

BIG DATA-BASED STRATEGIC COMMUNICATION

Big data enable strategic communicators to analyse the needs, opinions, attitudes and behaviour of their stakeholders in even more detail. From the planning to evaluation, big data analyses make corporate communication more analytic and potentially more strategic.

BY CHRISTIAN WIENCIERZ AND ULRIKE RÖTTGER

Despite their often-stated potential for corporate communication, studies show that only a minority of corporations and agencies make use of big data applications for their own communication. Communications must be careful not to miss the bus here, especially since disciplines such as marketing have become much more advanced in the field. This is why, in the course of a study funded by the Academic Society for Management & Communication, we interviewed 35 big data and social media analytics experts from enterprises, services providers and the sciences about big data in the field of strategic communication.

Variety as the greatest potential

Big data describes the utilisation of huge amounts of data which have no standardised shape and structure and cannot be handled with the help of standard software and regular database infrastructures. As demonstrated by our results, it isn't the volume of big data but rather its variety and velocity which create added value for strategic communication: any kind of data from any source can be used in a variety of formats and at high speed,

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including text files, photos, data gathered from the Internet of Things, and so on. Corporate communicators use sophisticated listening tools to catch and process the needs, opinions, attitudes and user behaviour of target groups from around the world. By connecting this data to market data they can track evolving perceptions of their companies, brands and products in different countries, and this more or less in real time. Insights gained from big data analyses allow companies to carry out more individualised communications in marketing, public relations and internal communication than in the past (see figure 1 next page). Apart from these general potentials listed in Figure 1, big data also provide added value for the different phases of communication planning.

Big data applications for situation analysis

Big data provide communicators with a broader knowledge base for situation analysis. In this context, share-of-voice analysis based on big data is especially worth mentioning. This improved market and competition analysis provides insights about which share of the online discourse one's own brand or company has in different regions compared to

Marketing communication

According to the interviewed experts, almost all communication with customers will benefit from big data analyses – for example:

- Individual product and brand communication
- Online touchpoint analyses
- Predictive analyses of the spread of product and label messages
- Identification of topics or content marketing
- The processing of voluminous customer data for online marketing, and this almost in real time
- Identification of market shares by way of share-of-voice analyses

Public Relations

In the future, public relations will make even more intensive use of big data for:

- Individual communication with journalists, investors, politicians etc.
- Online touchpoint analyses
- The identification of topics for story telling
- Issues analysis and topical analysis for issues management or crisis communication
- The identification of relevant influencers
- The improvement of reputation management
- Share-of-voice analyses, among others for success measurement

Internal Communication

The possibilities of big data for internal communication are treated rather negligently, despite their huge potential. Such possibilities could include:

- Individual communication with staff members
- Automatised evaluation of internal communications measures
- The perception and understanding of messages
- Usage habits when it comes to internal media and channels

Fig. 1: Potentials of big data for marketing communication, public relations, and internal communication.

its competitors, and who are the main actors there. Big data also allows for innovative, explorative analyses to discover new topics, trends or insights. For example, one makes use of Google search data and connects them to market analyses for the purpose of analysing the competition. Big data technologies allow for a combination of different kinds of analysis.

Formulating data-based strategies

With the help of a network analysis of user-generated content, communicators are able to filter out important bloggers and other influencers for certain regions, and find out

if they support topics and opinions which might be suitable for the company.

Apart from a detailed analysis of company-relevant topics and of how these should be applied (i.e. which wording or which channels should be used), the optimisation of online-touchpoint analysis is another potential use of big data: for the sake of one's own strategy it can be analysed how, when and most of all where (at which online touchpoints) the target group looks for information about a certain group of products or a topic, as well as in which ways it expresses its opinion. Detailed target group analyses of aspects like region and demography are also possible.

Automatised communications measures

Examples of the automatised implementation of big data communications measures are the use of bots for customer queries and real time or programmatic advertising. This purely data-based utilisation of advertising content is also based on predicative analysis. Just the same, the individualised adjustment of content is possible: motifs, colours or texts can be created in a way that allows for modularly composing them for each specific target group.

Evaluation based on broader data stocks

Finally, big data applications have the potential to clearly optimise the measurement of success and to do so in real time. Among others, different kinds of advertisement may be created in different versions, to find out which works best. For example, in the field of influencer marketing, it is possible to analyse which of the influencers the company cooperates with are most successful in which markets. These analyses also clearly reveal which posts work best at which time, as well as which language style is most likely to be accepted. Just the same, a continuous share-of-voice analysis can inform if and how public attention changes when it comes to a certain brand, certain products or certain companies

when compared to competitors. This way, it is possible to react immediately to competitors.

How to 'do' big data

- Big data applications must be oriented at the goals of an enterprise. Before using an application it must be clear which of the company's goals they serve. The services providers we have interviewed complain precisely about this: often, goals are only formulated in the vaguest terms. Furthermore, despite the possibilities of improved analysis offered by big data, no clean actual state is measured, which makes the evaluation of the success of big data measures much more difficult.
- Iterative processes and ways of thinking are indispensable. That is to say that the same or similar actions - such as the generation, cleaning and analysis of data - are repeated several times until the result of the application is in line with the set goal. The motto is: try and fail fast.
- Inner-organisational data silos must be reduced, and cross-departmental cooperation must be supported, e.g. among corporate communication, marketing and IT.
- As the ideal case of a suitable data infrastructure we have sketched a 'data lake' (see diagram). In contrast to the data warehouse, where only condensed data is stored, in an ideal scenario the data lake stores internal data (first party data), jointly used data (second party data) and external data (third party data) in a structured, semi-structured or unstructured form, close to the format of raw data. The structure follows the application when the data is needed, although experts point to the difficulty of aligning this ideal case with existing data protection laws.
- Ethical guidelines must be formulated for the use of big data in corporate communication, taking into consideration both the potentials and possible risks. At the same time an overview of existing data protection regulations is necessary.
- Finally, the awareness of the limits of technology must be raised: whoever attempts a strong simplification of complex communications patterns will always come up against natural limiting factors – such as in the case of sentiment analysis, where it is often not possible to classify verbal statements according to simple patterns.

Knowledge gained through the analysis of big data provides communication professionals with the possibility of communicating in a more strategic way, and big data tools provide communicators with new opportunities for illustrating the contribution of strategic communication to organisational goals. ●

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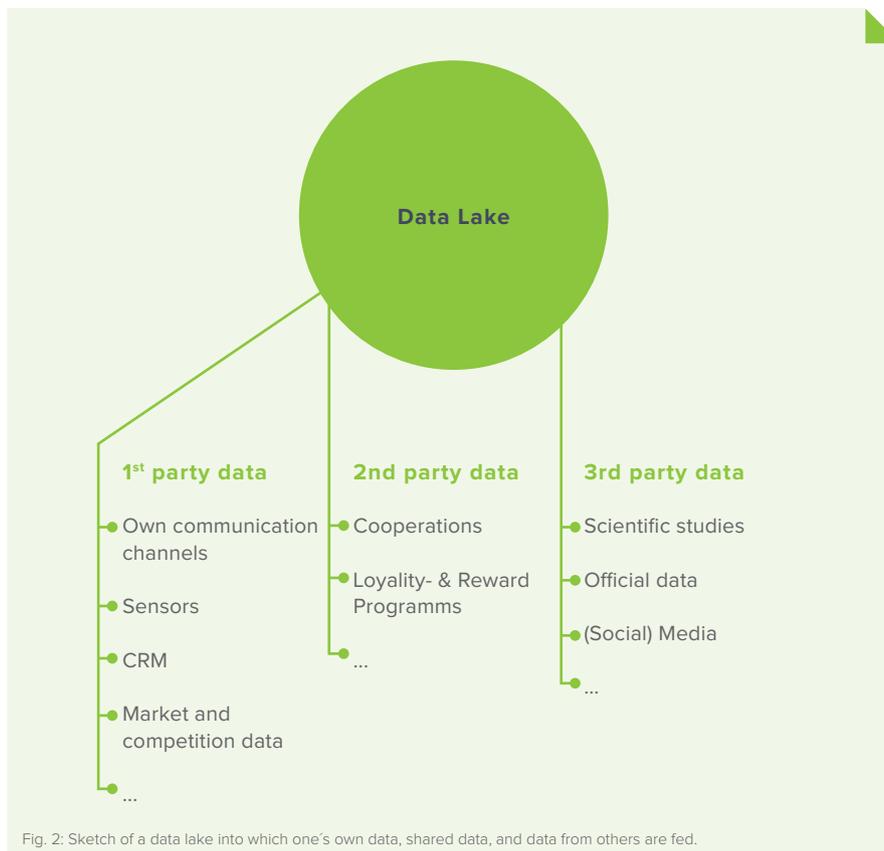


Fig. 2: Sketch of a data lake into which one's own data, shared data, and data from others are fed.