

Tearing down silos to better delivery of city

The City of Helsinki and IBM Consulting co-create faster, more flexible customer experiences with a digital assistant network

[Read the guidebook](#) →

[Explore more](#)



× Close

Hello! How can we help you?



< Business Challenge Transformation Outcome

The City of Helsinki takes care of its own. In fact, services—covering everything from healthcare to 38,000 employees help provide those services, in the country.

Those services generate enormous quantities of already vast store. “We’ve been utilizing many of says Tomas Lehtinen, Head of Data for the City of data going back almost 30 years.”

In 2019, the city established a data strategy to s data. “Our team wanted to enable data-driven d well as to apply that data to optimizing the city’s responding to citizens’ service needs on their ter

Hello! How can we help you?

At the time, each service organization had its own way of dealing with high volumes of citizen requests. “Customers were overworked,” says Janne Kantsila, Leading Specialist at the City of Helsinki. “At the same time, we wanted to improve service. Our citizens expected faster service and more flexibility. We had to be put in queues.”

To help address these issues, the city turned to vendors and began experimenting with various vendors’ solutions. After the city had verified how virtual assistants could best address the request for proposal (RFP) for a virtual assistant solution for digitalization needs.

Chief among the platform requirements were the ability to connect to other systems—including the city’s various departments, other Finland cities and outside vendors. Virtual assistants also linked to many other areas indirectly. By sharing training data on Helsinki Region InfoShare in 2011 over which major cities in the metropolitan area were opening up our chatbot data, we could help other cities build chatbots, so they wouldn’t have to start from scratch.

Other required capabilities included the ability to integrate with APIs and automated translations. Data privacy laws were more so in Finland, where transparency and trust were paramount. We wanted a solution that could run from a local Finnish server to protect highly sensitive data, like social services data.

IBM® offered the best overall solution for the city. The IBM team that could help deliver it.

Hello! How can we help you?



300 contacts

Virtual assistants currently handle
up to 300 customer contacts per day

“The ‘multi-chatbot’
long-term vision for
want to tear down t

Hello! How can we help
you?

separate our organi they're invisible to 1

Janne Kantsila

Leading Specialist, Automation Technologies, (

A network of virtual assistants

Once the RFP was finalized, the City of Helsinki and [IBM Consulting™](#) worked together to design the virtual assistant implementation using [IBM watsonx Assistant](#), initially running on [IBM Cloud®](#).

The first virtual assistant the team undertook was for the city's Sporting and Outdoor department. "We specified the chatbot scope and designed the user experience—for things like tone of voice and how to fit the chatbot within our chat application on the web pages," says Kantsila. "Then we began gathering the necessary chatbot training model for things like intents and answers to questions."

In co-creating the training model with the city, IBM Consulting applied elements of the [IBM Garage™](#) methodology, a proven development framework that integrates people, processes and technology to transform business and culture. "We didn't have chat logs from customer service available," says Kantsila, "so we ran mini-workshops with customer service personnel to get their input on citizens' most common inquiries."

The team began work on the digital assistant in December 2020 and launched it in early March of 2021—less than three months from the publication, the team continued to monitor and refine intent models based on actual customer questions.

Hello! How can we help you?

Next up was the maternal advisory virtual assistant, which served expectant and new mothers. The department had an existing virtual assistant, but it was structured

differently from the IBM watsonx Assistant virtual assistant, and the team had to redesign the intent model and do significant dialog building from the ground up. “Users were quite happy to see that there was a continuation of the chatbot,” says Kantsila.

The team then built an internal IT virtual assistant for employees that incorporated [IBM Watson Discovery](#). When the virtual assistant cannot answer a question, the solution searches through an enormous instruction library for relevant documents to help.

Following the IT virtual assistant, the team developed a rental housing services virtual assistant, a financial services virtual assistant to help with billing and other finance-related inquiries and an International House Helsinki virtual assistant to help immigrants and new international employees settle in the Helsinki capital region.



“Our employees are learning how to use different kinds of AI-based systems. Some are afraid that a new system like AI is

Hello! How can we help you?

going to take their jobs. But now they are seeing that it's supporting them and giving them more time to devote to helping patients and other citizens."

Tomas Lehtinen

Head of Data, City of Helsinki

The virtual assistant of the future

Currently, the City of Helsinki is running 10 virtual assistants, including a "multi-chatbot" that combines virtual assistants from several healthcare and social services organizations into one. Typically, the virtual assistants handle up to 300 customer contacts per day and can handle most inquiries from start to finish. The "multi-chatbot" takes advantage of [IBM Watson Language Translator](#) to translate skills training services, which are in Finnish, into Swedish and English, the other two predominant languages in Finland.

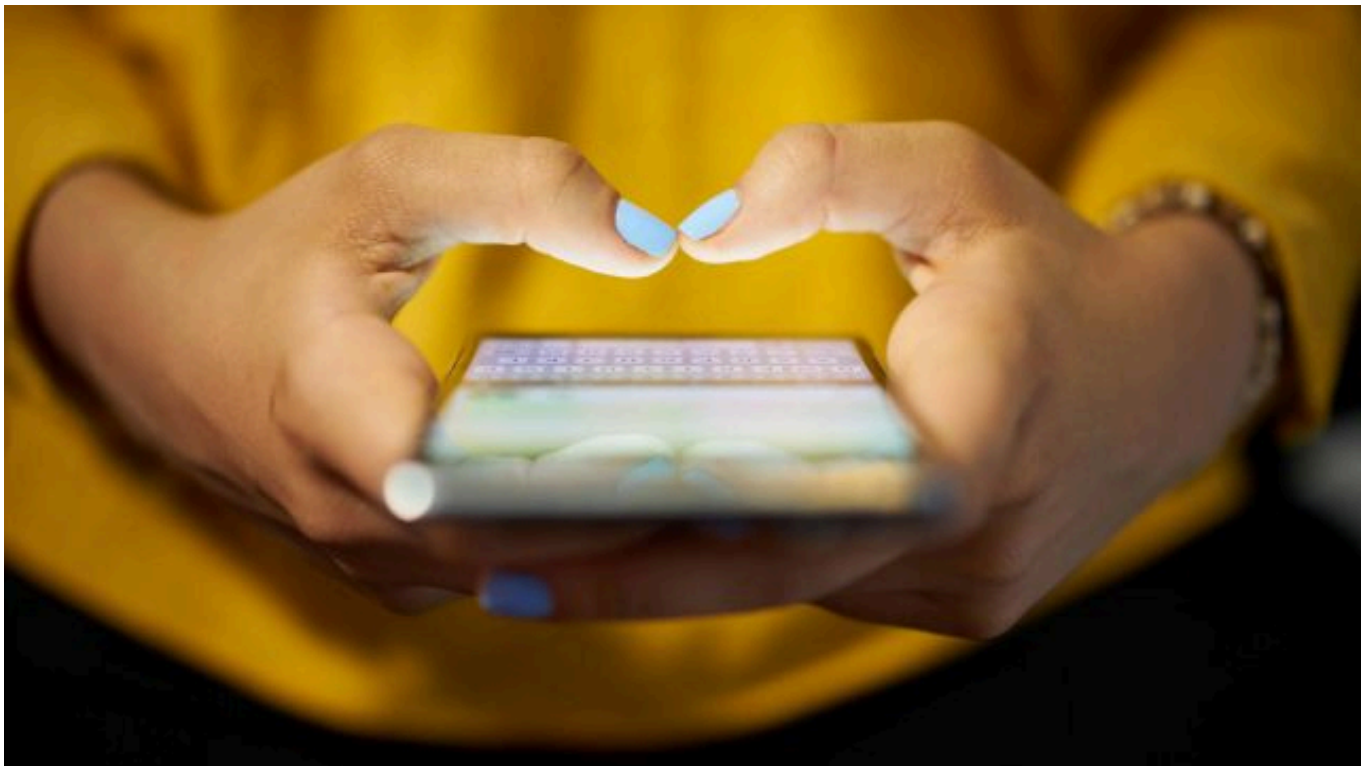
"The 'multi-chatbot' is part of our long-term vision for chatbots," says Kantsila. "We want to tear down the silo walls that separate our organization, so they're invisible to the user. Ultimately, we want to provide self-service features with our chatbots, enabling citizens to take action. Such cases could include changing an invoice due date or canceling an appointment."

Innovation is top of mind in developing new virtual assistants to automate existing processes," says Kantsila, "but rather than just reacting to requests, we can deliver services to citizens proactively, more efficiently and in a more user-friendly way."

Hello! How can we help you?

Employees are also starting to embrace the new technologies. “Our employees are learning how to use different kinds of data and AI-based systems,” says Lehtinen. “Sometimes they’re afraid that a new system like AI is going to take their jobs. But now they are seeing that it’s supporting them and giving them more time to devote to helping patients and other citizens.”

The City of Helsinki team continues to meet weekly with a local IBM team to plan and develop new virtual assistants and capabilities. “It really helps that the IBM team is open-minded and solution oriented,” says Kantsila. “Now that we have the foundations in place, we want to develop our existing chatbots further to gain even greater value. With IBM, we can throw around a lot of crazy-seeming ideas and openly discuss and refine them. I think because of that, we are moving into an even more exciting phase.”



Helsinki

Hello! How can we help you?

About the City of Helsinki

The [City of Helsinki](#) is a government entity that provides a large number of services for its 650,000 citizens. Those services cover a wide range of areas, from healthcare to education to land use. With approximately 38,000 employees, the city is Finland's largest employer

Solution components

IBM Cloud®	→	IBM Consulting™	→
IBM Garage™	→	IBM watsonx Assistant	→
IBM Watson Discovery	→	IBM Watson Language Translator	→

Take the next step

To learn more about the IBM solutions featured in this story, please contact your IBM representative or IBM Business Partner.

Request a watsonx briefing →

Camping World

Driving a reimagined customer experience with an AI-powered virtual assistant

ABM
ABM

Hello! How can we help you?

transformation with virtual agents

[Read the case study →](#)

Humana

Expertise on call

[Read the case study →](#)

[Read the case study →](#)

Hello! How can we help
you?