

How Cognitive Platforms are Reshaping the CEM Landscape

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Customer experience management (CEM) is undergoing a major transformation in the digital economy. There is no industry domain that is untouched by this transformation and the winners will be the ones that deploy technology in the direct front lines of customer interaction. Enterprises that manage the digital transformation through a combination of strategy, leadership, production and consumption of the generated data, are best positioned to lead their respective industries. The office of the CDO (Chief Data Officer) is going to perform a critical role in CEM focusing mainly on the consumption of data to derive insights and personalized user experiences. The rapid proliferation of “cognitive” application platforms from being a specialized functionality to widespread adoption in the enterprise accelerates the shift to an analytics driven culture.



Cognitive systems are those computer applications that “learn” from sets of interrelated data and generate computational models. The vast strides in machine learning, data science and the increased adoption of tools and techniques are significantly improving the quality of human computer interaction in ways that were unimaginable half a decade ago. Cognitive systems allow companies to derive valuable insights about their customers and help them deliver the best-personalized experience. In every customer interaction, the key to providing the best customer service is to understand “intent.” Technologies that listened only to what the customer is saying or typing have negatively impacted customer satisfaction. Those systems of the past did not derive context and focused only on the present.

Today, we are surrounded with cognitive systems in various forms, product recommendations on Amazon.com, vacation recommendations that flood our inboxes from travel sites, coupons and flyers in our mailboxes, movie recommendations on social media sites, the airline call center bots, kiosks at the fast food chains – there is technology deployed at every turn that is tracking our behaviors and learning something about us every single day. A major disruption is already underway with smart assistant technologies like the Amazon Alexa and Google Home devices now invading our homes and eliminating the need to pick up our phone or boot our computer to do certain things. We can now just ask what the weather is, track our shipments, order a cab or a pizza, search and listen to music, stream videos to our TVs, manage to-do lists and calendars, turn on/off lights and applications (and the list is endless) all with just our voice. These assistants are constantly learning an individual’s accent, word patterns and personal attributes so they can understand the “intent” accurately and provide the best responses. [Gartner predicts](#), “By 2020, the average person will have more conversations with bots than with their spouse,” that “30% of web browsing sessions will be done without a screen”, and more significantly, “20% of brands will abandon their mobile apps.”

Understanding and treating a customer as an individual is the future of customer experience and, to provide that individualized experience, technology is going to play a significant role. There are some enterprises that take this approach too far and completely eliminate the human element in all of the customer touch points to their own detriment and poor customer experience. The key is in striking the right balance by “augmenting” the human-human interaction with intelligent systems. A recent Stanford study, [“One Hundred Year Study on Artificial Intelligence \(AI100\)”](#) says, “AI will likely replace tasks rather than jobs in the short term” among other social impacts of cognitive computer applications.

Customers still want to interact with a human but the quality of that interaction is now enhanced by

the cognitive systems put in the hands of the customer service representative presenting relevant insights and suggested actions. The customer demand for better, convenient, and responsive service is growing exponentially and, given the fact that customers have limitless choices today to explore and acquire what they want – puts a lot of pressure on companies to retain customers and revenue.

Customer Service has evolved over the years from primarily call centers to what are now called contact centers that handle a variety of customer interactions through different channels like computer chats, smart phone apps, phones, email, social media, SMS, and this list is only growing. This presents a unique challenge to provide a consistent and seamless user experience irrespective of the channel. Cognitive platforms help deliver this Omni channel user experience at large enterprises around the world. Let's consider a scenario of a customer calling in about their internet service disruption.

According to the [The Connected World Technology Report](#) by Cisco, for customers in the 21-29 year old age group, internet access is more important than owning transportation. Thirty two percent said the internet is as important as water, food, air, and shelter. Forty percent consider internet access more important than dating and social activities, and 50% said they could not live without internet access. The report also highlights something interesting in exchange for a free smartphone with unlimited data service, more than 4 in 10 professionals would allow their carrier/service provider access to all of the data and information stored on the phone.

Given this information, go back to the customer calling about their internet service disruption. Just a few relevant data points about the individual customer's demographic and a response tailored to empathize with the customer will help a customer service representative handle the call effectively with an irate customer that has just lost something they cannot live without. Providing that context about the customer, about the systems, about the weather, about global events, behavioral analysis studies, past interactions with similar demographics and connecting them all together to assess the problem and provide the shortest path to resolution is what cognitive systems are getting better at every day.

As we make the case for artificial intelligence to be at the forefront of customer engagement assisting the front line staff in most cases and automating the rest, we should also ensure that these systems are trustworthy. If humans do not trust cognitive systems, they will stop using them. One of the key concepts in helping systems gain trust is to have them explain the rationale behind the decisions being made. The WHY. Systems that are able to provide the reasons behind why and how a certain decision was arrived at will earn the trust of the user much more quickly than the ones that do not.

Enterprises have made significant investments in artificial intelligence systems over the past few years and are now demanding ROI. What were once in the experimental domain of the R&D labs is now seeing widespread proliferation in the enterprise. Some of the benefits of these applications may not be tangible, but they play to the underlying human emotions of trust and empathy that have a direct correlation to customer satisfaction. Enterprises should place emphasis on the value of customer satisfaction and continue to enhance the capabilities of the cognitive systems to provide better experiences.

What's next?

Gartner predicts, "By 2020, 100 million consumers will shop in augmented reality" and that "half of all searches will be done by voice." This is a call to action for companies to start investing in these areas to provide that immersive digital experience to their customers whether they are buying furniture, ordering a movie, paying their bill, checking the status of their order or trying to self-install the equipment from their cable provider. Augmented reality has applications in the entire LBGUPS (Learn, Buy, Get, Use, Pay, Service) chain of the customer journey and is something enterprises should start focusing their attention to. As augmented reality (AR) technologies start to mature, enterprises should be ready to capture the momentum and start rolling out solutions. AR, along with natural language voice interfaces, will be a huge game changer in customer experience management and will decide what companies go on to lead their industry domains.

We are transitioning from the era of eCommerce to VoiceCommerce and VisualCommerce. This transition promises an engaging customer experience that will generate significant value to companies by retaining customers and increasing the likelihood of a customer purchasing the product. People tend to remember 80% of things they see versus 20% of the things they read. Shoppers are twice as likely to order a product over voice as logging on to their computer or opening a smartphone app to purchase a product.

We are going through an era of transformation on various technology fronts, and companies should be ready to adapt and respond to these changes in an agile fashion. Disruption is the name of the game and companies that continuously improve their quality of engagement and experience with their customers will likely cede leadership to new entrants that embrace the latest and greatest in cognitive technologies. Steve Jobs once said, "Get closer than ever to your customers. So close that you tell them what they need well before they realize it themselves," and we are witnessing a period where artificial intelligence and cognitive systems are enabling companies to realize that vision.