
5 CPaaS Predictions for 2020

PREDICTION 1

There will be a steep growth in adoption of CPaaS in Asia



The CPaaS North American and European markets have been traditionally been stronger and more mature as compared to the more nascent Asian market. This is mainly due to the CPaaS players being headquartered in the US and Europe. But this is set to change as these players turn their attention to Asia, as well as native CPaaS providers emerging in Asia.

In 2020, we expect a spurt in market growth in Asia, with higher CPaaS adoption rates.

One key factor is the pervasive connectivity and high digital transformation adoption rates in Asia. Mobile usage is soaring across Asia, from more mature economies such as China and South Korea to developing countries like Vietnam and India. Not only are these markets growing, they have leapfrogged the Western economies –Korea now have the highest smartphone adoption rate in the world¹.

Another key factor is how Asians have intertwined technology with culture. The adoption of technology has always been accompanied by political or cultural shifts, resulting in explosive bursts of growth. Already, the smartphone is the pervasive tool in everyday life. Asians spend more time and money using their phones than in the West, including taking photos of their food at the start of every meal! With providers set to incorporate live audio/video capabilities into their mobile applications, the CPaaS market is on the cusp of another growth spurt in Asia.

Native application development capabilities is also critical to the growth of the Asian CPaaS market. IDC estimates there were 22.3 million software developers in the world in 2018. The Asia Pacific region accounts for almost 46% of this talent pool, while EMEA and the Americas account for 31% and 23% respectively². With a significant portion of application developing capabilities within Asia, this can only mean a shift in growth trends towards the Asia market is just over the horizon.

Source :

1.<https://www.statista.com/statistics/539395/smartphone-penetration-worldwide-by-country/>

2.<https://www.idc.com/getdoc.jsp?containerId=US44363318>



PREDICTION 2

Full-stack CPaaS players will drive a seamless omni-channel experience

The bar for CPaaS will be raised even higher in 2020. While there are many CPaaS players offering SMS or SMS and Voice Call APIs, this will no longer cut it. The demand is on for full-stack CPaaS players.

The ever-evolving consumer expectation for more convenient and interactive communication has resulted in the need for a more engaging and immersive experience. Video communications is seen as a vital game changer. Fuelled by 5G and advancement of WebRTC technology, the addition of high-quality Video Call into the CPaaS stack is imminent.

Video calling has many advantages. A face-to-face interaction helps build trust. And in the Customer Services sector, the “See what I see” experience provides immediate technical support. This results in many organisation adopting a video-first approach, with IDC expecting a CAGR (2017 to 2022) of 131% for video, which far outstrips Voice and Messaging’s 57%¹

Moving forward, CPaaS will involve a broader range of communication modes, from just voice and messaging to include video calls and broadcasting.

For consumers, the variety of communication modes gives them the choice of their preferred channel, as well as the option of seamlessly switching channels according to their needs, without having to exit the application.

What may have started off as a chatbot message from a customer to a helpdesk, could escalate to a voice call to better describe the situation. And when needed, the customer could switch to a video call to show the actual issue that he or she is experiencing. When all done within a single application, this could significantly reduce the customer’s frustration, and result in a satisfying customer omni-channel experience.

Businesses are also increasing preferring the full-stack CPaaS. They can quickly launch their application with a single preferred communications channel, such as message, and gradually include voice and video calling. This way, they do not have to juggle or integrate multiple CPaaS solutions.

While it is possible to engage different CPaaS providers for different communication channels, challenging integration work has to be implemented. And when one provider upgrades its platform, integration efforts are required again.

The extensive integration effort required essentially negates the developmental fuss-free benefit that CPaaS brings to the table.

A full-stack CPaaS is critical not just to a faster-to-market process, but also a complete customer experience. This only means that CPaaS providers must redefine themselves, and offer the full spectrum of communication capabilities –voice, video, messaging and chat.

Source
<https://insights.enablex.io/wp-content/uploads/2019/05/IDCInfoBriefvCloudxCPaaSFinalHiRes.pdf>

PREDICTION 3

Carriers will reclaim lost ground through partnerships with CPaaS players



This year, more telecommunications carriers will seek out partnerships with CPaaS players in a bid to recover revenue lost when consumers switched from traditional voice, messaging and mobile services to non-telecom solutions such as OTT products and services.

This will enable them to create new lines of business and revenue streams, as the world's largest telco AT&T did when it partnered with CPaaS provider to launch the API Marketplace in March 2019 to offer turnkey applications and self-service Application Programming Interfaces. These enable developers to easily create customer applications with real-time communications capabilities.

Japanese telco KDDI also jumped onto the CPaaS bandwagon with its partnership few years back to provide application developers with tools to build highly-scalable, web-based communications capabilities.

The evolution of Communication Platform as a Service (CPaaS) has benefited enterprises greatly and carriers should use it to their own advantage too. Partnering CPaaS players allows carriers to share the risks and protect their core assets while rapidly launching CPaaS innovations for their customers.

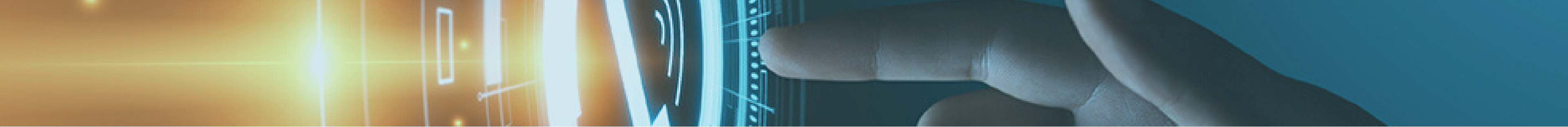
However, their choice of a suitable CPaaS partner is crucial. Telcos will require a flexible white-labelled platform that can be deployed in private or hybrid cloud environments, and that comes with full stack communication functionalities.

Unlike software developers who choose CPaaS for its backend infrastructure and carrier networks, carriers instead look for a CPaaS partner that allows them to host on their own network, giving them greater control and the ability to offer QoS. In addition, the platform should have the flexibility to allow carriers to customise billing, UI, documentation as well as being able to integrate seamlessly with other software. This will give them the flexibility to develop products suitable for their target audience.

How carriers respond to the emergence and competition of OTT service providers in 2020 will prove to be critical. It could mean continuing to lose market share and revenue, or staying competitive by creating new revenue streams with CPaaS.

PREDICTION 4

Communication Will Move Beyond People
To Things Too



Communications Platform as a Service in the coming year will do more than just connecting people – whether they be business representatives or consumers. Moving forward, it will also enable businesses and people to communicate with smart devices as well as between smart devices.

While smart devices are able to collect data and perform pre-programmed tasks, they are unable to make decisions on the information collected. They need to communicate to truly be “smart”. To do that, these devices need to be armed with a platform to ensure that the right information reaches the right people at the right time. That is where CPaaS comes in.

For example, a smart factory automates much of their production process, and monitors the manufacturing processes to optimise performance. This information is collected, waiting to be manually downloaded and analysed, before any action can be taken.

But to rapidly minimise inefficiencies and downtimes, real-time intervention is required. With a communication layer back to the control center, the sensors in the smart factory can trigger off alerts to the right person. For example, in the event of an overheating machinery, the sensors can send alerts to the engineer, who can switch on a video camera to triage the incident even if he is off-site.

The communication layer, which can be built via a CPaaS, is just what is needed for the smart factory to execute preventive strategies and minimise inefficiencies and downtimes.

In another example, if a sensor determines that an apartment isn’t cold enough, it could transmit the data in real-time to the CPaaS platform, which would then trigger the central aircon system to reduce its temperature automatically.

By integrating CPaaS to IoT, businesses can create a greater IoT experience for customer. And that’s the future of communications—smarter, connected and more convenient.

PREDICTION 5

Artificial Intelligence will enhance CPaaS for a differentiated and hyper-personalised customer engagement, resulting in greater operational efficiency and new revenue opportunities

Communications Platform as a Service (CPaaS) is already utilised by many businesses to quickly scale real-time communications capabilities. But in 2020, we expect to see CPaaS to evolve further, with more extensive use of Artificial intelligence (AI), Machine Learning (ML) and Virtual Reality (VR) to pave the way for a hyper-personalised customer experience.

Customers expect brands to personalise every single interaction they have, creating an experience that is unique to themselves. Regardless of industry or company size, a superior customer experience is key to differentiate from its competition.

AI, ML and Analytics will play a pivotal role to enhance customer experiences. Real time analysis of network operational metrics helps the system identify opportunities to improve performance across applications. For example, by embedding AI capabilities, the system can easily identify endpoint system issues, bandwidth limitations in the transport network or regional network outages.

CPaaS with AI can also utilise speech analytics and sentiment analysis to change the game in understanding the quality of customer-agent interactions. It creates predictive models for complex human behaviour, leveraging patterns and data that are otherwise indiscernible to the naked eye.

The addition of such technologies will also enable enterprises to adjust and adaptive capacity, especially for solutions that have a large user base and that covers multiple regions. Where this would be challenging previously, AI-enabled CPaaS can automatically detect trends by region, predict which servers might max out their capacity, and propose recommended capacity enhancements.

AR and VR when implemented for real time communication can complement CPaaS to evolve basic video calling to more advanced and enhanced video interactions, delivering a fully immersive experience for the customised customer experience.

In field services providing on-site technical support, AR and VR can be used to enable real-time troubleshooting and maintenance. When facing complex issues, maintenance crew can consult engineers in real-time by sharing the environment in VR. Engineers then examine the environment in detail to remotely guide the crew step-by-step through troubleshooting, configuration, repair-work and maintenance.