

Technology and Disruption: How the New Customer Relationship Influences the Corporate Strategy

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Abstract

It is increasingly the case that major changes in the technological environment and customer digital behavior have a significant impact on the way companies manage their customer relationship. Here, the related perspectives of value management are concerned: (a) The design of products and services including the way of interaction with the customer that generate a high customer benefit and (b) the focus of companies on customers with high profit margin and sales potential.

The flow of information is also in two directions. Firstly, one information flow refers to data that originates from the customer. Through digitized customer relationship processes, companies receive more detailed and real time data about products and services than was the case earlier – this is a noticeably new situation for industries that formerly had limited contact with the end consumer.

Secondly, there is an information flow triggered by the company as it is now easier for enterprises to actively communicate with customers increasingly in real-time and individually. This direct marketing has been revolutionized in a digital and networked world, making a long discussed 1:1 marketing approach feasible.

This is an opportunity and a challenge for the corporate strategy at the same time. The ability to extract information from Big Data and evolve smart data becomes a competitive factor: on the one hand tailored products and services can be offered to the customer, while on the other hand the controlling and steering of customer value management in real time is possible.

In the first step the paper examines the challenges for CRM in a world of disruptive technology. In the second step it shows how digital transformation changes the flow of information from customer to company and vice versa by looking at different industries. In the third step the influence on corporate strategy is examined and a broader definition of CRM is suggested regarding both aspects, the perspective of the company and the perspective (and perception) of the customer.

Keywords: CRM, Internet of Things, Big Data, Customer Value Management, Digital Transformation, Social CRM, Omni Channel Management

1.0 Disruptive Technology and its Challenges for CRM

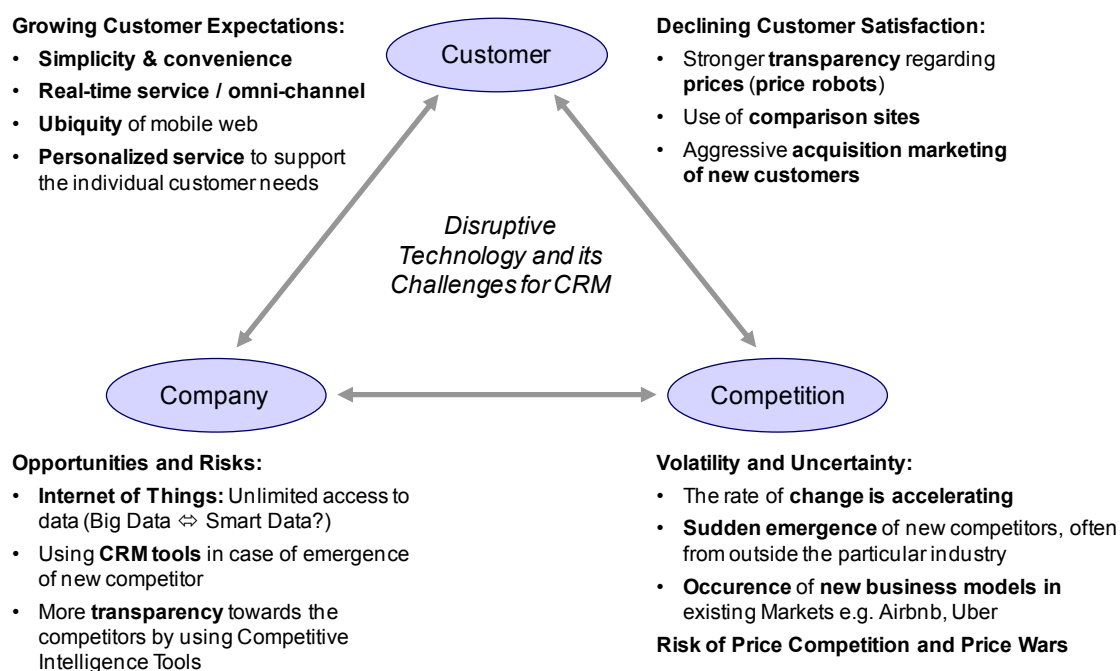
Customer relationship management (CRM) is a business strategy that optimizes revenue and profitability while promoting customer satisfaction and loyalty. The occurrence of disruptive technology is changing the framework for Customer Relationship Management. Figure 1 describes major challenges for CRM looking at the 3C of the strategic triangle (customer, company and competition).

On the one hand customer requirements are constantly growing and often exceed the capabilities of the companies. Customers expect easy and convenient processes, of course, with real-time solutions no matter where they are and regardless of the communication channel used. Offered solutions have to be customized (in response to the actual service request, at the same time keeping in mind both the discrete product history and the customer personal history in general). On the other hand indications are that customer satisfaction is declining, due to more transparency by using comparison sites or looking at rating sites (Diehl and Poynor, 2010).

Companies that align their products and processes accordingly, have a clear competitive advantage. Accordingly the rapid success of Messenger Apps is not really surprising: Messenger Apps fulfill almost all of these customer expectations: they are simple and convenient, real-time, ubiquitous, personalized, and free of charge. The numbers of active monthly users are already impressive, and they are still growing : WhatsApp with 900 million users, Facebook Messenger with 700 million users, followed by many previously only regional / national services provided - such as WeChat (China) with about 600 million users (Wolf, 2015) .

Although access to these Messenger Apps for companies can be partly restrictive at present depending on the provider particularly in Asia, providers already demonstrate how money can be earned with Messenger- integrated additional services. At WeChat, e.g. Taxi services can be searched, booked and paid for. The expansion to online marketplaces within WeChat is being pushed (e.g. by releasing the source code/open access), overall there are already several million web-shops integrated (Eisenbrand and Mühle, 2016). Facebook Messenger and Whatsapp will follow this strategy, as Marc Zuckerberg laid out his plan during the Q2 earnings call in July 2015, but in a slightly different way. First, as seen at the history of Facebook, companies are invited to integrate whatever they want to (e.g. profiles, product/service offerings, contact possibilities), so customers/prospects and companies can get in touch with each other (Zuckerberg: "enabling people to have good organic interactions with business"). As this is achieved the monetary transaction starts e.g. the companies have to pay to reach (more) customers (Constine, 2015).

Figure 1: Disruptive Technology and it's Challenges for CRM

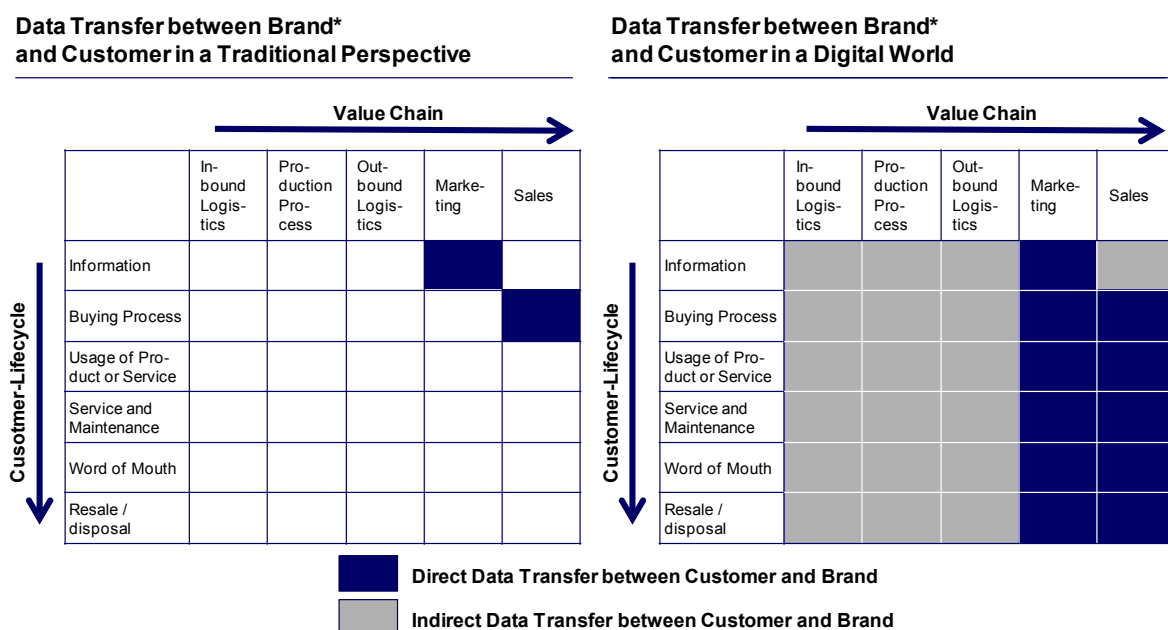


What does this mean for marketing, particularly for CRM? The expected triumphal course of Messenger Apps at the expense of social media and internet usage (Wolf, 2015) requires a change in marketing: If companies want to be exactly where the customers are, then "Messenger Marketing" is required. And, CRM plays an increasingly important role: as classic internet marketing attempts to generate clicks by Search Engine Optimization (SEO), messenger apps and social media deliver more traffic to build a sustainable one-to-one relationship. The additional quantity of higher quality data (assigned to an individual) enables the use of analytical CRM on a database that was never available before (in compliance with the Data Protection legal framework). SEO can thus be understood more as an instrument of generating new customers, while in the world of social media and messenger applications, the existing customer is the focus of interest. CRM delivers the appropriate instruments to develop a sustainable customer loyalty while optimizing the customer value throughout the entire customer lifecycle. In this context: The relevance of SEO will continue to decline, as (1) surfing the internet on mobile devices/smartphones is inconvenient and therefore continues to drop, (2) search engines grant less space to unpaid content, and (3) SEO marketing is becoming increasingly expensive (Eisenbrand, 2016).

Besides these customer-driven developments the companies themselves change the CRM framework. Especially the internet of things (IoT) is a "game-changer": products and services are generating data when used with the permission of customers, but with no customer-initiated company interaction. While certain companies had strong brands but only limited contact with the end customer (industries with several levels of added value, such as beverages and automotive industries), now in the era of Internet, Social Media and Messenger Apps, this situation has completely changed and continues to evolve further.

To explain the consequences and changes we would like to combine the concept of value chains (company perspective) and the concept of customer lifecycle management (customer perspective). As a result we get a Value-Chain – Customer-Lifecycle – Matrix (Figure2).

Figure 2: Individual Data Transfer between Customer and Brand (traditionally vs. digital world)



* Looking at companies with strong brands but only limited contact with the end customer (industries with several levels of added value, such as beverages and automotive industries)

On the left side of Figure 2 a situation of data transfer between customer and company is shown: contact (in combination with “direct” personal / individual data transfer) between company and customer more or less took place during just two phases of the customer-lifecycle: when customers requested information and / or actually purchased a product / service. Typically, the data generated was transaction-orientated. With IoT, data is provided at every stage of the product-lifecycle. Customers actively identify themselves with strong brands and communicate their experiences throughout their total customer lifecycle – from the first awareness right through to the end of using it. Although data security might be a concern, consumers willingly provide preference data as well as full profile descriptions and agree to the storage of this data in order to get access to tailored offers and services. Customers are paying with personal data for free product or service usage, unconsciously knowing that there is “no free lunch” (Bernasek and Mongan, 2015). If the technical and legal (data protection) requirements are met, a customer-centric mapping of data is possible. Looking at the value chain of a business, the data can directly help to improve marketing and sales, but also allows the improvement concerning all the other stages of the value chain (“indirect” personal / individual data transfer).

The IoT is related to Big Data: Now, a huge amount of data is available as a result of the combination of product-generated and customer-driven data. Consequently, it is possible to go beyond the transaction to every little detail of the customer’s actual (and upcoming) experience; a company can get access to visibility into (nearly) everything (Merrifield, 2015). For CRM this is challenge and opportunity at the same time. On the one hand companies face the challenge of extracting the right information (to provide smart data based on Big Data). On the other hand, there are opportunities to make a long discussed 1:1 marketing approach feasible (Bernasek and Mongan, 2015; Kalka and Krämer, 2016).

Additionally, the competitive landscape changes through the development of disruptive technologies. Unexpected by incumbents, new competitors from outside the industry enter the market. Google Car (self driving) or Tesla (electric mobility) are typical automotive examples. From the perspective of the incumbents CRM cannot prevent the entry of new competitors. But some incumbents are fighting back successfully, while mobilizing their own strengths including scale, superior resources, and access to customers (D’Emidio, Dorton and Duncan, 2015). For example, customer retention campaigns are feasible tools to increase customer loyalty using the given access to customers. Loss of market share towards incumbents may weaken significantly making the new competitors return on investment more distant.

However, there is another development with importance for the future CRM: the unprecedented transparency of marketing within an industry or relating to specific competitors. In the online / mobile environment, an entire new industry has formed, which offers competitive intelligence tools (Ziegler, 2016), e.g. “Similarweb” or “Sitrix” are tools to analyze Search Engine Marketing (What are the relevant key words? Which key words are competitors using?). “Buzzsumo” on the other hand, is specialized in the analysis of content and identifies the best content in Social Media. “AppAnnie” checks all relevant apps in the industry or at a competitor, while “Ghostery” analyzes the tools used on the competitor sites. These examples of disruptive technologies show that it is increasingly difficult and dangerous to further rely on the achieved strategic advantages regarding to the competition. For the new CRM, this also means that one's company has to use the relevant tools to identify trends in or among competitors in real-time.

The requirements for CRM capabilities have risen sharply. In the following chapters two perspectives are examined in this context. First, the customer-to-company perspective: “What kind of data is

generally available on disruptive technologies in CRM and how can relevant data be specifically incentivized?” The second perspective - from company-to-customer – covers key questions such as “What are the opportunities from the disruptive technologies in CRM?” and “How can they be used specifically?” To understand the changes in relation to these perspectives better, examples are taken from three sectors - Automotive, Media and Professional Services.

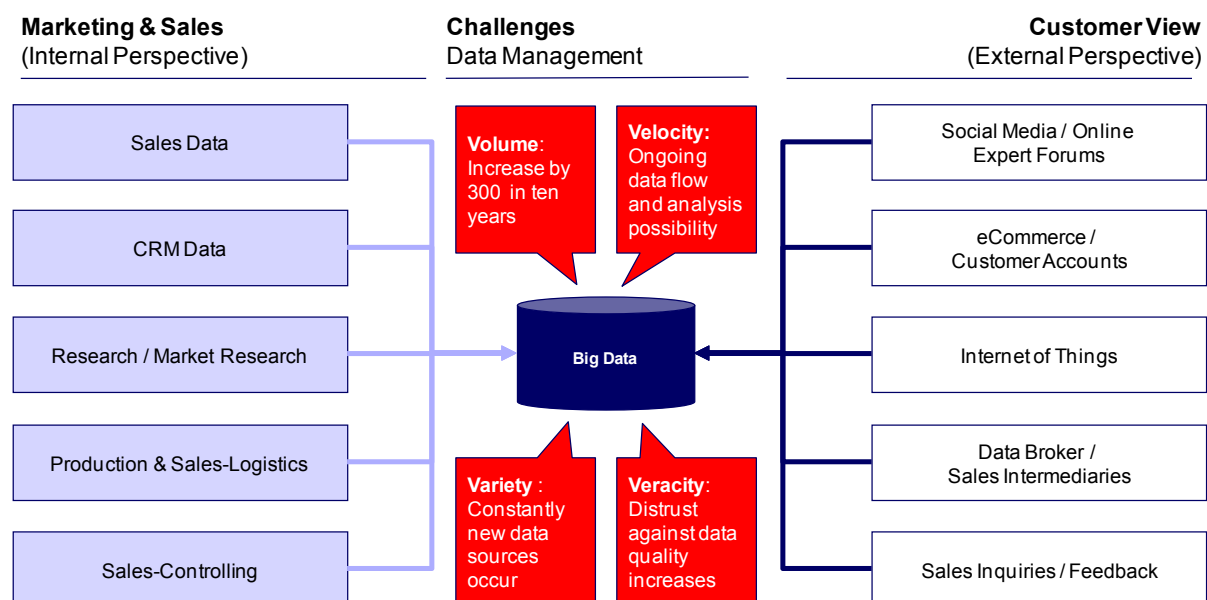
2.0 Data in a Digital World

The CRM approach is based on data referring to the (potential) customers' history / future with a company. A holistic view of the (potential) customers' data helps to improve business relationships with existing and potential customers, in order to drive sales growth and to generate customer value. In general: the more data the better.

Limited access to consumer data is changing. Companies can now receive more detailed and real-time data about products and services than previously through digital customer relationship processes and by linking different data sources (Figure 3). This is true for data internally available for firms as well as externally accessible. This results in different challenges for data management, summarized as “4V” model (Krämer and Tachilzik, 2016):

1. Volume: Data volume is growing rapidly.
2. Variety: Constantly new data sources occur and need to be linked.
3. Velocity: The ever-increasing speed of new data that need to be connected and analyzed.
4. Veracity: The validity of the used data is becoming more critical.

Figure 3: Changed market and customer environment to create Big Data



In the development of data management during the last decade these challenges can already be observed and have led to changes concerning data structuring, data aggregation, and in the supporting of the sales process (Figure 4). Starting with manual observations of customer interactions and data analysis largely by hand, the processes have evolved to a complete automation today. In the field of CRM, Payback, a multi-partner-loyalty program in Germany is a good example of this

automation process. With more than 25 million members, Payback gives out more up to 64 million account statements per year in 13 million personalized versions per account statement (Payback, 2016).

The goal of the first CRM Systems was to aggregate all the information of customer and prospects, which was available in one company. The data sources were all the sales representatives, who were forced to enter their customer relationship into a centralized system that provides access to the whole sales department. The quality of customer data relied on the ability of the sales representatives to summarize and articulate the needs of customers in a structured form appropriate to the data structure of the CRM system. At this stage the customer data was a combination of both product information based on sales history and filtered usage information by sales representatives. The customer relationship management was able to analyze and recommend additional sales potential out of structured and aggregated data. Aggregating customer data was one of the key results, but at the same time relatively cost intensive through the amount of time required for every sales representative generating this data.

The corporate strategy changed with this new sales potential towards CRM. This was especially true when companies had direct customer contact, provided high value goods or lifecycle products and a large number of sales representatives was working in the organization. Finally this strategy resulted in delivering data to other departments like marketing which used them e.g. to design dialogue campaigns. On the one hand an advantage for the customers was created due to a new opportunity to buy products based on customer needs. On the other hand companies created omnichannels where no longer just sales representatives generated sales at these companies. Thus, the CRM changed from one-to-one sales relationship towards one-to-many-relationship (Tachilzik, 2012). The success factor of the strategy at these companies relied on generating and using customer data on a company level regardless of the ownership of this data within a company. Companies which were not able to leverage the ownership of customer data within their company could not encourage sales representatives to generate high quality customer data as input for the CRM systems. Consequently, the implementation of the CRM strategy failed as well as the automation in Marketing & Sales.

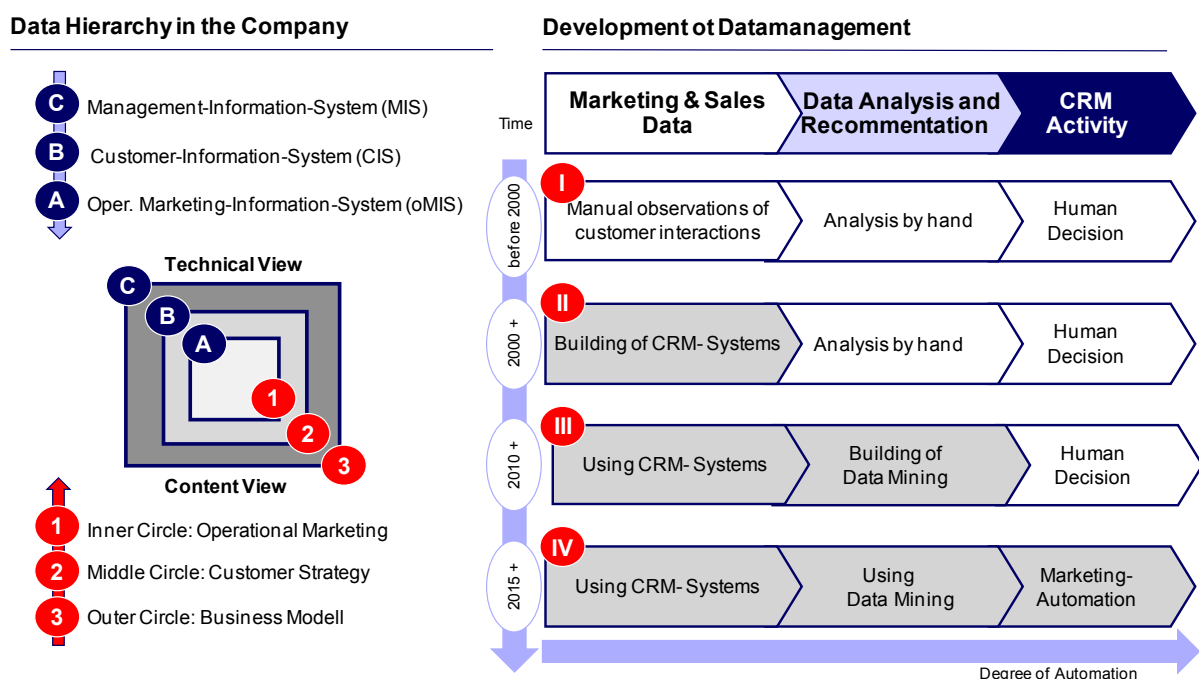
During the last decade the customer data generation process at companies was more and more transferred from sales representatives towards automated generation which allowed other branches to set up CRM in their corporate strategy. Automation leads to cost reduction where campaigns allow additional sales (one-to-many communication) and new information out of the campaign results (opening rate at email campaigns, etc.). With more and more customer data the classical CRM based companies face the variety of data which enhances the customer database. Companies without access to customer data and without a CRM system either established in the market or as new market pioneers, are challenged by receiving more and more customer data. Social Media, Smartphone usage and Internet of Things are changing from one-to-many towards a many- to-many communication. Customers are talking in Social Media about brands to the community as well as to the companies directly.

Companies with strong brands are having direct customer contact regardless of the established sales chains in their branches. The automotive sector as an example shows how customer data is changing a corporate strategy in these days. The new technology allows new business models, e.g. the German automotive companies BMW, Daimler and Audi are investing in enhancing their vehicles with mobile communication and combining the moving data of 2 Million vehicles with internet access in one database and managed by the new company "HERE". Linking the local mobility information with maps allows new traffic services available in the vehicles' navigation systems. The vehicles are sending error codes to the next car service station enabling the contacting of the driver in case of

serious errors. When self-driving cars are used in the future, privately owned cars will be offered for carsharing and thus allow the automotive industry to target new business models and customer segments. Analyzing movement data from mobile customers allows not just to offer this service on demand but also with predictive modeling to places with high flow of traffic and potential customer contact. Supply will not only be offered to private devices but also on advertising screens near the traffic flows of potential customers.

Digitizing products allows companies with limited CRM establishing Customer Relationship Management through actual product updates and not like just one anonymous customer selling event in former times. The usage of digital products generates customer data across three dimensions - quantity, time and quality. Media companies e.g. are offering actual paragraphs in law related online books with new payment models and are able to establish more frequent customer interaction not limited to the bookstores in their value chain any more.

Figure 4: Data Hierarchy and the development of data management



During that development of data management the data flow between customers and companies is changing towards devices to company. Subsequently there is a challenge in this data flow to link multiple data sources to one customer account, decide which information is relevant (variety and volume of data) for which purpose. Companies with a high volume of customer data and low in-house usage of this data are frequently using data as an asset to generate cash-flow when acting as a reseller. Companies which offer their customers a free service such as Google, WhatsApp or WeChat are looking for other business models, e.g. generating revenue by indirect use of the data (by creating B2B-markets).

Offering the potential customer a service for free or at a reduced price after signing into a customer account is another way to generate authorized customer data inside the company. Customers are leaving digital footprints outside the company on shopping websites (accepting cookies), using locality programmes in stores and inside the company by interacting directly with the company. Even

if companies are not able to digitize their products or value chains, nevertheless they are able to purchase external data about their existing or potential customers on the market.

Every interaction with a technical device generates customer data, which allows generating a customer view related to the needs for specific expectations concerning products and services. Customer data is no longer generated by just asking customers about their needs. Instead, it is generated by listening to the customer and observing customer behavior. This has far-reaching consequences for service Industries as, for example, the market research which was for decades strongly focused on surveys as a core element of the business model. New possibilities for data generation and delivery challenge the established business models, because customer expectations change rapidly. Obviously, the need is shifting from social sciences to data sciences.

Identifying customer behavior is no longer limited to actively sign-in or registered customers. The majority of generated customer data is based on cookies on PC and smartphones. The transparency of the listing process towards the customer is one key element of corporate strategy in the next decade (Tachilzik, 2013). It is easier for companies with strong brands to get an active permission from their customer to allow permanent listing (e.g. Apple) than new and not established brands. Permission to customer data usage is linked to the emotional loyalty and trust level of a brand.

Today technology and cultural change in using digital communication channels enable companies not only to manage customer journeys to increase sales for existing products but also to develop new product innovations or even new business models. Customers with a specific product need are organizing themselves in social media platforms. If necessary, crowd-funding allows a company to develop the needed product or even new companies are founded (e.g. www.kickstarter.com, www.FundRazr.com & www.RocketHub.com). Customers are giving proactive information on social media platforms to optimize products which can be linked to CRM systems and used by product development departments. Intensive customer research activities are replaced by analyzing real-time usage data and automated do-it-yourself research campaigns (e.g. SurveyMonkey). More and more digital equipment and processes are used in generating more data in real-time. This results in a boost of relevant customer data accessible for companies. Each company has to define which kind of data will be relevant for their Customer Relationship Management. In this context it is becoming obvious that transaction data will dominate the customer data in the next decade in each branch and in each country, but not at the same time, and not at the same disruptive level depending on the cultural environment.

Disruptive technologies lead primarily to the fact that at different levels of the customer relationship pieces of data are generated by the customer (either consciously or unconsciously), which is made available to the companies involved. The “four V” (volume, variety, velocity and veracity) are an opportunity and a risk at the same time, since data no longer constitutes a limiting factor for the company. The limitation exists in the ability to draw the right conclusions from the data and support decision-making in marketing and sales, for example, by preparing targeted marketing campaigns. This analysis can cover the following areas: predictive (forecasting) descriptive (business intelligence and data mining) and prescriptive analytics (optimization and simulation).

3.0 information flow triggered by the company

Section 2 described the first component of the information-flow generating customer data. The second component is outlined in this section, this is the information-flow triggered by the company due to the greater ability of enterprises to actively communicate with customers.

3.1 Using data to improve the customer experience

Information and additional offers to customers is provided more and more real-time and individually, but with non-classical customer data. Once transaction data is linked with a customer account or at least contact data, there are numerous ways to create additional value to the customer, for example by:

- Sending information on the status of delivery or offer the possibility to change predicted time or day of delivery (ecommerce)
- Providing information on flight delays or gate changes at airports or customized offers
- Informing travellers about upselling options (for example, to book a more comfortable seat in the aircraft after the ticket booking process is terminated).

The “relevant moment” in marketing communication opens new opportunities. Amazon is one example here, sending products to customers while there is no existing order. Products are finding customers and the other way round, with non-customer relation in advance (e.g. Amazon patents “anticipatory” shipping goods before the customer bought it). But also the direct marketing has been revolutionized in a digital and networked world, making a long discussed 1:1 marketing approach feasible. By combining different data sources a more accurate way to improve performance in marketing and product development becomes possible. On the one hand tailored products and services can be offered to the customer, on the other hand the controlling and steering of customer value management in real time is possible. By using transaction-oriented customer satisfaction measurements managers can quickly identify and eliminate performance defects, when the degree of customer satisfaction or the intention to recommend (Net Promoter Score=NPS) of a single transaction is linked to sales, production and logistics as well as social media data.

Real time decision-marketing allows the generation of the next best action depending on the customer needs and established rules. The company is steering the information flow more and more to the customer than initializing it by product-driven campaigns. Offer delivery changes from customer personal data delivery to user event-related delivery. Companies are budgeting in-sales automated tools where they can select target groups in direct competition to other companies targeting the same customer groups. For these companies it is not necessary to keep customer data, e.g. the Email address in their system to establish a customer relation to these target groups. Depending on the value of the customer groups the company is able to place their offer and navigate the customer to the company website, start a chat, receive a call or video chat. Banks are using the most innovation CRM processes like video chat for user-account validation or Messenger App paying functions.

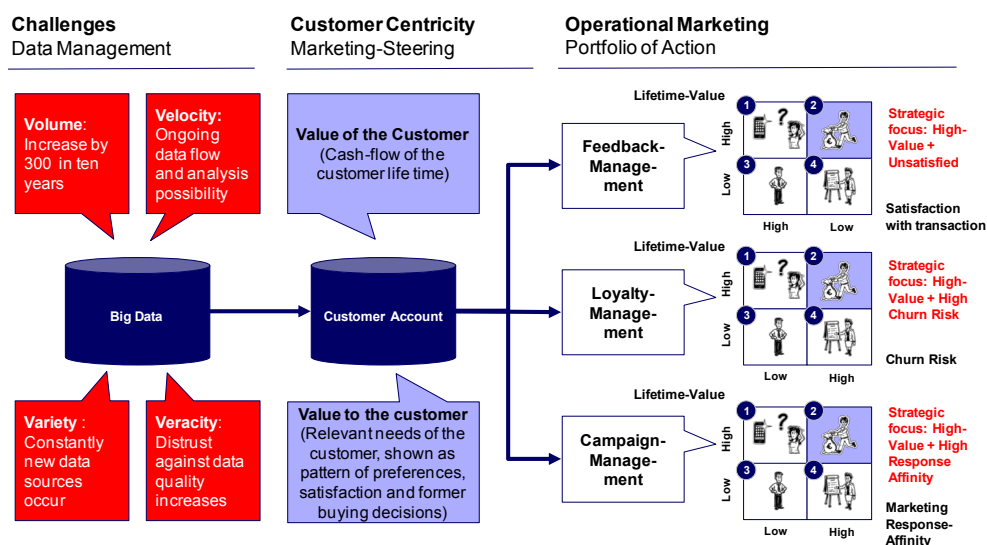
3.2 Customer feedback as a learning system

Due to the digitization of business processes, the possibilities of companies have improved in obtaining customer feedback and thus achieving an immediate change in operational marketing. First, a new trend in customer satisfaction research can be seen. While earlier, companies had sought to measure customer satisfaction in detail as a core element of the relationship management (the individual level, not the individual transaction is a key element), in recent years the trend of satisfaction measurement has gone towards transaction orientation. As Markey, Reichheld, and Dullweber (2009, p. 3) point out, “most companies devote a lot of energy to listening to the “voice of the customer, but few of them are very happy with the outcome of the effort. Managers have experimented with a wide array of techniques, all useful for some purposes - but all with drawbacks.” Instead, the concrete (last) customer point of contact, be it a product delivery or a service request, is

the main focus. This is particularly due to the fact that the marketing decision-makers are looking for immediately implementable actions. This was the perfect touchdown for Reichheld (2003), when introducing “The One Number You Need to Grow”. Nowadays, companies in almost all industries have embraced the NPS as a way to monitor their customer service operations. The main advantage of the tool is its simplicity (Bendle and Bagga, 2016), since consumers answer only one simple question (How likely is it that you would recommend X to a friend or colleague?) on a scale from 0 to 10, with 10 being the most positive. Customers who answer 9 or 10 are considered promoters; those who answer 6 or less are rated as detractors. The score is the percentage of promoters minus the percentage of detractors.

Secondly, through the spread of the Internet, a stronger customer focus in marketing (creation of CRM databases with appropriate contact information such as email, etc), and the accessibility to free market research tools, the conditions for an inexpensive measurement of customer satisfaction have been significantly improved. The execution and analysis of customer satisfaction measurements has traditionally been a core competence (with exclusive claim) for external consultants. Today, companies are able to conduct market research projects themselves quickly and cost-efficiently. An essential element of this is the offering of these online survey tools for free or at relatively low cost, the U.S American company SurveyMonkey is a particularly good example of the new business model. In the ranking of "most disruptive companies" is the company's 14th place (CNBC). SurveyMonkey, the amusingly named online survey company, has enabled literally everyone from Fortune 500 companies to small companies to know what's on their constituents' minds. The Palo Alto, California-based company was started in 1999, and its core survey business allows companies and organizations to quickly set up online surveys, most of which are free. The company earns money (estimated to be more than \$100 million in annual revenue) by charging for premium services such as downloading the survey results or the ability to address larger samples. In addition to conducting the survey and the data management for the non-professional users, the particularly challenging part is still the creation of a suitable questionnaire. Here, the provider supports by offering standardized questionnaire designs, which can easily be adapted. In early April 2015, the company launched a new tool, called Benchmarks, which let users compare metrics, such as website feedback or employee engagement, with their competitors. Consistent to its business model basic information from Benchmark will be free, the paid service starts at less than a \$1000.

Figure 5: Big Data-driven customer-centric marketing



If customer satisfaction information is generated in the aftermath of the service, this can in principle be linked to other data sources. A good example is the airline GermanWings (since the beginning of 2016 rebranded to Eurowings), which since the beginning laid great emphasis upon both a centralized customer account and the ticket sales via Internet. A few days after the flight, customers will receive an email with an invitation to a short feedback. This offers several advantages for the company: First, a continuous flow of data is possible. Second, immediate adjustments in marketing can be made because the data can be provided within hours after sending the mails. Third, the satisfaction scores can be cross-linked for example with production data or CRM data. The relevance of management actions may be different, i.e. if a low user with a small lifetime value or a regular customer with a very high lifetime value complains about a service deficit, the way the company reacts may differ dramatically.

Figure 5 shows the dependencies between a targeted segment-oriented marketing and the factors Big Data and central customer account. Ideally, from the Big Data, information is provided that can be assigned to individual customers. In this case, the customer profile can be enriched so that the central dimensions as driver of customer's needs and customer contribution margin are mapped (Bongaerts and Krämer, 2014). This is itself necessary for the targeted implementation of specific marketing measures. These may affect the activities like customer feedback, loyalty management or direct marketing campaign.

3.3 New and modified products to meet customer requirements

The media industry is a good example of how managers have initially misunderstood the digitization of the industry and have tried in the second step, to correct the mistakes of the past. Basically, a high proportion of fixed costs characterizes the newspaper business. Once the editorial work completed, the marginal costs are almost zero. Consequently, the majority of newspapers have offered significant high-value content to online editions or Internet portals for free. This may represent, at first glance, a way to increase the accessible readership. At second glance, however, there is the risk that consumers draw the conclusion that editorial content has to be regarded as a readily available product provided free of charge. Only when the industry had realized this severe threat did managers try to develop new business models for online marketing. In the meantime, a number of intermediaries have been trying to meet customer needs better by individually created news services. They are not publishers, but provide editorial content tailor-made for the reader. Flipboard is the innovator and leader in this small but rapidly evolving market (Macmanus, 2011). Social magazine is a term that Flipboard came up with. The business model focuses on a News Reader type application for the iPad that has the visual appeal of a magazine, along with the social media features common to this era of the Web (integration with Facebook, Twitter and other social apps). Flipboard can, of course, choose to generate a cash flow by being a paid app in iPad and other app stores. Instead, Flipboard has chosen to remain free, a sensible move given that it wants to maintain its first mover advantage and ramp up its user numbers.

Journals have gone another way. From the beginning they pursued rather a value pricing approach and thereby only address a limited demand segment. While newspapers like the New York Times have erected pay walls that are aimed at charging readers pennies per copy for their digital content, reading a single article in an academic journal published by a company such as Reed-Elsevier or Wiley, can cost up to \$40 or more per article. Besides single readers there is a valuable market segment such as libraries: they subscribe to these journals and magazines and have to pay in some cases as much as \$20,000 for a single journal. The past few years have seen a change, however. The number of

open-access journals is rising steadily, in part because of funders' views that papers based on publicly-funded research should be free for anyone to read (Van Noorden, 2013). For the authors this has several advantages. First, the publication is cost-effective and secondly, the process of publishing is significantly shorter (between submitting the papers and the publication potentially less than 3 weeks). Thirdly, opportunities to reach a wider audience and to address them with the latest research results are also achieved. Another step in this logic is the development of textbooks to a learning system. While new information and additional facts were previously recorded with the new edition (offline), online publishing leads to completely new opportunities. For example, the German C.H. Beck publishing group, specializing in legal and economic literature actually offers standard textbooks as online versions in addition to books traditionally sold through bookstores. These ensure that current online jurisprudence experience is taken into account. By contrast, printed books are often already outdated when they appear in bookstores.

As is true for market research also Management Consulting's fundamental business model has not changed in more than 100 years. It has always involved sending smart outsiders into organizations for a limited period of time and asking them to recommend solutions for the most difficult problems confronting their clients. Typically, companies entrust either large consulting firms or smaller specialists to manage specific issues and to prepare solutions and /or to implement them. This usually happened through solid teams of consultants (larger consulting firms are organized in functional competence centers). Since there is a significant turnover in prestigious consulting at all levels, it is estimated that the number of alumni of the Big Three combined are approaching 50,000 (Christensen, Wang and von Bever, 2013). Part of this pool is available on the market as individual consultants. Alternative professionals such as Eden McCallum and Business Talent Group (BTG) assemble leaner project teams of freelance consultants (mostly mid-level and senior alumni of top consultancies) for clients. Consequently they are able to offer projects at much lower cost than large consulting teams without clear quality differences (Krämer, 2010). Similar to the successful business model of Airbnb or Uber the new providers use existing capacities in the market and are not burdened by high fixed costs. Further possibilities arise for the customer-company: the consultancy team can be optimally designed, depending on desired skills.

3.4 Differentiated customer management to increase the customer retention rate

The customer lifetime is mostly driven by the length of business relationships with the customer. The longer this relationship is, the longer the customer lifetime. In addition, the longer this relationship, the lower the costs and the bigger the volume of purchase. Typically, the price sensitivity decreases over time due to an increased customer loyalty. Some empirical researches have proved the cited advantages of investments in customer retention. Thus, for instance, Gupta, Lehmann and Stuart (2004) have shown that it is far more worthwhile to increase the consumer retention rate by 1% than to increase the rate of attracting new customers or reduce the margin and increase the discount rate (Gupta et al. 2004).

Churn is predictable to some extent, but partly not. If it is possible to predict the customer's likelihood to churn and simultaneously to determine the lifetime value of a individual customer, there are clear options to rank and prioritize management actions. For example, there is a need for immediate action (i.e. the biggest economic risk) if a customer has a high likelihood to churn and at the same time a high lifetime value (expected future gross margins). Forecasting possibilities are improved when both the quality and quantity of data increases. Then, companies can discern the drivers of customer behavior (analysis of variance, correlations etc.). Instead of descriptive analytics managers are looking for predictive and further prescriptive analytics. In addition, automated

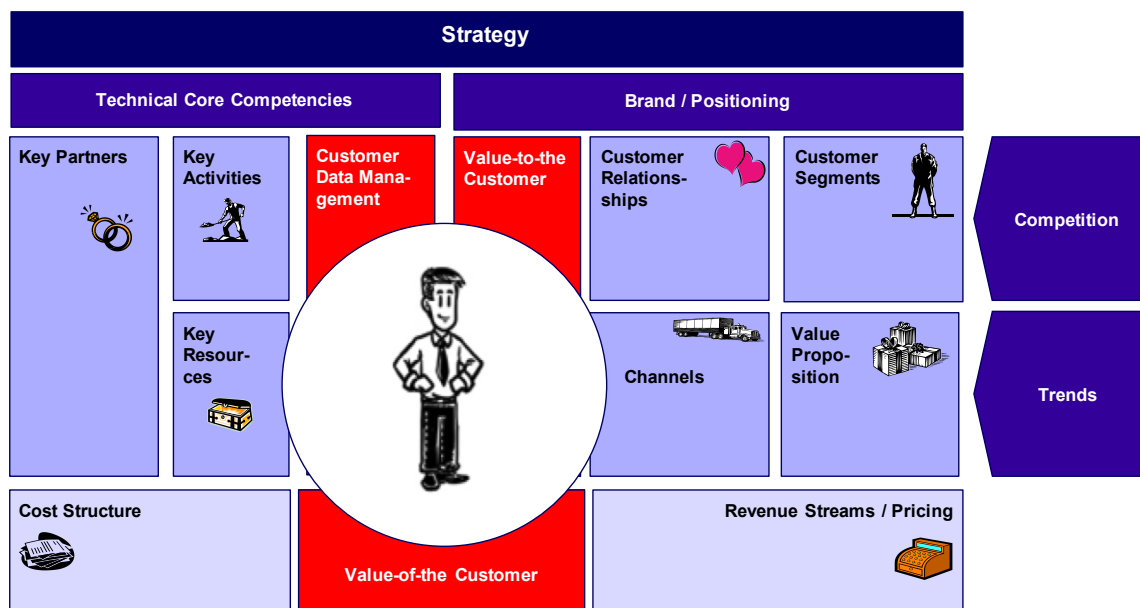
routines are required for larger customer bases, enabling a decision support in individual cases and in real time.

Digitization includes an information flow from consumers to companies but also from companies to consumers. Hence, it is possible (1) to use data to improve the customer experience, (2) to establish systems to collect customer feedback and use it as a learning system, (3) to develop new and modified products to meet customer requirements and (4) to differentiate the customer management to increase the customer retention rate.

4.0 Customer-centricity as key element of the digital business model

As digitalization and Big Data increase, the role of CRM in organizations is changing. The new way of managing the customer relationship shows a development from the classical target “gathering customer data” and adding customers to defined product campaigns towards a customer-centric CRM approach (Krämer and Burgartz, 2015). Customers only want to be contacted by companies when relevant and only by the communication means preferred. Personal interaction is no longer a must. Using Messenger Apps, Social Media Forums und self-service portals CRM enhances the classical channels phone, mail and email. In the self-service portal, needed information is directly applicable and just relevant product offerings are building a centric customer approach. Offering the right product at the right time can now be implemented on strong usage of smartphone and Messenger Apps. One stop shopping with one click will be a challenge for all companies through all branches. Real time analyzing the “next best offer” is not limited to branches with less customized products anymore (Tachilzik, 2013). Customers will ask for customized offers in a high value and complex product environment, without any time consuming choosing process. Holiday bookings or even a new car could be offered and bought final customized. The cultural change in knowing or even allowing companies to listen to customer journeys will be reflected in the need for relevant product offerings only, or even direct product deliveries. Companies with a high match of relevant offers will dominate.

Figure 6: The new customer-centric business model (adopted from Osterwalder et al.)



Easy and convenient CRM processes will substitute complicated and intransparent processes in sales. Companies with the ability to analyze automated customer data can concentrate their valuable personal CRM processes on the right customers to generate value.

The new CRM has a strong self-service focus which allows validating data by the customers themselves, offers automated relevant customer activities (next best action) and generates a company - wide data source for customer data.

In the final consequence, the changed strategic role of CRM means that the business model has to be aligned accordingly. Based on the model suggested by von Osterwalder, Pigneur and Wegberg (2011) these crucial adjustments are presented (Figure 6). The central element of the business model is the focus on the customer. The consequently modified core elements are (1) the customer data management, (2) the generation of a customer value and (3) the value extraction that is the conversion of customer benefits into cash flow for the company. All the parts of the traditional business model are thus affected.

Disruptive technologies are both an opportunity and a challenge for the corporate strategy at the same time. The ways to extract valid information from Big Data and evolve smart data become a competitive factor: On the one hand tailored products and services can be offered to the customer, on the other hand the controlling and steering of customer value management in real time is possible.

5.0 References

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