

case study -

# Developing the virtual workplace of tomorrow for customer service representatives

React

.NET 5

CXaaS

Virtual Office Platform

## Company

A Global CX Technology and Services Innovator

## Customer since

2020

## Goals

- ✓ Create a unified platform to streamline workflows for customer service professionals
- ✓ Provide a beautiful, engaging and interactive virtual environment to simulate a physical office space
- ✓ Collect and analyze data across the customer journey for insights to improve the customer experience

# Welcome to the [virtual] neighbourhood

Resolute Software recently contracted with a large, global customer experience (CX) technology and services innovator, who provides end-to-end, digital CX solutions and operational CX orchestration through a proprietary, cloud-based CX-as-a-Service (CXaaS) platform.

The organization's mission is to improve CX at every virtual interaction and customer touchpoint throughout the customer journey.

## The Goal

With nearly **60,000 employees** distributed across six continents — and now with many continuing to work remotely as a result of the Covid-19 epidemic — the organization approached Resolute Software with the goal of **designing a beautiful digital office environment to enable employees to collaborate more effectively, feel more engaged and work together in a virtual “neighbourhood” that mimics a physical office space.** It was an enormous undertaking that required extensive technical prowess from experienced software developers.

## Complex design called for experience and creativity

As the client organization serves global brands, there is a constant need for its customer service representatives to collaborate efficiently across teams regarding questions, concerns and customer requests.

- Most customers have an extensive process and strict policies pertaining to customer service protocols and procedures, requiring a significant amount of cooperation and communications between team members, team leads and supervisors.
- Typically, the organization's customer service representatives must toggle between numerous disparate systems and dashboards as they provide service to clients. **Accessing and assimilating information stored across different systems is time-consuming and inhibits effective collaboration, which must happen in real time to deliver on customer expectations for service quality.**
- Additionally, access to communications analytics was critical. Chat history and messaging had to be analyzed alongside other customer data to help improve consistency and quality of customer interactions, enhance training and provide recommendations for improvements. **The end goal was to leverage the data to ensure corporate standards for high-quality communication and customer service are consistently upheld.**

the challenge –

The target platform was intended to facilitate and streamline collaboration, while at the same time creating a virtual business center that would help teams feel more connected and cohesive as they serviced customers.

The organization needed a strong full-stack development team to design a unified platform that provided seamless access to all the tools contact center employees use within their daily workflow, and quickly iterate on the target application within an ambitious timeframe. The application needed to:

- ✓ Support 1000s of simultaneous users
- ✓ Run in the cloud on Microsoft Azure
- ✓ Enabled unified access to various applications and services
- ✓ Feature a rich visual interface and simple, intuitive UI
- ✓ Support scalable and flexible back-end services to deliver the desired functionality

the challenge -

## The need for design flexibility and scale

The Resolute team was provided with a rough draft of the initial design, created by another team of designers. They were tasked with improving on the design and adding several new features, which needed to be designed from scratch. The team who worked on the project during its early stages didn't collaborate effectively, and the output reflected that -

**"Our team took over the project as it was, which is a challenging way to begin," said Resolute's Veli Pehlivanov, who led the development effort.**

**Over time, we were able to keep what worked, modify what didn't and redesign the application to include all of the features and functionality the client requested."**



the challenge –

From a design perspective, the biggest challenge Resolute faced was that the graphical interface would have to accommodate teams of varying sizes, from a few people up to 50 or more. **Designing in that flexibility meant creating a visual environment that would look good – and convincingly real – regardless of how many desks were in an area, what building the team was in or where people were sitting within a cluster of desks.**



**“Creating a virtual environment that was flexible enough for five or 50 desks was quite challenging to design. We had to create a fluid layout that would accommodate different screen sizes, as well, and support the necessary interactivity, regardless of team size.”**

- said Pehlivanov

**From a technical perspective, the biggest challenge was integrating all of the various collaboration tools via APIs.** For example, Zoom was used to provide real-time chat functionality, which was quite difficult to integrate.



**“We had to push the limits of Zoom's system capabilities to facilitate the extension of the API with some of the features required for the application,”**

- said Pehlivanov

**And, while mobile capabilities were not included in the scope of this first phase of application design, the long-term vision for the design was to make it mobile and tablet friendly.**



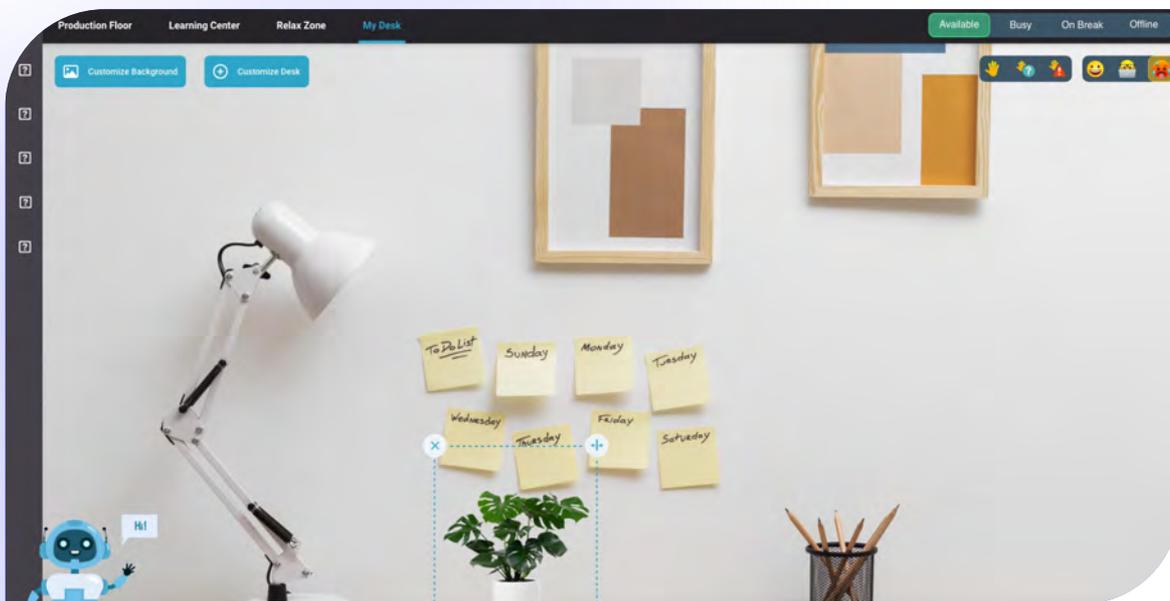
solution -

## An innovative virtual business center takes shape

Resolute provided a strong team of six veteran developers who were proficient in the client's preferred tools and technologies. They were able to ramp up quickly and collaborate efficiently with the client's internal data team, despite representatives being distributed across the globe. They were also able to implement an Agile development process to achieve the client's technical objectives.

Designing the finished product required continuous updates and modifications throughout the development lifecycle, which necessitated tight collaboration, flexibility and creativity on the part of the team. **The result? A graphically rich, easy-to-navigate and engaging virtual business center that makes employees feel as if they are at the office, and not separated by, in some cases, continents.**

As part of the design, employees can customize their profiles and avatars, decorate their desks, share their availability status, and even display their moods. Users can “look around” the office and see their teammates or check if someone is at their desks, just as they would in a physical office space. When someone has a birthday, balloons even appear at their desk.



The interface includes a chatbot for communicating with other team members, and an integrated email widget that enables employees to access Outlook with one click and send emails without leaving the application.

**Escalation channels are quickly accessible in the UI, and if an employee has a problem or question, they can raise their hand to send a notification via the messenger app to the team lead, who can then act quickly to address it.**

Importantly, the application includes an innovative sticky note feature, a “pin board” of sorts that enables employees to quickly jot down notes about an interaction and pin it to their desktops. **Supervisors can access and understand the type of information being collected, and it’s all conducted in a controlled and transparent way.**

For security purposes, employees cannot store files locally on their computers, and the information is lost once they log out. With the pin board, they can **safely and securely capture notes** about client interactions to provide context and continuity to other team members who may be involved in resolving a client issue.



**“Within the virtual business center, our employees now have immediate access to all of the information and tools they need to accelerate issue resolution. They can operate within a graphically rich virtual environment that is engaging, interactive and efficient, and removes many of the barriers of working remotely with geographically distributed teams.”**

- said a representative from the client organization

## Productivity, efficiency and improved CX

The first iteration of the virtual business center was a production-grade deployment that took roughly six months to roll out and can accommodate up to 600 users. This first subset of employees will provide feedback on the system's usability, performance and resilience. **The next deployment will accommodate about 25,000 users globally.**

### What benefits will the client realize from deploying the virtual business center?

- ✓ Enhanced productivity, with unified access to the tools needed for rapid issue resolution and problem-solving
- ✓ Improved communication, collaboration, and efficiency as they service clients
- ✓ Higher customer satisfaction scores, due to faster issue resolution, more effective problem-solving, and the ability to leverage insights from data analytics for employee training

## What's next

The Resolute team is looking to enhance the system's scalability to accommodate up to 30,000 active users and has begun initial performance testing to assess the system's resilience for that level of potential activity.



Next, they'll move to building out additional features and functionality that were not slated for the first version of the application. Eventually, the client organization will work on expanding the virtual business center to include a gaming tower, where employees can engage and interact in an informal virtual setting by playing games with one another.

While the client is currently focused on expanding system integrations and enhancing the overall interactivity of the system, **Resolute is involved in shaping the long-term vision for the project and expects to be developing additional innovative features and capabilities in the near future.**

# Let's talk about your technology requirements.

Get in touch

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