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XURA

Digital Communications
Revenue Generating Services with WebRTC White Paper

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New Revenue Generating Services with WebRTC

WebRTC is not just another overhyped technology… it enables communications in new and unique ways that deliver real value to consumers—and create real revenue opportunities for service providers.

Web Real-Time Communications (WebRTC) has the potential to be a game-changer for the telco industry. Its ability to embed real-time communications in an application or web browser opens up a new world of opportunities for point-to-point and multipoint communications, from sales kiosks to web sites. Many believe WebRTC will be a market disruptor, although not everyone agrees which market will ultimately experience that disruption; some see it as a competitor to over-the-top apps such as Skype and WhatsApp, while others believe that WebRTC will erode traditional voice services from telcos.

One thing seems certain: WebRTC is not just another overhyped technology. By 2019, industry analysts expect that there will be more than 2 billion subscribers and more than 6 billion devices using WebRTC. How does a new technology become that big, that fast? By doing something that other technologies can't do, and doing it well. WebRTC doesn't simply enable real-time voice or video calls; it enables communications in new and unique ways that deliver real value to consumers—and create real revenue opportunities for service providers.

In this whitepaper, we examine four use cases for WebRTC that highlight how this new technology will change the future of the telco industry. These are not far-off, science fiction predictions. They are real applications that are being developed by digital services vendors such as Xura to improve customer service and grow revenue.

Four Ways That WebRTC Can Make You Money

#1 Number Privacy

Personal privacy is an increasingly important issue for subscribers, whether it's protecting personally identifiable information from aggressive marketers or guarding passwords and personal identification numbers (PINs) from prying eyes. One such piece of personal information is our phone number; particularly in the case of smartphones, a phone number can provide 24/7 access to us—at work, at home and even in bed.

Exposing your phone number has always been the cost of communications. If you want people to reach you, they need to know your number. But this has become problematic as the Internet and social media multiply that exposure to millions of strangers. For example, consider a homeowner who is selling their home through an online site. Today, if you want interested buyers to call you, you need to provide your phone number. But what if potential buyers could click on a link from your online listing and instantly launch a WebRTC call to your phone from their web browser— without ever dialing your number? Your phone number and your identity would never be exposed.

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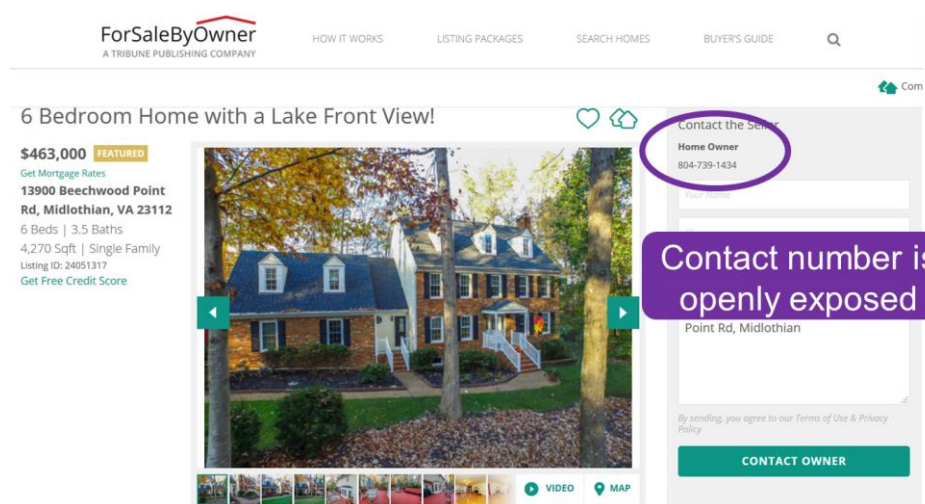
Contact Number Published on Website

Figure 1 – The way it is today. Phone numbers are exposed to everyone.

On the surface, the session would appear to work similar to a click-to-call feature. A potential buyer could click on a "Call Me" icon, a WebRTC session would open in their web browser and dial the owner's phone (without revealing the owner's number or identity), and both parties could talk with complete anonymity. The homeowner could even customize the experience using policy controls to determine who could call them and when (e.g., calls between 8:00 pm and 8:00 am might go directly to voicemail).

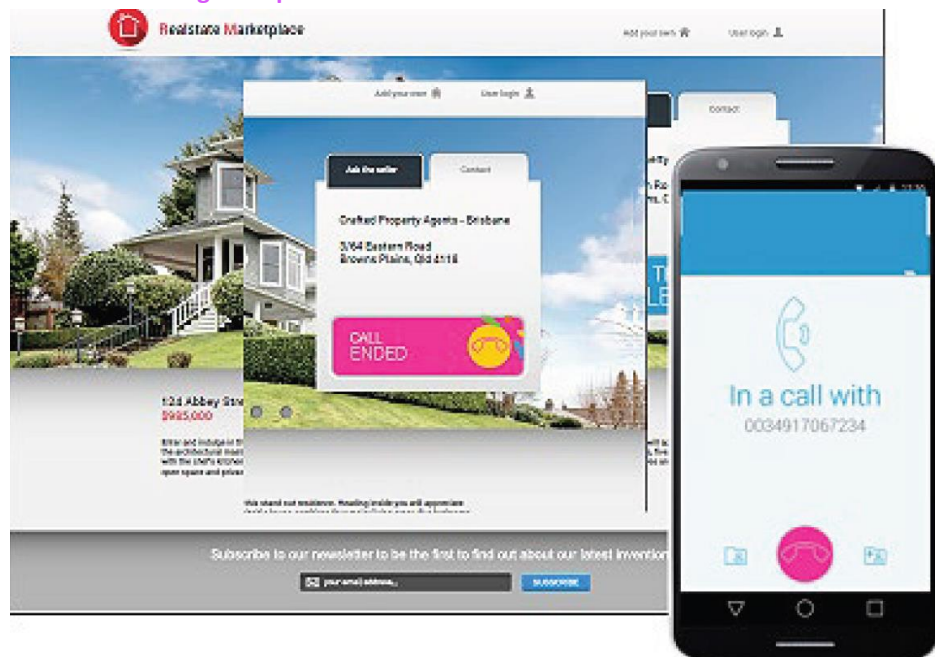## Real Estate Listing Example

Figure 2 – The way it will be tomorrow: Identity protection with WebRTC.

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There are many applications where anonymity has value, from classified advertising to online dating. And, because these applications are leveraging WebRTC technology, they don't require any extensive scripts or client-side software. The hosting site or software developer can "drag-and-drop" the WebRTC application into their environment with the appropriate software developer's kit (SDK)—no telecommunications experience required. In fact, the hosting site wouldn't even need to know the customer's phone number, which provides a reassuring layer of security in a world where hacking into business databases has become all too common.

Dating Site Example
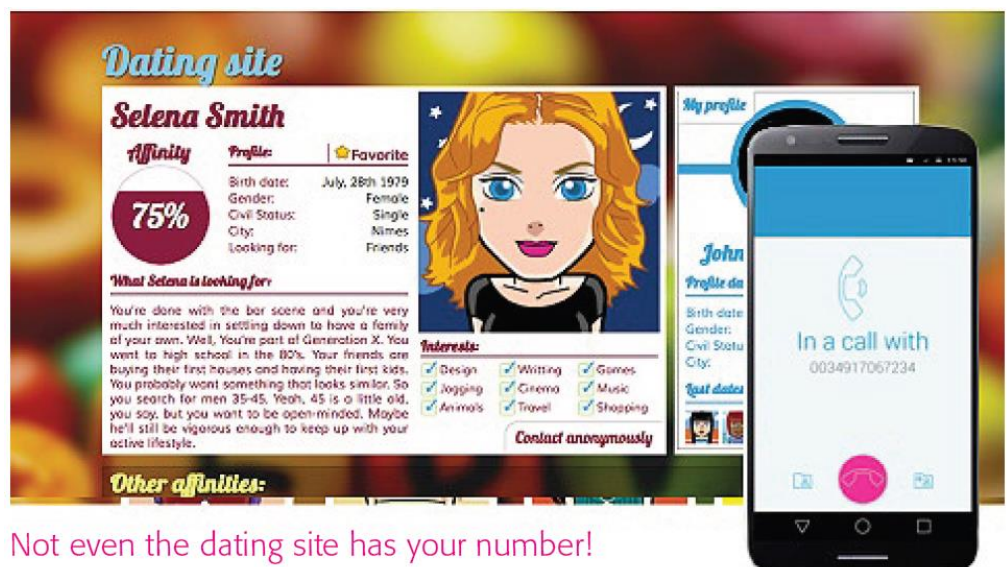
Not even the dating site has your number!

Figure 3 – Yes, WebRTC can even help you make a better love connection.

#2 Virtual Phones

Roaming charges can be a real problem for mobile subscribers, who are often hit with high per-minute surcharges to make local calls in their new region as well as long-distance calls back home. WebRTC offers an inspired solution to this problem: a virtual phone application that can be accessed directly from the subscriber's phone and provide call services via WebRTC.

Imagine that you're travelling to Madrid for an important conference. When you arrive at the airport, you log on to the virtual phone provider's site from your mobile phone and sign up for a temporary local phone number. Now, you can make and receive calls on your phone using a WebRTC app with a familiar telephony user interface without incurring high per minute charges.

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WebRTC Virtual Phone Offering

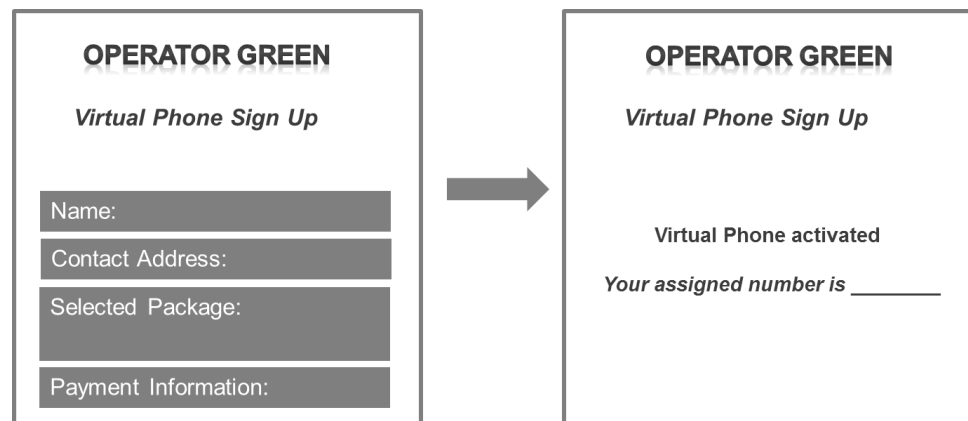Subscriber signs up for local phone number from Operator in Roaming Country

Figure 4 – Signing up for your virtual phone is simple.

Virtual phone service isn't limited to your phone either — the app could be loaded onto a tablet or laptop. This service has broad appeal to both business users and consumers:

- **It's inexpensive:** Minutes can be purchased by the virtual phone service provider in bundles much like a prepaid calling card;
- **It's simple to use**: No SIM card required, no "loaner" phone to lose;
- **It's portable:** If your phone battery dies, you can easily access the app from another device;
- **It works everywhere that Wi-Fi works:** No worries about spotty macrocellular coverage.

WebRTC Virtual Phone Line

Subscribers can access and initiate voice calls and UC services (messaging, audio/video calls, chat) through a Web Browser

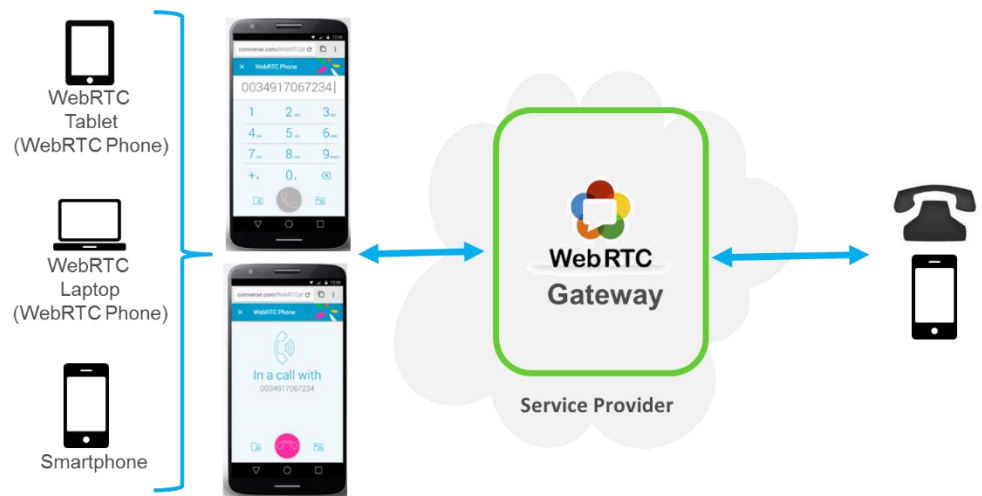# Revenue Generating Services with WebRTC White Paper

Figure 5 – The virtual phone looks and behaves like a regular phone client.

For service providers, a virtual phone application opens up new revenue opportunities:

- Service can be activated quickly at minimal cost;
- It creates a new revenue stream for mobile operators at vacation destinations and events (e.g., business conferences);
- It can be positioned as an inexpensive second phone line and mapped to an existing phone number.

#3 WebRTC Call to TV

Video calling services such as Skype and FaceTime are driving more mobile data traffic through service provider networks, yet service providers struggle to monetize these services. One way in which service providers can create revenue opportunities around these services is by connecting mobile devices and televisions for richer video sessions. Using a WebRTC application, service providers can link video calling sessions directly to smart TVs without installing any client software on the television.

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Figure 6 – WebRTC can bring video calls directly to your TV screen.

WebRTC-to-Smart TV communications enable service providers to monetize the video revolution:

- It supports common technology (over 140 million smart TVS will be sold this year) with no unique software or
- capabilities required to activate service;
- It creates a "sticky" service that increases customer loyalty;
- It can be easily combined with chat and messaging capabilities for a unified communications experience.

#4 The Internet of Things

As billions of automated devices and sensors flood the Internet in the next few years, they will create an Internet of Things (IoT). Currently, machine-to-human communications—for example, homeowners communicating with their home's thermostat to check temperatures and regulate heat—require some type of client software to enable that connection. With WebRTC, however, machines and human beings can communicate over a standard web browser connection or through a mobile app without any additional software or change to the devices themselves.

Imagine that a homeowner has an Internet-connected wireless thermostat in their home. Using WebRTC, the homeowner could pull information from the thermostat directly from their smartphone (e.g., "What temperature is it?"), or the thermostat could periodically push information to the homeowner's smartphone as a text message (e.g., "It is currently 68 degrees Fahrenheit"). This service could then be bundled by a service provider as a Digital Home package for a nominal monthly fee.

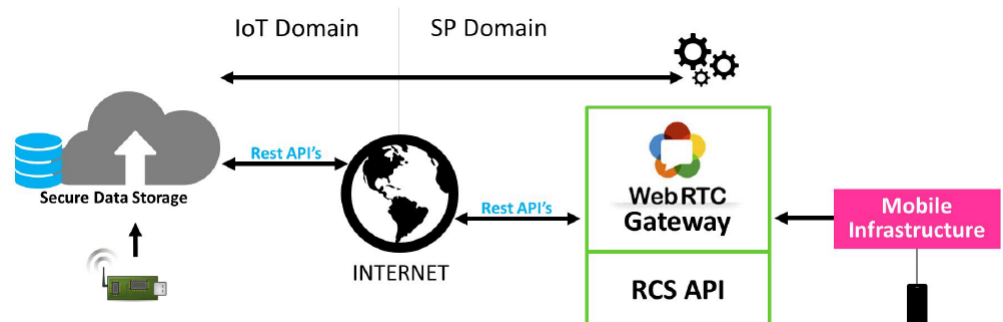# Revenue Generating Services with WebRTC White Paper

Figure 7 – The Internet of Things.

Summary

Now That we have provided a glimpse of what is possible, let us help you get there. Each of the revenue generating services discussed in this paper have been developed by Xura and their customers using the Xura WebRTC gateway and Software Developer's Kit (SDK), an advanced WebRTC gateway solution that allows service providers to easily develop, deploy and support WebRTC in their network. The Xura WebRTC solution is innovative in that it converts all SIP communications to HTTP so that no SIP support is required in any of the WebRTC endpoints. This ensures a simple, seamless WebRTC experience that can be shared with the widest possible number of devices, right out of the box.

Xura WebRTC-Telco Gateway offer the following benefits:
- Brings WebRTC enabled devices from the Peer-to-peer world to a different business case. Allowing getting the media of the WebRTC specification increases to base of users that can benefit from the telco services reducing the dependency from the actual device they are using.
- The solution is easy to integrate in telco architectures, and can be deployed inside or outside their infrastructure. The product has been tested in real telco environments taking a short period of time to deploy (hours/days).
- With the addition of different SDKs and samples, using Xura WebRTC-Telco Gateway allows developers to both enable the use-cases they require and do it in the minimum time.

Xura WebRTC-Telco Gateway products can be summarized in the following points:
- Pioneering company in WebRTC for telco exposure
- Highly-scalable performance
- Plug and play solution as it works UNI (creating virtual endpoints, outside the SBC)
- SDK enabling not only web-based telephony endpoint but also enabling new services combining internet call-leg with a telco call-leg with a myriad of monetization capabilities.

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We are Xura

We offer our customers a pathway to next generation digital technology. Our thinking unlocks the possibilities of no boundaries communications.

For over 20 years, we have been working with Communications Service Providers (CSPs), operators and enterprises all over the world, helping them to meet the needs of tomorrow's multi-device, multi-services consumers.

We offer clever ways to financially realize opportunities from existing technology, while guiding customers to richer communications solutions by creating innovative products and services to disrupt digital.

We help 8 out of the top 10 global operators reach over 3 billion endpoints.

We are the enabler making the future of digital communications services happen.

Xura. We think beyond.

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