



Customer Intelligence in the Era of Data-driven Marketing

How analytics can help your marketing department focus on customers in ways that will benefit your company even more.

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Analytics to the rescue
when gut feeling is no
longer enough



1.1 The three biggest challenges in marketing today

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The current marketing ecosystem is more complex than ever and impossible to manage on gut feeling alone. Customers are more demanding and forever switching between an increasing number of channels. Competition keeps expanding. Budgets are plummeting. Decisions have to be made faster, and smarter. Simply put, marketers are struggling to answer three deceptively simple questions in a manner that is relevant, effective and profitable:



How can I know my customers better?

One of the biggest marketing challenges of today is the **proliferation of channels**. We now have the online, the mobile, written media,

social media, e-mail, stores, podcasting, etc. What a lot of us regard as one channel - the mobile one - is actually several channels at once. Although a lot of content has already been written about this, most companies are still struggling with recognizing their customer over ALL these channels. There is nothing more annoying than having filled in your details and requirements online to calculate an insurance rate and calling the same bank a few hours later, only to have the person on the other end of the line ask you the very same questions. And yet, this still happens a lot.

Many organizations fail to realize that the concept of 'channel' means nothing to a customer. No one thinks "I was browsing the mobile channel for skinny jeans, then I went to the store channel to try it on, after which I am now buying it via the online channel on my PC because it's cheaper that way and I totally understand that it is difficult to recognize me across all those channels." You might laugh, but that's exactly how most marketers are treating this situation.

Not recognizing them across channels can be a deal-breaker for many customers. That's because, in a very short period, digital has completely overturned their behavior. They are permanently connected. They expect to be treated as unique. In the vast ocean of messages and offers that they receive per day, they have only patience for personalized and relevant messages. Social media has offered them an empowered voice. You really don't want them to put them in a bad mood, like United Airlines did with Dave Carroll when

they broke his guitar and he posted a song on YouTube that has been viewed more than 15 million times (and that is only the original posting) so far. [Here](#) it is just for the fun of it.

The good news, though, is that bouncing from channel to channel, consumers leave traces, and a lot of them. We're talking about data, Big Data to be precise: a massive amount of data in all kinds of formats: structured or unstructured, inside the company's wall and outside. That is exactly how e-marketers can truly get to know their customers: by analyzing these Big Data traces. In fact, today, it is the only way.

What should I tell my customers to keep them happy?

The internet has turned what used to be a controlled, one-way message into a real-time dialogue with millions

Danielle Sacks



One of the biggest worries of marketing experts is sending the right message at the right moment to the right customer through the most effective channel. Marketing has gone a long way in the personalization of messages. It has evolved from being intrusive – a traditional 'monologue' from the brand that used to be entirely in charge – to being convenient – an event-driven message that is relevant, but not always delivered at the time it is needed – and has now the potential to be truly appropriate, responding to a moment of truth at the exact right time. The difficulty consists in offering information this is not merely relevant, but truly answers a need. No wonder that the success rate of marketing campaigns keeps growing from intrusive (3%) to convenient (20%) to appropriate (40%) marketing.

Marketing is at its most effective when it is answering such a need. For instance, when a Telco company offers a data renewal opportunity to a traveling customer looking for a nice restaurant nearby when he is almost past his data limit. Or when an office supply company contacts a consumer because the printer ink she so loyally purchases every month is due to be refreshed soon. Most companies do not reside in this stage yet. And even those that have the reputation of being the 'Kings of Personalization' sometimes still get it wrong. A large online retailer, for instance, with a great reputation in the matter, consistently kept suggesting books about jewelery art to a high-level business woman who only ever bought business analytics literature

based on the fact that she once purchased such a book as a gift for her sister-in-law. Needless to say that this drove the marketing fatigue of that person to very high levels, making her a lot less susceptible to relevant offers.

How do I balance my budgets to keep both my customers AND my management happy?

This last question is perhaps the most difficult to answer of the three. Peter Drucker once stated that “The aim of marketing is to know and understand the customer so well that the product or service fits him perfectly... and sells itself.” True as that may be, the flaw in this definition – and that of many others about marketing – is that the company is not mentioned anywhere. It is essential to keep a customer happy, and to get him to buy a product or service, obviously. But it is as crucial to make sure that marketing efforts fit the strategy of a company and are executed in such a way that is the most efficient and profitable approach for a company.

Let’s say that a retailer has two personalized campaigns waiting for Jane in one week: one with a margin of \$30 that is to be sent on Tuesday and one with a margin of \$155 that would go out on Thursday. Since the contact policy of the company says that a

customer cannot be contacted more than once a week, most would just let the first go out, and delete the second. And yet the most optimal choice for the company would be the second. Smart analytics make sure that organizations remain customer-centric while, at the same time, picking the choices that are the best for the organization. Few are the marketing organizations that are capable of doing this.



1.2 How marketing can solve its three biggest challenges

SAS believes that there are two important evolutions needed in marketing departments to solve the three aforementioned challenges of marketing: one human and one technological:



From Mad Men to Math Men

Marketing experts are notoriously intuitive and creative. And they should be, because marketing campaigns that do not surprise or move will not capture the customers' attention between the plethora of messages they are presented with each day. It is still true that an experienced marketing professional will sense faster what will work better than a junior. But in a market environment as complex as today's, there is so much information to process before one can make

an effective decision, that just being imaginative and following a 'gut feeling' no longer suffices.

The best marketing professionals are those that understand the power of data and have enough analytical capabilities to truly grasp what they can accomplish with it. This does not mean that marketers need to be statisticians or fully fledged data scientists. The real answer lies in approachable analytics, which can be easily used and interpreted by business laymen, as will be further explained in chapter 2. One of the most important bonuses of business-oriented analytics is a better collaboration between the CMOs and the CIO's department. Being no longer the sole source of analytics in the company, the data scientist team is no longer an over-solicited bottleneck. The marketing experts, on the other hand, are no longer frustrated while waiting for customer insights that are sometimes obsolete when they arrive. Approachable analytics are clearly a win-win.



A centralized platform

One of the most common mistakes in digital marketing is expecting that one 'magical' Big Data analytics solution is going to solve everything and turn the company into a customer centrality virtuoso. If software is to really deliver what it promises, it ought to be part of an ecosystem: truly connected and integrated into the rest of the IT architecture and following an evolutionary plan.

Strategy first. Always. That is no different for technology. When it comes to customer analytics, organisations ought to have a clear direction in mind and execute it step by step. This is even more important if there is a large gap between the 'as is' and the ideal situation. Customer analytics need a holistic vision, driven by a digital strategy.

This kind of data-driven marketing platform has to be a network of interconnected analytics which delivers **insights** that can be turned into the most valuable **actions**, based on a set of **intelligent business rules**. Advanced Big Data analytics should allow managers to extract actionable insights from the treasure-trove of customer data most companies have in their hands. This is about creating a 360° customer view. These insights need to be turned into customer-centric marketing and sales actions of which real-time campaigns are the most evolved step. Last but not least, house rules have to be devised which need to focus on priorities, strategy, constraints, customer

preferences, channel restrictions, budgets and contact permissions. This will ensure moving beyond extreme customer centrality to the course of action that will benefit the company the most.



How to achieve customer centric marketing in a hyperconnected world:

[Read here](#)

Truly knowing the customer with Big Data analytics

2.1 A data-driven marketing process & what it takes

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A change of mindset

It might seem surprising, but the very first step towards a data-driven marketing is a change in mindset. We're sure that the very words "data-driven", "analytics" and "rules" and "statistics" will terrify many marketing professionals, but it really shouldn't. Customer analytics does not have to be about an entire department of very expensive data scientists supported by even more expensive tools. As stated

Marketing without data is like driving
with your eyes closed

Dan Zarrella



before, marketing departments will profit the most from approachable analytics.

Once installed and configured, these kinds of democratic solutions can offer deep insights into a manner that is both manageable and understandable to laymen. They automate the delivered intelligence in a far-reaching manner, allowing self-service and output which is easily readable in a highly visual manner. Many customer analytics

are too complex for business end-users, which completely defies the purpose. Only those tools that can be used by the business can truly empower the marketing department. Keep that in mind when you make your choice.

Start with the data

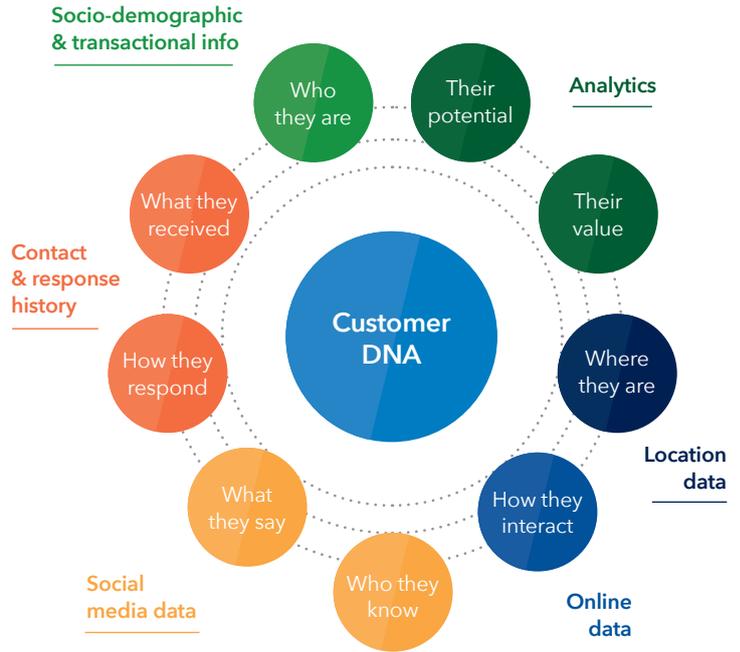
The very foundation of marketing analytics is obviously your customer data. The trick is not just to collect as much information as you can, but to make sure that it is clean and qualitative. It's not so much about a lot of data as it is about the right customer data, which is properly enriched with other kinds of sales, operational and even external types, like weather data.

There are many types of **explicit data** - which is what we call raw data from which the noise has been filtered out - needed for a full 360° customer view. These are some of the most common and frequently used examples of customer data¹:

1. Socio-demographic data
2. Contact & response history
3. Analytics
4. Location data
5. Online data
6. Social media data

¹ Depending on the activity and sector of a company, or what it wishes to measure, other specific types of data - like network data for telcos and utilities - will of course be added into the mix.

INSIGHTS IN THE CUSTOMER DNA



Now, in order for the business to make this explicit data useful in contextual marketing terms, it needs to use analytics - what we call **implicit insights** - to make it meaningful. Here's an example to fully understand the difference between raw, explicit and implicit data. **Raw data** could, for instance, be a tweet stating "Damn, the TV which was in promo this week is already out-of-stock in Brand X! Bad marketing! Wondering, now, if Brand Y or Z are offering the TV at the same price..." This would then be filtered and distilled into **explicit data** of this type:

- Product: TV
- Action: Promo,
- Problem: Out-of-stock
- Sentiment: Bad marketing
- Brand: X, Y, Z

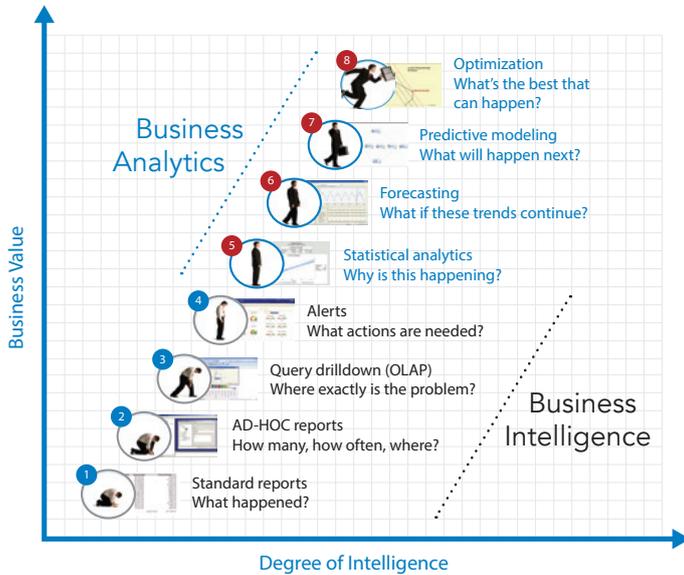
And after being analyzed, this will offer **implicit insights** such as these:

- Sentiment: Negative
- Churn Score: High

Data-driven marketing should be a step-by-step journey. It is not possible to simply move from a mass marketing approach to a full 360° view with real-time interactions. Analysing transactional and response data can already offer companies a great many insights. We always advise our own customers to get the basics right first, and then move

into the more advanced realm of Big Data, which is characterised by a **massive volume of data** in **many different formats** (structured, numerical data in traditional databases as well as unstructured data coming from email, social media, call center logs, etc.) which grows and evolves at a **spectacular speed** and ought to be analysed and reacted to accordingly. **These are actually the three Vs of Big Data**, as defined by industry analyst Doug Lane in 2001: **volume, variety and velocity**. At [SAS](#), we also consider **two additional dimensions when thinking about Big Data**: variability - because data flows can be highly inconsistent with periodic peaks - and complexity, because it's a gigantic undertaking to link, match, cleanse and transform data across systems when working with multiple sources.

Obviously, the more data an organization uses, from the more sources in the more types of format and the faster it responds to it, the more valuable and persuasive the insights will be when turned into marketing actions and initiatives. The degree of intelligence and business value will keep rising together with the more extensive use of Big Data's five Vs:



What can you do with analytics?

Of course, it depends on what your company needs and what its strategy is. Do not just dive into social media analytics without planning a roadmap first, starting with the most basic goals that your organisation needs to strive to achieve. That being said, here are some of the most used results of customer analytics your company might leverage.



Response modeling



Cross and up selling



Churn prediction



Customer segmentation



KPI forecasting



Customer lifetime value



Web mining



Credit scoring



Fraud detection



Marketing optimization



Market basket analysis



Customer link analytics



Social media analytics



Location analysis



Marketing mix analysis

2.2 An analytics maturity roadmap

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If you have more money than brains,
you should focus on outbound marketing.

If you have more brains than money,
you should focus on inbound marketing.

Guy Kawasaki



The very first step of the marketing maturity line is **mass marketing**. A surprisingly large number of companies are still residing in that area of evolution. These are the organizations that mainly rely on “above the line” communication to mass media: television and radio advertising, print as well as internet. The messages are not tailored and mostly outbound. This is the most traditional type of marketing. In most cases it lacks relevance and is therefore often highly ineffective from a ‘value-for-money’ point of view.

A bit more evolved in their data-driven approach are the organizations that target marketing campaigns on the basis of broad **customer segments**, which can be rule-based or analytically driven. Rule-based segmentation focusses on broad, predefined socio-

demographic characteristics. And it is true, single mothers of age 35 to 40 with a net income of \$5,000 a month can have some of the same preferences. Yet you only need to think of the difference between you and your best friend in consumer behaviour even though (s)he would probably reside in the same segment as you, to realise how random this approach still is. If this segmentation is however analytics-based, the delivered insights will be a lot more valuable: if Joan for instance bought product A from a website and other customers who are very similar to her bought product A as well as product B, then chances are that Joan will be susceptible to product B as well.

Next up on the maturity line are the **one-to-one campaigns**, a concept which was notoriously introduced by Don Peppers and Martha Rogers in their book “The One-to-One Future: Building Relationships One Customer at a Time”. The goal of this type of approach is to drive loyalty in customers and deliver a better marketing ROI through the use of highly personalized and relevant messages. One-to-one marketing is merely a return to the one-to-one approach that mom & pop stores used to handle their customers in the past: remembering the customer’s name, preferences and knowing how (s)he is probably due for a new order of a certain type of product seeing that it was such a long time ago. It is about knowing your customer so well that you can have quite a familiar dialogue with him or her.

Consumers are statistics.
Customers are people.

Stanley Marcus



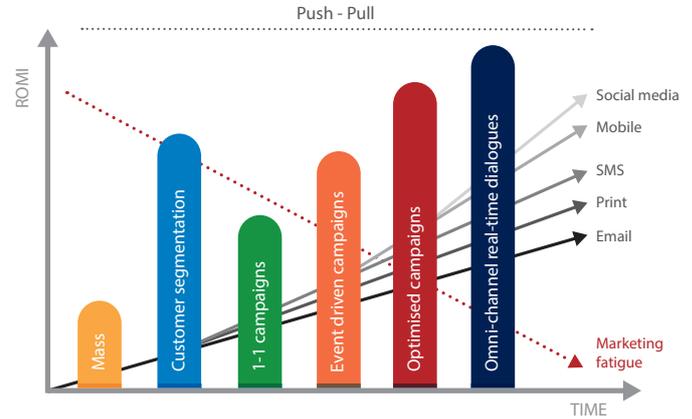
Companies that are even more advanced in marketing, base their campaigns on specific triggers. An example would be a campaign activated by a complaint in a call center or a bank sending information about home insurance, remembering from an earlier interaction that the customer had bought an apartment and was going to move 5 months later. This type of approach is called **event-driven marketing**.

An even more evolved phase of marketing are the **optimized campaigns**. These consider the customer's propensity to buy, and how that relates to the margin of a product. They maintain the smartest balance between customer centricity and the company's objectives by taking into consideration budget constraints as well as contact policy constraints.

Last, but certainly not least, **real-time contextual marketing** enables marketing professionals to deliver the right message in the right channel at the right time, taking into account both contact policies and company objectives.

The further an organisation moves along this data-driven maturity line, the lower the marketing fatigue of the customer and the bigger the return on marketing investment. Companies also tend to move from a push to a pull marketing strategy the more evolved they are in data-driven marketing. These days, with the customer so empowered and over-solicited, pull and inbound marketing seem to be the most effective.

Impact of analytics on data driven marketing campaigns



Closing the loop of marketing is one of the hardest hurdles organizations have to overcome. They have to move beyond producing relevant messages and efficient campaigns. They ought to continually analyze and re-evaluate these actions so that they can optimise them for full effect, and from a budgetary point of view.

EDP energy, for instance, was able to improve customer loyalty up to 95 and 80 % for their electricity and gas segment respectively by using omni-channel analytics. Macy's, for its part, wanted to improve the customer insight across channels. Using analytics and campaign management, it was able to reduce churn by 20% and gain \$500,000 in productivity.

2.3 Key benefits of a data-driven marketing process

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Data-driven marketing has many advantages, as you will have read in the preceding pages, but we would like to elaborate on the most striking ones here:



Improved customer satisfaction

Smart marketing analytics will help you identify complex moments of truth for every customer based on their behavior. Not only will this allow you to offer them relevant and personalized information but also at the exact time that it is most needed. And the more an offer responds to what the customer expects, the more, obviously, that (s)he will be satisfied.

Better recognizing the needs of customers, and across all channels, will also drive a reputation for great service which can turn your company into a magnet for high-value customers.

The first step in exceeding your customer's expectations is to know those expectations.

Roy H. Williams





Reduced cost-to-serve & better ROI

From all the communications that are planned for a single customer, smart analytics will only select the ones with the highest probability score and which are the most profitable from your organization's perspective. Marketing analytics will help you measure what works and what does not, and where you ought to put your budget to drive maximum results. This means that you will stop spending money on consumers that do not actually matter to your company or its strategy. You will spread the marketing budget efficiently according to the channels that have the highest success rate.

Increased cross-sell & up-sell

Using analytics, organizations can score which products are a good up-sell and cross-sell without annoying customers with aggressive and irrelevant messaging. This will result in a higher average spend. It is about helping customers convince themselves that they might need a matching product, or a better one which is just slightly more expensive.



Check out the SAS view on Marketing Analytics:
What it is and why it matters.

[Watch here](#)

Real-time campaigns as the highest level of customer centricity

Social media are tools.
Real time is a mindset.

David Meerman Scott



Having a 360° view of your customers and deep insights into their behaviour is merely the first step towards a smarter marketing approach. The second step consists in turning this valuable intelligence into customer-centric actions. There are many examples of this kind of data-driven marketing action - churn prediction, web mining, location analysis or social media listening - but this chapter will focus on the most advanced type: real-time campaigns.

3.1 Driving extreme one-to-one customer centricity

Real-time marketing is marketing at its best, at the most granular and intimate level of customer relationships: engaging in an interactive one-to-one conversation. It elevates marketing efforts to a new standard that surpasses aggressive and annoying push efforts.

Having a brand stand out and sell in the avalanche of information that surrounds each of our customers is an incredible challenge. According to marketing thought-leader Jay Baer "smart marketing is

about help” and that is the only way organizations can communicate effectively with customers. Forget ‘going viral’. What really catches the customer’s attention is when brands are truly useful, when they “inform” the customer instead of “promoting”. It is a fine line that can only be bridged with real-time insights. Only if you exactly offer welcome information to the exact right customer at the exact right time, can it be useful. Only if it fulfils an actual need. Because in any other case - yes even if it is personalized - it is just convenient at most (or annoying, in the worst case). Do not let anyone tell you otherwise: extreme customer centricity is all about need and usefulness. In other words, customer service is the new marketing.

The difference between helping
and selling is just two letters.
But those are the most important
letters in modern business.

Jay Baer



Every company that you meet, will probably tell you that it is customer centric: the word resonates in their strategy, media interviews, core values on the website, etc. And yet, a surprising number of

companies are not getting it right. Most are, in fact, product-centric organizations which only claim that they put the customer at the heart of everything they do, because it sounds right.

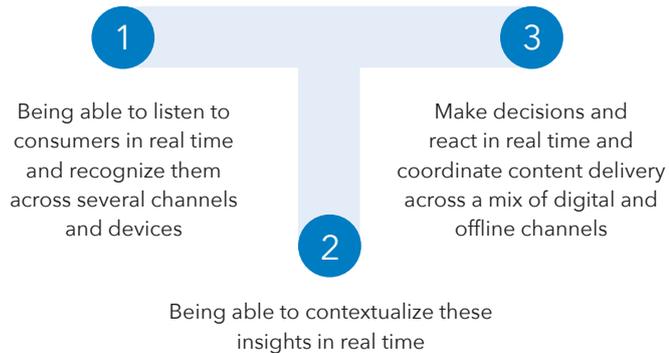
But what does customer centricity actually mean? Well, first and foremost, it is about corporate culture: if the marketing department is the only one to actually focus on the customer, then an organization can hardly be called customer centric. That is why all customer-related data ought to be connected, even if it comes from departments other than that of marketing. Second, it is about really knowing the customer so that you are even able to anticipate his or her needs: for instance notifying someone when the carburettor of a vehicle is due for renewal. Customer knowledge with this kind of depth can only be accomplished with real-time analytics.

3.2 Real time – what it is (and what it isn't)

Real-time decision-making enables the real-time delivery of decisions and recommendations that optimise every customer interaction up to a point that you improve revenue, growth and retention. Forrester defines real-time marketing as follows: “Enterprise marketing

technology that delivers contextually relevant experiences, value and utility at the appropriate moment in the customer life cycle via preferred customer touch points.” According to the analyst, real-time marketing is a crucial part of brand strategy today. It is not just a nice added-value, it is about filling in the customer’s expectations.

Real-time analytics basically means three things:



In near real time, the same amount of data is processed – and sometimes really fast – but there is a delay between the occurrence of an event and the use of the processed data. Though sometimes the line between near real time and real time can be a fine one, there is definitely a difference that many organization fail to make properly.

A lot of companies confuse real-time marketing with inbound marketing – which focuses on creating quality content that pulls people toward their brand – or even with the personalisation of messages. Research commissioned by the Direct Marketing Association showed that the majority of participants (43%) think of real-time marketing as “dynamic, personalised content delivered across channels” while 64% of participants believe real-time marketing revolves around some kind of dynamic personalization.² Others seem to think that it is about capitalising on hot events with topical social media campaigns.

There seems to be a lot of confusion about the term, but ‘real time’ is much more sophisticated than all of the above. It is more than mere predictive and pre-calculated analysis. It is a perpetual adjustment or re-execution which happens extremely fast. Like, for instance, in the case of a marketing campaign that is waiting to be sent out to Sophie – based on her past behaviour – about the iPhone 6 but instead of that offering her an advert on her Facebook for the Samsung 6, because she has been browsing the web for it. It is about changing continually together with the customer.

And it works. The real-time version is the most effective version of marketing: according to Econsultancy “businesses that use real-time personalization technologies see an average uplift of 19% in sales.”

² Source: <http://www.evergage.com/blog/real-time-marketing-isnt-what-you-think-it-is/>

Capturing and processing data in real time

To be able to react in real time, you need to perform analytics over one customer's data and context, instead of over let's say 1,000 customers in 1 batch. Though it might seem obvious, still too many marketing specialists fail to understand that if you want to perform real-time analytics on consumer events, you need to have real-time data as well. In some organisations, especially the larger ones struggling with legacy architecture filled with informational silos, data is only refreshed once every few hours, which makes it impossible to listen to moments of truth when they actually happen. A 'real-time' project can only react as fast as the slowest system in your architecture.

Contextualizing the insights

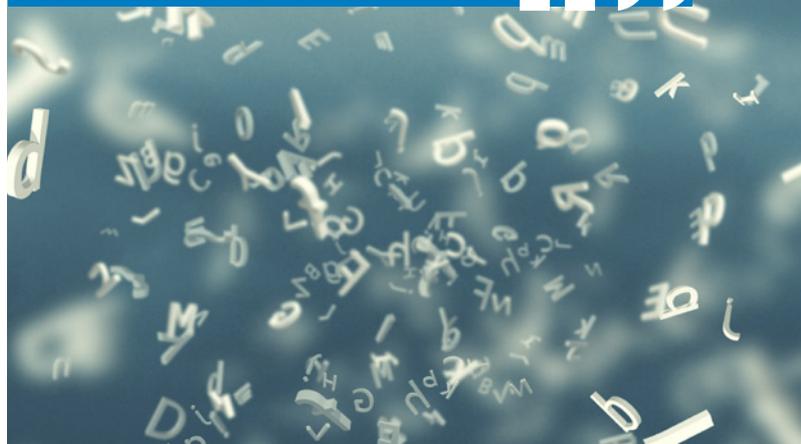
Hearing and seeing what the customer is doing at the very moment he is doing it, is just the first step. Being able to add value to these moments of truth with advanced analytics is where it gets really interesting.

The explicit data - for example, a customer profile, historical or transactional data - needs to be transformed in such a way that the business can filter out the noise - the irrelevant information - and put the data in a context which it can act upon. This context can be many

things: someone talking to a call center employee, walking around in a shop, paying at an e-shop, using a bank account, tweeting to his friends... It is about merging real-time data with events that happened on other channels from the same customer, to have the full behavioral context, recognize him or her as one and the same and know what the best product offers will be.

We need to stop interrupting what people are interested in and be what people are interested in.

Craig Davis





Translate the contextualized insights into real-time actions

Being able to contextualize the insights into real-time actions is the point where the analytics really pay off. This is where marketing grows from a product-centric commercial 'trick' to a welcome service. Like when a retailer sends a relevant promotion to a customer near one of its shops, based on her browsing on her mobile phone for a warm winter coat a few hours ago, while the weather forecasts snow and ice by the evening of that very day. It is not just welcome information, but much needed and sent through the right channel at the best possible time. That is real-time marketing at its most powerful.

Valuable real-time actions are about banks serving customers in real time and using real-time risk profiles in order to dynamically offer products and services. It's a cable operator using real-time analytics for its contact centre agents so they have a complete picture of the client and can recommend the most suitable offer in real time. It's about cross-selling accessories to Laura who is browsing an e-commerce website for a digital camera, knowing that she is a big spender, not very technologically savvy, has not yet received recommendations for accessories (which might have annoyed her) and has not yet browsed for any accessories. Making sure, too, that the suggested product is immediately available in stock

3.3 From storing to streaming data

One of the biggest challenges of real time is dealing with the massive amount of data that needs to be combed through carefully... but very fast. Working with the massive volumes of Big Data, storing data becomes increasingly difficult, even irrelevant. That's because the value of data no longer lies in the data itself, but in the events that are contained in the data. In other words: organisations ought to stream the data, analysing it in real time without, however, storing the entire informational history.

It is essential to filter out the noise, when you are dealing with these tremendously large volumes. Streaming data is perfect for that. Only relevant information - like the marketing campaigns for which the customer was selected - is kept, but not how long someone stayed on the website, where they came from or where they have clicked... The latter type of data - which has a short shelf life - is only read in real time. This is the only way to avoid storage problems when leveraging Big Data and real-time analytics.

3.4 A step-by-step process

Launching yourself in real-time analytics is best done in an iterative manner, experimenting and learning from the easier phases of these

kind of projects and moving forward with more advanced capabilities as time passes. A popular approach among many companies is to add real-time capabilities to just one channel. More often than not, this is the online channel because that is where customers leave the most and most readable traces. In a second phase, they start to add the offline channels into the mix, like the physical shop or the call center.

The examples of companies that engage in real-time, omni-channel marketing are still quite limited, though this is where the highest level of customer centricity lies. Organizations that strive towards this level of sophistication, ought to realize that they first need to get their culture, management, data management and centralised analytics architecture right, step by step.

3.5 Don't be Big Brother

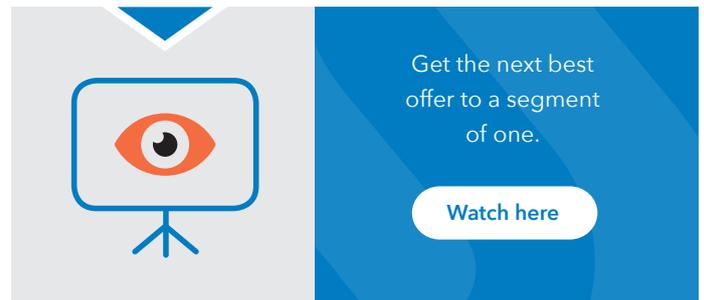
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The possibilities to know your customer become more and more advanced, now that there is an increasing amount of data available, ready to mine and analyze. We would like to end this chapter with an important notice: just because you can, does not mean you have to. If you react in real time to certain events in an inappropriate manner, this might very well backfire. You do not want your call center team to call a senior citizen while he is browsing a website for a life insurance

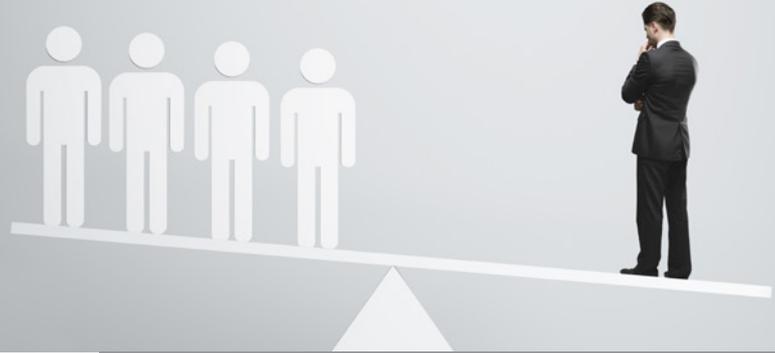
policy to offer him a promotion or try to upsell a prepaid and prearranged funeral. These are delicate decisions, in which you should respect boundaries, privacy and ethics. Aggressive communication, even if it might be relevant, is totally out of place in such a case.

Knowing someone too well in a commercial situation can be harmful for the future relationship. Big Brother-like behavior will not only scare the customer away but, in these transparent times, it has the potential of ruining the reputation of a company for a very long time. Just think of the example of [Target and the pregnant girl](#) that still keeps on living in the minds of people after more than three years.

So, when it comes to real time, one-on-one personalization: remain ethical and respect people's privacy, for the benefit of the customer and your own. Knowing when to react, to what and when it is appropriate or not and within which timing can perfectly be included in the rules of play and automated.



Optimization and attribution modeling



4.1 Balancing company and customers

There is no doubt about it that today, more than ever, marketing is all about the customer. Customers are more empowered than ever and now organizations have to fight for attention amidst all the other messages of all the competitors on all the different channels.

It is surreal how, in some cases, the strategy and benefits of a company seem to be of almost secondary importance, these days, to this almost fabled customer centrality. This is actually one of the trickiest parts

What helps people, helps business.

Leo Burnett



of marketing: striking the right balance between the needs of the customer and those of the organization. Without the right data and insights, it is almost impossible to find a fruitful equilibrium between customer centrality and the contact policies, on the one hand, and the organizational goals and the commercial strategy plans, on the other. Attribution modeling - the use of advanced analytics to allocate proportional credit to each marketing touch point across all on- and offline channels, leading to a desired customer action³ - has a key role to play in this.

4.2 Investing in the right channels

According to the CMO Survey, marketing organizations are feeling more pressure to prove the value of what they do (65% say the pressure is increasing), but lacking the means to demonstrate impact in quantitative terms (about 65% say they can't).³ One of the results of this escalation in tension is that each and every sub-silo of marketing is fighting to be credited for sales successes. Yet, in the complex customer journey environment, it is very difficult to detect who is, for instance, mainly responsible for the sale of those burgundy Gucci sunglasses that Elizabeth bought? Is it the billboard that she passed on a sunny June day, is it the fact that her favourite actress was wearing it as product placement in a movie, is it Google for directing her to your website, is it the website team for making such a great e-shop, is it the banner Elizabeth saw on Facebook after leaving the website because she thought the glasses were too expensive or is it the direct mail offering her a promotion on that very product because she is such a loyal customer? How can companies give marketing credit where credit is due? How can they know that they ought to divide their budgets which are increasingly spreading thin?

³ Source: The Forrester Wave: Cross-Channel Attribution Providers, Q4 2014 report

⁴ Source: <http://www.forbes.com/sites/forbesinsights/2014/12/02/cross-channel-attribution/>



This is where marketing attribution comes in. It aims at understanding how marketing channels impact the customer experience and drive revenue for the company with the help of smart analytics. It answers the perennial question – which lever works best (or not at all)?⁵

There are many ways to measure marketing efforts, of course. Whereas a lot of marketers tend to measure their worth along ‘softer’ metrics like web visits, share of voice, impressions or click-through rate, attribution modeling uses hard business metrics like turnover, profit, customer retention and volume of sales.⁶

4.3 Types of attribution modeling

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There are basically three different ways companies can approach attribution modeling, which are ordered by range of maturity and sophistication:



Rule-based attribution modeling

Few are the companies that do not measure their marketing efforts. There's just no other way in today's competitive environment. Though they want to carefully evaluate their efforts, most are, however, not very advanced in the matter. That's because most of them are not actually taking into account every touch point, every effort and every relevant piece of financial and customer data.

A lot of companies are benefiting from rule-based attribution modelling. They investigate only the online data, checking what the results per digital channel were. Most just credit the last click for 100% of a sales success, without taking any of the costs or other complex moments of truth into consideration. So if a customer searches for a certain brand of smartphone, lands on a web page and immediately buys it there, the search channel is held accountable for the sale. But customer journeys are so much more complex than this today, seldom existing of merely one contact point. That is why the intelligence coming from these kind of simplified metrics is quite limited in its usefulness.

⁵ Source: <http://blogs.sas.com/content/customeranalytics/2014/11/17/marketing-analytics-for-attribution-modeling/>

⁶ Source: <http://www.thedrum.com/opinion/2014/09/24/beginners-guide-attribution-modelling>

Top-down attribution modeling

Companies that are more mature in their marketing measuring efforts often have evolved from rule-based to data-driven, top-down marketing attribution. The latter analyzes the return on investment of marketing actions in relation to the organization's sales: this model takes into account marketing spend, economic factors as well as competitive factors. This uncovers actionable insights into which marketing channels are working and how companies ought to further allocate their marketing budgets.

There are many benefits to top-down attribution modeling. It reveals valuable aspects of the relationship between sales and marketing spend and allows the marketer to create different scenarios for marketing spend. It uncovers the consequences of budget cuts or increases for a certain marketing channel and how promotions are impacting brand equity. It offers insights concerning cannibalization and halo effects across different brands, themes or products. It shows the influence of competitor spend on your sales.

The reason why the top-down attribution modeling tends to be more popular than bottom-up analysis is that marketing spend and sales data are often more easily available within organizations and there is no actual need for granular customer level data (which is what is used in bottom-up analysis). At the same time, this could also be seen as a drawback as it offers quite a high-level view of channel

influences and interactions, encompassing some very important details. The top-down model will never help you learn which banners are performing well, which are the most popular search keywords, what exactly drives conversions, etc. Still, it is a great way to perform smarter marketing if it is not yet possible to measure all your customer touch points.

Bottom-up attribution modeling

Bottom-up attribution modeling, for its part, is mainly behavior-driven. It will attribute the sales based on the marketing touch points that were used during the customer journey. So it analyses as much data as possible to get the most granular type of insights possible: from socio-demographic and transactional info about customers and their contact and response history, to web-, social- and location-based media data. Bottom-up analysis will look at each customer journey individually in great detail and award each marketing touch point with a percentage of the sales generated by that customer journey. Unlike top-down, this approach can indeed tell you which banner worked or specific fields of your web shop that are most clicked upon.

There are many benefits to reap. It will help you understand the customer journeys of new and existing customers and provide evidence that a channel is important even if it doesn't seem so. It

will help you gauge the quality of engagements at certain stages in the funnel and recognise the value of multiple channels for multiple conversions. It can go very deep (and in great detail) into the customer journeys, unlike the two other approaches.

The best of both worlds

Though there is something to be said for each of the different types of attribution modelling, the wisest course of action is still to combine the top-down approach with the bottom-up one. The top-down is more interesting from a long-term strategy point of view - used for setting the budget for each marketing channel - while the bottom-up is more short term and detailed, showing which content and keywords etc. exactly drive sales.

4.4 Step by step

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We suggest moving in small steps if you are not yet leveraging attribution modelling in your marketing team. Start with the easiest scenarios. To keep it manageable, it is, for instance, always easier to start with just one channel before shifting in a higher gear into a full-blown omni-channel. If you feel intimidated about gathering the data from each and every possible touch point with the customer, start with what you feel most comfortable with, though, or with what makes most sense in your situation.

If you are more of a bricks-and-mortar seller and are gathering much more data there, it does make sense to start your marketing attribution in the physical channels. On the other hand, if you are already gathering and analyzing a lot of data online or even via social media channels, and get most of your revenue from your e-shop, it might be easier to start your attribution analysis there. There is no one size fits all. Just do what you feel most comfortable with and what is most logical for your company.

4.5 Secure top-down sponsorship

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A word of advice for those who wish to manage their marketing budgets in a smarter way with attribution modeling. Realize that this kind of far-reaching transparency might sound like heaven to the ears of marketing management, but that it will probably make your marketing team a bit insecure and even nervous. Metrics tend to scare people. They might uncover that they could perform better, in some areas, and most people will try to avoid that.

That is why it is really important to create a strong business case first and, with that, secure sponsorship and support from your general management. They will be much more prone to come on board this kind of project, because it will allow them to clearly see how their

marketing department is performing and what the best possible division of budget would be to drive sales even more efficiently. Make sure that Management are your champions so you can get your own team on board as well. Change is always hard. But if you have a business case that will help everyone do their work better, it will be easier to get the team on board.



Check out the SAS view on Multichannel Marketing:
What it is and why it matters.

[Watch here](#)

Check out how to get in the
“Why” in Multichannel Marketing Attribution

[Read here](#)

Moving forward on the new marketing journey: the SAS Customer Decision Hub



We are all now connected by the Internet, like neurons in a giant brain.

Stephen Hawking



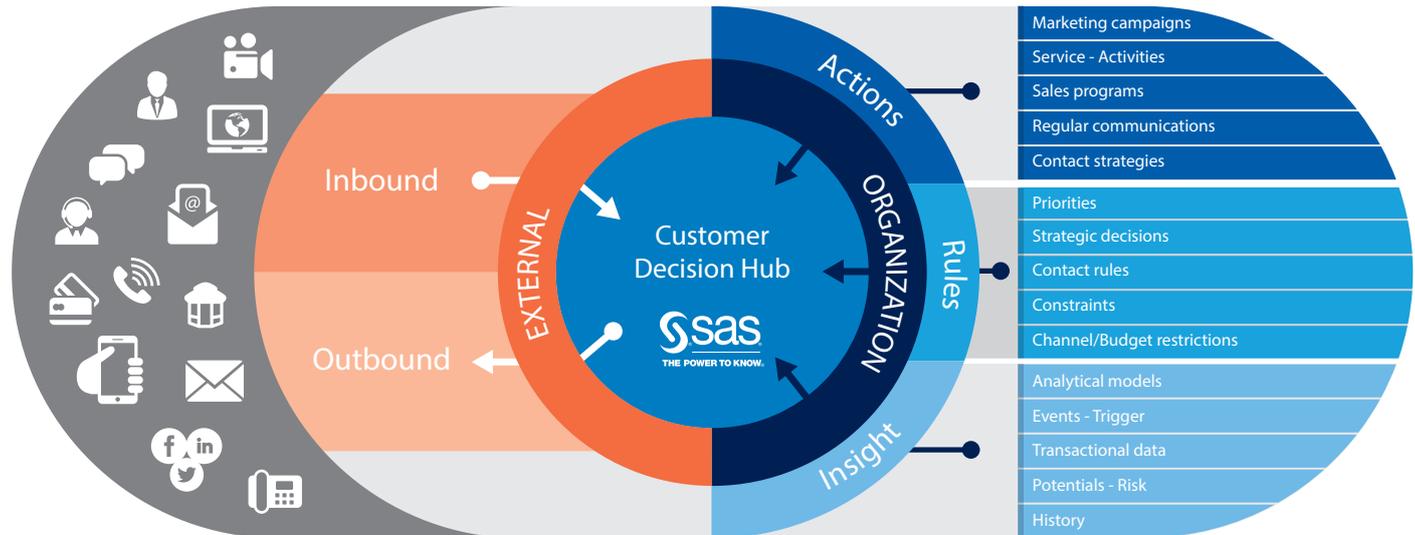
There is simply too much customer information that changes too fast, spread over too many touch points, channels and campaigns for one CMO or even an entire corporate marketing team to capture, grasp and assess. Gut feeling, creativity and intuition alone will not suffice in this fast-moving, data-driven environment. That is why the SAS

Customer Decision Hub wants to help marketing organizations gather a 360° view of the customer and automate an essential part of their decisions, based on the vast pool of Big Data that's available both in- and outside the company walls.

Marketing can only be properly and efficiently automated if you have smart analytics which can uncover insights out of raw data AND if you have the ability to turn these insights into relevant customer actions AND - and this is a very important one - are able to keep a good balance with what's best from a commercial point of view. For this,

you need ALL the data, the analytics and the marketing automation to be centralized and integrated into one platform. That is why the SAS Customer Decision Hub is conceived as a holistic, fully integrated end-to-end customer intelligence engine.

The SAS Customer Decision Hub enables organizations to establish **value-driven** marketing with a true **contextual, omni-channel communication** across all channels.



5.1 From insight to rule and appropriate action

The SAS Customer Decision Hub has three essential components that will allow a marketing department to automate certain kinds of crucial intelligence from A to Z:



Insights

By listening, marketing will re-learn how to talk.

Doc Searls & David Weinberger



Before you are able to surprise your customers with relevant and needed information, you will need a 360° view of them, in a consistent manner across all the different channels. And in order to get to this

kind of insight, you need data, intelligent data management tools and smart analytics. **Data management** is a prerequisite of the SAS Customer Decision Hub, seeing that the intelligence about customers is only as valuable as the data it was built upon. It makes sure that you choose and use the right customer and organisational data, which is relevant, up to date and clean.

The hub **centralizes all the different customer analytics tools** - social media listening, real-time recommendations, trend forecasting, web mining, customer segmentation, credit scoring, customer lifetime value analysis, predictive modeling and any of the solutions that you choose - on top of which a user-friendly interface is placed. The hub aims at offering the marketing department as much independence as possible from the IT department with extensive automation of capabilities, a far-reaching self-service and easy-to-understand visualization of data & insights. It is the only way to allow the speed of response that is needed in the current market environment.

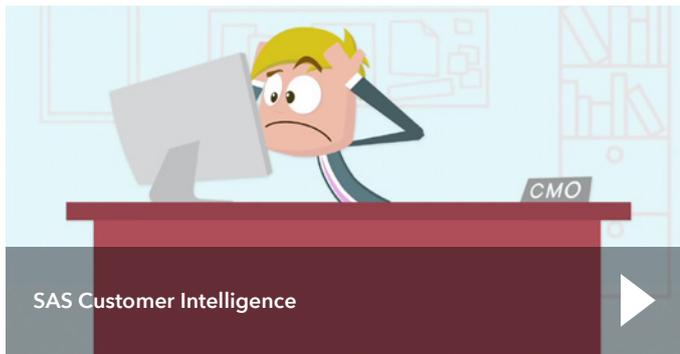
Rules

Before you transform the insights into welcome actions and campaigns, you have to take a whole lot of things into consideration: is the action consistent with my contact policy, does it comply with my commercial strategy, are there any channel restrictions or what are the exact priorities? The SAS Customer Decision Hub centralises

and automates all the different rules and makes sure that only the actions that are the most optimal from both a customer-centric and organizational point of view will be planned and executed. It is the only way you can make sure that your company objectives will translate into the most optimal value.

Actions

The last component of the Customer Decision Hub is where all the insights and all the rules are effectively transformed into marketing and communications campaigns and sales programs. This can be in real time, near real time or delayed, depending on what is needed. This is where the design and the action are defined and where gets decided which inbound or outbound scenarios are effectively



implemented. Depending how far you want to travel on the customer intelligence journey, the Customer Decision Hub can help you deliver highly relevant, interactive offers in real time - even in high-volume environments - based on automated analytical techniques, not business presumptions.

5.2 A smart marketing ecosystem

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Innovation thought-leader Peter Hinssen believes that organizations have to become a network because the outside markets have become networks of information. That's because connected networks are smarter, faster and more agile than any other type of organism. The SAS Customer Decision Hub works according to those very laws: it aims at **connecting every layer of customer and marketing and sales-related information** - all the data from all the different departments, databases and channels - into one highly intelligent, fast and interlinked ecosystem.

Marketing is too important to be left to the marketing department.

David Packard



But the SAS Customer Decision Hub works like a networked ecosystem in more than one way: **it creates a much smoother collaborative connection between the marketing and IT department** who have always had a co-dependent but very ambiguous relationship. Traditionally, customer intelligence solutions have always been too complex to handle for business users. Marketing needed to work with statisticians and data scientists to receive their much-needed customer intelligence, who – over-solicited and technology-centered as they were – were not always able to deliver the solutions on time and in an understandable format. The Customer Decision Hub, on the other hand, offers approachable analytics that automate otherwise complex actions in a way that marketing business users can extract a lot of insights without needing the help of the IT department. A user-friendly interface lets them design decision-making processes intuitively rather than through cryptic programming and rules using a set of reusable, out-of-the-box tasks. It's a win-win situation, reducing the dependency on IT experts: the marketing department receives and leverages the customer insights faster than ever and the data scientists can focus on delivering real added value to the much more complex questions that they enjoy answering.

Last, but not least, the SAS Customer Decision Hub **creates an intelligent and balanced connection between what the**

customer needs and what is best for the company. It allows investing where it really matters, intelligently reducing marketing investments at the same time while increasing customer satisfaction and maintaining – or even increasing – the value that is being created.

The SAS Customer Decision Hub will adapt your marketing perfectly to the fast-flowing market environment of today. It will help you understand your customers through and through and make the best campaign decisions for them and for your commercial strategy. It will enable you to give your customer what they need at the time they need it, through the best channel. It will allow you to sell more because, at the end of the day, that is what marketing aims to do.

The aim of marketing is to know
and understand the customer
so well that the product or service
fits him and sells itself.

Peter F. Drucker





Learn more about the concept of a Customer Decision Hub.

[Read here](#)

[Watch here](#)





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