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A BRIEF HISTORY OF COMMUNICATIONS
For years now, the phone system has been a major form of communication between humans all over the world. As children we probably all played with the two soup cans connected by a string to see if we could hear each other over “the line.” Talking with friends over party lines on rotary dial phones seems so long ago and so cumbersome—today’s youth have no idea what this even means.

Communication has certainly come a long way since the dawn of the telephone circa 1876 by A.G. Bell. Thinking back even a shorter time, about 50 years, to the "revolution" of transitioning from a rotary dial device to a touch-tone-style phone. This changed calling times from about 45 seconds down to 10 seconds or less (depending on the length of the phone number, how many digits within that number sequence were closer to 0, and how fast you could push the buttons). This was likely the biggest step forward in communications efficiency that the industry had seen to this point. Going from having a dial wheel interrupt an electrical signal based on the number being dialed (eight times for the number 8 for example) to a specific electronic tone for each number being dialed had radically changed the speed and accuracy of telephone calls.

Fast forward to the age of the cell phone, and no one seemed to be able to live without one. Adoption of the smartphone followed quickly after that, and text messaging and data plans were soon along for the ride. As we followed this path of communication and technology there was another one forming in parallel. It was initially labeled VoIP (Voice over IP)—telephone communications over the internet.

ENTERING A NEW ERA OF TECHNOLOGY
The benefit that this technology has delivered over past tools is that you could communicate with different devices anywhere in the world at a dramatically reduced cost (as long as they are connected to the internet): desk phones, smartphones, tablets, desktop computers, etc. Even video calls are now possible, and this began the era of webinars.

These two major thrusts in communication have recently been overlapping in the telephony API space where websites and internet users can have computer code facilitate almost all forms of communication.

The first evolution in the API-driven telephony space was the ability to communicate over the internet with Voice over IP or VoIP. As VoIP communication became more prevalent, businesses started looking for ways to build more efficient communications into their workflows and applications, leading to the launch of CPaaS or “communications platform as a service” solutions to help solve this new need.

While these early models required two separate services and oftentimes UCaaS APIs were not made available to businesses, it was evident that these new ways to communicate and the power of the cloud would become a major disruptor, allowing businesses to innovate and scale like never before.

Tools and features like voice, video, and messaging could now be controlled programmatically and customized to a client’s particular application and data collection needs. The real advancement here is found in WHERE this technology resides. The term “in the cloud” grew to be commonplace when these “as a service” platforms started coming online. Cloud-based
computing meant that, among other things, the client did not have to invest in physical hardware while they were trying to implement and leverage CPaaS solutions. Soon to follow was another cloud-based platform known as UCaaS or “unified communications as a service.” This is currently the zenith of the cloud-based-platform world where the client has access to almost anything communications based via a cloud-based platform of tools plus an accompanying API (application programming interface).

Traditionally the client is also given access to an SDK (software development kit) that augments the use of the platform by connecting to the API, as well as online documentation, training, video tutorials, blog articles, code samples, and general use documentation.

While CPaaS offered businesses the ability to use separate numbers to call or text their customers, UCaaS APIs allow businesses to communicate using their standard business number using the existing tools and software already in place. UCaaS APIs can also offer a wider feature set on top of the traditional features available with CPaaS, such as automated IVR with data dipping, call and device management, active call control, call recording, call transcription, voicemail to email, SMS and MMS, extended fax capabilities and fax management, online meeting solutions, instant messaging, and more.

As in the name, all of these features are unified, or designed to work together out of the box, allowing businesses to use a single provider while managing how they communicate with their customers across different channels. It also means having access to call log, message store, QoS, and other forms of communication data that help businesses implement smart processes, improve customer service, increase sales, and ensure compliance and security.

Looking back at those 50 odd years, we have certainly come a long way in our many forms of communications. Communication has not just evolved for humans, but even progressed in how technology communicates. Just think that both Voyager 1 and 2, launched in 1977, are still sending back signals from beyond the heliosphere in interstellar space!

But how do we migrate from old technology to the new? What role does this new technology have in current infrastructures? How can we pay for a needed transition? If we don’t make a transition will we get left behind? Can we afford not to make the transition? If I am part of a small business, how can I leverage this newer technology to level the playing field with my bigger competitors? In this paper, we hope to provide guidance toward the future of communications and the accompanying tools.

THE STATUS QUO

The status quo of communications in the present day is still a little like the wild west. If you place a call to a company today of any size, you will be presented with any number of call answering systems and then eventually get placed on hold for “X” number of minutes. You may get an automated IVR answering system (“press 1 for sales, etc”) or you may get an automated voice recognition system (“Please tell me in short words what you want to do…”) which often misinterprets the request of the caller, directing them to the wrong extension and escalating the frustration of being unable to communicate with your company.

While for many of us this is the experience we grew up with, the expectations among customers, especially millennials is changing.

According to one study, 77% of customers now see speed to resolution as the best indicator when they contact a company.  

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1. Intrado Consumer survey, 2019
As companies continue to face more and more competition, convenient and efficient communications become even more critical, as 77% of consumers report opting-out from a brand within the last six months—distancing them from your company and opening the door for your competitors. And with 68% of consumers preferring voice to other forms of communication, it remains a vital part of your business today.

In fact, 44% of consumers with text messaging capabilities prefer to text customer support immediately rather than have to wait on hold with an agent.

Add to that voice, SMS, and new digital channels such as email, online forums, social media accounts, online reviews, and other mediums, and it is clear your business can no longer rely on a single channel to reach, communicate, and sell to your customers. Today’s dynamically changing environment requires you to take a flexible, scalable, omnichannel approach.

When you look at your current business capabilities and how you empower your customers to communicate with you, can you truly say you are meeting the expectations of your customers in the 21st century with convenience and efficient communications?

THE POWER OF THE CLOUD

Cloud technology (or cloud computing) is simply ideal for managing and leveraging the use of all the aforementioned communication points. It is best described as a remote internet based-platform where software can be accessed, used, and tailored to individual client needs. This allows for the cloud user to not have to spend any time or other resources on maintaining the software or keeping it up to date. Additionally, the supporting hardware will also be maintained by the platform provider. This leaves the cloud client free to focus on the HOW of the software platform rather than the WHAT, WHY, and WHERE of it all. Cloud platforms are also typically load balanced across many physical computer servers and in more than one physical location (North America, Europe, Asia, etc). This adds stability, redundancy, speed, and availability to the platform. The often overused term “Economies of Scale” truly applies in this case. Add to that the power and potential of an API that allows for the extension and integration of the platform and you have a utopian situation to be sure.

64% of consumers are likely to have a positive perception of a company that offers texting as an additional service channel.

However, voice should not be the only channel for resolution that you provide for your customers, as more and more younger generations are preferring more channels and seeking convenience on top of speed to resolution. In fact, 66% of those surveyed stated they had used three or more channels to communicate with customer service and a study of 46,000 shoppers showed that 73% of consumers used multiple communication channels when shopping.

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Using APIs and Integrations

It is clear that UCaaS is the way of the future and that customers are demanding the future now. As mentioned, the cloud offers another significant advantage over other platforms, the ability to make use of APIs to integrate, extend, and customize your business communications. This allows for cloud-savvy companies to seamlessly integrate their CRM systems to send out SMS text messages on customers’ birthdays, anniversaries, and other significant dates as desired. Other examples are connections between UCaaS and data mining tools that could notify upper management of significant business trends while they are happening, not after they have already finished. Business advantages like these mentioned from the relatively simple to the more complex are why UCaaS is on the rise.

APIs specifically provide a unique advantage in that you are able to control what data and/or services your company utilizes. This means being able to not only take advantage of your business communications data to build out in-depth analytics but also to offer the ability to build more advanced and intelligent systems using machine learning, predictive analytics, and artificial intelligence.

Through access to this data, you can even be more reactive to solving business issues as they occur like seeing patterns in why calls are being missed, dropped, or not replied to in a timely manner. Additional innovations like audio transcriptions, deep call analytics, video meeting scheduling, call recordings, call agent supervision, joining calls, managing outbound call lists and campaigns, social media interactions, receiving and forwarding digital fax transmissions, and so many others allow you to create truly unique and efficient customer experiences—increasing overall customer satisfaction and providing your business with a competitive advantage.

More so, these integrations and extensions can save your company valuable resources in both time and money while allowing your business to scale faster and more efficiently than ever before.

THE FUTURE IS NOW

You may think this is all futuristic smoke and mirrors or that it is too difficult and time consuming for your organization to take on. Well, the truth is this technology, although futuristic, is available now and has been for a few years. Also, it does not require “rocket-science” to accomplish some great things with it. In the following section, we will take a look at some real-life examples of how UCaaS is being used to great advantage by companies of all sizes and levels of technical competencies to provide communications in the 21st century.

Using SMS to Scale—and Improve the Customer Experience

Consider the case of 24 Hour Tees in Nebraska, a T-shirt design and print company that ships custom T-shirt orders from small to large quantities all over the United States. They were facing issues around customer service and response times. Using traditional landlines at the outset, they quickly realized that with their limited staff they could not keep up with simple but time consuming tasks like the amount of customer inquiries on basic questions like order status. They were spending more time on the phone than actually doing the work of printing the T-shirts.

Having some past positive experiences with RingCentral products, they implemented a cloud-based solution (the RingCentral Office® product family) that allowed them to use the same phone number for voice calls and texting. This kept costs down for the number of lines that they needed. They also used the API that came with the Office platform to integrate with their existing task management system. They were able to programatically receive text messages from a customer and create a to-do item in their task management system that everyone in the company could see. At the same time, they used the SMS texting feature of Office to respond to the customer with automatic well-formatted content that included the current status of their order.

Also, in the instances of orders that were connected to fundraising efforts, they were even able to keep customers informed of how their specific fundraising effort was moving along as orders and donations came in.
These automations and integrations allowed 24 Hour Tees to have a better workload balance as tasks were picked up by the next available person. There was no longer a bottleneck caused by having a real person in charge of distributing the tasks around the work pool or time lost while looking up order status information. The overall processes that they implemented with the Office product family and some API integrations saved them from having to hire up to four additional staff just to respond to customer inquiries and distribute tasks among the team. This naturally led to better customer service, which in turn led to higher customer satisfaction and ultimately more repeat customers.

Staying lean and still being able to respond to clients in a timely and courteous manner has helped 24 Hour Tees to not only maintain their current customer base but also allowed them to expand into other aspects of the T-shirt world with the same complement of staff.
Reducing Customer Wait Time

AXA, the largest insurance provider in Switzerland with over 165,000 employees and 107 million customers worldwide, had a major hurdle to overcome in their call centers with customer wait times. Additionally, with so many social media connection points and new ones frequently coming online, it was proving difficult to reach clients on their own social platforms.

AXA incorporated a RingCentral product (Engage Digital) that uses artificial intelligence (AI) to monitor and combine the social media information of a client so that AXA can have a more complete picture of what the client was saying and experiencing with their insurance services. The AI tool also collects information in over 70 languages and merges the data into comprehensive reports. When a client calls, the answering agent can be ready with historical information and any current data that may be needed or useful. This is a massive time saver as the agents no longer have to switch between applications or screens to see scattered data.

By using AI, AXA has increased customer satisfaction while increasing their load from 100 to over 4,000 messages a month.

Voice recognition software is also in heavy use at AXA. Their IVR (interactive voice response) system is controllable through their UCaaS system and can be used to generate text messages to the client via API instructions. For example, when the wait time for an agent passes a certain threshold, the system can alert the caller that it is a better time to call back.

Clients can even post their questions on one of their social media channels, and an AXA agent can see the inquiry and respond to it thus saving time; also, the client can see the response on the social media channel that they are comfortable using. Through this technology’s enhanced contact methods, AXA has gone from answering 100 to over 4,000 messages a month in the span of a year, and this number is increasing as more experience is gained. Customer satisfaction is growing exponentially.

Convenient Voice Calls with Artificial Intelligence

Insureon is a mid-sized company that sells insurance to smaller entrepreneurial companies that often get overlooked or ignored by the larger insurance brokerages. Insureon was having issues with their sales approach being consistent among all their sales staff. They wanted to have all their best practices and expertise information in one easily accessible location.

They made use of RingCentral’s call management suite and an AI product to analyze sales calls in real time and assist the sales agents by providing them with relevant content from their own knowledge base. This was even able to be done while an agent was talking to a client or prospect. Since new information could be added to the knowledge base in real time, sales agents were provided with the most current data possible.

Insureon was able to accomplish this by recording sales calls, transcribing them live, and then submitting the transcription to the AI tool. The AI tool would then provide any newly gained knowledge back to the agent. To do this, they needed to direct the API to integrate between three separate systems: one being the AI tool, another the real-time transcription software, and the third being RingCentral’s call management software that would feed the amalgamated data back to the agent. By integrating all three systems, Insureon was able to exponentially grow in knowledge, skill, and efficiency when it comes to agents interacting with clients and prospects.
MODERNIZING THE HEALTHCARE INDUSTRY

(auto)MATE is a leading provider of medical records automation for home healthcare agencies. Managing documentation from doctors, nurses, in-home therapists, and social workers in relation to home healthcare was proving to be a big task. Keeping it all straight and sending information to all the involved parties was difficult.

(auto)MATE discovered that a lot of their paperwork was still needing to be faxed to additional places of concern as well, like pharmacies, health clinics, and laboratories.

So much time was being lost in trying to ensure accuracy of documentation, creating customized cover sheets, and maintaining call lists to ensure all the necessary parties were informed of a patient’s medical needs on a timely basis. When faxes failed to transmit, ensuring they were re-sent and delivered correctly was also another headache and time void.

(auto)MATE realized significant gains by not only automating their faxing services but also by using the RingCentral Fax API to create custom cover sheets, manage call lists, and resend failed transmissions. They had enough success with internal gains that they decided to make their custom solution available to their member agencies so that those advances could be realized on the fringes of the business as well.

Through the RingCentral Fax API, (auto)MATE reduced their manual fax workload from nine hours a day to just minutes!

The time that was gained in productivity has been estimated to have reduced manual paper management efforts from upwards of nine hours a day to just minutes! Additionally, antiquated physical fax machines could now be retired as well, saving many dollars on maintenance and replacement parts to older equipment, not to mention the savings of being able to discontinue dedicated phone lines that were reserved for fax transmissions.
THE FUTURE IS YOURS

With so many requirements for current and accurate business data these days, it behooves businesses to be as efficient and scalable as possible. These terms, however, must be more than just buzzwords. Businesses do indeed need these kinds of data, and they need to be more proactive in their communications with their customers. As we have seen in the few examples above, there are many ways and forms that this information can take in order to be valuable to a business. Integrations and machine learning with artificial intelligence, automatic faxing and SMS texting, and voice transcription are just the beginning of what can and is being accomplished. APIs are gaining in their use and their effectiveness as business and information technology continue to leverage their use as they advance together side by side. If you have some of these business pain points, then you should consider what a communications API platform can do for your business and its bottom line. Even if you have a business issue that is totally unique to your own operation, a flexible communications platform will not only provide a competitive advantage but also future proof your company, saving you time, effort, and money.

If you think this is all too futuristic for you to consider starting a project of this nature, then please ask yourself the converse of that question: “Where would my business be if we did nothing?” The future of communications is here, and customers are expecting these types of communications today.

RingCentral makes it even easier with a suite of powerful APIs to help you revolutionize communications and communicate like it’s the 21st century through voice, SMS, team messaging, video, meetings, fax, social media, online messaging, and more.

Learn about the RingCentral APIs and capabilities at developers.ringcentral.com.