiable. A broad social media appearance often contributes indirectly to a company's turnover, for example by strengthening the company's positive public image.

2.6 Reach

The category **reach** provides information on how many users can potentially be reached with social media and a specific social media channel as well as the speed with which a digital contribution is spread by social media users. For this category we chose five metrics (Table 7).

By choosing these KPI we try to get an overall estimation about how many customers and potential customers are reached at the current moment and about how many customers potentially can be reached. Furthermore the KPI and variables interact and influence each other. The KPI *Reach* can also be found in the KPI *Velocity* but in a different circumstance. For *Velocity* the *Reach* needs to be already calculated because it is a variable for the calculation of *Velocity*.

To use social media channels more efficiently and to investigate which channel is the optimal one for the aimed purpose, it is essential to be able to determine key figures such as *the Share of Voice*, *Unique Contributors*, *Reach*, *Velocity* and *Virality*, as shown in table 5 (Lovett, 2011).

Table 2: Customer experience.

Metric	Description	Formula
Sentiment Type	Absolute number of positive, neutral or negative statements about a subject (Product, Brand etc.) (Weinberg et al., 2012, Fiege, 2012, Sterne, 2010 77ff.).	number of positive (neutral, negative) references
Sentiment Ratio	The ratio of positive (or neutral / negative) comments compared to the total number of statements on the matter. This metric defines the overall opinion of users on a topic (Lovett, 2011, Owyang and Li, 2011, Sponder, 2011, Kelly, 2012, Dörfel and Schulz, 2011).	$\frac{\text{posit. (neutr., negat.) references}}{\text{all references}}$
Topic Trends	Percentage of how often a specific subject is mentioned in a relevant segment. This metric allows for an early identification of trends (Owyang and Lovett, 2010, Lovett, 2011, Greve, 2011).	$\frac{\text{number of references of the subject}}{\text{all references in the relevant segment}}$
Idea Impact	Acceptance / enthusiasm of the interacting user for an issue or an idea (Owyang and Lovett, 2010, Lovett, 2011, Greve, 2011).	$\frac{\text{number of positive references}}{\text{number of all referenc}}$

Table 3: Customer interaction.

Metric	Description	Formula
Conversation Buzz	Measure of the reactions (answers, likes, tweets, etc.) published on an issue (Fiege, 2012).	number of reactions to a topic
Conversation Volume	Scope of user interests in the dialogue at all (Fiege, 2012).	number of posts in involved social media
Engagement	Estimate of the degree and extent of a person's interest in a topic. (Lovett, 2011, Werner, 2013)	user × time × comments × shared content
Audience Engagement	Proportion of visitors who actively participate in a marketing campaign by commenting, sharing or forwarding. (Owyang and Lovett, 2010, Lovett, 2011, Greve, 2011, Dörfel and Schulz, 2011)	$\frac{\text{comments} + \text{shares} + \text{links}}{\text{total no. of views}}$
Conversation Reach	Scope of the dialogue: ratio of participating users to the total number of potential users (Owyang and Lovett, 2010, Fiege, 2012) (Dörfel and Schulz, 2011).	$\frac{\text{participating user}}{\text{total number of potential users}}$
Interaction Rate	Percentage of users who access content and interact with it. (Lovett, 2011)	$\frac{\text{views}}{\text{activity}}$
Conversion Rate	Specifies how many prospective buyers become buyers. (Lovett, 2011, Peterson, 2004)	$\frac{\text{number of goal achievement}}{\text{visits}}$

Table 4: Customer activation.

Metric	Description	Formula
Active Advocates	Expresses how many advocates of the brand (product, etc.) were active in a fixed period of time and recommended the product / service. (Owyang and Lovett, 2010, Lovett, 2011, Greve, 2011, Dörfel and Schulz, 2011)	$\frac{\text{active advocates in a fixed period of time}}{\text{total number of advocates}}$
Advocate Influence (Level of Influence)	Assesses the impact of an advocate statement on the opinion of others. (Owyang and Lovett, 2010, Fiege, 2012, Lovett, 2011, Greve, 2011)	$\frac{\text{unique advocate influence}}{\text{total advocate influence}}$
Advocacy Impact	Specifies the effect of the contributions of active advocates on others. (Owyang and Lovett, 2010, Lovett, 2011, Fiege, 2012).	$\frac{\text{number of advocacy driven conversions}}{\text{total volume of advocacy traffic}}$

Table 5: Customer satisfaction.

Metric	Description	Formula
Issue Resolution Rate	Evaluates the effectiveness of social media use. (Owyang and Lovett, 2010, Lovett, 2011, Fiege, 2012, Greve, 2011)	$\frac{\text{satisfactorily answered service requests}}{\text{total number of service requests}}$
Resolution Time	Shows efficiency of the social media service. (Owyang and Lovett, 2010, Lovett, 2011, Fiege, 2012, Greve, 2011)	$\frac{\text{total response time to service requests}}{\text{total number of service requests}}$
Satisfaction Score	Percentage of customers who gave a certain rating (positive, negative, neutral) for content / a feature (Owyang and Lovett, 2010, Lovett, 2011).	$\frac{\text{customer rating(A, B, C ...)}}{\text{total number of customer ratings}}$
Social Service Level	Measure of the efficiency and utilization of social media customer service (Etlinger, 2011).	$\frac{\text{resolved service requests per time}}{\text{total number of open service request}}$

Table 6: Finance.

Metric	Description	Formula
Average Cost per Visitor	Average cost per acquired visitors. This includes not only cost of acquisition but also includes payments for banner advertising, television advertising, etc. (Peterson, 2006).	$\frac{\text{sum of acquisition marketing cost}}{\text{number of visitors}}$
Average Cost per Visit	Average cost per visit by an acquired visitor. (Peterson, 2006)	$\frac{\text{sum of acquisition marketing costs}}{\text{number of visits}}$
Average Revenue per User	Average revenue per user. (Deloitte, 2010, Peterson, 2006)	$\frac{\text{sum of revenue generated}}{\text{number of visitors}}$

Table 7: Reach.

Metric	Description	Formula
Share of Voice	Relative number of references of its own brand in proportion to the number of all reference to a brand in a defined competitive environment. (Owyang and Lovett, 2010, Fiege, 2012, Werner, 2013, Lovett, 2011, Bock, 2012, Weinberg et al., 2012, Sponder, 2011, Schmitz-Axe et al., 2012, Kelly, 2012, Dörfel and Schulz, 2011).	$\frac{\text{references of own brand}}{\text{all references in a defined competitive environment}}$
Unique Contributors	Total number of participating users (regardless of the number of accounts). (Lovett, 2011).	total number of participating users
Reach	Estimation of the potential audience size. (Lovett, 2011, Sponder, 2011).	number of direct users × network of users
Velocity	Indicates how quickly and to what extent news spread on the Internet. (Lovett, 2011)	reach × time
Virality	Expresses how quickly and to what extent a discussion is spreading. (Fiege, 2012, Werner, 2013)	$\frac{\text{number of threads to a topic}}{\text{time}}$

3 CRITICAL ANALYSIS

The research in this paper shows that the already existing literature on the topic of social media provides a number of metrics and key figures for the use of social media in customer services. These need to be categorized in order to develop an adequate balanced scorecard. The given summary was researched in great detail, but it is impossible to claim that every social media metric was analyzed and categorized. This is due to the fact that new ways of data capturing are invented almost on a monthly basis.

The six categories which were established in this paper are based on an analysis of the service and social media literature. It is planned to translate the framework by applying simulation modelling into a standardized model which empirically proves the developed concept. However this would go beyond the constraints of this paper. This is why we strongly recommend further research on this topic. We are fully aware that developing an empirical model could lead up to some changes in the categories and assumed cause and effect relationships. Our aim in this paper was to present a first guideline for developing a customer service scorecard for the use of social media.

4 CONCLUSIONS AND FUTURE RESEARCH PROSPECTS

The key figures in the current literature should enable companies to evaluate their social media use. However, the allocation of the indicators is not yet structured, which among other things is reflected by the fact that up to 90% of companies which are

currently using social media claim that they are not able to rate how useful their social media work actually is (Conrad Caine GmbH and Universität St.Gallen - Institut für Marketing, 2011, Spillecke, 2013, Bock, 2012).

The existing literature is already well fit to develop some first assumptions developing a balanced scorecard for applying social media in customer service. This paper lays the groundwork for future research in terms of literature overview and categorization. How and to what extent these metrics, KPI and variables influence each other and how the scores should be calculated are the questions which should be answered by future projects.

For future research it is advisable to develop the model further on the research done in this paper.

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