

# Next Generation Customer Experience

Holograms, floating warehouses,  
self-operating products and  
workerless retail

Ruben Moffett

Technology innovation is rapidly unlocking possibilities affecting all aspects of our lives. While Customer Experience is hardly as important as the innovations driving healthcare or as glamorous as the capabilities of autonomous vehicles and space travel, effective and progressive Customer Experiences are a critical driver of corporate success. In fact, studies indicate that poor customer service costs companies more than \$62 billion a year and that by 2020 the experience someone has with a brand will be a more important purchasing differentiator than price or the product itself. In addition, customers are already demanding engagement in completely different ways:



**See Me** – Customers expect customization and personal context. Companies must evolve from the broad stroke, Customer Persona definition to a targeted and personal approach using microtargeting. Companies must empower customers to engage on their own terms through their chosen channels.



**Understand Me** – Companies must leverage the far-reaching capabilities of Big Data and Analytics to interact with their customers in an efficient and personalized manner. They cannot waste the customer's time with messages, offers and service that are not applicable.



**Guide Me** – Machine Learning, IoT and Predictive Analytics allow companies to engage more proactively and intelligently. Being one step ahead of the customer's needs puts your company one step ahead of the competition while driving customer loyalty and, in many cases, increased revenue.

And while technology advancements have already facilitated vastly different experiences than what was possible a decade ago, the next generation of the Customer Experience represents change at an exponential rate.

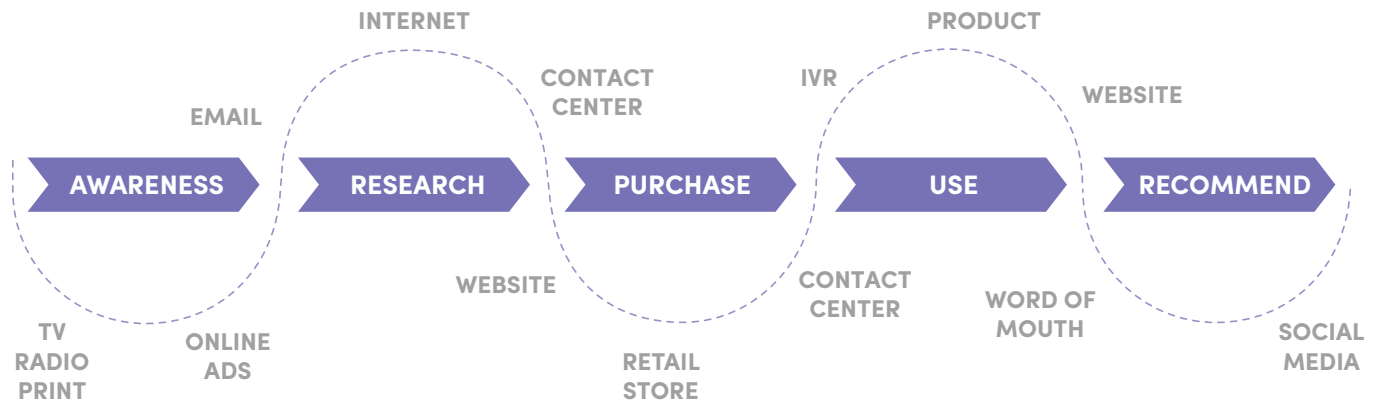
Customer Experience can be defined as the accumulation of customers' perceptions formed over the course of all interactions that a customer has with your brand and company. This aggregation of interactions spans the entire lifecycle, from initial awareness, through company and competitor research, to the purchase process, and to ongoing product usage and service. Often, many individual interactions take place at each stage of the lifecycle. This provides many opportunities to make a positive (or negative) impression.



Additionally, your company controls a variety of inputs that work together to support every interaction. People are a large component of that experience and must be properly screened and trained for the requisite skills. Processes are another contributor, and companies must design policies and procedures that appropriately support the customer while aligning with company objectives. And finally, technology is the single largest enabler of the interaction experience. These technologies provide customers with their choice of rapidly evolving interaction channels and ensure that the information available is relevant, timely, simple and contextual. These advancements in technical capabilities drive process efficiencies and improve people performance, ensuring that customers feel as if companies "See Them, Understand Them and Guide Them".

The capabilities that innovative technologies provide are giving us exciting glimpses into what is possible now and what is just around the corner, affecting each stage in the Customer Journey.

**TOUCHPOINTS IN THE CUSTOMER'S JOURNEY**



Customers are interacting both anonymously and openly through many touchpoints and channels throughout the Customer Journey.

**1 BRAND AWARENESS**

As customer empowerment continues to grow, companies have been forced to adapt. In the mid-20th century, companies began to form distinct Marketing departments separate from the Sales function. This emphasis on marketing and concern for customer needs evolved into a focus on building relationships between the company and its customers. Measures such as lifetime value, loyalty, retention and Net Promoter Scores emerged. This concentration on the customer relationship has continued to expand into the early parts of the 21st century by becoming more real-time, and most recently, highly individualized.

Today's innovators are changing the customer's experience drastically by tapping into unrealized wants and needs, and matching them with customized, real-time and contextual messaging. The most advanced marketers are using microtargeting and location-based content marketing to proactively prompt

individual consumers toward a purchase, based on the burgeoning availability of cross-domain data. By tapping into demographic and purchase data, companies can prompt customers in real-time with information and offers that are relevant and timely for the customer.

Companies that can most effectively predict high-probability future purchases will have a leg up on cementing their brand in the customer's eyes - and proactive firms can capitalize by presenting special offers before their competition even recognizes the customer as a prospect.

In the near future, companies will be regularly identifying seemingly innocuous events and data that correlate to support sales trends. That information will then be used to identify and market to customers before they even understand their own needs and interests.

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## 2 RESEARCH



Many of the same techniques emerging in the Marketing Awareness stage can be leveraged as customers begin to move closer to the Sales stage and function. However, a major advance benefiting the Research stage is driven through the already readily-available Personal Assistants (PA) such as Alexa, Siri and Cortana. The next generation will deliver new possibilities through these technologies.

Companies will begin providing advanced interfaces for these PAs that deliver a seamless experience for the customer. It is estimated that at CES 2017, over 1,000 new Alexa-controllable products were introduced (referred to as Skills). But, PAs are not just about controlling other products and devices; they are also about sharing information and data. Customers are already maintaining their shopping and wish lists within their PAs, and through these interfaces, the PA can research vendors and provide options for review. Companies that don't develop product interfaces for PAs will be overlooked in favor of competitors that provide customers with real-time information on product functionality and availability.

Taking this one step further, imagine a PA empowered with Augmented Reality/Virtual Reality (AR/VR) and holograms. When delivered through the same PA interface referenced earlier, companies could provide three-dimensional representations of their product displayed by the PA. In this way, customers will benefit from a much more robust shopping experience from the comfort of their own home. Today, most consumers shop and compare features and pricing on-line (they often must visit multiple websites) but then venture out to visit brick-and-mortar retail locations to inspect the actual product. The next generation Personal Assistant will eliminate those visits and provide much more value while also streamlining the process. Companies that build AR/VR representations of their products allow customers to view accurate representations of their products from the convenience of their homes thus by-passing retail visits, shortening the customer journey and allowing customers to engage on their terms.

## 3 PURCHASE



Online retailers are constantly striving for frictionless experiences, and those who have developed the most streamlined online buying tools experience fewer abandoned Shopping Carts than their less advanced peers. That frictionless, value-rich experience must begin early in the cycle and persist through the purchase and provisioning stages.

Over a year ago, Amazon was beginning to move toward the physical retail location. This was an about-face from their market-disrupting, on-line retail dominance. However, I am sure you have all seen the recent details about Amazon Go, which will be opening to the public in early 2017. These cashier-free, brick-and-mortar retail locations take the buying experience to the next level.

Retailers will soon leverage AR/VR and hologram technologies to further automate non-value-adding human resources in their physical locations. Interfaces will move from brick-and-mortar retailers to an evolved, portable PA that empowers customers to pare down shopping stops (eliminating those that don't carry specific brands or products, those that are out of stock of specific products, or those that don't have the best prices in the area) and then upon arrival, streamline the in-store experience with their personal, hologram assistant.

These are examples of the new purchasing experience, one that allows for immediate gratification with very little hassle. Amazon again leads the way in the delivery process, breaking down conventional processes to empower and satisfy the customer. Their recently won patent application for giant floating warehouses could change the distribution and logistics world. Having already begun their drone delivery program, they aim to further reduce the delivery timeline, providing customers with previously unthinkable capabilities, by equipping blimps filled with product floating above major metropolitan areas and serviced by fleets of drones.

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## USE AND RECOMMEND



Revisiting the capabilities described in the Research stage makes it clear that PAs will provide profoundly improved experiences related to the set-up and installation of products. No longer will users have to suffer through poorly-worded instruction guides, as they soon will have access to 3D images walking the customer through the process and providing real-time responses to questions and concerns

These services can be extended into the ongoing usage stage, as customers will interface directly with the company's support organization through their PA.

Having one familiar source to turn to, on the customer's terms, that provides updated and highly useful information, represents a huge step forward toward improved customer satisfaction.

Referring back to the power of cross-domain data, we can see that product-specific information delivered to a specific customer, leveraging everything previously known about that customer, will dramatically improve the support experience. A wireless router provider's ability to proactively leverage the data about the customer's model, firmware version, age, previous incidents, Internet Service Provider, ping/download/upload speeds, etc. will help improve the service experience exponentially.

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But the Use stage also represents yet another transformative opportunity powered by technical innovation: the Internet of Things (IoT), Artificial Intelligence (AI) and Machine Learning. Customer Service models are already changing rapidly. AI has delivered Chatbots, robots who chat, to serve as new-age Customer Service representatives, equipped with advanced natural language voice recognition and dynamic response capabilities. In fact, I recently answered a call from an insurance company and had a two-way dialog with an advanced, natural language machine for nearly a minute before I realized it was not a human. Chatbots are taking over repetitive, non-essential tasks, providing easy responses to customers,

and collecting and organizing information requiring human intervention and judgment. This capability streamlines the customer experience and frees up human capital for more advanced activities. And, Chatbots never sleep, they are available 24x7.

Products are evolving rapidly through the pervasive deployment of sensors, thus helping companies detect and manage usage for a variety of purposes. Companies can proactively suggest service or replacement parts automatically while also understanding usage patterns of customers (both individual and aggregate). This expanded use of available data not only improves the user experience by proactively preventing product failures, but also by evolving designs for optimal value and efficiency.

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## Machine Learning and cross-domain data will be leveraged to more accurately predict interaction arrival patterns, thus optimizing scheduling and reducing labor costs.

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Taking these capabilities yet another step forward, on top of improving the design and reliability of their products, companies can also begin to identify ways that the product can operate itself. Think of the concept of self-propelled vacuum cleaners which are now being extended to self-driving automobiles. We have countless examples in our homes today: coffee makers, smart thermostats, fitness wearables and home security systems. With our household of five, I certainly look forward to consumer-ready, self-operating laundry systems that sort dirty clothes, kick off washing loads, transfer to drying cycles and ultimately fold and sort automatically.

Internally, companies are beginning to leverage AI and Machine Learning to improve their human workforce. These tools are used to streamline and improve the

hiring process and automate the quality inspection and training processes. Machine Learning and cross-domain data will be leveraged to more accurately predict interaction arrival patterns, thus optimizing scheduling and reducing labor costs.

While many of the features and use cases described above may seem far off, customer expectations have never been higher and only continue to grow. New generations are growing up with a completely different context from their predecessors, and Millennials, whose expectations are the highest, are on the verge of becoming the highest-spending generation of them all (\$200B by 2017, according to Forbes). Investments in Big Data and analytics, advanced interfaces and gateways, virtual reality and holograms, frictionless, but valuable consumer experiences powered by Machine Learning and Artificial Intelligence, and the pervasive capabilities enabled by IoT will all be rewarded. According to Forrester, 72% of businesses say that improving the CX is their top priority. Those companies that choose to embrace these possibilities and invest in the next generation Customer Experience will reap the benefits... those that don't may go the way of the door-to-door salesman.

### ABOUT THE AUTHOR

#### Ruben Moffett, Partner

Ruben is a senior leader who combines extensive technology, operational and business expertise to help clients maximize and align technology with their strategic objectives. Ruben's specialties include customer experience, workforce optimization, business intelligence, software development, infrastructure, cloud solutions and professional and technical services management. He is a graduate of Cornell College and holds an MBA from the University of Iowa. Ruben spends his free time playing hockey and attending his children's soccer games, cross country and track meets and dance competitions.

## About Cimphoni

Cimphoni is built on the premise that technology, when properly applied and led, can deliver innovative solutions that transform businesses, enrich the products we use daily and improve the quality of our lives. The Cimphoni team is comprised of highly experienced technology and business leaders with a thirst for innovation and a passion for solving problems. Founded in 2012, we serve customers throughout the United States from our offices in suburban Milwaukee.

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## Contact Cimphoni

**If you would like to enhance your understanding of the customer experience you are delivering at your company, please contact us at (888) 365-4176 or [info@cimphoni.com](mailto:info@cimphoni.com). We can help you improve every step and every touchpoint in your Customer Journey.**