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Leverage Teams Phone to Migrate Your Contact Center

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ABSTRACT

Cloud telephony is increasingly recognized as a pivotal technology for enhancing organizational communication efficiency and customer engagement. This paper explores the concept of cloud telephony with a specific focus on Microsoft Teams Phone, discussing its market relevance, benefits, and considerations for implementation. Key players in the cloud telephony market, such as RingCentral, Vonage, Mitel, Avaya, Zoom and Microsoft, are analyzed for their service offerings and competitive advantages. The benefits of adopting Microsoft Teams Phone are including reduced hardware costs, streamlined administration, improved team collaboration, higher employee engagement, superior customer experiences, and enhanced analytics. The migration of contact centers to Teams Phone is discussed in detail, outlining strategies like Direct Routing and Operator Connect, along with considerations for successful implementation such as network readiness assessments, bandwidth allocation, quality of service (QoS), and interoperability testing. A use case from the utility industry illustrates practical applications and benefits derived from integrating Teams Phone with CRM systems. Overall, this paper provides insights into how cloud telephony, particularly through Microsoft Teams Phone, can transform organizational communications and operational effectiveness.

Keywords: Cloud Telephony, Microsoft Teams Phone, Unified Communications, Contact Centers, Direct Routing, Operator Connect, Organizational Communication, Utility Industry

1. Introduction

Effective communication is paramount in today's business landscape for achieving organizational objectives, fostering growth, and meeting customer expectations. In pursuit of robust communication systems, cloud telephony emerges as a transformative solution offering unparalleled flexibility, scalability, and cost-efficiency. Unlike traditional phone systems, reliant on physical infrastructure, cloud telephony leverages internet connectivity to manage communications securely and efficiently.

Cloud telephony represents a paradigm shift from traditional Voice over IP (VoIP) systems by centralizing phone services in the cloud, eliminating the need for extensive on-premises hardware and maintenance. This technology empowers organizations to streamline operations, scale resources dynamically, and reduce operational costs significantly.

This paper explores the concept of cloud telephony, underscoring its pivotal role in modern organizational frameworks. It identifies key players in the cloud telephony market and specifically delves into Microsoft Teams Phone, highlighting its value proposition for businesses. Furthermore, the discussion centers on the strategic advantages of migrating contact centers to Teams Phone, emphasizing cost optimization and enhanced operational efficiency.

Key considerations for deploying Teams Phone are examined to ensure a seamless adoption process, mitigating potential challenges and maximizing benefits[3]. The paper also presents a reference architecture illustrating the operational framework of cloud telephony, providing a practical framework for understanding its implementation.

Drawing insights from the utility industry, where customer service and contact centers play a critical role, this paper

illustrates real-world applications of Teams Phone. By showcasing how cloud telephony enhances communication infrastructure, operational agility, and customer engagement, organizations can envision its transformative impact on business outcomes.

In essence, this exploration aims to elucidate how cloud telephony, particularly through Microsoft Teams Phone, can revolutionize organizational communications, drive efficiency, and elevate customer satisfaction in today's competitive business environment.

2. Key Players in Cloud Telephony

The key players of cloud telephony include RingCentral, Vonage, Mitel, Avaya, Zoom and Microsoft. Most of these firms provide Unified Communications as a Service which includes voice, video, messaging, and other Information and Communication Technology services being delivered through a single interface.

Currently, companies find several choices in cloud telephony depending on their requirement and affordability. However, competitive leaders can be distinguished based on their features, reliability, and customer satisfaction. Let's examine these key players in the cloud telephony market without prioritizing any order:

2.1. RingCentral

RingCentral is a top-tier provider of cloud communication and collaboration tools that allow organizations to communicate with their workers and consumers at any time and from any location. The deep feature list allied to the simple, intuitive design and competitive pricing plans for RingCentral make it popular for small businesses and enterprises. Specific features of RingCentral are the call routing, voicemail to text, team collaboration and compatibility with other business applications such as Salesforce, G Suite and Office 365 among others[8].

2.2. Vonage

Another strong competitor in the sphere of cloud telephony is Vonage that provides a list of communication services relevant to specific industries and business scales. Its feature offering includes calling features, messaging, video, and business phone systems for VBC that integrate with CRMs such as Zoho and HubSpot[8]. Moreover, Vonage has implemented strong security features such as encryption, multi-factor authentication, and fraud detection technologies to make sure that the data is safeguarded.

2.3. Mitel

Mitel is one of the global leaders in offering cloud (SIP) communication and collaboration solutions for midsize and large organizations across industries and sectors such as healthcare, finance, hospitality, and education. Mitel has many offerings, which range from business telephony solutions and unified communications to contact center, mobile, and IP communications services that are intended to help organizations enhance communications and productivity while enhancing business outcomes and customer satisfaction[8]. Services provided by Mitel include auto-attendant, call recording services, analytics, and real-time reporting, through which managers can assess performance and make informed decisions.

2.4. Avaya

Avaya Communications is one of the leading multinational corporations that offer enterprise communications systems and knowledge base solutions in the field of hardware, software, and cloud. Avaya's standout feature is OneCloud, a cloud-based solution emphasizing Contact Center as a Service (CCaaS). OneCloud integrates advanced technologies such as AI-driven virtual assistants, speech recognition, chatbots, and seamless social media integration. Avaya prioritizes extensibility, reliability, and integration readiness, forging robust connections with existing networks and applications while embracing new innovative technologies.

2.5. Zoom

Zoom has rapidly established itself as a pivotal player in the cloud telephony landscape, primarily known for its robust Unified Communications platform that integrates video conferencing, voice calling, messaging, and collaboration tools into a single interface. Originally gaining prominence for its reliable and user-friendly video conferencing capabilities, Zoom has expanded its offerings to include comprehensive UCaaS solutions tailored to meet the diverse communication needs of businesses worldwide.

2.6. Microsoft teams phone

Microsoft Teams Phone is new in the cloud telephony market, but it draws from Microsoft's strong suite of products, which makes it a highly integrated and easy to use communication system. This integration is incorporated within Teams, and it improves call, meeting, and collaboration quality for users while integrating it with their primary tasks. Microsoft Teams Phone unifies functions of communication and collaboration, thus allowing organizations to optimize automation and minimize interruptions in project flow.

2.7. Benefits of leveraging teams phone

Microsoft Teams Phone provides numerous advantages such as lower hardware costs, easier management and training, improved team cooperation, increased staff engagement, enhanced customer satisfaction. Also, seamless integration with CRM tools, such as Salesforce, Dynamics 365, or Zendesk, provides agents productivity and more personalized experiences.

2.8. Reduced hardware expenses

One of the main benefits of using Microsoft Teams Phone is that it can help organizations avoid costs of enterprise telephony hardware that is one of the key characteristics of modern PBX systems[3]. As everything operates in the cloud, the only requirement is a connected computer or mobile device. This not only brings down the initial investments that are required but also reduces the recurrent costs of maintaining and supporting the system.

2.9. Streamlined administration

Phone systems require considerable configurations and updates which need to be managed as well as troubleshooting. Administrative functions are made easy by consolidating management within the Microsoft Teams Phone environment that is well known. The product is easy to use, and administrators can easily manage the users, roles, settings, and policies without necessarily having to hire someone to do it.

2.10. Simplified user training

Most professionals are already using Microsoft Teams daily for communication and hence, only a little time and effort will be

needed to teach them how to use the phone[3]. Many of the basic features that include making and receiving calls, transferring calls, voice mail management, and conference calls are easy to learn and familiarize with. Additionally, there are interactive training sections and tips to successfully operate within the program.

2.11. Better team collaboration

Using communication channels and interfaces together with shared files, tasks, and calendars, Teams Phone improves the working of teams[3]. The conversations are well-organized, and users can transition easily from chatting, to calling and even video calling. From integrated knowledge bases, co-authors, and, in particular, the ability to work in parallel, cross-functional teams gain more productive work and faster decision-making and problems solving.

2.12. Higher employee engagement

As clients continue to adopt remote and/or hybrid work solutions, it's important to sustain relationships throughout departments and members. Workers can use Teams Phone to communicate with each other in a normal fashion irrespective of the physical distance between them, and thus fostering team culture. Enhanced communication levels correlate with increased job satisfaction, reduced employee turnover, and a more favorable organizational environment.

2.13. Superior customer experiences

Enhancing customer experiences through the integration of Teams Phone with CRM tools like Salesforce, Dynamics 365, or Zendesk creates a powerful synergy that revolutionizes customer service[3]. By accessing real-time customer information, agents can personalize interactions based on end customer needs, their interests and preferences. Advanced automation and machine learning capabilities optimize resource allocation and predict outcomes based on historical data. Ultimately, this enhances customer satisfaction, strengthens customer relationships, and improves overall brand perception.

2.14. Improved analytics and reporting

Today's cloud telephony platforms can give plenty of usage data, operational statistics, and quality parameters. It was also found that managers have ready access to much information, which they can use to decide where change is needed, how current approaches may be tweaked, and how performance is deviating from benchmarks. Data visualization techniques through real-time dashboards and recorded intelligence reports enable the organizational leaders to make informed decisions aimed at constant and ever improved organizational performance.

3. Migrating Contact Centers with Teams Phone

When transitioning contact centers to Microsoft Teams Phone, organizations have three main options for external call connectivity: Direct Routing, Operator Connect, and third-party vendors. Each approach offers unique strengths based on the size, nature, and existing telephony environment of the organization.

Direct Routing enables the mapping of a customer-owned Session Border Controller (SBC) to Microsoft Teams Phone to set up Public switched telephone network (PSTN) connectivity on-premises. This method is ideal for large-scale enterprises or organizations with complex telephony systems, as it allows integration with existing systems, thereby avoiding losses from previous infrastructure investments[5]. Combined with Direct Routing, on-premises SBCs provide connectivity in challenging locations and support businesses with extensive communication endpoints around the globe.

On the other hand, the Operator Connect allows partner operators to connect their networks with Microsoft Teams. This partnership frees organizations from the need to prepare an SBC so that they can retain their carrier contracts and agreements[6]. Operator Connect makes setup and maintenance easier, leads to increased implementations, and reduces IT concerns.

There are other options provided by third-party vendors to facilitate external calling through Teams Phone. There are different types in the market with unique characteristics as well as varied cost structures. To use third parties means that organizations can gain more control and more freedom for communication systems of communication, which might even save them fees and utilize advancements independent of Microsoft.

When adopting Microsoft Teams Phone for contact centers, it usually leads to significant cost reductions. The integration of multiple platforms streamlines communication and collaboration and reduces costs associated with maintaining those platforms. Other telephony costs, like connecting to SIP Trunks, PRI lines, or POTS lines, may also drop after migrating to Teams Phone[6].

Additionally, Teams Phone is optimized for large-scale businesses that enables ease of user management in line with organizational needs. Flexibility comes in handy during staffing changes, which work well with seasonal business and organizations experiencing rapid growth. Remote work capabilities are beneficial to the employees and their employers since they enhance flexibility, which in turn helps improve their levels of contentment in their places of work[6].

Therefore, migrating contact centers to Microsoft Teams Phone presents several advantages, including seamless integration with existing infrastructure, reduced operational overhead, lowered capital expenditures, and cost savings derived from abandoning expensive legacy on-premises equipment. Choosing between Direct Routing, Operator Connect, or third-party vendors caters to varying organizational priorities, guaranteeing a perfect fit for any company embarking on a successful journey toward a modern, cloud-based communication platform.

4. Considerations for Teams Phone Implementation

Implementing Microsoft Teams Phone requires careful planning and execution to ensure a smooth and successful rollout. Here are some critical considerations to keep in mind:

4.1. Network readiness assessments

Conduct thorough evaluations of your current network infrastructure to determine if it meets the necessary standards for Microsoft Teams Phone. Factors to evaluate include latency, jitter, packet loss, and bandwidth availability. Addressing any underlying issues beforehand ensures optimal call quality and minimizes disruptions during the migration[6].

4.2. Bandwidth allocation

Properly allocate adequate bandwidth to accommodate Microsoft Teams Phone traffic. Insufficient bandwidth degrades call quality and impacts overall user experience[6]. Calculate the expected demand based on the number of concurrent calls and provision enough capacity to sustain consistent call quality.

4.3. Quality of Service (QoS)

Configuring QoS settings helps prioritize Microsoft Teams Phone traffic over non-critical applications, thereby ensuring reliable call quality even during peak network utilization. Establish appropriate QoS parameters based on network conditions and application priority levels[7].

4.4. Interoperability testing

Verify compatibility between Microsoft Teams Phone and your existing communication systems, including SBCs, gateways, and analog devices[7]. Thoroughly test call routing, transcoding, and Session Initiation Protocol (SIP) trunking to detect potential conflicts and rectify them promptly.

4.5. End-User device compatibility checks

Confirm compatibility between Microsoft Teams Phone and supported endpoint devices such as desk phones, smartphones, laptops, and tablets. Perform pilot trials to validate the intended functionalities and resolve any discrepancies encountered during the assessment phase.

4.6. Staff reallocation planning

Prepare a detailed plan for redeploying personnel responsible for managing and maintaining legacy phone systems. Determine skill gaps and invest in targeted training initiatives to develop proficiency around Microsoft Teams Phone administration, operation, and troubleshooting.

4.7. Documentation and ongoing maintenance plans

Develop comprehensive documentation covering design architecture, installation procedures, and operational guidelines. Create backup and restore mechanisms to safeguard valuable data and minimize downtime during unexpected failures. Design proactive monitoring frameworks to track system health, diagnose emerging faults, and trigger alerts accordingly[7].

5. Reference Architecture of Cloud Telephony

The reference architecture diagram seamlessly integrates with the broader discussion of cloud telephony, emphasizing the transition from traditional telephony systems to modern, cloud-based solutions. By leveraging components like DCOSS, APS, PacketGen™, RTPToolBox™, and PacketScan™, organizations can ensure robust, scalable, and efficient communication systems. This architecture supports the flexibility, scalability, and cost-efficiency that cloud telephony promises, aligning with the strategic advantages of solutions like Microsoft Teams Phone in enhancing organizational communication and operational efficiency.

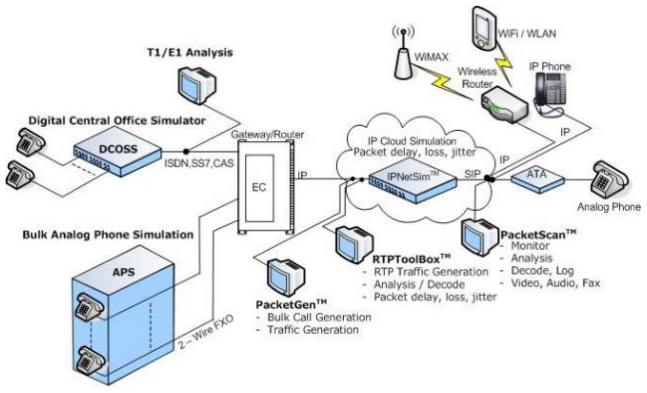

Figure 1: Cloud Telephony Reference Architecture

6. Use Case of Teams Phone from Utility Industry

PG&E Corporation, a major energy company serving millions of Californians, embarked on a space conditioning heat pump retrofit project. The retrofit involved replacing existing gas wall furnaces and air conditioning systems in 253 dwelling units across four multifamily sites in Northern[1]. The project took place during 2018 and 2019 as part of PG&E's Multifamily Upgrade Program (MUP).

6.1. Problems resolved

1. **Energy Efficiency**: The existing gas wall furnaces were outdated and inefficient. By replacing them with heat pumps, PG&E aimed to improve energy efficiency and reduce utility costs for residents[4].
2. **Workflow Challenges**: Managing remote agents across vast territories posed communication challenges. PG&E needed a solution to streamline internal and external engagements.

6.2. Solution

PG&E deployed Microsoft Teams Phone alongside Salesforce integration. Here's how it addressed the problems:

1. **Centralized Communication Hub**: The integration of Microsoft Teams Phone and Salesforce created a centralized communication hub. Agents could collaborate seamlessly, improving workflow efficiency.
2. **Improved Customer Service**: Decreased average handle times and increased first-contact resolutions led to enhanced customer satisfaction.
3. **Energy Savings**: The heat pump retrofit resulted in energy savings, benefiting both PG&E and residents.

6.3. Timelines

The retrofit occurred over two years (2018-2019), with careful planning and execution.

6.4. Benefits

1. **Cost Savings**: Energy-efficient heat pumps reduced utility costs for residents.
2. **Operational Efficiency**: Streamlined communication improved overall workflow.
3. **Customer Satisfaction**: Faster issue resolution led to happier customers.

6.5. Critical role of team telephony/Contact center solution

In the utility industry, efficient communication is crucial. PG&E's deployment of Microsoft Teams Phone addressed this need by providing a unified platform for agents. It allowed them to collaborate effectively, resolve issues promptly, and enhance customer experience.

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