



FORCHT BANK: CYBERSECURITY EXCELLENCE THROUGH STRATEGIC OUTSOURCING

WINNER OF CELENT MODEL RISK MANAGER 2022 AWARD FOR LEGACY AND ECOSYSTEM TRANSFORMATION

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CASE STUDY AT A GLANCE

Forcht Bank, a community bank operating in Kentucky and Ohio, aimed to strengthen cybersecurity by leveraging managed services on the strategic principle that, through outsourcing, small banks can implement services, security, and infrastructure comparable to larger institutions.

> Forcht Bank's managed cybersecurity services include an outsourced Security Operations Center (SOC) team as well as a range of cybersecurity tools. In addition to greatly reducing the bank's on-premise technology footprint, outsourcing cybersecurity removes the burden of maintaining an in-house SOC team and managing multiple vendor relationships for the tools.

Forcht Bank's cybersecurity technology is deployed on Microsoft Azure on a hybrid cloud model and managed by Fiserv. Managed SOC services are provided by BlueVoyant.

Key benefits realized by the initiative include significant cost savings, reduction of the IT staff to a core team focused on governance and strategy, access to advanced technology and industry best practice through managed service providers, and a more secure environment for the bank and its customers.

FINANCIAL INSTITUTION	Forcht Bank
INITIATIVE	Cybersecurity Excellence through Strategic Outsourcing
SYNOPSIS	Forcht Bank leveraged cloud-based managed services deployed on a hybrid cloud model to achieve a cybersecurity posture comparable to large institutions.
TIMELINES	• Project implementation: Q1 2020 – Q4 2021
KEY BENEFITS	 Vendor technology savings Reduction of inhouse IT staffing Access to advanced technology and industry best practice
KEY VENDORS	Fiserv, Microsoft, BlueVoyant

CELENT PERSPECTIVE

Cybersecurity is a technologically and operationally complex domain, requiring myriad tools, highly trained response teams, and increasingly advanced analytic and data science capabilities. It was a clear win for Forcht Bank to outsource its technology infrastructure to experienced providers, freeing themselves to focus on the strategic planning and governance aspects of cybersecurity.

In this initiative, Forcht Bank leveraged managed services to improve their cybersecurity posture beyond what a smaller institution can typically achieve.

Cyber threats against banks and other financial institutions continue to grow in sophistication and intensity, a trend fueled by the expansion of cloud-based and digital financial services. Community banks are not spared from the increasing risk and may lack capacity to effectively deploy the advanced tools and techniques needed to ensure a secure environment.

The bank's vision for its new infrastructure was ambitious for an institution of any size. Carl Clements, Executive Vice President at Forcht Bank and the sponsor of the project, aimed for a holistic approach to cybersecurity that aggregated data from as many tools and services as possible into a "single pane of glass" dashboard to generate actionable alerts.

Clements also knew it was vital to leverage emerging technologies, such as machine learning, and a zero trust security model in order to ensure the integrity of the banking environment in the face of incessant cyber attacks.

The bank chose an existing partner, Fiserv, to manage the technology, leveraging Fiserv's expertise in Microsoft's suite of cybersecurity tools hosted on Azure. The relationship provides Forcht Bank with access to world-class technology and analytics and a sustainable approach to keeping up with the rapidly evolving cybersecurity space.

Forcht Bank's decision to outsource its cybersecurity operations was part of a larger transformation project to migrate its technology to a hybrid cloud infrastructure. Managed services have produced substantial savings on both vended technology and internal IT costs. It has enabled the bank to reduce its entire IT staffing model to five people, who now focus on governance and vision. As Clements puts it, Forcht Bank's managed services partners "can do the heavy lifting and we can do strategy."

DETAILED DESCRIPTION

Forcht Bank is a community bank operating in Kentucky and Ohio. Founded in 1985, the bank acquired 10 other community banks over the next two decades. The bank's mission statement focuses on respect for the customer, competitive rates, and service to the community. Forcht Bank was named Best Bank in Kentucky by Forbes in 2021 and, according to the bank, its improved infrastructure was a key factor in achieving this recognition.

Forcht Bank sought to ensure a robust and sustainable cybersecurity posture comparable to larger financial institutions. To achieve this goal, the bank decided to rely on a managed services infrastructure integrating multiple cybersecurity tools and services into a cohesive environment, with governance provided by the bank.

	Forcht Bank
YEAR FOUNDED	1985
TOTAL ASSETS	US\$1 billion
GEOGRAPHICAL PRESENCE	Kentucky and Cincinnati, Ohio
EMPLOYEES	Approximately 300
RELEVANT TECHNOLOGIES AND VENDORS	Fiserv, Microsoft, BlueVoyant

Table 1: Forcht Bank Snapshot

Source: Forcht Bank

Opportunity

Forcht Bank's cybersecurity initiative was part of a transformation program to migrate the bank's IT infrastructure and security tools to a hybrid cloud environment. The bank saw outsourcing to strategic partners as a way to access world-class technology while at the same time reducing costs.

Specific requirements for the initiative included:

- The ability to manage, monitor, and restrict the bank's new cloud-based applications due to their potential vulnerability to attack
- Implementing a zero trust model and real time access analysis to identify and block unusual log-in attempts
- A unified "single pane of glass" console for aggregating security data, reports, and alerts from multiple tools and services, allowing Forcht Bank to operate with minimal IT security staffing
- A multi-layered email defense strategy including anti-phishing, DMARC authentication to protect against email compromise, and other techniques
- Vulnerability remediation, firewall, and data protection services
- Support for business continuity and resiliency

Solution

The bank chose Fiserv to manage the technology, which was deployed on a Microsoft hybrid cloud environment. The platform includes Microsoft security tools hosted on Azure, including the Microsoft Defender security stack and Azure Sentinel, as well as Splunk and various other tools. Managed SOC services are provided by BlueVoyant on a 24/7 basis.

The technology stack covers a full range of cybersecurity functions, including:

- Multifactor authentication (MFA) with a focus on biometric authentication
- A privileged access management (PAM) solution with MFA, to manage access to servers and critical resources
- Email defense, anti-phishing, and anti-spoofing
- Anti-malware security
- Intrusion prevention
- Patching and security update management
- Data backup and high-availability infrastructure, including redundant SD-WAN connections

Implementation and Timeline

Forcht Bank's cybersecurity transformation involved many moving parts and overlapping implementation activities. The project launch coincided with the emergence of the COVID-19 pandemic, requiring the bank and its partners to develop remote working methods. Nevertheless, the initiative proceeded at a smooth pace, starting in January of 2020 and ending in October 2021.

Some of the key milestones of the initiative included:

- Project start: Q1 2020
- Azure migration: Q2 Q4 2020
- Discovery and knowledge transfer completed: Q2 2020
- Azure and Splunk SIEM solutions: Q3 2020 (Splunk tuning completed Q1 2021; Azure Sentinel tuning completed Q3 2021)
- Physical network: Q4 2020 Q3 2021
- SD-WAN: Q2 Q3 2021
- Multifactor authentication: Q3 2021
- Privileged access management: Q3 Q4 2021
- Managed SOC go-live: Q3 2021





Source: Forcht Bank

Results

The move to managed services strengthened the bank's cybersecurity posture, substantially reduced IT costs, and allowed Forcht Bank to reduce the size of its IT team to a core group focused on IT governance and strategy.

The bank has experienced a progressive decrease in pending critical vulnerabilities, patches, and security updates. As a result, Forcht Bank rose from the 50th percentile

of peer banks to the 95th percentile for vulnerability management, according to an assessment by Fiserv.

Forcht Bank now has greater visibility into their current cybersecurity status through a unified console for managed detection and response (MDR), vulnerability, and managed SIEM.

The bank is also able to provide a safer and more secure environment for its customers. This improves trust, an increasingly important factor as digital financial services potentially expose the bank and its customers to new threats.

Fundamentally, managed services provide Forcht Bank with ongoing, sustainable access to world-class technology. As Carl Clements puts it, through its managed services partners, the bank is "able to leverage the relationships that they have and their expertise in this area, and they help us improve our security posture through regular strategy sessions. So it's been a win for the bank all the way around."

Lessons Learned

Both the executive management and users supported Forcht Bank's transformation program. Looking back, though, the bank feels that with a project of this size and scope, they might have slowed the implementation pace to reduce the stress on the bank's teams and users who had to adapt to rapid change.

Considering the demand on resources and time that a migration of this size entails and the fact that team members also had full-time regular responsibilities—the bank also learned the importance of reallocating employee duties at the beginning to ensure the team has sufficient time and resources to complete the project.

Finally, Clements stresses the need to be open to dialogue and feedback as a means to overcome disagreements. As he put it, "Problems will arise. Don't waste time blaming. Solve the problem instead."

The Way Forward

Building on the positive outcomes of its strategy to move cybersecurity to a managed services footing, Forcht Bank plans to continue to work closely with its technology partners to identify opportunities for enhancing cybersecurity capabilities and effectiveness through continual process improvement, new product offerings and services, and industry best practices.

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