

Getting to the Need: Driving the Right Interaction at the Right Time

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Introduction

Building effective, productive and profitable relationships with customers is rooted in the ability to interact with them in ways that are meaningful and relevant. This poses two distinct challenges: the ability to understand exactly what an individual customer needs, and the ability to address that need at the correct point in time.

Many traditional customer relationship management (CRM) systems serve to facilitate interactions but do so with suboptimal individualization and, therefore, miss the mark on these two critical challenges. This can result in interactions that are misaligned with customer needs, delivered at inopportune times or both – which ultimately forfeits opportunities to maximize customer value over time.

This paper examines the need to uncover and understand the dynamic roles and changing needs of individuals, the importance of synchronizing interactions with these changing needs, and how predictive analytics can drive customer intimacy by facilitating 1:1 interactions.

Anatomy of an interaction

An interaction comprises two main components: the nature of the contact (content), and the point at which contact is made (timing). That is, the “what,” “where” and “when.” The other components of this familiar journalism construct also come into play and, in fact, lead up to the point of interaction: to whom is the interaction directed, and what customer motivations are in play at the time of interaction.

The “Five W’s”

- **Who:** Which customer?
- **What:** Type of interaction?
- **Where:** Through which touchpoint
- **When:** At what point in time?
- **Why:** Driven by what motivation?

The “who”

Traditional marketing segmentations – as typically applied through CRM systems – group customers by similar attributes based on standard assumptions or “accepted wisdom.” However, this manually selected set of attributes may be limited in dimension, perhaps based only on a demographic profile. As a result, key nuances that may differentiate individuals are likely lost. For example, one marketing segment might group women who are married, college-educated, between 29-39 years of age, living in Phoenix, with more than one child and a household income greater than \$120,000. This is a useful profile, provided that every single person in that segment has an identical life history, preferences, attitudes, personal networks, moral beliefs, wellness habits and so forth. That is, the motivations behind the life choices that ultimately produced these attributes may vary widely person to person.

Traditional segmenting also tends to overlook the complexity of individuals and the multiple roles that they simultaneously assume. That is, customers become sets of attributes rather than dynamically interactive people. A customer is perhaps also a family member, an employee of a company, a member of a community group and so forth. Dominant roles may emerge and change frequently depending on the time of day, the individuals or groups with whom the individual is interacting, as well as other externalities – which means that specific needs, driven by attitudes and preferences, will also likely shift.

Needs of individuals in the “customer” role are no different: they shift depending on experiences, interactions and general attitudes and preferences – and this happens over time. Consider again the “Phoenix married women 29-39 year old” customer segment. A traditional CRM system might make certain assumptions about the homogeneity of the segment members, when in fact two women within that sample may look very different and would, therefore, benefit from a different type of interaction:

	Woman 1	Woman 2
Description at Time 1	■ Uses e-mail occasionally and only to communicate with family ■ Kids are not allowed to play video games ■ Is uncomfortable using credit cards online ■ Works in an office 5 days per week.	■ Heavy user of e-mail and the Internet for both home and business ■ Works long hours and communicates with children over IM ■ Frequently shops online ■ Husband and children are extremely tech-savvy
Possible interaction?	Send catalog by mail promoting easy to use, plug-and-play desktop computer equipment, educational software, and an invitation for an in-store shopping promotion event	Send SMS message about new high speed mobile services and sophisticated virtual solutions, family networking plans, the next generation mobile phone to be released and a promo code for free expedited shipping for online orders

These same systems may also neglect to account for changes in life circumstance, seasonal events, technology proficiency and general expansion of interests. This will again change the type of interaction that is appropriate at some future point in time:

	Woman 1	Woman 2
Description at Time 2	■ Has expanded her use of the computer to include media downloads and some online shopping ■ Telecommutes on Fridays ■ Oldest child has begun attending university abroad	■ Has been laid off from job and is now price sensitive about amenities ■ Hesitant about shopping online since credit card was stolen ■ Is focused on purchasing upcoming birthday gifts for husband and children
Possible interaction?	Upsell offer: special package for high-speed networking, VoIP telephone options, and promo codes for online orders	Retention offer: promotional discount rate on networking and software/equipment bonuses with service contract

So, when considering the individual to whom an interaction will be directed, it’s important to consider not only the underlying drivers of similar visible attributes, but also how those might change over time.

The “what” and “where”

Along with its content itself, an interaction includes the format or delivery medium and specific messaging that makes the contact compelling for an individual customer (“what”), as well as the touchpoint through with the contact occurs (“where”). Intuitively, each individual person will prefer or respond more readily to a different type of format or be more readily reachable through a particular touchpoint.

Formats may include electronic, paper-based, in-person conversation, Internet chat (instant message), e-mail, telephone (live or recorded, e.g., voicemail), SMS message or Web site banner. The interaction itself may take place in real time, as with in-person dialog or instant message; in a “push” format (e.g., e-mail, postal mail, or SMS mobile message); or via approaches that “pull” customers in, such as Web sites, banner ads or other promotion advertising.

And finally, there are the actual touchpoints, which are the ultimate means through which the interaction takes place. Touchpoints may be storefronts/retail outlets, Web sites, call centers, mail catalogs, social media sites and online forums. Intuitively, the format and touchpoint are closely related; for example, an in-person touchpoint like a retail channel would not rely on a virtual reach medium such as Internet chat or e-mail.

The “when”

Timing is a crucial ingredient when driving interactions, particularly in business settings. It can result in the gain or loss of a customer or a dramatic shift in product relevance – ultimately, the difference between profit and loss. Consider how three attributes of timing – *frequency*, *duration* and *chronology* – affect and shape a series of interactions. Each interaction must occur with the right frequency, for an appropriate duration and at a meaningful point in time, or else it will fail to maximize its effectiveness – and, at worst, actually cause damage.

The effectiveness of timing is highly correlated with individuals’ needs as well as with their desires/preferences; both may be either articulated or unarticulated.

Articulated needs and wants are easily managed – e.g., a company may simply need to ask customers how often they would like to be communicated with and through which format. Unarticulated needs and wants, however, are much more difficult. In most cases, the customer may not even be aware of a particular need or want – uncovering these is often the job of marketing focus groups. In other cases, an individual may be reticent to offer personal insights due to privacy concerns. In this case, building a strong relationship and developing trust – partly through effective and relevant interactions – will ease customers into expressing their needs and wants more readily.

Ineffective interactions can actually be detrimental to the health of the customer relationship, so focusing on quick wins by acting on articulated needs may be the most prudent approach.

The “why”

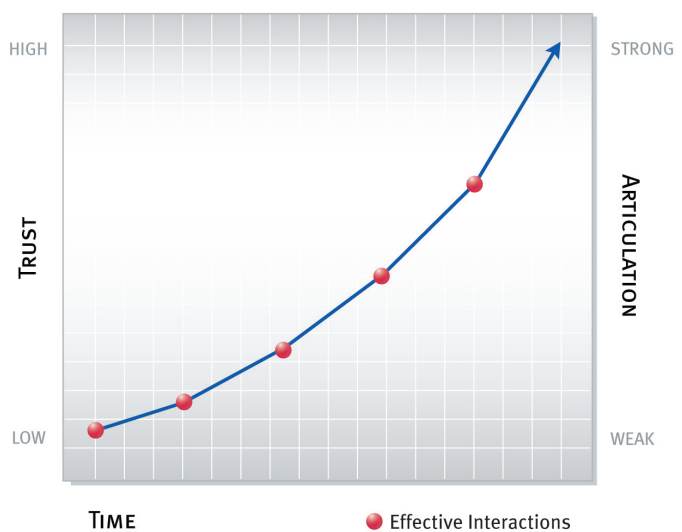
Understanding the underlying drivers of an individual’s needs and preferences differentiates individuals who may look very much alike on the surface.

Consider three individuals living in Denver who might belong to the same traditional marketing segment: one may be there because the dry climate and fresh air are optimal for a respiratory condition (need); another out of proximity to her job (desire and need); still another out of interest in a healthy, active lifestyle (desire).

Alternatively, consider how the motivation behind living in Denver could change for the same person over time: born there (neither desire nor need); attended college there (desire); developed skills in snowboarding and wanted to be near the ski slopes (desire); assumed responsibility for an ill parent living in the area (need).

Differentiating between true “needs” and true “wants” may not be necessary in a customer relationship; the line between the two tends to be blurred, particularly if a marketing department succeeded in the foundational goal of transforming wants into needs. Therefore, for the purposes of this paper, the two will not be necessarily distinguished.

■ Evolution of trust and articulation of needs over time



A lesson from Maslow and Alderfer

Abraham Maslow's 1943 paper, "A Theory of Human Motivation," outlined five main areas of needs and expressed those needs as a distinct hierarchy (see Figure 1). The simple premise of this theory is that more sophisticated needs do not surface – or aren't a priority – until lower-order needs have been met.

For example, social acceptance is a relatively unimportant need if an individual is starving. This hierarchy implies that the relevance of a met need relies on some chronological order in which all needs are addressed.

Note the emphasis on *relevance* as opposed to *value*. This is because the value of a met need is driven entirely by whether it's relevant at that point in time, relative to other needs or events.



Figure 1: Maslow's Hierarchy of Needs

Consumer needs also follow a hierarchy (see Figure 2). The most basic need in a customer relationship – that which actually defines an individual as a customer – is *procurement*, or the need to purchase a product or service. This would be similar to basic physiological needs, as a customer cannot proceed to develop a sophisticated relationship with a company otherwise.

The next level, aligning with safety needs, is *reliability*, where the customer has the product and is now seeking to ensure that it lives up to its promises (e.g., durability, versatility and the like). Once this need is met, the customer might seek social acceptance by using a particular product, or *dominant design* – whether or not this is the product that “everyone else is using,” thereby fostering some feelings of peer inclusion and also validation that the purchase was a good one, as evidenced by others' presumably good judgment.

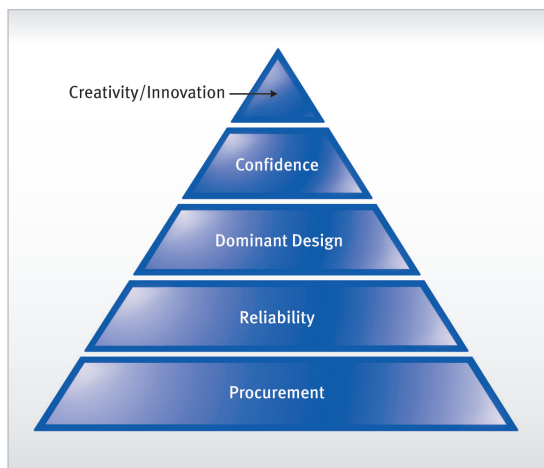


Figure 2: Consumer Hierarchy of Needs

The next order in the hierarchy, aligning with Maslow's esteem need, is *confidence*, which is essentially a need to feel good about the purchase. This is partly driven by evidence of reliability and the validation of owning the dominant design, but also by the need to gain deeper value from the product or service and perhaps develop a more material relationship with the company.

Finally, at the top of the Consumer Needs pyramid is *creativity/innovation*, which may be expressed as a need to fully exploit product functionality at the expert level or, for early adopter types, the need for the next product or an improved version of an existing one.

Ultimately, relevance is crucial to value creation in the customer relationship. Driving a particular type of interaction is only relevant if it meets the need of that customer at that point in time. For example, a retention offer (e.g., a discount on product or service) extended too early may sacrifice profit for the organization and ultimately awaken price sensitivity in the customer, provoking him or her to start shopping around for other providers. Similarly, a retention offer sent too late might result in an unnecessarily lost customer (see Figure 3).

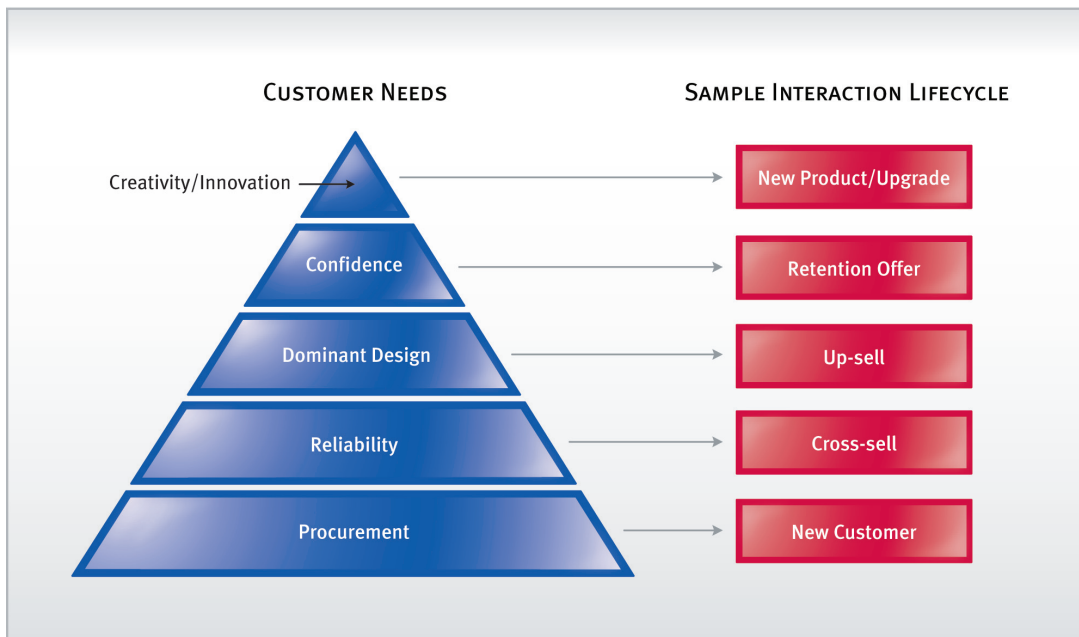


Figure 3: Aligning customer needs with interactions

Obviously, organizations (companies) also have needs, such as driving profitable revenue growth. The progression of these needs can also be expressed as a natural hierarchy, in which, for example, a customer must be acquired before customer loyalty can be sought. This is also a process that requires time and persistence.

The distribution of effort between the customer and the organization also shifts as both move up the hierarchy. It is often a difficult first step for a customer to make the commitment to become a consumer of a product or service, selecting it over other competitors (choosing a Mac vs. a PC, for example). Although acquisition is an expensive and ongoing challenge for marketing departments, it is a relatively low effort step for the organization on the whole; often the underlying engine is a broadly executed campaign – “casting a wide net” with relatively little individual investment.

However, as the customer moves up the needs hierarchy, the resistance to the company’s offerings lessens and decision making becomes easier – out of confidence, familiarity or even inertia. Further, as the relationship with the company grows and strengthens, the customer develops a greater level of trust and loyalty, and may become more willing to offer otherwise guarded information and personal insights that can help the organization customize interactions even more effectively.

The company's needs, on the other hand, become more difficult to meet as the hierarchy ascends: retaining customers can be more difficult than acquiring them (the expense involved in the latter notwithstanding). Establishing network effects, which requires a large consumer base and broad adoption of the product/service, requires a significant commitment of operational resources – but, when successful, begets the next-sought need, customer loyalty. Finally, companies seek to convert their loyal customers into true advocates and product evangelists. This top level is the most difficult to achieve, requiring significant effort on the part of the company and strong customer relationships (see Figure 4).

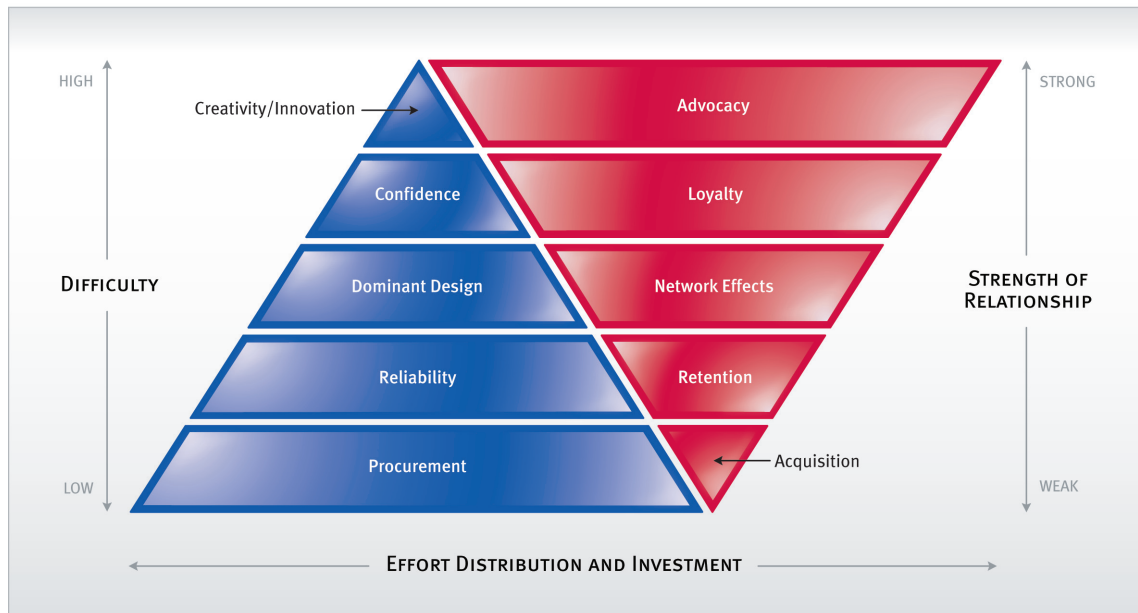
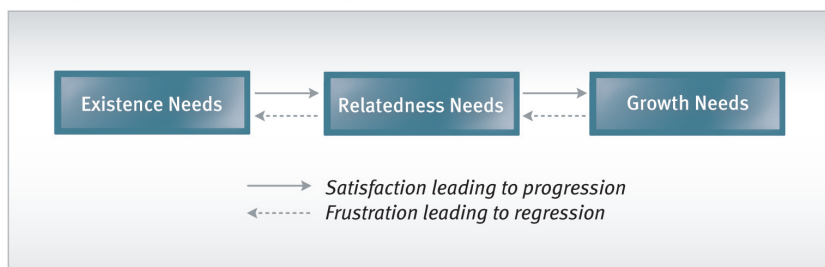


Figure 4: Customer vs. company needs

A major criticism of Maslow's model, which inspired Clayton Alderfer's 1969 ERG Theory, is its rigid linearity and assumption that everyone's needs are indeed the same. (e.g., the proverbial "starving artist" may put higher-order needs ahead of physiological ones).

■ Clayton Alderfer's ERG Theory



To refine the model, Alderfer proposed that basic human needs are categorized as either *Existence*, *Relatedness* or *Growth*; and, although they are loosely hierarchal, different types of needs can be pursued simultaneously, and the individual can actually regress to lower-level needs.

This, of course, complicates matters for companies seeking to drive the right interaction for the dominant need, but it illustrates more accurately the complexity of individuals and the multiple roles constantly in play. For example, an individual is not only a consumer, but might also be a family member and an employee. Each role may need to seek different categories of needs at distinct times, but may also seek them simultaneously based on the function of that role.

For example, when assuming the role of Family Member, an individual may seek only to fulfill Physiological and Safety needs for his or her family. Acting as a Consumer, that same individual may seek *Physiological* needs (e.g., purchasing products), *Social* needs (purchasing “cool” products) or *Esteem* needs (customer confidence, self respect for the purchase).

Finally, in the role of Employee, that individual’s *Physiological* and *Safety* needs are assumed, so the focus may shift to *Social* needs (acceptance and peer relationships in the workplace) and *Esteem* needs (confidence in job performance and respect of peers). So, because one individual is the dynamic composite of multiple roles with different needs, many needs need to be sought simultaneously (see Figure 5).

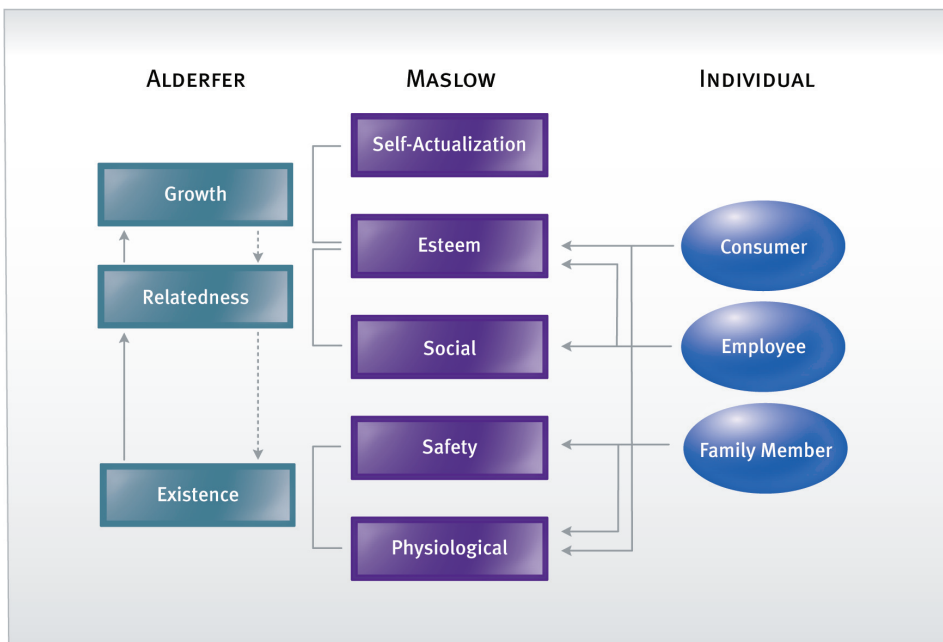


Figure 5: Customer vs. company needs



Uncovering needs

Identifying the needs of individuals requires a comprehensive understanding of multiple types of data. The most traditional and easily obtained types of data are *Descriptive* and *Behavioral*.

Descriptive data reveal who the customer is and include general attributes and demographic data such as age, marital status and family makeup, and socioeconomic indicators. Much of this information is self reported through mechanisms like product warranty registration, loyalty program memberships, policy/account setups and even surveys.

Behavioral data give insight into what an individual has done as a consumer and refers to transactional activities, such as purchases, claims submitted, types of policies held, returned products, or credit and payment history. Much of these data are recorded by the organization and associated with the demographic record to form a summary of the customer-organization relationship. The combination of these data fuel most Business Intelligence (BI) and Customer Relationship Management (CRM) systems and provide a very important historic view. These data are, by definition, static and unchanging and illustrate what has happened in the past.

Two additional forms of data will provide significantly greater insight into an individual's motives: *Interaction* and *Attitudinal*.

Attitudinal data comprise an individual's opinions, preferences, needs and desires (both articulated and unarticulated), and his or her general positions on a variety of topics ranging from satisfaction with a product or service to motivations behind a particular purchase. These data represent the "why" that explains past behaviors, which can provide insight into what an individual might want or need in the future.

Customer surveys are one way to obtain Attitudinal data, though this format relies on the voluntary declaration of information. Unfortunately, the most valuable information is also often the most guarded; for example a loosely guarded piece of information like the customer's name is much less useful than understanding whether they are price sensitive or tech-savvy or deeply interested in and committed to environmental issues, which is something that might inadvertently be revealed during a conversation with a customer service agent. Getting to the heart of these personal preferences and desires is the key to understanding the motivation behind past behaviors – and thus identifying needs and predicting future behaviors.

Interaction data represent the other key type, and is often a rich source of Attitudinal data when the latter cannot be collected directly. According to Gartner Inc., 80 percent of available data are in an unstructured form and the amount of unstructured data double every three months, making Interaction data a very important source. Interactions can occur through a multitude of channels, including discussion boards, call center case notes, telephone conversations, e-mails, blogs and social media like Twitter. Because these data are typically in a more candid form (vs. a formal survey, for example), they can reflect more authentically an individual's underlying or unarticulated beliefs and experiences and, if mined, can reveal a rich source of Attitudinal information.

The first key to fully leveraging Interaction data is to capture it. Most organizations do a fairly good job of recording transactions and customer history by using business intelligence (BI) and CRM systems, but if they do not take advantage of every possible customer touchpoint and capture every interaction, they forfeit a tremendous amount of rich information and the ability to continuously learn about their customers – and, ultimately, the ability to interact with them more effectively.

¹ Knox, Rita, T. Eid, and A. White. "Management Update: Companies should align their structured and unstructured data," Gartner Research, Feb 2005.



The fallen CRM promise

Today's CRM systems provide an important foundation for driving customer interactions, because they serve four important functions: they ensure that interactions *happen*, and that they are *consistent*, *efficient* and *recorded*. For example, a CRM system may automatically generate an offer to a particular segment of customers (happen), on a quarterly schedule (consistent), using scalable technology and automated channels such as e-mail (efficient) and track the interactions that have been made and to whom (recorded). Ensuring that interactions happen certainly improves the opportunity to capture additional customer data, and no executive would argue the benefits of leveraging efficient technology to do so. However, CRM systems rely heavily on historic data, particularly demographic information for segmenting, and transactional data to avoid redundancy of previous offers or interactions.

Using only these forms of data produces two major problems. First, historical data by definition are static, but the individual with whom the interaction takes place is constantly assuming multiple simultaneous roles and is, therefore, rather dynamic. To assume that needs and motivations remain unchanged over time is flawed and even dangerous thinking. It can even be detrimental to the customer relationship, because an interaction based on an obsolete need can suggest that the relationship between the organization and the customer, specifically the organization's commitment to the customer, is superficial rather than authentic. To ensure the highest quality and most meaningful interactions, the organization must have some insight – and thus foresight – into an individual's dynamically changing needs.

Consider this example: A woman receives a grocery store mailer with coupons promoting certain products. Because the store has a loyalty card program, it is able to identify her as a regular customer (demographic data) and track her purchase history (behavioral data). Combining these two types of data, the grocery store's marketing department sent an impressive looking mailer with her name across the front and suggestions for products she might like, based on what she's always purchased. However, the store was not aware of why she purchased those particular products or why she even shopped in that store (attitudinal data), so the coupon offer was based solely on static information – purchase history – and if her preferences/desires for certain products have changed, the offer becomes instantly obsolete.

The coupon example also highlights a second downfall of CRM systems: interactions tend to be uni-directional; that is, the CRM system simply "shouts at" the customer to buy more or do more. The feedback loop is often broken or nonexistent since the opportunity to capture additional information or leverage insights offered during an interaction is lost, and the customer may feel unheard.

A third problem is that CRM systems manage customers in segments rather than as individuals – a byproduct of the first problem with relying on incomplete data. Members of a particular segment may have very different motivations for belonging to that segment. For example, three individuals may choose to live in a townhome complex. Without knowing the motivation for selecting this living arrangement, these individuals might be segmented based on fairly accessible data – likely demographic data such as age or income. However, one individual may have chosen the townhome because of its proximity to the commuter train station; another because he or she does not like to do yardwork and wants to belong to a maintenance association; and the third because that particular townhome complex uses all environmentally-responsible energy sources. Therefore, a marketer who treats them all identically forfeits the opportunity to create a meaningful, customized interaction.

Identifying needs is difficult because each customer has his or her own unique hierarchy of needs, comprising articulated and unarticulated, conscious and unconscious needs. Therefore, driving customer interactions in aggregate, or based on a segment, will likely result in a large number of irrelevant interactions.



Predictive Analytics: right interaction, right customer, right time

The key to driving the right interaction at the individual level at the right time is to understand the customer need at various points in time and to do so at an individual level. CRM systems provide a good foundation for doing this, but they lack the ability to dynamically personalize interactions beyond the one-to-many level. Predictive Analytics can enhance these systems by combining all four types of data about people (demographic, behavioral, interaction and attitudinal) and match the attitudinal data with the demographic/behavioral record, thereby revealing individual motivations for actions – instead of relying on assumptions about such motivations based on surface data. This not only provides deeper insights into the historic data but also allows organizations to predict future behaviors by incorporating these dynamically changing attitudes and preferences of individuals. Enhancing CRM systems with Predictive Analytics, organizations can also adjust to changes in these attitudes by mining the ongoing interactions with customers. By understanding current needs, the right interaction can be crafted and delivered at the right time.

It is also important to also note that “real time” is not always the right time. Real-time actions sometimes come into play, such as using predictive models to automatically and quickly identify whether a newly submitted insurance claim is fraudulent. Predictive Analytics capabilities can also work to capture and incorporate information in real time and dynamically shape the interaction as it is happening – agility that can make the difference between an adequate interaction and an outstanding one. In other cases, however, it’s important to wait so that the interaction is appropriately aligned with a yet-unrevealed need rather than relying on an arbitrary schedule (quarterly mailings or weekly e-mails, for example).

Predictive Analytics allows organizations to do this, because it uncovers the true individual needs and preferences based on complete, comprehensive data, and then predicts individual behaviors before they happen. Ultimately, this means organizations can actively manage both the content of the interaction as well as the timing of it, ensuring that it is relevant and meaningful to the customer – and, in turn, profitable for the organization.

Taking the first step to better interactions

Adopting Predictive Analytics across an organization to drive more meaningful interactions requires both technology and process considerations. Before beginning this transformation, however, it’s important to assess the current state of the organization and identify the starting point.

1. What systems are in place today that drive customer interactions? What types of data do these systems leverage?
2. How does the organization evaluate customer satisfaction and preferences? Does it actively monitor changes in attitudinal data, and how does it adapt to these changes?
3. How is customer segmentation done? Are groups of individuals dangerously “homogenized” based on surface attributes?
4. Does the organization actively or passively collect and enrich customer data? That is, do the available data comprise only what is incidentally visible or are data actively mined?
5. What opportunities does the organization have to interact with customers? Are all of these touchpoints fully utilized?



Driving relevant and meaningful interactions with customers is a key step in gaining competitive advantage. The customer's perception and confidence that the organization knows him or her individually promotes customer satisfaction (or in the case of managing fraud and risk, keeps bad customer behavior in check) and fosters strong and loyal relationships – a mutually beneficial outcome for both the customer and the organization.

Through high-quality, ongoing interactions, the organization can not only serve individuals' needs as *customers*, but also as *people* – which, ultimately, is the goal of any relationship.

About SPSS Inc.

SPSS Inc. is a leading global provider of Predictive Analytics software and solutions. The Company's complete portfolio of Predictive Analytics Software (PASW) products – data collection, statistics, modeling and deployment – captures people's attitudes and opinions, predicts outcomes of future customer interactions, and then acts on these insights by embedding analytics into business processes. SPSS Solutions address interconnected business objectives across an entire organization by focusing on the convergence of analytics, IT architecture and business process. Commercial, government and academic customers worldwide rely on SPSS technology as a competitive advantage in attracting, retaining and growing customers, while reducing fraud and mitigating risk. Founded in 1968, SPSS is headquartered in Chicago, Illinois. For more information, please visit **www.spss.com**.



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