



Secure Real-Time
Communications



Service Providers: Go on The Offensive with CPaaS

Use CPaaS to Help Businesses Transform Customer Engagements and Employee Collaboration, Making it Easy for Them to Embed Communications into Websites, Apps and Workflows

Make it Seamless to Buy and Consume Your Services on the Web

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Executive Overview

Communications Service Providers face intense competition from public CPaaS providers who make it all too easy for businesses to buy services on the web and weave real-time communications into mobile apps, websites and business processes. The days of consumers placing phone calls via a dial pad are fading. To maintain a competitive edge in the digital era, CSPs must embrace the concept of immersive communications experiences—real-time communications capabilities embedded directly into end-customer applications and internal workflows.

The days of customers ordering traditional business communications services over the phone are also fading. CSPs must adopt a web-first selling model, offering products the way businesses prefer to purchase them, via an online marketplace.

Kandy is a white-label CPaaS solution that helps CSPs adapt to new market realities and fend off competitive threats. Kandy gives CSPs an immediate response to public CPaaS competition by providing open APIs and offering a digital marketplace framework and building blocks to e-commerce-enable traditional communications services. In many cases customers buying APIs ultimately acquire traditional services to enable their applications. This means CSPs get ROI for both new and traditional lines of business and extend the value of their core businesses.

Kandy is a cloud service, so the time-to-market and capital outlay are a fraction of that of a homegrown solution. Of course, Ribbon's carrier heritage also means that our teams know how to help CSPs integrate back-office billing and operations systems.

This white paper reviews public CPaaS competitive threats and explains how Kandy can help CSPs accelerate CPaaS and e-commerce initiatives to maintain customer loyalty and rejuvenate core business revenues.

Introduction – CSP Core Businesses are Under Assault

Communications Service Providers across the globe are feeling the heat from upstart Communications Platform as a Service (CPaaS) providers like Twilio, Nexmo and Plivo. These new players are using CPaaS offerings as a “beachhead” to become a business's primary communications provider. Once a relationship is established, business customers continue using these over-the-top (OTT) services, purchasing large, and growing volumes of traditional telecommunications services, eroding a CSP's core business revenues and market share.

Businesses are attracted to these upstart providers for a variety of reasons, including:

- **Simplicity** – business customers can order these over-the-top services quickly and easily on the web with a credit card.
- **Agility** – customers can activate SIP trunks, DID/DDIs and other services in minutes—compared to days, or even months, with most CSPs.
- **Affordability** – over-the-top-services are competitively priced. In fact, public CPaaS vendors often undercut CSP pricing, stealing long-time customers.
- **Extensibility** – public CPaaS providers make it easy for businesses to embed real-time communications into mobile apps and websites, pushing CSPs down the value chain and pilfering core service revenues.

Fight Back: E-Commerce-Enable Your Core Business

CSPs must fully embrace electronic commerce and digital transformation to protect their core businesses and expand markets. We all use the web to buy every conceivable product or service. Business customers expect the same experience when buying APIs, communications apps, DIDs and SIP Trunks. E-commerce is table stakes in today's world.

To remain competitive, CSPs must:

- Provide vibrant online stores and pre-packaged applications that make it easy for a customer's software developers and business managers to rollout new communications functionality on websites and mobile apps.
- Allow customers to easily order and quickly deploy, competitively priced SIP trunks, DIDs/DDIs and other communications services, directly on the web.
- Provide APIs that empower customers to easily add real-time communications to mobile apps, websites and business processes to unleash digital transformation, improve end-customer experiences and boost business performance.

Remember that the web is an "on-ramp" for customers, not a final destination. Unlike OTT competitors, CSPs can leverage their local staff for sales and customer care. CSPs already have strong and deep customer relationships; they just need to modernize those engagements.

The CPaaS Market is Hot – Use Kandy to Get Started Now

Businesses all over the world are already using communications APIs to improve customer engagements and increase worker productivity. Mobile apps have click-to-chat icons; web sites have "contact us" buttons; and internal online directories and business applications have click-to-connect icons. Businesses are already paying your OTT competitors to deliver these services. And CSPs are often the ones delivering these services as wholesale partners to the public CPaaS providers. Why live in the shadows? IDC forecasts global spending on CPaaS-delivered voice and text-messaging services alone to reach nearly \$11 Billion by 2022.

Tap into this massive market opportunity, quickly and easily with Kandy—the industry's leading white-label CPaaS solution. Kandy provides far more than wholesale connectivity. Kandy APIs make it easy for developers to buy and consume your network services.

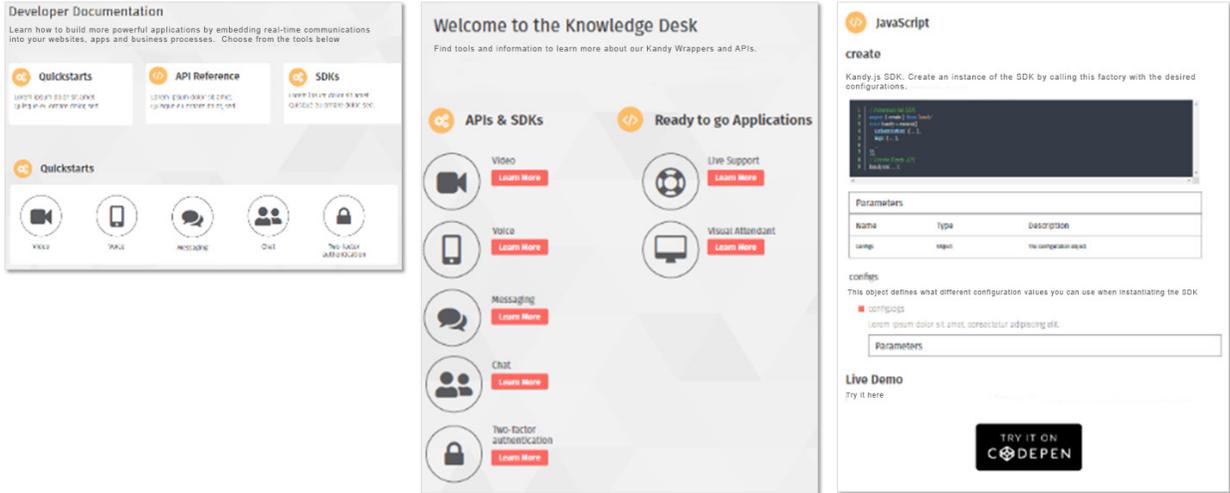
Leading CSPs around the world are already using Kandy to counter OTT threats. Kandy's simple REST APIs and comprehensive SDKs for iOS, Android and JavaScript, let your customers easily embed voice, video, messaging, collaboration and other real-time communications capabilities into mobile apps and websites for immersive user experiences.

Global Spending on CPaaS-Based Voice and Text-Messaging Services



Source: IDC, Worldwide Voice and Text Messaging Communications Platform-as-a-Service Forecast

With our white-label solution, you own the customer relationship and serve as the primary interface for sales, support, billing and all other customer interactions. Your brand, your value. Integrating into the Kandy Cloud takes weeks, not years, delivering fully branded, state-of-the-art, real-time communications services that meet or exceed public CPaaS offerings from upstart service providers like Twilio, Nexmo and Plivo.



Developer Documentation
Learn how to build more powerful applications by embedding real-time communications into your websites, apps and business processes. Choose from the tools below

Quickstarts | **API Reference** | **SDKs**

Quickstarts

Welcome to the Knowledge Desk
Find tools and information to learn more about our Kandy Wrappers and APIs.

APIs & SDKs | **Ready to go Applications**

JavaScript
create
Kandy.js SDK. Create an instance of the SDK by calling this factory with the desired configurations.

Parameters

name	type	description
comp	string	The component request

config
This object defines what different configuration values you can use when instantiating the SDK.

configprops
Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Parameters

Live Demo
Try it here

TRY IT ON CODEPEN

Kandy APIs Make it Easy to Add Real-Time Communications to Mobile Apps and Websites, Helping Drive More Traffic onto Your Network

- **Voice** – IP-to-IP voice calls, SIP trunking for PSTN calling and full WebRTC functionality including click-to-call.
- **Video** – high-quality, low-latency video with scalable resolution.
- **Messaging** – full text/SMS functionality including MMS and rich messages with pictures, video, group messaging, location and contact sharing.
- **Collaboration** – team communications and customer service using presence, co-browsing, screen-sharing and WebRTC voice and video.
- **Chat** – interactive one-on-one and group chat with presence, address book, enterprise directory and file sharing of pictures, videos and files.

Take Full Advantage of all the Financial and Operational Benefits of a Cloud-Based Platform

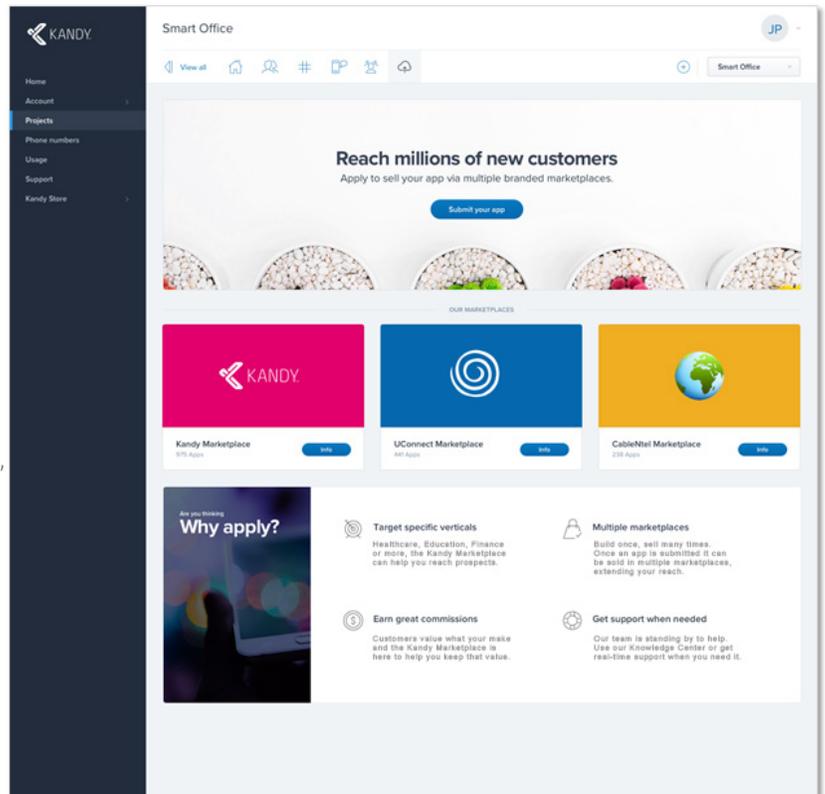
- Accelerate time-to-market
- Avoid infrastructure cost and complexity
- Free up staff and budget to focus on value-added services and innovation
- Tightly align ongoing operating expenses with evolving business demands
- Avoid lopsided business models with high upfront investments and long paybacks
- Scale capacity on-demand
- Enjoy global reach and resiliency

More Than APIs, Kandy Will Transform Your Core Business

Specifically designed to enable e-commerce, Kandy makes it fast and easy for CSPs to sell a wide range of communications services directly over the web, with a custom-branded digital marketplace for Kandy-compliant apps. Ribbon hosts and maintains the marketplace. You maintain complete control over the merchandise, customer relationships and billing.

Customers can order and activate DID/DDIs, SIP Trunks and other services on your digital marketplace, quickly and intuitively, with the click of a button. A customer that initially needed a click-to-chat service can also buy phone numbers for their next project. And since it is on the web, your traditional service delivery area barriers go away.

Kandy integrates directly with your network, helping you protect and extend your primary business lines including incumbent UCaaS, STaaS, IP tollfree, voice and SMS services. Suddenly, Kandy is doing far more than providing APIs; it is providing an on-ramp to new customer acquisition.



E-Commerce Enable Your Business with Your Own Marketplace

Become a Member of Larger Development Ecosystem with the Kandy Marketplace

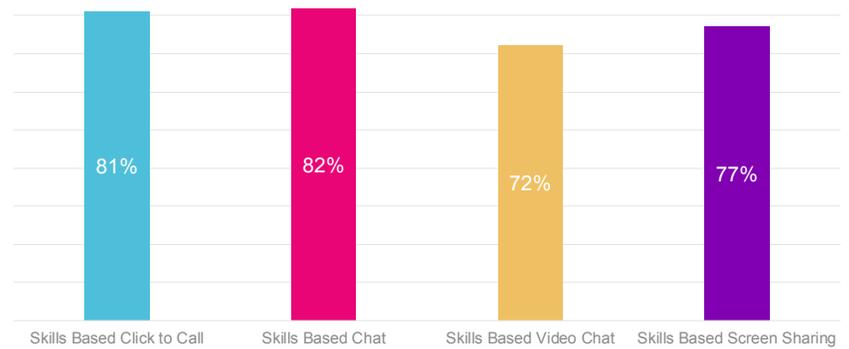
Service providers considering a CPaaS offer are often concerned that they don't have deep Independent Software Vendors (ISVs) relationships and they will have difficulty creating a broad ecosystem to challenge OTT providers. When you partner with Ribbon, you gain immediate access to a large and growing community of ISVs who have developed a wide range of applications for other Kandy CPaaS providers.

The Kandy marketplace creates a force multiplier for ISVs, giving them a new way to market with some of the world's leading communication providers. You can pick and choose the specific ISV apps you want to include in your particular marketplace. You can even create your own apps and sell them through other Kandy business partners, under your own terms.

Accelerate Digital Transformation with Kandy Wrappers

Kandy Wrappers are pre-packaged, fully functional software applications you can resell on your marketplace. Developed by Ribbon, these end-customer engagement tools make it easy for businesses to add “contact us” capabilities and other advanced communications features to websites and mobile apps. Developers and business managers can use Kandy Wrappers to quickly insert new functionality into their applications or web pages, with little or no coding.

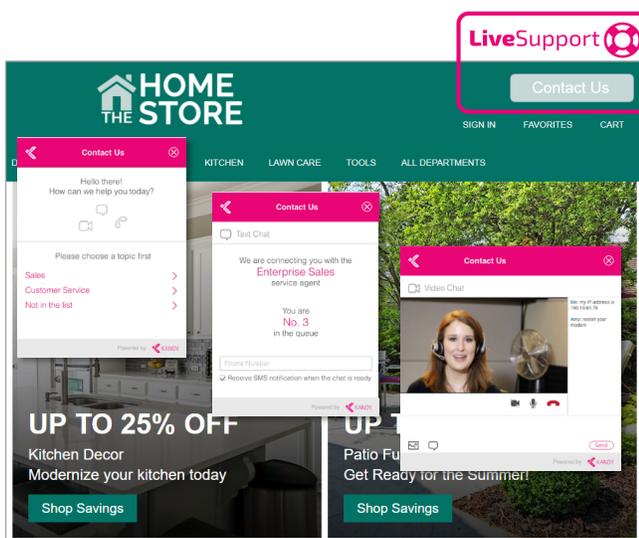
How interested would your company be if you could add the following with little or no IT involvement?



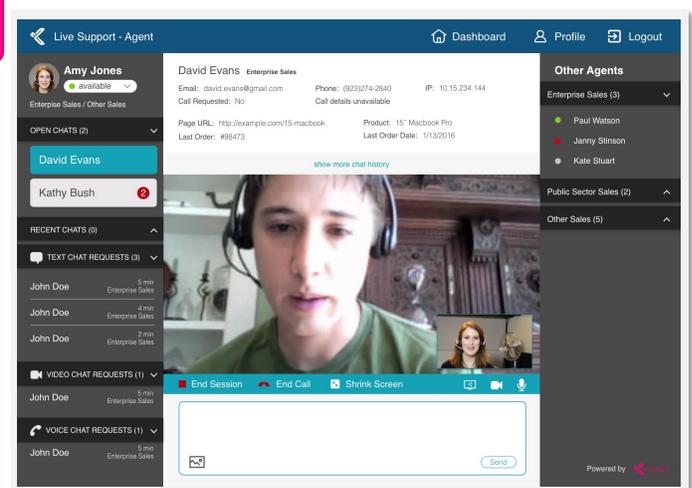
Kandy Wrappers in Action – Live Support Suite

The Live Support Suite wrapper makes it easy for your customers to add real-time communications to contact center websites and mobile applications. Businesses can use Live Support Suite to:

- Create a web-based concierge for more personalized online retail or VIP services
- Let end-customers communicate with agents via chat, voice and video
- Offer two-way video for customer support (users can show agents a problem using their smartphone camera)
- Provide off-hour or 24/7 support using AI-based agents
- Reduce hold times or agent personnel costs with chat bots



End-customer View



Browser-based Agent Experience – No Software to Deploy

Summary

CSPs are facing stiff competition from upstart public CPaaS vendors that make it easy for businesses to order services on the web and to add real-time communications to their customer-facing applications. Kandy can help you fend off competitive threats, restore customer loyalty and drive traffic back onto your network.

With Kandy you can:

- Offer rich APIs, SDKs and pre-packaged applications that let customers easily embed real-time communications into mobile apps and websites for immersive user experiences.
- Let businesses order and activate communications services quickly and easily on your custom-branded electronic storefront.
- Breathe new life into your core business by steering traffic onto your network to rejuvenate revenues.
- Take full advantage of all the financial and operational benefits of a cloud-based platform.

Win back customers, move up the value chain and restore revenue growth with Kandy!

Next Steps

To learn more about how Kandy can help you e-commerce-enable your core business, regain customer loyalty and grow revenues visit kandy.io.

About Ribbon Communications

Ribbon Communications Inc. (Nasdaq: RBBN) delivers market-leading software solutions that secure and power many of the world's leading service provider and enterprise communications environments. Built on world-class technology and intellectual property, the company's cloud-native solutions deliver intelligent and secure real-time communications solutions for the cloud, network and enterprise edge. Ribbon's Kandy Cloud real-time communications software platform delivers advanced and embedded CPaaS and UCaaS capabilities enabling service providers to rapidly create and deploy high-value communications services. To learn more, visit ribboncommunications.com.

Microsoft Partner
Gold Communications

Voice
Unified Communications
Business Productivity Solutions
Midmarket Solution Provider