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HOW TO MOVE COMMUNICATIONS TO THE CLOUD

Practical advice for CIOs making strategic decisions about their communications infrastructure

WHITE PAPER

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ABOUT THE AUTHOR

Zeus Kerravala is the founder and principal analyst with ZK Research. Kerravala provides tactical advice and strategic guidance to help his clients in both the current business climate and the long term. He delivers research and insight to the following constituents: end-user IT and network managers; vendors of IT hardware, software and services; and members of the financial community looking to invest in the companies that he covers.

EXECUTIVE SUMMARY

The digital transformation era has arrived, and it's causing unprecedented disruption in every industry. Many organizations that were market leaders just a few years ago are now struggling or being chopped up into parts, while others have disappeared completely. The long-term winners in the digital era will be those organizations that are highly agile and adaptable to change. This requires the ability to make the best decision as quickly as possible while involving the right people, which depends on the communications tools used by employees. These tools include unified communications, team collaboration, virtual presentation tools, contact center, and communications platform as a service (CPaaS).

Legacy on-premises communications solutions have neither the requisite levels of dynamism and elasticity nor the rate of innovation necessary for businesses to keep up with technology. Digital transformation mandates that communications must move to the cloud. Cloud communications can deliver several benefits including greater agility in communications, mobile workforce alignment, high resiliency and faster innovation coupled with lower costs and reduced complexity.

There's no question that the cloud is the way forward; the decision now lies in which communications cloud provider to use. There is a wide range of options, each with different features and functions. ZK Research has identified the following criteria for choosing a cloud communications provider:

- *Location*
- *Billing simplicity*
- *Initial deployment time*
- *Breadth of services*
- *History of innovation*
- *Modernized platform*
- *Service and support*
- *Pricing and flexibility*

The other critical decision is whether to use point solutions or a single cloud provider. It may seem wise to seek out the perceived best cloud communications vendor for each service, but for most organizations, this is the wrong choice. By purchasing a full suite from a single provider, businesses will realize the following benefits:

- *Integrated communications*
- *Simplified purchasing and administration*
- *Improved customer experience and faster problem resolutions*
- *Future-proofed investment*
- *Faster innovation*
- *Rapid third-party integration*
- *Integration of communications capabilities into applications*

The move to digital is putting increasing pressure on businesses to make decisions quickly while involving the right people.

Meeting the demands of the digital era is forcing companies, both large and small, to rethink their communications strategies. Yesterday's rigid and static on-premises solutions can no longer meet the needs of today's fast-paced digital businesses. Shifting communications to the cloud is a prerequisite for success, as it simplifies the process of delivering a great customer experience. When choosing a single cloud provider for all of an organization's needs, decision makers should look for one that delivers faster deployment with a better user experience at a lower cost.

SECTION I: DIGITAL TRANSFORMATION DRIVES COMMUNICATIONS TO THE CLOUD

While previous technological disruptions took many years—even decades—to occur, digital transformation is disrupting businesses faster than ever. In a few years, digital has quickly transformed previously analog or paper-based processes, models and organizational competencies. It is nothing short of a total reinvention of business. Companies that successfully become digital organizations will leapfrog their competition, while those that do not will struggle to survive. Anyone who doubts this is true merely needs to look at the past decade, when many well-established brands have either shut down, closed locations or been forced to sell.

Digital transformation is forcing employees to work in dramatically different ways. For example, customer service operations are changing by introducing digital processes, enabling granular mapping of customer journeys and making offers based on dynamic and personalized customer information. Moreover, organizations as a whole are improving overall worker productivity by using software and digital collaboration tools—changing everything from HR and finance to marketing and sales.

In the digital era, sustainable market leadership is no longer based on creating the best products or offering the lowest price; the companies that are the most agile and adaptable to change will be leaders. The move to digital is putting increasing pressure on businesses to make decisions quickly while involving the right people—whether they're in the next cubicle or across an ocean. Communications is central to that effort and therefore a key ingredient in digital transformation.

The term "communications" is very broad and involves the following components:

Unified communications (UC) provides the primary communications tools workers need including calling, messaging, video conferencing, chat and presence in a single interface. Individuals use UC tools to initiate conversations with other workers.

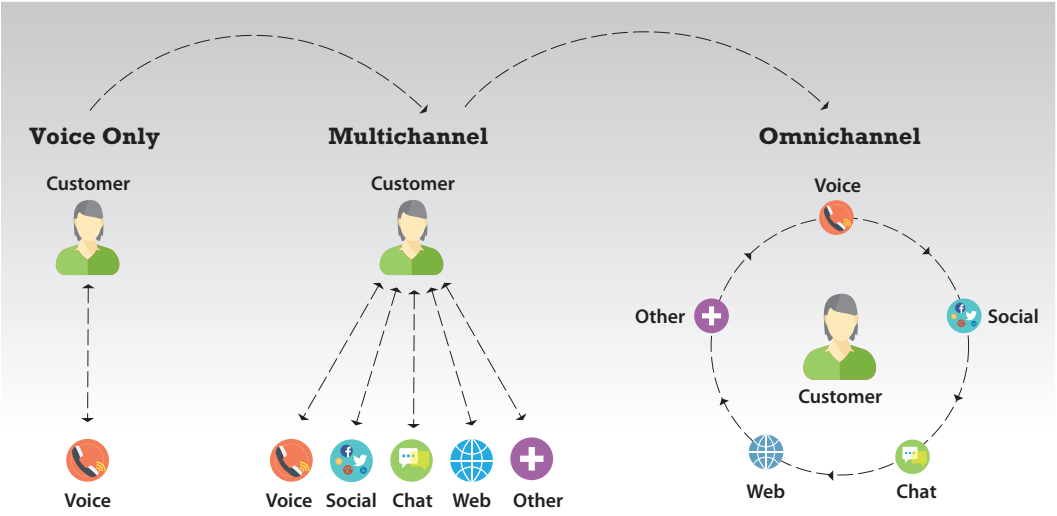
Team messaging or workstream collaboration uses many of the same tools as UC, but messages and documents are organized by project channels or threads. Team messaging is designed to enable agile groups to work more effectively with each other by keeping all relevant information together.

Virtual presentation tools enable groups of people to "meet" virtually by using a single application. Virtual presentation applications provide voice, video, content sharing, chat and other features to enable groups of individuals to collaborate in real time. Meeting tools can also be used by one person or several people to present to larger groups, both inside or outside of the organization.

Contact center services are used for business-to-consumer (B2C) communications. Contact centers are mostly used for inbound communications in which a customer might be calling to check on the status of an order, complain about a product, make a change to an account or a wide range of other issues. Increasingly, contact centers are used for outbound communications such as inside sales and proactive notifications. Several years ago, contact centers utilized voice-only communications, but modern ones support voice, chat, email and more. Also, more and more businesses are moving to omnichannel contact centers, where information is shared across communications modes (Exhibit 1).

Communications platform as a service offers communications embedded into applications via a set of application programming interfaces (APIs). For example, if developers wanted to add a click-to-call widget to a shopping application, they could use a cloud-based API to do this. The use of CPaaS obviates the need to deploy an entire communications stack for the desired functionality, saving a significant amount of time and money. Typical services available through CPaaS are voice, messaging, social media integration, security capabilities and video. Put simply, communications is a core component of digital transformation that is now business critical.

Exhibit 1: Omnichannel Communications Are a Must



ZK Research, 2019

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But as organizations become more dynamic and distributed, legacy on-premises solutions simply can't meet the needs of the emerging workforce or the demands of today's consumers. That's why organizations need to rethink their communications strategies.

The following are key questions for companies to ask themselves regarding digital transformation:

- Are we ready for digital transformation?
- How can we use communications to improve the customer experience?
- Which collaboration tools will have the biggest impact on employee productivity?

The remainder of this paper examines the breadth of services that fall under the umbrella of cloud communications, provides recommendations for choosing the right cloud provider and highlights the benefits of a single-stack cloud provider.

SECTION II: UNDERSTANDING THE SCOPE OF CLOUD COMMUNICATIONS

Legacy on-premises tools were designed for a static world that no longer exists, as the world is increasingly mobile and dynamic. The mobile developments enabled by the cloud make a user's location irrelevant; users no longer must be within the confines of enterprise walls to access critical information. With the cloud, an important meeting or phone call is just a click away.

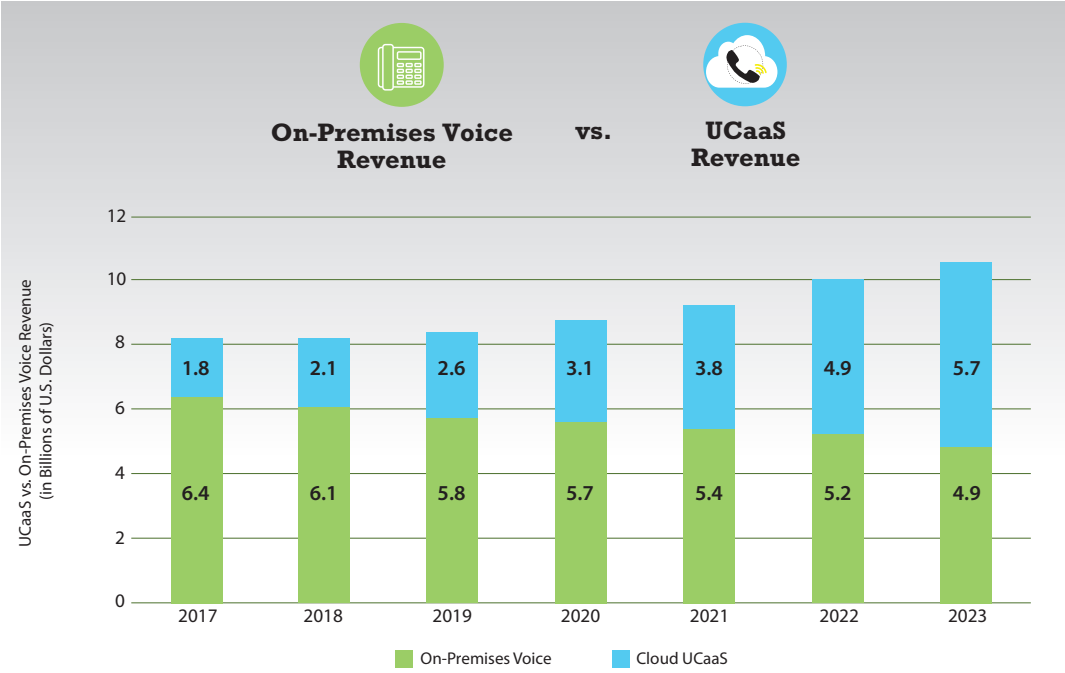
The numbers tell the story of how fast the cloud is growing. Based on its 2019 Global UC Survey, ZK Research forecasts that cloud UC will grow at a compound annual growth rate (CAGR) of 21% through 2023, to $5.7 billion. At the same time, on-premises services will decline at a CAGR of –5% through the same period (Exhibit 2).

However, cloud communications is broader than just UC, as all forms of communications and collaboration are available as a cloud service. All of the communications tools discussed previously—unified communications, team messaging, presentation tools, contact center and CPaaS—are available as cloud applications. Each of these communications services plays an important role in an organization's ability to transform digitally, as they directly impact user productivity or the customer experience.

Although cloud services have been available for years, ZK Research believes now is the time for all companies to embrace the cloud because doing so provides the following benefits:

Increases communications agility: A successful digital transformation requires business agility, but a business can only be as agile as its IT infrastructure enables. Legacy communications systems are rigid and brittle, and they can hold organizations back. Cloud services increase agility because companies can deploy services where and when they need them, which better aligns communications with disruptive digital trends.

Exhibit 2: Cloud UC Skyrockets While On-Premises Voice Declines



ZK Research 2019 Global UC Survey

Improves communications resiliency: Communications is the lifeblood of most organizations and must be a highly available service. With legacy, on-premises solutions, disaster recovery is very difficult because it requires redundant infrastructure and failover planning. With cloud services, most cloud operators have multiple points of presence and failover instantly for near–"five-nines" of uptime. Therefore, cloud services deliver significantly greater communications resiliency to companies.

Aligns with mobile workforce: With on-premises solutions, communications services are available only in the local office, so organizations must purchase one system per location. In most cases, workers have no access to communications services when working remotely or from home. Cloud services are ubiquitously available, so companies can deliver service to any place where workers have connectivity.

Lowers infrastructure complexity: On-premises solutions require numerous servers, storage systems, network devices and other infrastructure that must be operated and managed by the IT organizations. As communications has grown in scope and infrastructure, it has become increasingly disaggregated, and complexity has shot through the roof. Cloud services push all of the infrastructure and complexity into the cloud, simplifying the management tasks for IT pros. This lets them focus on more strategic initiatives.

The challenge for businesses is to determine the right cloud provider to use.

Innovates faster: Most businesses, particularly large enterprises, limit the frequency of upgrades to once or twice a year. This is because the process of upgrading to new features requires software to be loaded onto a back-up system, tested and then gradually rolled out; sometimes this process takes upward of a year. With a cloud service, new features are made available to everyone as soon as the vendor adds them. Cloud communications gives businesses continuous access to the latest and greatest features, which can lead to a competitive advantage.

Allows for a "pay as you grow" pricing model: Traditional on-premises products limit the number of users who can be supported. If the company outgrows the solution, it must buy a new, higher-end one. This puts IT buyers in the unfortunate predicament of making the difficult choice between "buy what you need today and then spend more money as the company grows" or "overspend today with a higher end solution and hope the company grows into it." With the cloud, IT professionals can buy what they need today and add more capacity as required.

Creates IT resources and staffing efficiencies: By shifting the collaboration infrastructure to the cloud, IT can offload many repetitive maintenance tasks. This enables IT staff to focus on more strategic initiatives, which maximizes their efficiency.

Lowers overall TCO compared to traditional deployments: Without a required up-front capital investment, a cloud solution costs less to run. According to ongoing research conducted by ZK Research, the cost of migrating a business application to a software-as-a-service (SaaS)–based solution is typically 30% to 40% lower over a five-year period, including factors such as hardware costs, application integration and IT support.

Shifting to a cloud model enables companies to have access to the latest and greatest features immediately without having to invest a significant amount of money up front or waiting for a lengthy infrastructure upgrade. The challenge for businesses is to determine the right cloud provider to use.

Companies should ask themselves the following key questions regarding cloud communications:

- Is continuing to "sweat our assets" causing us to fall behind?
- Are we using the latest and greatest communications features?
- How can we use cloud communications to operate faster?

SECTION III: BEST PRACTICES FOR CHOOSING THE RIGHT CLOUD COMMUNICATIONS PROVIDER

The choice of cloud communications provider can have a big impact on quality, total cost of ownership, customer satisfaction and productivity—and could be the difference between becoming a market leader or a laggard. However, there is no "Easy Button" for choosing the right provider, as

Cloud communications should be considered a strategic platform that companies grow with as their business grows.

every company has unique needs. Also, there is no single selection criterion, as the decision is multi-faceted. These are the main factors to consider when evaluating a cloud communications provider:

Location: Businesses are becoming increasingly distributed, and companies should ensure the cloud operator provides services in their region. For example, a company with locations in Europe should ensure there is a local point of presence, as the time taken for a call to go from London to San Jose and back will experience significant delay from the roundtrip time. Services need to be available wherever the business operates.

Billing simplicity: Complex bills have been the scourge of the communications industry for as long as there have been communications services. Much of this was due to old billing systems. Today's modernized cloud providers should have simplified bills that are concise and easy to understand. Also, having separate vendors for UC, contact center, team messaging and other communications results in separate bills and increases complexity even further.

Initial deployment time: This can vary widely among the different communications providers. Deployment time should be a huge indicator of what to expect with a specific provider, as every change requested will likely be equally complex.

Breadth of services: The terms "unified communications" and "contact center" are broad names given to a category of services. This means that even though two service providers offer something called "UCaaS" (unified communications as a service), it doesn't mean they are at feature parity. It's important to ensure the service provider has a set of capabilities that meets the needs of the specific company. Discrepancies are most often found with mobile capabilities, so special attention should be paid here.

History of innovation: Cloud communications should be considered a strategic platform that companies grow with as their business grows. Decision makers should review the historical innovation patterns from the cloud providers they are considering. This doesn't always mean selecting the first to market, but the provider should deliver new capabilities in a timely manner.

Modernized platform: Most cloud providers designed their underlying platform almost 20 years ago. At that time, the concepts of microservices, containers and web-scale architectures weren't around, so the underlying platform that businesses rely on is akin to a big IP PBX in the sky. Decision makers should take the time to understand the cloud provider's level of modernization. It's critical today to choose a cloud provider built on modern web-scale technology.

ZK Research does not recommend choosing a cloud communications provider based solely on price; however, price certainly factors into the mix.

Service and support: No matter how well a cloud provider runs its environment, failures and outages will happen. Spend the time to investigate the following:

- **Uptime rate:** Some cloud providers make this rate available, and others don't do so unless asked. Whichever the case, ask the cloud provider for its uptime rate, as this is a direct indicator of how reliable its service is. Also, it's important to not confuse uptime with the service-level agreement (SLA) percentage. Some cloud providers offer a 100% SLA, but that doesn't mean the service is up 100% of the time; it means that the cloud provider will reimburse the business for the time the service is down. However, that refund may be only a small portion of the lost revenue stemming from its communications being unavailable.

- **Management portal:** The provider should have a rich management portal available to the customer to provide such information as the following:
  - IT metrics such as uptime, call quality and the status of trouble tickets and change requests
  - Service metrics including call history, utilization reports and active users
  - User metrics such as call logs, transcripts and meeting information

  The portal provides a lens into the service, and IT needs a feature-rich one to do its job effectively.

- **Customer service responsiveness:** This is another critical factor for IT professionals. If the business is having an issue that impacts the business, it's important that the service provider respond immediately to customer requests. Many cloud operators force customers to navigate multiple touchpoints before reaching a qualified person.

- **Federated cloud services:** Workers rely on multiple cloud services to do their jobs. The problem is, the user often winds up being the integration point between UC, customer relationship management (CRM) systems, email, productivity apps and more. It's important that the cloud provider federate with other cloud services to enable seamless workflow integration among them.

Pricing and flexibility: ZK Research does not recommend choosing a cloud communications provider based solely on price; however, price certainly factors into the mix. The provider should offer pricing that's in line with the market—but more importantly, it should offer flexibility in pricing to give companies options.

Contact center agents often require unified communications tools to collaborate with internal employees, and other workers often need contact center seats to access relevant information.

Companies should ask the following key questions when evaluating a cloud communications provider:

- Is your platform built on microservices?
- How often do you deliver new services?
- How long does it take to detect failures?
- What is your uptime rate (not the SLA)?

SECTION IV: SINGLE CLOUD VS. MULTIPLE CLOUDS

Section III highlights key factors to look for in a solution provider. However, one decision point goes beyond features and functions: whether the business should use a single cloud provider for all of its communications needs. The multiple-cloud model involves choosing the perceived "best" provider on a per-service basis (e.g., contact center from vendor A, unified communications from vendor B and so on). With a single cloud solution, the cloud communications provider offers all functions from an integrated, single microservices platform (Exhibit 3). In a sense, the cloud provider is actually using its own communications APIs to build functions such as meetings and contact center capabilities.

It's important to understand that a cloud provider that resells or rebrands another vendor's products is not offering a "single stack"—it is merely acting as an agent for other vendors.

For example, a UCaaS vendor may want to do the following:

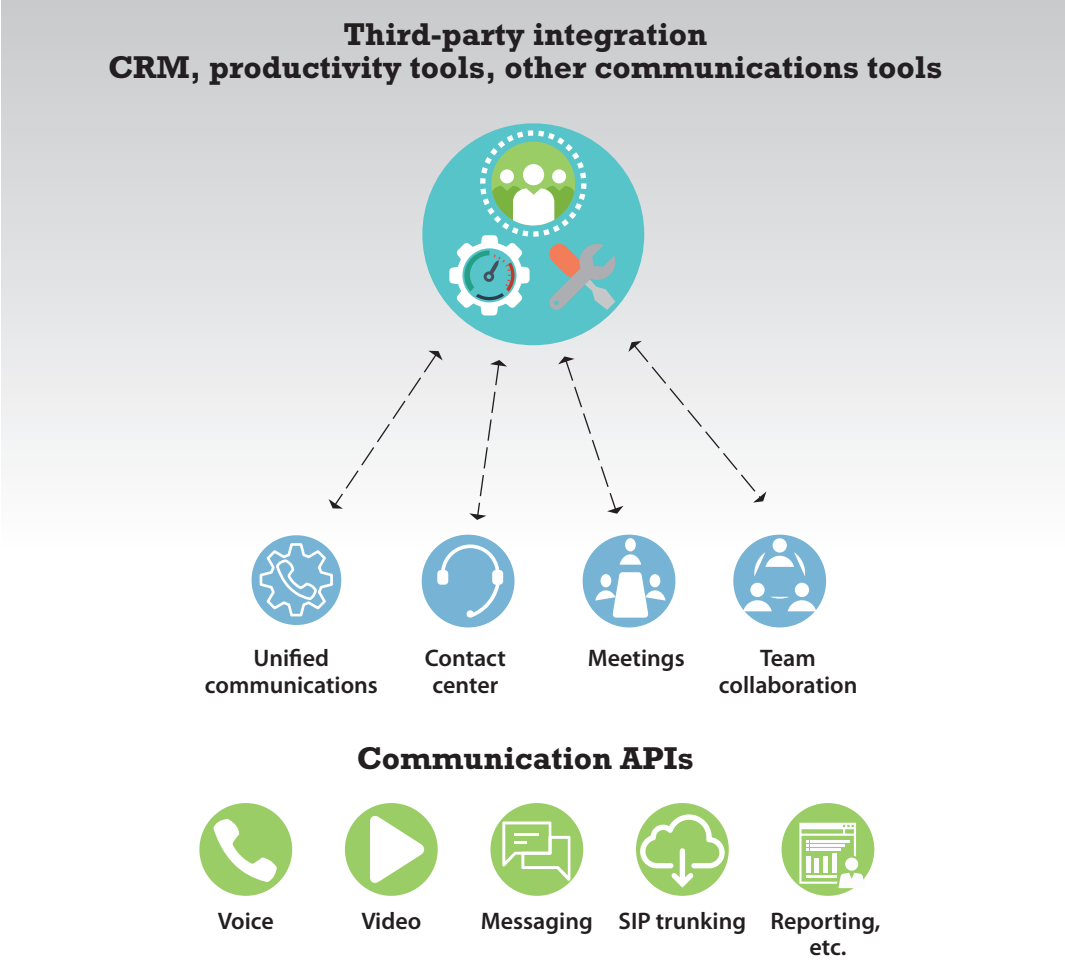
- Offer a broader set of solutions
- Choose to resell a virtual presentation tool from one provider and a cloud contact center product from another to quickly move into these markets

The cloud provider may also advertise itself as having a "full suite of solutions" when in reality, there is little difference between that model and a company choosing disparate multiple cloud solutions itself. In fact, if a cloud provider needs to do this, it's likely an indicator that its service is built on an older, monolithic technology stack—versus one that is modernized and built on microservices with the ability to easily build additional functionality using its own APIs.

Although it may seem appealing to take a "best of breed" approach, ZK Research believes that choosing a single cloud provider is superior for many reasons, including the following:

Integrated communications: At one time, the lines of demarcation between employee communications and customer interactions used to be very bold. Today, as the customer experience has become a key differentiator, these lines have blurred and the number of customer-facing employees has grown beyond just those in the contact center. Contact center agents often require unified communications tools to collaborate with internal employees, and other workers often need contact center seats to access relevant information. A single solution provider can offer seamless integration between front-office and back-office functions.

Exhibit 3: A Single-Stack Communications Service Offers Many Benefits



ZK Research, 2019

This will enable businesses to respond to customers much faster than if people were the integration point. A cloud provider that has built its portfolio through reselling other vendors' services can-not deliver an integrated communications experience.

Simplified purchasing and administration: Choosing individual point products requires a company to establish relationships with up to five cloud communications providers. In addition to a consolidated bill, the single cloud stack is easy to administer, and users can be given access to the tools they require. Juxtapose this with the point-product approach, where each user would need to have a profile set up on each system. This means an administrator at a company of only 100 employees would need to manage up to 500 distinct user profiles across the various communications tools. Lastly, by sourcing all of a business's communications needs from a single provider, the customer would likely receive some pricing benefits versus having to sign individual contracts with multiple providers.

With an integrated stack, the proverbial "one throat to choke" exists, giving IT professionals a single place to call when there is a problem.

Improved customer experience and faster problem resolutions: One of the biggest challenges associated with using a service provider that resells other cloud solutions is troubleshooting problems. If the meetings application is being resold by a UCaaS vendor and it's having problems, the customer would likely have to begin the troubleshooting process of opening a call with the UCaaS provider, as this is where the relationship lives, and then may need to also communicate with the meetings vendor directly. In some cases, it may not be clear as to where the problem lies—causing the customer to also play the role of communications detective to isolate the issue and find the responsible party. With an integrated stack, the proverbial "one throat to choke" exists, giving IT professionals a single place to call when there is a problem.

Future-proofed investment: The communications landscape is evolving faster than at any time in history. A cloud provider built on a single stack can offer ongoing investment protection in the following ways:

- **Faster innovation:** New features can be made available across all communications functions simultaneously. With multiple clouds, the new features will be added at the pace the individual cloud providers feel is necessary, meaning a certain function might be available from its UC provider quickly but then take months for the meeting provider to catch up. A single-stack provider will offer a consistent stream of new features much faster.

- **Rapid third-party integration:** Ecosystem integration is critical to communications today. It's common to want to share information or functions between CRM and contact center, or between work management tools and UC and others. The office productivity market continues to explode with new tools, and this requires integration with the communications stack. A single cloud provider can create all the necessary integrations across the various tools immediately. With multiple clouds, or a single cloud provider that resells multiple clouds, this integration process can take significantly longer and lead to an inconsistent workflow.

- **Integration of communications capabilities into applications:** Because the single stack is built on an API platform, customers also have access to these APIs. The business can use the APIs to create its own communications-enabled applications, which can be customer facing or employee facing and can differentiate organizations from their peers.

SECTION V: CONCLUSION AND RECOMMENDATIONS

The winners and losers in the digital era will be determined by the customer experience, which relies on the quality of the interactions between an organization's employees and its customers. This focus on the customer experience has raised the bar for these interactions. Communications is at the

core of improving engagement between customers and employees, which leads to improved brand loyalty and customer satisfaction.

Meeting the demands of the digital era is forcing companies, both large and small, to rethink their communications strategies. Yesterday's rigid and static on-premises solutions can no longer meet the needs of today's fast-paced digital businesses. Migrating communications to the cloud is mandatory for success, as it simplifies the process of delivering a great customer experience.

However, there are some challenges when migrating to the cloud. To help businesses get started, ZK Research makes the following recommendations:

Start the cloud migration with the biggest pain point. Cloud communications is multi-faceted, and it's unrealistic to migrate everything to the cloud at once. Start with the area of biggest pain to make an immediate impact. For example, if migrating to an omnichannel customer experience is a priority, start the journey with the cloud contact center. If the meeting process is poor, choose a cloud meeting solution. The key is to leverage the rapid deployment capabilities to solve the biggest source of pain today.

Choose a cloud provider with an integrated, single stack. The single-cloud approach will let companies add more communications capabilities as they need them. In the example in the above bulleted item, a company could start with contact center but then rapidly add meetings, unified communications and other capabilities without having to go through the contractual process and proof of concept for every service.

Leverage cloud APIs for modernized applications. Customers and employees want an experience that's easy. If the process of dealing with a provider is difficult, customers flee to a competitor. If employees find the collaboration tools too difficult to use, they bring in consumer ones. The API platform that cloud communications providers are built on can be used to create modernized applications with seamless communications built into them, removing the integration burden from the user.

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