

A young woman with long brown hair, wearing a white knit beanie and a blue textured sweater, is smiling and looking towards the camera. She is holding a large, light blue, cloud-shaped prop in front of her. In her other hand, she holds a red smartphone. The background is a blurred outdoor setting, possibly a city street.

5 WAYS

Next-Generation Cloud Computing

WILL ELEVATE THE
CUSTOMER EXPERIENCE

ttec™

In this e-book, you'll discover

1. How next-generation cloud technologies such as customer journey mapping platforms and advanced analytics are poised to transform the customer experience.
2. The top operational and technical challenges that next-generation cloud technologies tackle.
3. Examples of how companies can tap into next-gen cloud technologies to elevate the customer experience.



Executive Summary

Customer experience leaders get it. They know that customers expect to be recognized and treated consistently across all of the channels that they use. CX leaders also understand that customers expect real-time engagement and personalized messaging.

Even though CX leaders grasp all of this, they still find themselves struggling with the same challenges. Organizational silos and a lack of integration between functions and data sets make it nearly impossible to develop a multi-faceted view of each customer and deliver the types of personalized and contextual experiences that are needed to keep customers in the fold.

Fortunately, help is on the horizon. Next-generation cloud computing technologies will bring customer experience to a higher level. The combination of private, public and hybrid clouds will enable businesses to deliver faster and more intelligent customer experiences.

Marketers and customer service associates will benefit from a true 360-degree view of customers thanks to the greater integration of customer data across siloed business units that the next-generation cloud offers. Retailers will be armed to deliver rich, real-time in-store customer experiences that cater to individual customer behaviors and interests. Cutting-edge cloud analytics tools will provide business leaders with a faster path to customer insights by combining internal and external customer data.

Knowing what's looming for the cloud is essential for business leaders who are intent upon distinguishing the customer experience.

CUSTOMER EXPERIENCE IS
A TOP CLOUD DRIVER FOR
**46% of enterprise
companies worldwide.**

Source: 2015 Enterprise Cloud Report, Cloud Sherpas

UPLIFT #1

Customer Journey Mapping Connects the Dots

With so many options available to them, customers will naturally gravitate to companies that make it easy to be a customer. "Like electricity and water, customers will always seek the path of least resistance," says Don Peppers, founding partner of Peppers & Rogers Group, a TTEC Company.

Creating a friction-free path for customers starts by understanding the non-linear course that each customer takes across physical and digital touchpoints in the customer journey. A cutting-edge customer journey mapping platform enables CX leaders to identify the step-by-step actions taken by each customer that can then be used to streamline and simplify the customer experience. These platforms can combine a customer's real-time digital behaviors along with her transaction history, demographics, and psychographic data to provide intelligent and effortless experiences.

PROOF POINTS

Since customers often use their mobile devices in their paths to purchase, CX leaders should closely track how customers are using their mobile devices and to identify any pain points in the cross-channel passage.

An airline customer who uses her smartphone to check on the status of a delayed flight and other upcoming flights shouldn't have to abandon the airline's mobile website to connect with a customer service associate. The customer journey should be designed so that there's a logical way for the passenger to connect with a customer service associate through a call or chat interaction without having to leave the mobile website.



COMPANIES THAT DELIVER CONSISTENT AND GRACEFUL CUSTOMER EXPERIENCES GENERATE BETTER BUSINESS RESULTS THAN THE MARKET. A QUANTITATIVE STUDY OF CUSTOMER EXPERIENCE LEADERS SHOWS THAT THEIR STOCK PORTFOLIOS HAVE GENERATED **35% HIGHER** RETURNS OVER THE PAST EIGHT YEARS THAN THE S&P 500 INDEX.

Source: Watermark Consulting's 2015 Customer Experience ROI Study.

UPLIFT #2

Opening the Door to Smooth Omnichannel Engagement

Once companies are able to track the full path of a customer's journey, advanced omnichannel cloud application programming interfaces (APIs) can be used to connect in-house customer applications such as CRM and contact center platforms. By combining data across the full scope of a customer's interactions with the company (transactions, recent channel interactions, etc.), marketers, contact center professionals, and other employees can gain deep insights into each customer's history and behaviors. In turn, those insights can be used to provide customers with contextual and fluid experiences.

There are three essential elements to delivering great customer experiences: people, processes, and technology. Processes are the glue that cement the end-to-end customer experience. Customer-facing processes can be logically coordinated through the use of omnichannel cloud APIs.

Businesses can also use cloud APIs to assimilate and connect customer data generated by Internet of Things (IoT) devices such as activity trackers (FitBit) and other wearable devices. The insights that can be drawn from this data using advanced analytics will enable companies to provide personalized and customized services to customers.

PROOF POINTS

The Internet of Things offers new opportunities for brands to develop deeper relationships with customers post-purchase. Samsung, for example, has developed a "smart" refrigerator that takes a photo of a fridge's contents each time the door closes. Customers can be alerted when it's time to replace items like milk, juice, veggies, etc.



ENTERPRISE COMPANIES WILL INVEST AN AVERAGE OF
\$2.87M IN CLOUD TECHNOLOGIES IN 2016.

90%

90% OF COMPANIES ARE RELYING ON APIs IN THEIR CLOUD INTEGRATION PLANS FOR 2016.

Source: 2015 IDG Enterprise Cloud Computing Study

UPLIFT #3

Advanced Analytics Empowers Deeper Customer Understanding

As companies endeavor to deliver seamless omnichannel customer experiences, advanced analytics offers opportunities to provide personalized sales, marketing, and service interactions. By improving their analytical capabilities, companies position themselves to better understand customer expectations and sentiment, and to apply these insights into the systems and processes used to guide the customer experience.

Advances in cloud-based customer analytics are making it possible for CX professionals to explore a deeper pool of customer data from multiple sources (CRM, social, third-party data providers) and to see anomalies and trends that were virtually impossible to spot before. The real-time insights that can be derived from advanced analytics offer companies opportunities to differentiate the customer experience and gain a leg up on competitors.

PROOF POINTS

Customer churn is a huge problem in the telecommunications and media industry. Although churn rates vary by provider and country, monthly turnover rates for U.S. wireless providers ranged from 1.2% to 3.3% from 2013 through 2015, according to Statista.

One major telecom company found itself in the middle of this vortex and partnered with TTEC to develop an integrated data repository to deepen its understanding of its customers and reduce churn. The repository contains virtually every piece of information the telecom company captures about its customers, including transaction data, product usage, engagement, customer care interactions, and profitability.

Using the assembled data, the project team was able to explore the relationships that customers had with the client, identifying the factors that were highly predictive of a customer's likelihood to churn in time periods ranging from 30 days to 12 months. By developing statistical models to predict the likelihood for a customer to disconnect for reasons such as relocation, non-payment, or switching to a competitor, the telecom client has been able to proactively communicate with high-value customers and reduce monthly churn by 10% or more while boosting average revenue per customer by 5%.



33% OF CLOUD BI USERS ARE USING ANALYTICS AGAINST INTERNET OF THINGS (IOT) DATA, MORE THAN TWICE THE PERCENTAGE OF ON-PREMISE ANALYTICS USERS.

Source: "On-Premise to the Cloud: Keeping Up with the Analytical Evolution," December 2015, Aberdeen Group.

UPLIFT #4

Unikernels enable transformative CX

Unikernels are being labeled by some as the shiny new object in the cloud. But they're much more than that.

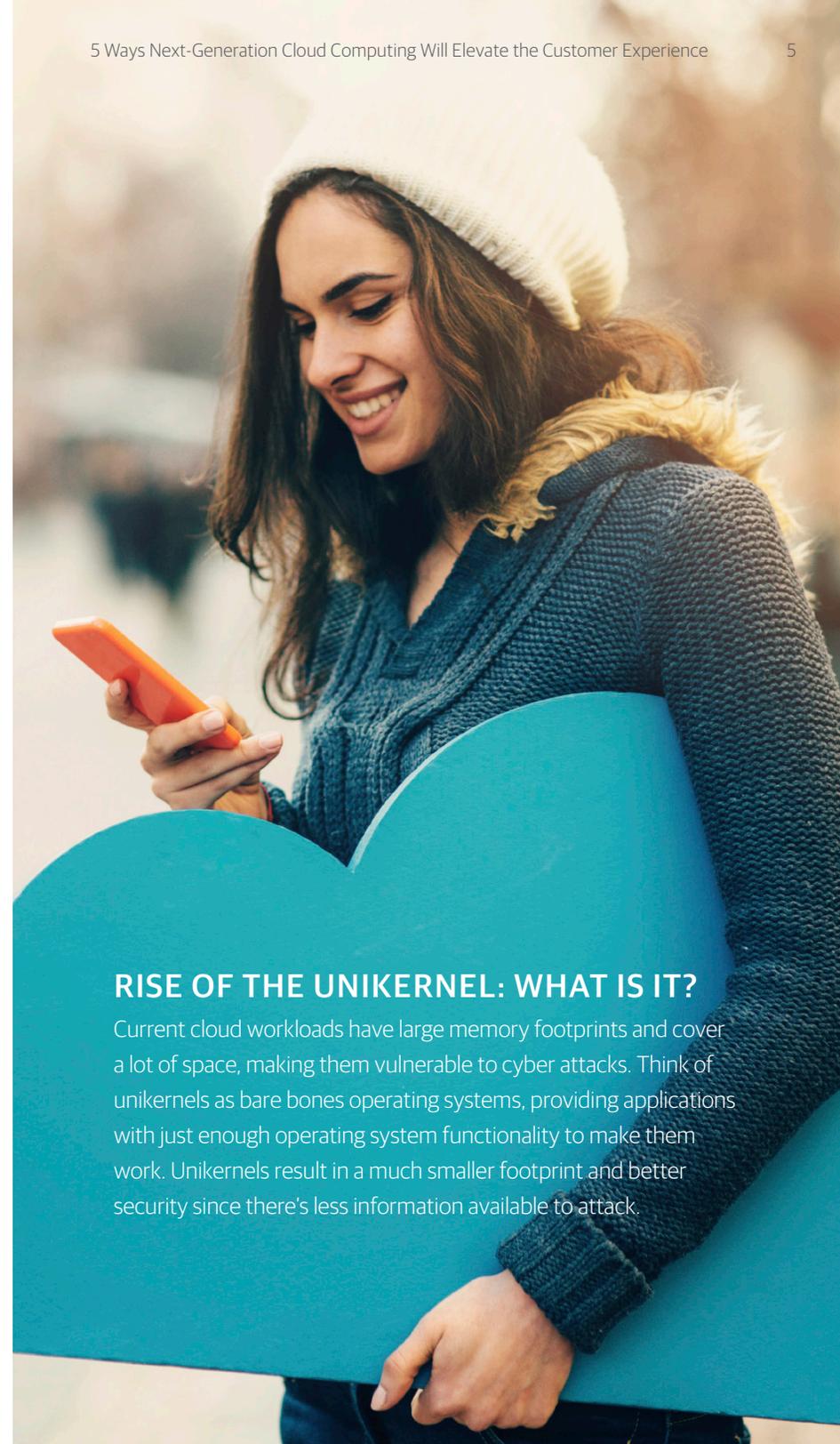
Unikernel technologies represent a new way of building and running applications. Instead of building an application on top of an operating system such as Windows or Mac OS, unikernel technology makes it possible for small pieces of operating system functionality to be built into the application. This means that companies can develop web applications that can be tailored to specific customer use cases.

For instance, retailers today are making extensive use of location-based data to generate email or SMS offers to a customer. A unikernel-driven customer management app can be used to provide a more enriched customer experience. A retail associate wearing augmented reality glasses can identify when a high-value customer has entered a store and obtain insights from the unikernel app about the customer's most recent product transactions and channel interactions that can then be used to provide the customer with personalized support based on everything that's known about her.

PROOF POINTS

As customers increase their use of self-service tools to resolve product or service issues, they're more often reaching out to the contact center to speak with an associate to resolve more complex problems.

Say an electronics customer is having trouble setting up a digital media player. A customer care associate can access a customer's smartphone camera and use a unikernel-enabled augmented reality application to walk the customer through the steps needed to set up the digital media player.



RISE OF THE UNIKERNEL: WHAT IS IT?

Current cloud workloads have large memory footprints and cover a lot of space, making them vulnerable to cyber attacks. Think of unikernels as bare bones operating systems, providing applications with just enough operating system functionality to make them work. Unikernels result in a much smaller footprint and better security since there's less information available to attack.

UPLIFT #5

Platform-as-a-Service Ties the Omnichannel Journey Together

Platform-as-a-Service (PaaS) is a cloud computing model that provides applications over the Internet. PaaS frees companies from having to install hardware or software to develop or run a new application while offering a fast and convenient way for companies to provide customers with new functionality without having to replace legacy systems and processes.

PaaS can be embedded into a mobile app or a website, enabling marketers and other decision-makers to truly understand the context of the customer journey across devices and touchpoints. This type of data-driven approach allows CX leaders to see who a customer is, what he or she is doing at a particular moment, and how the customer prefers to connect on any given channel.

PROOF POINTS

As the healthcare industry continues to evolve, consumers are becoming more empowered and demanding tools that give them greater control over their healthcare choices. TTEC worked with one wellness brand to tackle these trends and remove internal obstacles to meet changing customer needs.

TTEC's integrated PaaS capabilities enabled our client to create and deliver advanced training programs and simulated learning to help its employees become experts in the company's product, services, and processes. TTEC also enabled the wellness company to manage member interactions across voice, email, social, video-chat, mobile-chat, and web-chat. TTEC also helped the client connect members directly with human coaches via mobile tools and provided the coaches with best practices in customer interactions.

The results have been positive, with member satisfaction rates and NPS scores exceeding expected levels. Meanwhile, 85% of members rank themselves as promoters after a brand interaction.

PLATFORM-AS-A-SERVICE
IS EXPECTED TO HANDLE

13% of
all cloud
workloads
by 2018.

Source: Cisco Global Cloud Index.

5 Steps Up to the Next-Generation Cloud

- 1.** Take the customer's POV. Incorporate customer feedback into every decision, including voice of customer data that's shared via social and voice. Ask customers to share in the design of applications and technologies intended to help them.
- 2.** Go outside the box for fresh insights. Use advanced analytics to glean customer insights shared in contact center and other channel interactions to identify ways to improve existing experiences along with opportunities to introduce new products or services.
- 3.** Use journey mapping to identify customer pain points and tear down organizational silos. Customer journey mapping tools can help executives to see where customer experience processes break down and to identify ways in which advanced cloud technologies can be used to improve both internal and customer-facing processes.
- 4.** Remodel, don't rip and replace. Evaluate existing technologies to establish what's working and to identify opportunities for applying next-generation cloud technologies which will take customer experience to the next level.
- 5.** Measure, rinse and repeat. Assess the current state of customer satisfaction and engagement levels before deploying next-generation cloud technologies. After evaluating post-deployment customer experience, identify opportunities for further refining processes for additional improvement.



ABOUT TTEC

TTEC (NASDAQ: TTEC) is a leading global provider of customer experience, engagement, growth and trust and safety solutions delivered through its proprietary end-to-end Humanify™ Customer Engagement as a Service offering. Founded in 1982, the Company helps its clients acquire, retain, and grow profitable customer relationships. Using customer-centric strategy, technology, processes and operations, TTEC partners with business leadership across marketing, sales and customer care to design and deliver a simple, more human customer experience across every interaction channel. TTEC's 49,500 employees live by a set of customer-focused values that guide relationships with clients, their customers, and each other. To learn more about how TTEC is bringing humanity to the customer experience, visit [ttec.com](https://www.ttec.com).

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