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Прочитайте статью¹ и сделайте её критический анализ на русском языке.

Introduction

A good reputation is one of the central success factors for being accepted as a voice in public discourse and – regarding companies – also for being economically successful. This is widely accepted among both communication practitioners and scientists. But in practice there is often a diffuse understanding of reputation, which begins with a correspondingly vague use of the term. Reputation is often equated with image or reduced to elements such as credibility. Although both aspects play a central role when it comes to reputation, they are only partial features of the underlying concept.

The reputation of an organisation is a complex construct that is based on a range of factors. There are varying definitions and understandings of reputation in science, often depending on the different disciplines in which they have been developed. In communication science and in academic research concerning corporate communications, the concept developed by Fombrun in the late 1990s is widely used and accepted. He defines reputation as “the overall estimation in which a company is held by its constituents” (Fombrun, 1996, p. 37) and further as “a perceptual representation of a company’s past actions and future prospects that describes the firm’s overall appeal to all of its key constituents when compared with other leading rivals” (Fombrun, 1996, p. 72).

According to this definition, reputation can be understood as an aggregate of different images among different stakeholder groups. The reputation of an organisation is thus made up of the images it projects among the various relevant stakeholders. The strength of this understanding of reputation stems from the fact that it clearly distinguishes reputation from the concept of image and at the same time establishes it as a superordinate, collective construct. Still, the individual images may vary: a company may be appreciated by customers for its good products but at the same time criticised for its behaviour towards employees.

Aula and Mantere (2008) have made the presumption that a good reputation develops in a triad of good deeds, good communication, and good relations. These dimensions show that reputation is formed by past actions both on the factual and on the communicative level. From the perspective of the stakeholders, reputation is the empirically based assessment of past behaviour that has one essential benefit: it enables probable future behaviour to be assessed. Luhmann (1973, pp. 23 ff.) understands trust as a risky investment – and reputation is the basis on which stakeholders decide whether to invest or not. Therefore, stakeholders first draw on their own personal experience in their risk–benefit considerations. If they have no experience of their own, external experiences and assessments are used.

This has always been the case, but the changing media landscape and the rise of the Internet and social media have changed the way reputation is formed. These new channels allow much easier access to information about the experiences of others with a certain organisation. Moreover, they make not only the experiences of people from the same stakeholder group more easily accessible but also those of other stakeholder groups. Therefore, the different stakeholder

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dimensions increasingly influence each other: images that function in isolation in individual stakeholder groups are becoming the exception, whereas the perception of the collective, holistic reputation is rising.

The current state of reputation management and the influence of online communications

Since a good reputation is based among other things on “good deeds” according to Aula and Mantere (2008), this concerns the good conduct of the company – and thus the good conduct of management personnel and employees. This understanding is matched by a survey conducted by news aktuell. According to their findings, in 47% of companies initiatives aimed at enhancing the company’s reputation could be ascribed to the executive board and/or management, which bear the responsibility for good conduct on the part of all management personnel and employees (news aktuell and Faktenkontor, 2015, p. 13). There is also a disparity between the strategic claim and operative implementation of reputation management: a total of 99% of the communicators surveyed confirm that a good reputation is very important or important for entrepreneurial success (p. 3). Yet, a strategy for reputation development exists in only 58% of the respective companies (p. 8). The executive board and/or management of only 45% of the companies receive regular reporting on progress in reputation management (p. 23). And only a modest 24% of those surveyed report that reputation measurement occurs on a regular basis (p. 28). A cause for this may be that reputation measurement in many companies is based on market research, which is complex and entails considerable costs.

While the aforementioned study thus attributed the role of the central reputation driver to management, Einwiller et al. (2010, p. 311) came to the conclusion that reputation is strongly dependent on product and service quality. Depending on interests and demands, and possibly also on the sector, the prioritisation of image dimensions obviously depends on a range of individual factors and associations (Veh et al., 2019, p. 315). In this context, the evaluations, perceptions and the respective associations that are linked at the societal and individual level to individual characteristics attributed to an organisation also play a decisive role (Einwiller, 2013, p. 293). From this it can be concluded that reputation is anything but a stable construct, but rather inclined to be fragile and not very constant (Kaulet al., 2015, p. 459), as it is not only composed of the different attitudes of all relevant stakeholders (Einwiller, 2013, p. 293), but is also subject to social developments and changes in social values.

In Carroll’s view (2013), communication in particular must be considered as another influential perspective. Consequently, Carroll (2013, p. 4) defines the reputation of a company as “a widely circulated, often repeated message of minimal variation about an organization revealing something about the organisation’s nature”. With the help of his AC4ID (actual, conceived, communicated, desired) model (2011, p. 467), he takes up this key role of communication in reputation building. He also elaborates the significance of the various channels that have an influence on a company’s reputation. In addition to communication by the company itself and the ability of management to use the power of language in a targeted manner (O’Rourke, 2013, p. 1), a company’s reputation is influenced by many other external sources outside the company’s sphere of influence, including the vast number of social networks.

The considerations of Aula and Mantere (2008, p. 179) are interesting in this regard. They ascertain that the company’s own reputation does not really lie in the hands of the company itself, since it results from communication in networks both within and outside of the company – and thus to a large extent outside of the company’s own direct sphere of influence. Its reputation thus lies in the hands of an abundance of third parties. Lee (2015) found that each platform is subject to its own rules and circumstances and, accordingly, each contribution must be adapted to the channel’s requirements.

Especially against the background of the changing media landscape, the boundaries between the online and offline world are becoming increasingly blurred. Nearly every piece of information is shared, every post is commented on, and day after day data is sent around the world in large quantities (Szwajca, 2017, p. 162), so that virtually anyone can become a journalist with the help of their smartphone (Kaul et al., 2015, p. 470). It thus becomes clear that social media and their massive use have led to a transformation of the business and communications world. It is therefore all the more crucial for companies to recognise this change and react accordingly (Kaul et al., 2015, p. 455).

This is underlined by the fact that the proportion of people who use social media in Germany is 76% (IMWF Institute for Management and Economic Research et al., 2017, p. 15). Hence, it becomes evident that communication in the real world finds its mirror image in the virtual world: print media corresponds to online media. Currently, most people communicate with personal reference groups on Facebook, Instagram and Twitter. Moreover, forums and blogs have been established as well-recognised guides and technical information sources.

As a consequence of this development, O'Connell (2010, pp. 2 ff.) already reported several years ago that traditional surveying methods no longer function. In the case of policy surveys, traditional telephone surveys are already diminishing in their importance. As a cause, O'Connell assumes that people are becoming less and less accessible via landline numbers. The interviewers barely succeeded in achieving a good random sample. The increase in importance of social media could be the key to cheaper and more precise results, O'Connell states with reference to a report by PwC analyst Rao (2015, p. 1). It may be assumed that this statement holds true beyond political communications. Paying attention to the dialogues around the company and using the knowledge gained from this represents a new approach to the reputation management of a company (see Carroll, 2013, p. 4; Kumar, 2015, p. 459) and can be seen as a key future success factor.

Social listening as an analysis method

It should be noted that social listening, social media analytics, social analytics and social media intelligence are often used as synonyms in the discourse among experts (Holsapple et al., 2014, p. 2). Above all, the evaluation of both online media and social media is relevant as a basis for reputation management. Thus, the terms "social media analytics" and "social media intelligence" focus too much on social media in the following regard: classic media also influence the discourse in social media and, therefore, a holistic view on the reputation of a company on the Internet needs to go beyond social media. Thus, journalistic reporting in online media should also be considered when analysing the company's reputation online, which makes the broader terms "social listening" and "social analytics" much more suitable. However, these terms describe two successive steps required for information processing for reputation management: first, statements on the Internet are collected – the listening – and second, the analytic consolidation takes place – analytics.

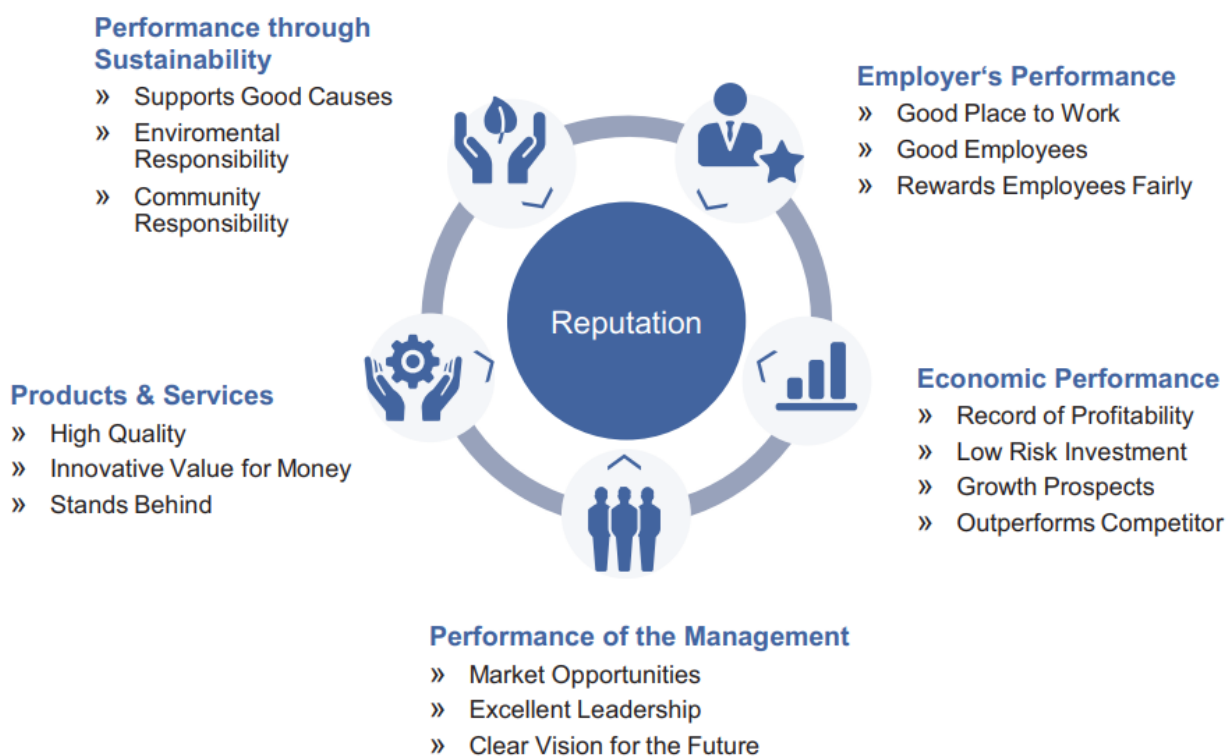
It can be observed that Internet-based communication analyses are used particularly in market research and with the purpose of obtaining customer insights (Chui et al., 2012, pp. 38–39). Moreover, with regard to the importance of social media analytics for reputation management, Aula (2010, pp. 45 ff.) explains that social media play a crucial role in the reputation of companies. Poynter (2010) sums it up nicely with "Listening is the new asking", thus stressing that the analysis of online conversations is crucial for understanding the reputation of organisations.

The continuously increasing number and availability of Internet sources in the context of "big data" and the "data deluge" provide valuable information on consumer decision-making,

psychology, culture, opinion leadership, the development of consumer communities, understanding of social media firestorms and WOM communication. In order to handle the problem in terms of the “data deluge”, a change in the analysis methods used is also necessary (Humphreys and Jen-Hui-Wang, 2018).

Social listening study

In order to test to what extent social listening can measure the reputation of companies using the model explained, an approach with a broad data basis was chosen which also takes into account the specific strengths of social listening, because the evaluations refer to a data set that cannot be evaluated practically by traditional means. All identifiable online statements concerning the 5,000 German companies with the highest number of employees were defined as the basis.



The adapted reputation model for social listening is shown on the Figure.

The prerequisite for social listening is the so-called crawling of websites, which uses search terms to find statements from online communications about the respective companies in order to store them in a database in a second step. Due to the large number of Internet sources that can be read by search engines at present, this technology is in principle a very mature, common and widely used process.

The database generated for the study is based on the crawling of 350m online sources (online media, forums, blogs, communities, Twitter, Facebook, etc.) and covers almost the entire online communication in the German-speaking world concerning the 5,000 German companies. The statements identified in this way were then analysed with the help of AI and processed for the subsequent reputation analysis. A total of 30m statements were evaluated for the purpose of the study. In the process, the contributions were separated by AI into individual statements and each sentence into its individual fragments in order to be able to evaluate statements in a post that is topic-specific.

An online report on a press conference of a listed company, for example, is therefore divided into several statements if the text reports on several topics, for example, on economic

development, measures to improve the quality of employers and a new sustainability initiative of the company. The individual statements are then analysed by different AI instruments. In this case, there are five different tools that identify the five reputation dimensions and one AI tool to determine the tonality. To determine tonality, the AI tool uses a corpus of signal words with which it has been “trained” to correctly recognise and interpret evaluations. As soon as a statement has been examined by the AI instruments, the data set is supplemented by information on the reputation dimension and tonality addressed.

Basically, the category system for content analysis based on AI consists of two main types. On the one hand, it includes the object of reporting – the entity – which in this specific case is the company under observation. On the other hand, it includes the event type, in this case the dimension of the reputation model to be examined. Then the tonality of the statement is determined.

In order to obtain relevant data, it is necessary to define the specific characteristics and coding schemes for both types in advance. Using concrete terms as well as additional spellings, “sentence killers”, invalid URLs and possibly Facebook pages, it is possible to determine the respective entity quite reliably. Within the framework of this event type matching, comprehensive text corpora are created for the event types sought on the basis of which an AI tool, a so-called “neural network”, is trained. This network stores typical patterns for each event type and learns to assign new text fragments to the events using specific probability algorithms. Even complex sentences with several events can be analysed in this way. To ensure that content and tonality are correctly categorised, the AI tool’s error rate was controlled by manual intervention. The examination of 1,500 fragments revealed an error rate of between 8 and 18%.

For the present studies, a combination of rule-based analysis and deep learning in AI was applied due to the complexity of the text content. In the neural network, rule sets are developed through continuous training with sample data sets in order to correctly answer the underlying questions with the highest possible probability. The sets of rules in the neural network cannot be understood from the outside, so that no transparency can be established in the scientific discourse. A neural network consists of several layers of nodes. In the evaluation of a statement, a decision path is chosen within this multi-layered node system. The path depends on probabilities that the AI forms in the individual nodes based on extensive test data. There is therefore no classic set of rules for a decision by the AI. Ultimately, AI is only a technological aid to be able to encode large amounts of data. Since the training data sets were coded manually and the quality of the AI was checked manually, the analysis result of the AI within the error tolerances corresponds to that of a manual coding.

In order to make the reputation of a company measurable, an individual score can be determined for it. This score is made up of evaluations of the individual reputation factors and can be calculated using the following three criteria:

(1) Ratio of the number of positive and negative mentions in each category and the number of neutral mentions in each category

(2) Ratio of the number of positive and negative mentions in each category to all mentions in each category

(3) Ratio of the number of positive and negative statements in all statements compared to the proportion of positive and negative statements concerning all companies investigated; this helps to identify if the conversations are extraordinarily emotional. If the discussion is positively emotional, this is positive for the reputation rating. If, on the other hand, the conspicuously strong emotional discussion is negative, this has a negative impact on the reputation rating.

The resulting five individual scores are then consolidated into an overall reputation score. First of all, the calculation follows the basic assumption that not only do the individual tonality balances of the respective dimensions, that is, the general sentiment, play a role, but also – as

the agenda-setting theory (e.g. Carroll and McCombs, 2003) suggests – the general visibility of a company on the Internet makes a decisive contribution to building its reputation. The procedure for determining the overall score on the basis of weighted or unweighted individual scores is based on the PSM method (points sum method) or index method, which, due to its simplicity, has become established to a large extent in the form of a multivariate procedure within the framework of social science research for measuring complex variables (Kladroba and von der Lippe, 2004, p. 115ff).

Since it can generally be assumed that the individual dimensions make different contributions to the development of an overall reputation, the weightings were determined with the help of a correlation matrix. Based on the Pearson correlations calculated with SPSS, the respective arithmetic means for the individual dimensions and thus the weighting for each individual dimension could be derived. The exclusion of outliers, which were mainly found on the “Employer Performance” dimension, was waived for reasons of content. The exact procedure is explained as follows:

Basis for the index calculation:

- (1) The visibility of a company = number of reputation-relevant statements
- (2) The tonality of the statements = positive/neutral/negative

To calculate the index, the following three values are calculated for each of the five reputation dimensions.

Example: 1,000 total nominations (150 x positive/600 x neutral/250 x negative), of which 300 nominations are assigned to the dimension “sustainability”, for example. Of these 300 mentions in the dimension, 50 are positive, 180 neutral and 70 negative. The following is now calculated:

- (1) Tonality and visibility absolute, per dimension

Balance of the number of positive and negative nominations and the number of neutral nominations (0.5 times) per dimension

$$\text{Value 1} = 50 - 70 + (0,5 * 180) = 70$$

- (2) Tonality balance in the dimension in relation to the total denominations of the dimension

$$\text{Value 2} = (50 - 70)/300 = 0,07$$

- (3) Tonality balance and visibility in the dimension in relation to tonality balance and overall visibility

Balance of the number of positive and negative mentions and the number of neutral mentions per dimension

$$\text{Value 3} = ((50 - 70)/(150 - 250) + (180/600)) * 100 = 30$$

In the final analysis, the values were normalised to 100 for better comparability and to counteract distortions. In addition, it was possible to avoid small companies being completely displaced by large companies with much higher values. Consequently, a score of 100 indicates an excellent reputation (best reputation of the companies examined, high visibility, positive ratings on all dimensions). The lower the score, the worse the respective company is in the overall comparison of all companies.

In the course of the study, all 5,000 German companies initially considered were analysed with the adapted model and then rated using the procedure presented in the previous section. In this way, a ranking was created, and the 50 companies with the best reputation were identified. Based on these results, it is possible to work out an ideal relationship between the various dimensions in order to achieve a good overall reputation in the public eye. In this way, the correlations form a conceivable foundation for an optimal reputation architecture. This was also used for weighting the individual dimensions when calculating the overall score and is therefore explained in more detail as follows.

Results

All 5,165 German companies initially considered were analysed using the adapted model and afterwards ranked. Thus, the 50 companies with the best reputation scores were identified and the correlation of the five reputation dimensions was then evaluated (see Figure 5).

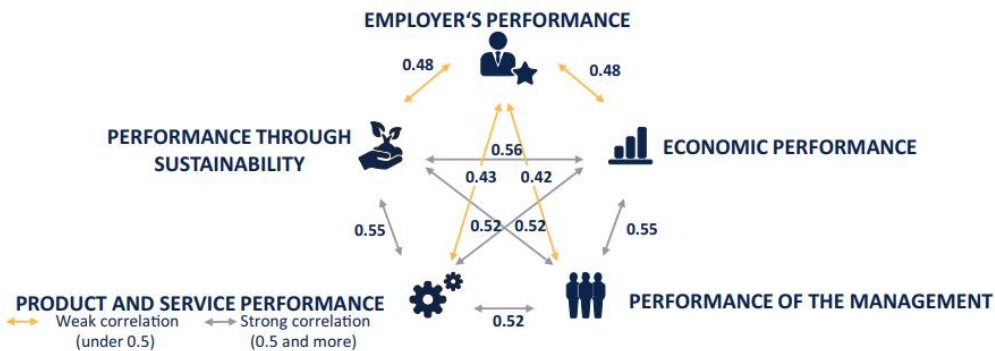


Figure 5.
Optimal reputation architecture of the 50 companies with the best reputations in Germany

Source(s): Own representation

The underlying idea was to find the ideal balance between the different dimensions leading to the best overall reputation. Thus, the resulting correlation matrix with the respective correlation coefficients (according to Pearson) forms the foundation of the optimal reputation architecture.

In total, it is shown that “Employer’s Performance” is rather of secondary importance for the total reputation. Its correlations with other reputational factors are rather weak, lying between 0.42 and 0.48. The management, with better correlations lying between 0.42 and 0.55, however, has a large effect on how the company is perceived, which may be explained by the personification of the company by the CEO. The CEO makes the company more tangible for people, and it is easier to develop emotions towards a person than towards an abstract company.

The importance of sustainability for the reputation can also be clearly seen. At a value of 0.56, the highest correlation is with economic success. Sustainable business is therefore a strong argument for economic performance in the eyes of the public. The second highest correlation (0.55) is with the performance of products and services, which will be driven by consumers’ desire to buy products that are as sustainable as possible.

These correlations were then used to weight the individual dimensions in the calculation of the total value. It was assumed that the influence on the other reputation dimensions would have a corresponding influence on the overall reputation. In concrete terms, the calculation was performed as follows:

$$\text{Overall reputation} = 0.160 \times \text{individual value employer} + 0.23 \times \text{individual value employee} + 0.23 \times \text{individual value product and service} + 0.2 \times \text{individual value profitability} + 0.18 \times \text{individual value sustainability}.$$

Conclusion

The method used shows that social listening can deliver valuable results for research in the field of reputation management and marketing, as it expands the possibilities of investigating reputation on a large scale. The approach shows to what extent scientific research can be expanded beyond classic content analysis, as the number of items which can be analysed exceeds that of classic analytical approaches by far. Explicit and implicit experiences, which are the drivers of reputation, can be systematically recorded and analysed using social listening, thus delivering valuable insights into how stakeholders perceive the performance of a company in different dimensions.

Measuring reputation on the basis of social listening is very important for practical applications in companies, because the data is available digitally and can deliver up-to-date reputation values almost in real time – so that the communication can be aligned very quickly with current events. This is almost impossible with classical market research, and if it is done, then with a high financial outlay. In addition, the reasons for a change in reputation values can be identified immediately in the underlying data sets – that is, causal communication. In classical market research, however, additional surveys are required to determine the causes. This reduces the requirements for professional reputation management in companies, so that the prerequisite is created that more companies than at present will be able to measure and control their reputation.

Questions:

1. What are the main research questions of the article?
2. What are the possible limitations of social listening as a marketing research method?
3. How can social listening be combined with other marketing research techniques?
4. What possible practical applications of the obtained results do you see?