

September 2024

How GenAI Helped Blue Cross Blue Shield of Michigan Transform

Bill Fandrich

Follow this and additional works at: <https://aisel.aisnet.org/misqe>

Recommended Citation

Fandrich, Bill (2024) "How GenAI Helped Blue Cross Blue Shield of Michigan Transform," *MIS Quarterly Executive*: Vol. 23: Iss. 3, Article 8.

Available at: <https://aisel.aisnet.org/misqe/vol23/iss3/8>

This material is brought to you by the AIS Journals at AIS Electronic Library (AISeL). It has been accepted for inclusion in MIS Quarterly Executive by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

How GenAI Helped Blue Cross Blue Shield of Michigan Transform¹

Generative artificial intelligence (GenAI) is significantly transforming business processes in many companies. In this interview with Bill Fandrich, a senior executive at Blue Cross Blue Shield of Michigan, a major healthcare payments firm, we share a firsthand account of three examples of such transformation in an organization facing increasing complexity. We then offer seven recommendations for other organizations wrestling with the challenges and opportunities presented by GenAI.

Bill Fandrich

Blue Cross Blue Shield of Michigan

Introductory Comments¹

How are organizations harnessing GenAI? Bill Fandrich, executive vice president of information technology and operations for Blue Cross Blue Shield of Michigan (BCBSM) provides us with some answers.

Blue Cross Blue Shield of Michigan is a nonprofit mutual insurance company and affiliate of Blue Cross Blue Shield. Known as “The Blues,” these 34 independent and locally operated companies provide and administer health benefit to more than 115 million members in the U.S. BCBSM and its more than 8,500 employees support a healthcare services platform for over five million members, largely located in Michigan or working for companies headquartered there. In 2023, BCBSM processed \$36 billion in healthcare payments.

A benchmark of Blue plans over seven years shows BCBSM going from among the least efficient users of IT to the most efficient. An early adopter of AI, BCBSM has quickly incorporated GenAI into its operations. In this interview with John Sviokla, Bill Fandrich talks about the complex environment that the healthcare industry is facing, how BCBSM has shifted its focus from processing transactions to individuals’ healthcare needs, and how GenAI has aided this transformation while reducing complexity.

We then offer seven recommendations for CIOs based on Bill’s experience at BCBSM.

The Interview

John Sviokla: Bill, can you give us an idea of how your organization deals with the increasing complexity in healthcare?

¹ This MISQE Insights article is the edited transcript of an interview conducted by MIS Quarterly Executive senior editor John Sviokla with the authors. The purpose of MISQE Insights is to distill the findings from academic research into actions that can be taken by IT practitioners.



Bill Fandrich: We are among the 10 largest healthcare firms in the country. Last year, we processed over 100 million claims and paid out about \$30 billion in benefits; we handled five million service calls and interfaced with over 40,000 doctors and 150 hospitals. Also last year, we processed almost 50 million provider portal transactions. We have over 14,000 enterprise apps, twenty or more of which use AI, and over four petabytes of sensitive data.

The world has changed dramatically in healthcare—the model, the services, what is expected of us, and even how we define healthcare. Over 92% of Americans are in some program, but that does not necessarily mean they are getting effective care. Our goal is to ensure that they are getting the most value from their healthcare dollar.

John Sviokla: Even as you face ever-increasing complexity, you are transforming an organization almost singularly focused on payment-processing to a platform of personalized services. Can you describe to us what drove that transition?

Bill Fandrich: We used to be measured on how we processed claims, answered phone calls, and provided customers access to providers and networks of hospitals and physicians. Today, we focus on the individual, the individual's behavior, and his or her mental health. Healthcare is influenced by things that are a byproduct in people's lives—access to good food, transportation, housing, and so on.

The transaction part of our business remains, but the real value comes from better understanding our members and customers as individuals. That requires that we transition from a functional system-centric view to a platform that addresses our often immediate needs for access to internal and external information. We have assembled an ecosystem that enhances our ability to operationalize and integrate data through a supply chain built on mining and analyzing data, operating in near real time. Much of our data is unstructured and sourced externally to the organization. Today, we probably have the largest data cloud of any U.S. insurance payer.

John Sviokla: You are a mutual organization with only a 1-1.5% target operating surplus on payments processed. How did you move this huge organization to a point where you can deal with this complexity without driving up your costs?

Bill Fandrich: I describe the thousands of applications written over the past 40 years as our information management “chassis.” Access to this chassis, this ecosystem, is all virtual. It's connected, through third-party engines and tools, to data in our cloud. We started with artificial intelligence in 2007 and now have two dozen AI apps. Say we want to focus our analysis on a certain domain, such as the unique needs of a member's susceptibility to diabetes or a condition impacting an expectant mother. We can quickly assemble and tailor related information and use artificial intelligence to help provide insights. A customer service representative can then confidently guide a member or a provider through the care system. Today, our mindset is about assembling and focusing on adding value to the business and to our corporate and individual members, not just getting systems up within time and budget.

John Sviokla: How does the GenAI piece fit in? What are the strategic implications?

Bill Fandrich: GenAI has taken our AI accomplishments to a new level. We have done it with just 12 of our own people, supported by a strong consulting partner, Forum Systems, that assisted us on this journey and helped us to create an AI engine that sits on top of our ecosystem.

As we have already got the chassis, data, and integration, we can very quickly deploy these AI-based services. But here is the catch: In an industry like ours, 90% of the most important information is unstructured data. Previously, it was not economically or workflow feasible to digitize this type of data. But with GenAI, we can create virtual data schemes that allow us to search and use that unstructured data in ways no different from how we access our structured data. This also includes voice data. We have people calling in all the time, and we can mine that information.

John Sviokla: Can you tell us about the GenAI apps you have up and running, and how you keep them secure?

Bill Fandrich: Our first GenAI applications, which we started two years ago, help us manage contracts. There are thousands of contracts which we can now access with natural language queries. These contracts are complex and often unique to certain situations. Just in IT alone, I

have thousands of contracts; BCBSM has tens of thousands of contracts overall. We are constantly looking at our contracts for many reasons. Suppose there is a regulatory change, then we ask: what's in the contracts that needs to be attended to? Or, how does a contract with a new vendor match up with contracts providing similar services? We began feeding these contracts into AI and building a taxonomy as part of a large language model (LLM) that gives us the ability to instantly search and analyze contracts. It took us a year to really learn the technology. Now we are two years into it, and we have already saved \$10 million by eliminating redundancies across contracts.

John Sviokla: Let me kick off this next point, about your benefits app, with my own customer service anecdote involving a different company. A relative of mine requires twice a year infusions that cost over a hundred thousand dollars per dose. He now lives in one state, but his permanent home is in another. I spent days on the phone just trying to help him sort this out.

Bill Fandrich: That is a good example of a problem we want to solve with our Benefits GPT application. We want to quickly get the answers you need by putting more information in the hands of the customer service representative, or CSR. Say you have been diagnosed with a disease and need treatment. Your first set of questions might be: "Does my healthcare policy cover this? What will be my cost? And is it quality care?" The answers often lie in unstructured data buried in documents. Documents that determine whether this person is covered, and with what kind of restrictions or limitations. The Benefits GPT app empowers our CSRs to, for instance, quickly sort through hundreds of thousands of pages of unstructured data to help identify the most cost-effective, high-quality option the member qualifies for.

And CSRs having access to all this unstructured data, both internal and external, presents us with new security, ethics, and privacy issues. Trust becomes of paramount importance.

John Sviokla: That discussion of the strategic implications of security is a good transition to a third app, Secure GPT. Bill, can you fill us in?

Bill Fandrich: Today virtually every one of our potential corporate customers is asking in their Request for Proposals (RFP): "What's

your position on AI? Do you know exactly what it does? How are you governing it? And how are you securing it?" We have to demonstrate that, for algorithms and the insights that we are gaining from them, we have factored in any potential bias or ethical issues, that there is transparency on what the algorithms are doing, and that we are not taking the human out of the loop for anything significant.

We came up with three requirements for Secure GPT, our high-trust environment for GenAI. First, we have put guardrails in place intended to keep CSR conversations on track and prevent unethical content generation. Second, we need to obfuscate the data, including our private healthcare data, and ensure it is not sent to public LLMs. Third, for audibility, we need observability so we know who is accessing what data; we have to have the forensics to allow the re-creation of exactly what happened and to be able to guarantee that, for every individual who is using AI, their use is justified by role and purpose.

To me, our Secure GPT app is the most unique, and most desperately needed, thing in healthcare—and in any regulated environment for that matter. Our industry is governed by HIPAA, privacy and security laws. There are some 700 regulations required by state and federal government. The security tools and models we found in the marketplace were inadequate and could not fulfill our regulatory and security requirements. Healthcare enterprise security for GenAI has to be built into the fabric of the organization.

I asked our cyber security group to make sure that we understood all the security rules. We shared those rules with Forum Systems and told them that we need a system that abides by them. The result, after about 100 iterations over several months, is Secure GPT. We have just trained 170 people in the last week to use the tool internally. It is ready for adoption across the healthcare industry, or any industry for that matter.

John Sviokla: I mentioned earlier my trials and tribulations when trying to help my relative get approval for an expensive inoculation. I got incredibly frustrated with the same stupid questions every time I reached another person. How can this app help?

Bill Fandrich: By law we are required to verify who you are on every call. But here is a

nice opportunity for AI, or for something we have already done using biometrics. We now can verify, by analyzing your voice patterns, who you are. Identity management, trust and security are essential in any healthcare solution.

Recommendations

In a seven-year period, Fandrich and his team took the cost and complexity of the IT infrastructure from one of the worst across the entire Blues system to the top spot in terms of cost per employee on IT. Within incredibly tight operating margins (1-1.5%), they were able to transform the organization's IT platform. How did they do this? Here are recommendations drawn from our complete conversation with him.

Align and Communicate with the Business

As Bill says: "Technology and business are one and the same. IT should not have a separate strategy. It should be embedded in the business."

BCBSM started with a clear vision and then implemented specific projects and deliverables over a 12- to 24-month planning process. This iterative approach was fully integrated with the business. They never asked for large dollars over multiple years. Solutions requested by business leaders unfold and are funded in a sequenced fashion.

Manage for Value

Bill's team inherited a system with scorecards for scope, schedule, and budget; measures that are carefully tracked for every project. Bill continued this rigor, but added a new, far more important one. A project delivered on scope, on schedule and on budget that does not deliver business value is considered a failure.

To drive value, they tightly integrate IT with the business and often use existing talent who understand the complexities of the healthcare industry and their organization. For example, most of the AI work is done by a core group of six to eight people who work with BCBSM's businesses and provide input to strategic planning; they do not create a separate strategy for IT.

Bill used tight budgets to drive innovation. For example, when his team forecasted spending \$4-6 million and a couple of years to build a cloud data

infrastructure, he pushed back and said: "What can you get done for \$100,000? And in three months?" With that challenge, his team shifted from building systems from scratch to assembling solutions from components, often with vendor support. Three months later, they showed the business what they had accomplished and then planned out with them the next \$200,000 investment, again closely tied to business value. This "value delivered" mindset was central to this project

Aggressively Manage Outside Resources

BCBSM did not use vendors for big projects. Instead, they used them for knowledge bases and specific functions. They believed, and still do, in a team/partnership approach to using outside resources. At the same time, outside consultants do not create their strategy. As Bill told us: "You don't outsource your brain." But he did rely on external partners for building expertise in healthcare and, sometimes, with the expectation that they can market solutions, such as SecureGPT. He said: "The President of Forum Systems, on his own nickel, required all of his employees to go to courses at Harvard to understand the US healthcare system. Now, when they are in meetings, they often seem to know more about our business than some of our people. That's credibility."

Unlock the Latent Potential of Your People

With the massive salaries that AI professionals require, one of the striking things that BCBSM was able to do was to upskill their existing talent to meet much of their AI requirements. They have not added a net new employee with their AI efforts. As Bill told us, "we hire when we have to, but we prefer to realign. When we do hire, we look for folks who are not only technologists, but passionate about healthcare and our purpose—people that understand the business."

Critical skills BCBSM fosters are the ability to see a portfolio of projects and codevelop consultative and market analysis skills, as well as an understanding of how to transition from building systems to assembling components.

Build a Culture of Teamwork and Innovation

As Bill described, one of the most important and difficult things is to get staff to work cross-functionally and establish an agenda and direction while still allowing and encouraging them to debate the best path forward. As he puts it, "I'm here to be part of the team, and to remove obstacles to their success."

Bill and his team listened to ideas and efforts with an openness to the new and a willingness to give small, micro budgets to see how far the team can go with just a little incentive money. He felt this helped encourage innovation while avoiding time-wasting bureaucratic processes.

Harness Centers of Excellence to the Business

Fostering innovation and experimentation often requires deep expertise. BCBSM leveraged centers of excellence, in AI, data analytics and robotics, to share and leverage specialized knowledge. In this way, they were able to develop strong skills without overly increasing the cost base. This approach helped Bill and his team to keep tabs on new initiatives around the firm.

Plan for Future Knowledge Workers

Bill's team strongly believed that they were at a pivotal time when knowledge work had to be reinvented. Roles, skills, and process designs all had to be reconceived. For example, they believed that in five years the main interface for systems at BCBSM would be the use of voice across many different devices. Getting the different business functions, ranging from HR to finance, to engage with those ideas and to move to the future together is essential to their strategy.

Concluding Remarks

These seven recommendations, if followed, can reinvent the CIO's role. A technology leader needs to be a business person first and then a technical expert. When working with the rest of the management team, it is about having a clear vision of the platform and ecosystem one wants to create, while working closely with business leaders to educate, co-create and deliver value. Bill tells an insightful story:

"I went to my first board meeting here seven years ago. They said, 'Well, what are your thoughts?' And I talked about the ecosystem, the vision. I said, 'but I gotta work with my business partners to make sure that we are solving their problems and pain points. When I got done, my chairman said, 'You are the first CIO who did not talk about technology once in twenty minutes.' I told him, 'That's because the technology is my problem to figure out. There is no technology that is gonna solve your problems without the ability to leverage it and apply it. So we will figure out the technology. That's not what the discussion should be. The discussion should be the business problem we're solving.'"

"They don't see me as an IT person."

We suggest these seven recommendations can help technology executives expedite their business transformation effort. If Bill's team can perform this type of transformation in the midst of a \$36 billion mutual insurance firm with a tiny operating surplus, we suggest a similarly armed leader can accomplish change anywhere!

About the Author

William Fandrich

William Fandrich is the executive vice president of information technology and operations and chief information officer at Blue Cross Blue Shield of Michigan. He is responsible for providing critical IT, analytics, service and core operations and strategic technology leadership and facilitating the connection between business strategy and technology and developing strategies. Before joining Blue Cross Blue Shield of Michigan, he was the executive vice president and chief operating officer for Beacon Health Options in Boston. From 2008 to 2015, he was senior vice president, chief information officer and head of operations for Blue Cross Blue Shield of Massachusetts.