



## CASE STUDY

# BCU: AI Banking Agent

BCU wanted to explore how artificial intelligence (AI) could improve customer service by reducing support call volume and delivering faster, more personalized member interactions.

The goal was to develop a conversational AI that could answer complex, multi-part member questions without requiring extensive internal training or specialized AI expertise.

### Key Priorities Included:

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- **Deliver seamless multi-request handling** by leveraging conversational AI to resolve complex member inquiries in a single session.
- **Optimize support efficiency** through automation that reduces call volume and reallocates staff capacity to higher-value tasks.
- **Maintain security and compliance** with integrated authentication, access controls, and Azure-native safeguards.
- **Establish an extensible AI framework** that supports future scaling across BCU's digital service ecosystem.



*Lunavi is a well-oiled Agile machine. Very clean, very efficient. It was a great experience.*

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**Dmitriy Melnik**, Senior Director of Software Development & QA, BCU

PROOF, NOT PROMISES

## The Solution

Lunavi partnered with BCU to deliver a working AI proof of concept in just two weeks. Leveraging Azure OpenAI and multiple custom GPTs, the team built a Virtual Banking Agent capable of resolving multi-part inquiries in one clear conversation.

The Agent allowed members to ask natural-language questions—such as checking account balances, reviewing categorized expenses, or getting help with bill payments—all in one seamless interaction. This significantly improved user experience while easing pressure on phone support systems.

To meet security, compliance, and member trust requirements, the solution incorporated:

- **Authentication & Access Control:** Integrated with BCU's existing APIs for identity and authorization.
- **Azure Infrastructure:** Used native Microsoft tools for AI, analytics, and data processing.
- **Content Filtering:** Prevented inappropriate, inaccurate, or harmful outputs.
- **Custom APIs & Plugins:** Enabled connection with internal and external systems.



## Virtual Banking Agent Features



### Secure

access via existing APIs



### Natural-language

interface powered by Azure OpenAI



### Multi-request

resolution in single conversations



### Integration-ready

with existing systems

## Our Results

The prototype successfully demonstrated that AI could reduce support load while maintaining accuracy and data security. The system maintained accurate responses and restricted access to only approved financial data.

BCU now has a proven path to scale AI across member service operations, accelerating its digital innovation roadmap.

Lunavi delivers full-stack technology expertise that helps clients navigate what's next. Whether modernizing infrastructure, implementing data analytics strategies, migrating to the cloud, building next-generation applications, or deploying AI at scale, we provide the guidance and execution needed to drive transformation.



Microsoft Partner

Azure Expert MSP

