Customer Experience 2.0: How Data, Technology, and Advanced Analytics are Taking an Integrated, Seamless Customer Experience to the Next Frontier

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**ABSTRACT:**

Customer experience is defined as the sum of a customer’s interactions with a company across all of its touch-points and the resulting perceptions about the brand. Research has shown that a customer’s attitudes towards a company is developed as a result of their interaction across multiple-channels and that a positive and effortless customer experience can result in increased customer satisfaction, loyalty, and greater customer lifetime value.

Customer experience has recently become more critical lately because managing it via the emergence of a host of enabling technologies to provide data-enabled, insight-driven customer interactions can result in improved customer retention, greater ability to cross- and up-sell, the ability to prevent commoditization and margin erosion, and increase the propensity for customer advocacy that may generate additional referral revenue. Nevertheless, it is important that companies holistically address the four dimensions of customer experience - strategy, information, insights, and delivery - in order to enable competitive differentiation.

“*The most important single thing is to focus obsessively on the customer...*”

~ Jeff Bezos, CEO & President of Amazon.com

**Introduction**

Customer experience is defined as the sum of a customer’s interactions with a company across all of its touch-points – including employees, channels, systems, products, and services – and the resulting perceptions about the brand. Research has shown that a customer’s perception of a company is developed as a result of their interaction across multiple-channels, not through one individual transaction or moment in time, and that a positive and effortless customer experience can result in increased customer satisfaction, loyalty, advocacy and greater customer lifetime value.

Customer experience has recently become more critical as a focal point for businesses because:

- Customers have recently gained a significant amount of decision-making power due to technology changes and wide and easy availability of information. Data, transparency, mobility, and social media all enable customers to make better-informed, faster decisions.
- There are fewer ways to differentiate over the long-term, making customer experience, or differentiation through the best customer interactions, a compelling way to go-to-market.
- Research has shown that competing on customer experience results in a positive return on investment and financial benefits.
- Negative customer experiences exposed by both mass and social media have significantly damaged firm credibility, brand equity, and sometimes market capitalization.

The importance of an effortless customer experience as a competitive differentiator, as well as the importance of the digital and multi-channel experiences, is made
clear by the following research from Forrester in 4th Quarter 2011:

- 93% of respondent firms said that customer experience is among their companies’ strategic priorities.
- More than 75% said that their executives aim to differentiate on the basis of customer experience.
- 64% said that leadership aims to differentiate customer experience against competitors, while 11% said that they aim to differentiate against companies in any industry.
- 77% said that improving the online/digital experience is a major objective.
- 61% expect their organization to add or improve mobile experiences in 2012.

The financial benefit of customer experience is also validated by the following 2011 Gartner research:

- 86% of consumers said they would pay more for a better customer experience.
- 89% of customers were lost after a negative customer experience (up from 68% in 2006).
- 73% stated that they would expand their purchases with a vendor by 10% or more if the customer experience were superior.
- 58% said they would recommend companies that deliver customer experiences that are superior to others.

Improving the customer experience can result in improved customer retention, greater ability to cross- and up-sell, ability to achieve price premiums and prevent commoditization and margin erosion, and increase the propensity for customer advocacy that may generate additional referral revenue.

The financial benefit of customer experience has been further validated by a recent study that has taken Forrester's annual Customer Experience Index (CxPi) and compared it to total returns for customer experience Leaders and Laggards.1 From 2007 through 2011, a period which includes both economic peaks and troughs, ‘Leaders’ performed 27% better than the S&P 500 Index and 128% better than ‘Laggards’. Furthermore, our analysis has determined that the correlation between the 2011 CxPi and 2010 to 2011 revenue growth for these firms is statistically significant (0.47). Thus, expertise in customer experience cannot only be correlated to better top line financial results, but it can also help drive market capitalization and shareholder value.

**Evolution of Customer Experience**

Over the last ten years, managing customer experience has become a leading initiative for many companies due to the emergence of a host of enabling technologies. But customer experience as it is known today really began with the creation of automated call routing technology for call centers in the early 1970s. Prior to this, media experiences were “one-size-fit-all”—delivered by the three major television networks, radio, and hard-copy newspapers and magazines. Increased computing capabilities enabled large-scale data mining, which began in the 1980s and provided better insights into customers. Interactive voice response (IVR) and telephony technology dramatically changed contact centers in the 1990s. A revolution began with the Internet in the mid-1990s and continued through the end of the decade. The 2000s saw the proliferation of smart phones and creation of social media. The late 2000s and early 2010s have seen the proliferation of social media, rise of the cloud, and launch of tablets. Today, customer experience has become digital, data-enabled, insight-driven, and multi-channel.

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1 Forrester Research 2012. CxP Leaders and Laggards are defined as the top ten and bottom ten rated public companies in Forrester Research’s 2007-2012 Customer Experience Index studies. Comparison is based on performance of equally-weighted, annually readjusted stock portfolios of CxP Leaders and CxP Laggards relative to the S&P 500 Index.
Customer Experience: A Brief History

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| **Importance of Mass Media**  
- Customer experience is defined by one size fits all ads found in channels such as TV, radio, newspapers, and magazines as well as face to face experiences with employees.  
**Creation of Call Centers**  
- Continental Airlines first to use call routing technology (1973)  
**Targeted Products & Services**  
- Products and services continue to be targeted to target markets | **Advent of Large Scale Data Mining**  
- Companies begin to utilize computers in collecting and analyzing large amounts of data that improve understanding of customer insights, trends, and future outlook  
**First Customer Loyalty Program**  
**First Mobile Phone 1G Network**  
- Chicago-based Ameritech using the Motorola DynaTAC cellular phone (1983)  
**Metrics & Operations**  
- Focus on metrics to improve operations and reduce costs | **Customer Loyalty Program Proliferation**  
- Interactive relationship between customers and companies  
- Rewards are exchanged for customer information  
**IVR Proliferation**  
- IVR dramatically changed the contact center model  
**Widespread Internet Usage**  
- Customers can interact via the web including e-mail, chat, and websites  
**Call Center/CRM/SFA Software Introduced**  
- Siebel founded (1993)  
- Salesforce.com founded (1996)  
**Targeted and Cross Marketing Campaigns**  
- Focus on cross-selling customers during interactions and target marketing based on existing customer knowledge  
**First Smart Phone**  
- Blackberry launched (1999) | **CRM Software Considered Foundational**  
- Oracle/SAP dominate the marketplace  
- Oracle acquires Siebel  
**Call Center Outsourcing Flourishes**  
- High percentage of businesses use overseas call centers  
**Mobile Internet Capabilities**  
- Smart phones allow firms to cater to the mobile consumers  
**iPhone and Kindle launched (2007)**  
- Consumers are better informed regardless of location | **Proliferation of Social Media**  
- Personalized ad experiences are prevalent on sites such as Facebook, Twitter, and LinkedIn  
**Companies directly interact and receive feedback from individual consumers on fan pages**  
**Rise of the Cloud**  
- Cloud allows for highly accessible, easily organized and consolidated customer data for total 360 degree view of customer  
**huge amounts of data (big data) both structured and unstructured data that paves the way for improved analytics**  
**Mobile Tablets**  
- iPad launched (2010) |

Customer Experience Principles & Themes

Adherence to the following principles and transformative themes are mission critical to developing an effective customer experience strategy:

- Develop a Knowledge & Insight-based View
- Think Outside In
- Connect the Lifecycle
- Be Digital by Default
- Safeguard Privacy
- Measure Improvement

**Develop a Knowledge & Insight-based View** – All customers, their needs, and their value are not created equal. To understand where you should focus it is essential to view customers across all touch points. Integrating all demographic, behavioral, and attitudinal customer data – for a single view of the customer – allows marketers to uncover key insights not otherwise derived. Using this information and insight, customers should be differentiated based upon their needs and preferences from a company as well as their value (and potential value) to a company.

**Think Outside In** – Leverage customer insights and take a view from the customer’s perspective. Understand their needs, wants, and preferences and develop solutions accordingly. Treat customers as individuals – not markets, segments, or clusters. Don’t push products; deliver extraordinary, effortless experiences.

**Connect the Lifecycle** – Connect the customer lifecycle end-to-end from awareness to acquisition to growth to retention (and win-back if necessary), and successfully unveil unique moments of truth and opportunities to provide differentiation. Industry leaders always keep the customer experience at a given point in time effortless and consistent across channels based upon needs, preferences, and value.

**Be Digital by Default** – Today, digital devices have been integrated into much of everyday life. These devices put substantial computing power in the hands of consumers and enable them to have deeper, more fulfilling relationships with companies. Mobile smart phones and more recently tablets, which allow easier manipulation than mobile smart phones but more portability than...
laptops, have had a significant impact on the customer experience. For instance, a 75- or 80-year-old Silent or Greatest Generation retiree may or may not prefer a digital online banking experience and may instead prefer the comfort of an ATM machine or a teller.

**Safeguard Privacy** – Developing an excellent customer experience generally requires insight into customer needs and preferences, and that means collecting and maintaining customer information. Legal requirements exist for customer data that are generally industry specific (e.g. Gramm–Leach–Bliley Act in financial services, HIPAA in healthcare); however, to maintain an excellent customer experience and engender loyalty much more is necessary. According to the “Edelman 2012 Trust Barometer,” consumer trust in businesses to “do what is right” averages only 53% globally – so firms should do what is right and, if they use data, ensure they safeguard customer privacy.

**Measure Improvement** – Baseline the current customer experience, its metrics and its current measurements; build the business case for change using proven models and methodologies; create and implement a closed loop feedback improvement mechanism; and evaluate and refine results.

Although no one metric is a silver bullet, Customer Effort Score (CES), a metric developed by the Corporate Executive Board's Customer Contact Council, is an effective metric to measure the overall customer experience. Customer Effort Score is, in short, comprised from one question that a firm can add to a post-transactional survey to assess the degree of effort that the customer had to exert in order to get an issue resolved, a request fulfilled, a product purchased/returned, or a question answered, relative to expectations. Whereas conventional thought states that to improve customer loyalty a firm must ‘delight’ a customer by exceeding expectations, large scale research has determined that what customers really want is simply to resolve their service issue satisfactorily.

Another widely used customer experience metric is Net Promoter Score (NPS). This is a customer loyalty metric developed by (and a registered trademark of) Fred Reichheld, and serves as an alternative to traditional customer satisfaction research. NPS measures the level to which a customer is either a detractor or a promoter of their firm. It is currently very popular but is not universally accepted from an academic and market research perspective. Research by Keiningham, Cooil, Andreassen and Aksoy disputes that the Net Promoter metric is the best predictor of company growth (2007) and Hayes in 2008 stated that the “likelihood to recommend” question, does not measure anything different from other conventional loyalty-related questions. Nevertheless, NPS does have many strong advocates.

**Customer Experience Capabilities Model**

There are four key capabilities that are required to deliver customer experiences that are multi-channel, digital, and take advantage of customer knowledge and insights:

1. **Customer Experience Strategy & Design** – Developing a unified vision and strategic blueprint that is consistent with the brand promise

2. **Customer Experience Information Management** – Having integrated customer data and platforms in order to develop a single customer view

3. **Customer Experience Insights** – Leveraging information-based customer intelligence, analytics, modeling, segmentation, and research

4. **Customer Experience Delivery** - Using data, insights, and technology to make an optimal customer experience operational for prospects and existing customers that is multi-channel and leverages digital

Leading practices within each dimension include:

**Customer Experience Strategy & Design**: Research shows that customer experience is a strategic priority for many firms, but not nearly as many firms have developed a clearly articulated vision and strategy as to what that means or is. Leading practices here include development of a customer experience strategic
roadmap that is closely aligned with the customer experience vision and differentiated brand proposition. These firms are also measurement-driven and develop and incorporate lagging, if not leading, indicators and Key Performance Indicators (KPIs) for customer experience. More advanced firms also incorporate organizational design and incentive structure consistent with a customer-centric culture – a senior-level Chief Customer Officer or equivalent with cross-functional responsibilities that may even tie directly to the CEO, as well as a performance and monetary incentive structure that ties managerial and senior executive compensation to performance on key customer experience metrics.

**Customer Experience Information Management:** Leading practices relate to common customer data definitions and their enforcement through a governance organization and processes. Tools that support the movement of data from operational systems into data stores and warehouses for customer analysis and reporting are called ETL tools (extract, transform, and load). ETL tools also enable common data definitions through metadata capabilities, and thus are also considered best practice.

Recent additional leading capabilities here also include the ability to handle and leverage both big and unstructured data, especially from customer postings/interactions on social media channels. “An explosion of information is now available, explicitly and implicitly, for collecting customer demographics, psychographics, customer behavior, their clicks, their aspirations, their sentiment, their networks, their location, their reputation, online and offline transactions, stage of a buying process, life cycle stage, etc. All this information will be mandatory to meet lofty goals, such as a 360-degree view of the customer. Big data will not be an exercise in merely collecting massive amounts of this data; rather, it will be about making the right information accessible and action oriented for both the company and the customer for core CRM,” says Adam Sarner in Gartner’s report “CRM Team Perspective: CRM and Big Data,” April 2012.

Gartner goes on to predict that over 85% of Fortune 500 companies will not be able to effectively exploit big data for their competitive advantage from 2012 through...
2015. That leaves a wide open opportunity for firms to leverage competitors’ customer experience failures to their market advantage.

**Customer Experience Insights:** In general, leading practices in customer insights require some advanced analytics and data mining platform (e.g. IBM SPSS). These tools are leveraged to perform advanced statistical analytics on large data sets. Advanced types of customer segmentation include persona-based and micro-segmentation. They also include customer profitability and lifetime value analyses, including customer-level activity-based costing capabilities to accurately calculate cost to serve and contribution profit. Advanced companies develop sophisticated predictive propensity and pre-emptive models that focus on retention/attrition, cross-sell and up-sell, and other customer propensities. Leading practices also include subjective and outcome-related customer experience metrics such as Customer Effort Score.

**Customer Experience Delivery:** Leading practices for customer experience delivery include multi-channel integration and activation, customer journey mapping, development and implementation of a customer brand and engagement strategy as well as a loyalty and correspondence strategy, and having automated capabilities for problem resolution, both assisted and self-provisioned. Customer experience delivery capabilities also include digital and social platform integration, customer experience management applications, as well as traditional CRM applications. In order to provide insight-driven sales, marketing, and service offerings, a company must execute complex processes that convert insight-based rules about customer behavior into differentiated offers and treatment by customer-facing personnel or electronically across all touch-points.

**Conclusion**

A customer's perception of a company is developed as a result of their interaction across multiple-channels, not through one individual transaction or moment in time. A positive and effortless customer experience can result in increased customer satisfaction, loyalty, advocacy and greater customer lifetime value, which leads to competitive advantage.

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**Customer Experience at Amazon**

Several years ago a customer was checking Amazon.com (AMZN) for books to help her start a home business. She found a used workbook for would-be entrepreneurs that sounded promising and was described as “like new.” The seller wasn't Amazon itself, but one of the merchants that markets through its website. Nevertheless, the customer purchased the paperback.

When the book arrived at her home, though, it wasn't new. The worksheets were already filled in with someone else's scribbles. She first tried the merchant and didn't get any response but then called Amazon. Amazon immediately gave her a refund, without her having to return the book.

Amazon has earned a reputation for strong service by letting customers get what they want without ever talking to an employee. Sales clerks are nonexistent. Orders ship with a few mouse clicks. Packages arrive on doorsteps quickly. But when things go wrong at Amazon—and they occasionally do—the company’s employees get involved. That may be where Amazon stands out most markedly from other companies, and helps explain how the company earned the #2 spot in Forrester Customer Experience Index in 2012.

Jeff Bezos, Amazon’s founder and CEO, describes the distinctions Amazon makes between customer experience and customer service. Customer service is only when customers deal with Amazon employees, which Bezos wants to be the exception rather than the rule. “Internally, customer service is a component of customer experience,” he says. “Customer experience includes having the lowest price, having the fastest delivery, having it reliable enough so that you don’t need to contact [anyone]. Then you save customer service for those truly unusual situations.”
Customer savvy organizations always want to know who have advanced customer experience capabilities and what they are doing to achieve this level. Banks, insurance companies and investment management firms are leading the way in such advanced capabilities, mostly on the retail sides of their businesses. Healthcare payers also continue to make major strides, given healthcare consumerization and reform.

Profitable growth is always a challenge. When firms identify strong brand propositions, however, and align them with data-enabled, insight-driven, organizational design and technology-leveraging strategies to enhance and optimize the customer experience, they can achieve competitive advantage. In a digital, social media-connected world, customers are expecting effortless, multi-channel, differentiating customer experiences from the firms with which they choose to do business.

Companies must holistically address the four dimensions of customer experience in order to provide a data-enabled, insight-driven customer experience and enable competitive differentiation. Developing a unified vision and strategic blueprint that is consistent with the brand promise is the first step. Integrating customer data and platforms in order to develop a single customer view is the information-based foundation of a customer-centric organization. Leveraging this information and analytic-based insights that along with new technologies can be utilized to deliver multi-channel, digital, and optimized customer experiences can then truly enable competitive differentiation with incredible results.

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References


“A Longitudinal Examination of Net Promoter and Firm Revenue Growth”, *Journal of Marketing*, 71 (3): 39–51. Timothy L. Keiningham; Bruce Cooil; Tor Wallin Andreassen; Lerzan Aksoy, July 2007


