

# The ViCCi 2.0 Project

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Interactive customer  
service and  
wayfinding using  
Artificial Intelligence

# VISIONSTATE



## Leveraging Artificial Intelligence to Increase Customer Engagement in Physical Locations

*Between COVID-19, chronic labour shortages and the increasing reliance on analytics to provide key business insights, conversational artificial intelligence is quickly becoming the answer to delivering customer service in physical locations.*

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## 1.0 Introduction: The Proliferation of Artificial Intelligence

Visit any current retail website on the Internet and chances are your first introduction will be delivered by Artificial Intelligence (AI). For today's consumer, this only makes sense, particularly in the online environment which provides the convenience of shopping for products or services 24 hours a day, seven days a week.

Artificial Intelligence is trained to answer most questions a consumer may have about a product or service and can become increasingly sophisticated as the technology continues to learn. For online shoppers, access to readily available information makes the transaction smooth and quick, without having to rely on live agents to assist in the purchasing process.

While the use of AI in the online environment has proliferated, the same technologies are now being used in physical locations, often to address chronic labor shortages, but also to provide the same convenience that is provided through AI-powered e-commerce, easy access to pertinent information about products or services.

With the introduction of conversational AI, this technology can be seamlessly integrated into physical environments to augment customer service. It also provides important data analytics that can help drive revenue and increase customer engagement. Many brick-and-mortar companies are already moving in this direction. One fast food retailer in the United States, for example, has implemented AI to assist in the ordering process, and to focus on upselling customers which had been inconsistent when using live agents.<sup>1</sup>

The opportunities in introducing conversational AI to physical locations are indeed significant, and the potential applications are vast. Visionstate, in partnership with Fluidio.ai, is introducing an innovative new product that leverages this technology to deliver exceptional customer service while gathering important analytics on consumer trends and habits. The ensuing proposal details the path toward implementing this exciting new technology.



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<sup>1</sup> Nicholas Upton, *Checkers installing AI In All Company-Run Locations*, Franchise Times, January 14, 2022

## 2.0 The Evolution of ViCCi

In October 2005, Visionstate disrupted traditional static wayfinding with what became the first-ever interactive touchscreen directories aided by rudimentary AI. Set in a modern kiosk housing, the interactive directories featured large format touchscreens and digital displays that plotted the steps to finding locations throughout a facility. As the first installation preceded touch-enabled smartphones, the application included a two-dimensional avatar that provided basic assistance to patrons interacting with the technology.



The objectives in installing the first “ViCCi” (Virtual Interactive Customer Care Interface) directories were as follows:

- Provide better customer service to patrons by providing pertinent information
- Provide greater flexibility in updating directories to keep them current
- Be able to gather key data on consumer trends based on interactions with the touchscreen directory
- Provide digital advertising opportunities for in-house promotions and paid content

Following the first ViCCi installation at Southgate Centre, in Edmonton, Alberta the technology was installed in shopping centres across Canada and set the standard for what would become the proliferation of interactive directories throughout different verticals, including shopping centres, hospitals, airports, and office towers to name a few.

Wayfinding using interactive technology became standardized yet left an opportunity to increase the marketing and customer service features by providing next-generation technologies, specifically in artificial intelligence.

Today, with the pervasiveness of AI and its importance in delivering customer service, Visionstate is embarking on the next generation of its ViCCi product by basing the core technology on artificial intelligence. This provides new opportunities for facility managers to increase customer service while collecting key analytics on consumer trends and habits. It opens the door to understanding customers in a way that was never possible.

### 3.0 ViCCi 2.0 and Integrating Artificial Intelligence

Due to COVID-19 and labour shortages that existed both before and during the pandemic, the demand for technologies related to interactive customer service has grown substantially. The adoption of conversational AI provides an effective solution to customer engagement that enables staff to focus on more complex service issues.<sup>2</sup>

Additionally, the global pandemic has fundamentally changed the way people interact with publicly accessible touchscreens, and in fact, many interactive directories now rely on static maps or downloadable maps to avoid having to touch a screen to access customer service. These new realities pave the way toward adopting the new generation of on-site customer service through conversational AI applications.

In 2021, Visionstate partnered with a technology company, Fluido.ai, to create the next generation of interactive directories using conversational AI. The combination of Visionstate's extensive experience in developing interactive directories, coupled with the AI platform provided by Fluido.ai, has resulted in the creation of ViCCi 2.0, which is now on the cutting edge of AI-powered customer service.

ViCCi 2.0 has features that are applicable to many different customer service requirements, including information about brands, products, or retailers, and providing wayfinding assistance to find specific locations within a defined setting. Additionally, the data collected through customer interactions is available on an analytics dashboard through the ViCCi 2.0 portal.

Features include:

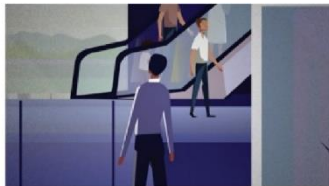
- **ViCCi 2.0 Portal** – Provides access to easy changes and updates to the ViCCi 2.0 live directories
- **Interactive AI-driven wayfinding** – Voice-activated wayfinding from varying origination points to varying destination points
- **GUI development** – 3D maps plotting the path from point A to point B
- **Performance Analytics Dashboard** – Detailed analytics in the ViCCi 2.0 portal highlight consumer trends and habits
- **Chatbot** – Specific to the facility, the chatbot can be branded as the official customer service spokesperson, like Alexa™.
- **Multi-language Support** – ViCCi 2.0 can understand multiple languages where required
- **Bot to Live Agent Hand Over** – The bot can hand over customer service questions to live agents where required
- **Testing** – Ensuring smooth interactions between the customer and bot in defined locations with background noise
- **Hardware** – Sleek, modern kiosk housings with interactive screens, microphones, speakers, and cameras to detect proximity
- **Interactive Advertising and Messaging** – ViCCi 2.0 can be used to display rich media advertising on in-house events, branding, and promotions

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<sup>2</sup> Praynay Jain, *6 Ways AI is Changing the Retail Shopping Experience*, itworldcanada.com, Sept. 7, 2021

## 4.0 Artificial Intelligence and the Customer Journey

Understanding the customer journey is as important to physical locations as it is online. In fact, the advantages of e-commerce as it relates to the customer journey are significant in comparison to brick-and-mortar locations where it's more challenging to understand that journey. The application of artificial intelligence is one strategy to gain valuable insights into customer needs. The following flow chart highlights a typical customer journey using AI in the ViCCi 2.0 kiosk.



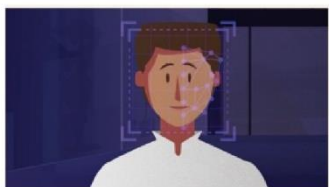
**V:** "Hello sir, how can I help you?"



**B:** "I want to buy a t-shirt, but I don't know where to go."



**V:** "Do you have a specific brand or store in mind?"



**B:** "Not sure, no, can you recommend one please!"



**V:** "The red flags point to all the stores that sell t-shirts, you can speak the name of the store you want, and I'll help you find it."



**B:** "How about ZARA?"



**V:** "Please follow the red line to your destination Zara."



**B:** "Wow! What cool technology!"



## 5.0 Benefits of Conversational AI

### 5.1 Customer Engagement

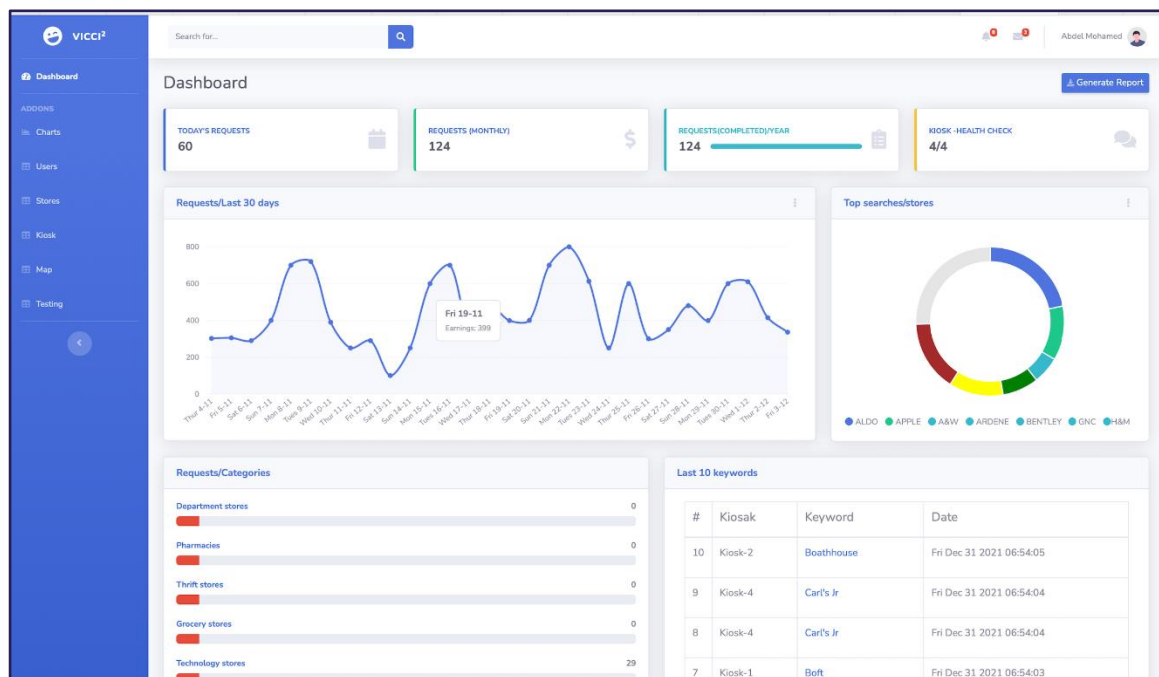
AI-powered ViCCi 2.0 facilitates interaction with customers in a human-like conversation where the AI becomes more intelligent with each interaction. Given its automated nature, ViCCi 2.0 is always available for customer interactions no matter what the conditions. This is why AI is in many instances the first point of contact with customers. The information can easily be shared between customers and ViCCi 2.0 providing quick and effective service.

### 5.2 Consistent, Reliable Customer Service

ViCCi 2.0 can be interacted with 24/7 or during operating hours without interruption. Since content is controlled and analyzed by ViCCi 2.0 customers, the AI can be tailored to provide a consistent and reliable high level of customer service to patrons. With its ability to hand off complex questions to live agents, ViCCi 2.0 introduces an effective method for providing a complete and superior customer service solution.

### 5.3 Analytics

One of the most powerful aspects of ViCCi 2.0 is the analytics it collects with each interaction. Since the solution is based on conversational AI, the data is extremely important in understanding the customer journey, their expectations, and the types of products or services they seek. This can be valuable information in formulating marketing strategies and addressing deficiencies in product or service offerings. The following graph provides a glimpse of the type of analytics dashboard available with ViCCi 2.0.



## 5.4 Improved Messaging and Advertising Content

ViCCi 2.0 provides opportunities for facility managers to easily share information through AI interactions and on the kiosk itself by displaying current and important customer messaging while at the same time displaying advertising or promotional content. As ViCCi 2.0 is often the first interaction customers will have upon entering an establishment, the messaging, advertising, and brand promotion is extremely important and can result in additional sales and services.

## 5.5 Effective Utilization of Human Resources

AI is increasingly used in virtually any environment to increase customer service without having to invest in additional human resources. The technology is available 24/7 and is not affected by pandemics or any other extraneous event. Given the challenges related to labour shortages, ViCCi 2.0 can easily fill the gap, leaving experienced customer service agents to address more complex questions for customers. AI can deliver customer service at a fraction of the cost of live agents.

## 5.6 Building a Better Brand

In much the same way as Alexa™ has built a brand around Amazon and Siri has built a brand around Apple, so too can conversational AI build brand awareness for customers of ViCCi 2.0. Visitors can come to “know” the AI bot they are interacting with, and a brand can be built around that experience. For example, in a shopping centre environment, the bot can be named “Molly” and an entire campaign can be built around building that brand awareness.