

David: Welcome to the Microsoft Industry Experiences Team Podcast, I'm your host, David Starr. And in this series, you will hear from leaders across various industries discussing the impact of digital disruption and innovation, sharing how they've used Azure to transform their business. You can find our team online at aka.ms/indxp. Or, on Twitter, @IndustryXp.

For a very special set of episodes, we've partnered with Vince Menzione, to highlight the thought leadership of our team's principal program managers, who are doing great things within their specific industries. And now, your host for this episode, Vince Menzione.

Vince: In this special series of the podcast, I sit down with leaders from Microsoft that are helping important sectors of industry, to transform and thrive through the use of this innovative cloud technology.

In this episode, my guest is Howard Bush, principal industry lead for Banking and Capital Markets on the newly created Industry Experiences team.

In this episode, Howard and I discuss his background in banking, and as a technologist prior to joining Microsoft; the transformation going on in the banking and capital markets industries; how emerging technologies from Microsoft are solving big problems for this segment; and why customers and partners should invest here.

This episode of the podcast is sponsored by Microsoft, and the Industry Experiences team. Thank you for listening, and I hope you enjoy this episode.

Howard, welcome to the podcast.

Howard: Thanks Vince, I appreciate it. It's great to be here.

Vince: Well, thank you for taking the time today. You were the principal for banking and capital markets at Microsoft, as part of the newly organized Industry Experiences team under Paul Maier. And I'm excited to hear from you about your role and focus; your perspective on this amazing transformation, Microsoft and Azure's compelling value proposition in banking and capital markets; and why it all matters to customers and partners. So, welcome.

Howard: Thanks a lot. I think it's an exciting time for our industry, so I'm looking forward to chatting.

Vince: You were the banking and capital markets lead. Can you explain to our listeners in simple terms, your role in the Microsoft organization? And the mission and objective of your team?

Howard: Sure, I'd be glad to. As our Industry Experiences team has been forming, we are really considered the advocate for industry. By peers and other industries for be specifically

banking capital markets. And we're those advocates for Azure Engineering. We are program managers, which means we have a breadth program and a depth program.

And our vision is to really ensure that Azure is seen as the cloud of choice, that platform of choice for the banking capital markets industry. And it's about trying to help influence the industry around cloud perceptions, because a lot of them are having difficulty wanting to migrate into the cloud. Around satisfaction with cloud computing.

As well as just adopting some of those scalable-type initiatives that you would use for cloud that gives them a capability beyond where they are on their on-premises technology to that.

Vince: Is security an issue for them in their resistance, or reluctance to transform to the cloud?

Howard: Absolutely. I'd say we work very closely with the regulators, as well as on our security capabilities, because they have customer information that they're holding. Which is called PII, and that personal information is what I call the Holy Grail of the business. That's what the business sits on.

And so, as we build new capabilities within our platform, it's really important that we have a secure platform, that they have confidence that all of the compliance and regulatory requirements are being met, especially with the new regulations around GPR, which is General Protection Rights for customers, giving them more power for their data.

So it's really important that we have a secure technology platform for banking capital markets.

Vince: Yeah, and we'll talk a little bit more about the technology under the covers here in a moment. But first, you describe yourself as a banker wrapped in IT clothing. And I find that fascinating. And my listeners are equally fascinated by the career journey.

So can you tell us about your journey from banking to tech? And how you got to this spot in your life, and your career?

Howard: Sure, I'll be glad to. I think it's been an interesting journey for me. I started out, coming out of grad school, going right into commercial lending, selling money to middle-sized market companies.

And as I progressed in my career, I did things like HR, and operations, sales, you name it. But when I landed in IT, that's when I felt like I fell in love with helping enable the bank to drive market share and revenue, through technology.

And so I always considered myself, because I started out as a banker, that I'm always that banker, 60% of the time, I'm really concerned about the business, about how the industry's driving.

I have a curiosity on where the industry's going. But wrapped in the IT capabilities of, "What's that vehicle that you use that's best in class, to get where you need to go from a business objective?" So I see myself as a banker wrapped in IT clothing.

Vince: What was the best piece of advice that someone gave you when you made the transition from banking to tech?

Howard: I think it was, especially when I was taking on a role in Microsoft that was consulting in nature. So I was helping consult other banks and financial institutions.

And the best advice that I got was, "Always walk in the customer's shoes. No matter how much you know about banking, and about maybe that particular vertical, or that part of the business.

"Always listen with an open, objective mind, to help align their strategic objectives to that technology. Because if you go in making certain assertions of what I think should happen, without really having those core nuggets of their experience and where they are. You could be giving them a solution that won't necessarily fit for it to be longterm."

So, I think that's the advice that I heeded, and it's played well over the years.

Vince: Yeah, and it's a great piece of advice for anyone in this business, because we sometimes get away from what the customer's objectives are, and we get so enamored with the technology we've created, right?

Howard: Agreed. Agreed.

Vince: So Microsoft is investing in the team, and at this time. Why is banking and capital markets getting increased focus from the Azure team?

Howard: I think that's a great question. You think about traditional retail and commercial banks. They are really fighting for their lives, in my opinion. The traditional function of banking, like advisory, payments, credit cards, deposits, lending, you name it ... they are rapidly being challenged by new business models.

Vince: New business relationships.

Howard: Within their competitive landscape, and the technology priorities are changing every day. So I think the combination of those challenging factors, I think they're causing the banks to rethink their role in that whole value chain of what is traditional banking.

And based on the regulatory compliance challenges and forced innovation from fintech, I think they're starting to rethink how they approach their business models in a much more innovative way.

Vince: So, you mentioned a term, "fintech." And for those of our listeners that are not familiar with that term, could you explain what that means?

Howard: Sure, absolutely. A fintech is really a company, they're typically startups, that has determined to take on one particular function, or several functions, of a traditional bank. Let's say, making payments or opening checking accounts.

And these are what we call challenger-related functions within the financial industry, that no longer necessarily have to have a bank charter to operate.

And they can have access to the same customers, access to the same level of capital, and help customers procure and curate the experience from making payments to buying a house, mortgage, buying insurance, you name it.

So these fintechs are considered to be the catalyst for the banking capital market's change and transformation that's going on today.

Vince: Would Quicken Loans be an example of a fintech?

Howard: It would be. They've been around for quite some time. And I think what they did was they brought a massive capability with capital, to consumers in a very quick and easy to adjudicate, or easy to underwrite way.

So they provided a necessary means, outside of the traditional mortgage company that you go to one of the big banks, and allows people to obtain capital at their desktop, in their car, or on their mobile device. And not have to step into a branch, which I think changed the mortgage industry quite a bit.

Vince: So a disruptor.

Howard: Absolutely.

Vince: So banking hasn't seen the same level of disruption as some of the other industries. At least not yet. And can you tell our listeners a bit about what's going on in these markets, and where you see transformation and disruption happening now?

Howard: Sure, I absolutely will. I think a lot of it is occurring in the open banking, the API ecosystem, with payment services directive to coming out of Europe, the open API banking, and just in general, the fintech community really starting to challenge the banks.

I think it's forcing banks to work with fintech companies to drive more of an open mechanism to share a trusted network for customers to come in and have different experiences from a financial standpoint.

And I think the augmented intelligence, or artificial intelligence, has really started to be the catalyst of taking all this big data that's out there, that's not really being heavily utilized. Because of some of those older legacy systems within banks, can now start to automate and to provide a much higher level of analytics, to be able to uncover insights that allow for banks to drive more customized personalized experiences.

Or to determine the fate or value of a portfolio much faster than they would before. And help the regulators keep tabs on the capital adequacy of those banks to ensure that, especially the ones that are too big to fail, artificial intelligence really driving a lot of that.

I'd say some other areas would be around digital ledgers in blockchain. That's where it's, the opinion around traditional bank is that the branches will be essential for certain transactions. But there are other transactions where smart contracts can be used, where you can facilitate trade finance.

And a great example of that is HSBC, they just performed the first trade finance deal on blockchain, globally. And so I think with that ledger technology, and having a consortium of banks being able to share information quickly, at reduced cost, I think that's going to be a major disruptor going forward.

And then the other area I would say would be fraud and detection prevention, with artificial intelligence biometrics capabilities are really taking off, where you could look at the behavior of a user, and determine, "Is this the real person, or is this an impersonator?," from some very sophisticated algorithms and machine learning.

And so that allows a bank or an institution to quickly find out if they are at risk for fraud, for certain transactions.

Vince: I just had an example of that just recently with my bank, because my password was stored by my browser. I went to re-log in; it wouldn't allow me to log in again because the password was outdated; it wasn't freshly entered. And so they're detecting that type of information.

Howard: Yes. Yes, absolutely. [inaudible 00:12:34] also how you click, do you drag things into text, do you type into text boxes, do you cut and paste? All those kind of things can become indicators of varying behavior outside of the level of normalcy.

Vince: I want to peel back a little bit. You talked about a term I hadn't before, "open banking." Can you describe for our listeners what that means?

And then you also talked about this API interfaces. How is that API ecosystem driving this transformation?

Howard: Well, sure. I think this is a really exciting time for banking in general. Because I think the financial service companies who have been focused on technologies to improve efficiency, have missed some of that boat on how to transform their business.

So, like insurers have had a traditional product delivery, I think banks are now trying to leverage the fintech companies who, through this open API ability, which is basically a generic way and a language that everyone can use to be able to tap into information that's resident within the bank.

Where before, it was very closed system. You couldn't get access to any of that information. Because there was no real way to procure that information. But now, with the open APIs, it's very easy to do that.

And a great example of that would be where you have some of those brands that have propped up, like airbnb, where you can not only put together a person who has a home, and a person who needs a home. To stay in on a short-term basis or long-term basis.

But they also offer experiences for travel. But to get access to those experiences for travel, they use the API network, those applications for other travel agencies, for other industries, to come in and tap. So that's the same type of thing that's happening in banking.

And so, what we're talking about is really what does a future bank look like? It's really that trusted network. Or put another way, it's going to be a consortium of what I call capabilities and services that connect people with capital, to people who have capital.

Vince: So, give me an example of how it's impacting the industry. Because as I think about just the API ecosystem and open banking, what's the information they won't share, I guess is what I would ask.

Howard: Ah, okay, that's great. Because I think there are some elements of a customer's profile that they will not want to share. Like their social security number. And in some instances, maybe their address. Those identifiable demographic indicators of who they are. But, I think they are willing to share the actual access to be able to reach those customers.

For instance, let's just take a bakery. And you have an entrepreneur who's owner of a bakery. Well, in order to do that, they could come to the bank and get a loan for their delivery trucks, and maybe a lease or some level of mortgage on a building.

But, what if the bank could really go deeper? And have a much more customized user experience for that bakery owner? For instance, what if not just not doing investments and helping them invest their capital, what if they also helped them with government services? Like a real-time tax submittal? Or shopping for the best deals or procuring the right amount of inventory for their dough and flour?

What if they could get access into an app that has all of the caterers around the city, and has access to be able to find out what events are happening, and bid on those events in an open market environment?

Now you can start to see how banks can broaden their reach, and not only provide capital, but to then be that procurer of a broader experience that satisfies a lot more of what that customer might need, than what initially would be a traditional banking environment.

Vince: Yeah, very different from our traditional banking experiences, right?

Howard: Correct. Exactly.

Vince: So, we hear a lot about AI, big data, high performance computing and the like. How are these technologies impacting, or being put to use in banking and capital markets to drive innovation?

Howard: Well, one of the things that we really pride ourselves on is that differentiated customer experience, and how do we use our platform to help enable banking capital markets to do that? And it's really through intelligent banking.

So some great areas would be obtaining that 360 view of the customer. How do you create a personalized and relevant experience? Other ways could be enabling real-time payments, to address customer and competitor regulatory demands.

And then we talked a little bit about risk, previously, just that integrated data and analytics to be able to visualize what that data is telling you, to be able to act on it, and have a comprehensive risk management approach, using a platform that would provide a comprehensive risk model capability.

And then, optimizing around financial crime. This is where deploying the enhanced data analytics that enable banks to conduct ongoing risk scoring. To be able to detect and prevent transactions from happening, where traditionally you're doing a lot of post analysis, because something happened.

Where, now with AI, and machine learning, you can have predictive propositions and have a propensity for certain types of fraud based on indicators. And you can stop a transaction before it starts. Which saves the industry billions and billions of dollars.

Vince: Yeah, I could think of my own personal experiences with my credit cards and fraud detection, in fact. And it seems like the banks have gotten much much better in this area.

Howard: Absolutely.

Vince: So, if you're a customer in the banking industry or capital markets industry, and you're looking to transform, why should you consider Azure?

Howard: I would say Azure is by far the most comprehensive cloud platform out there. One of the things, especially specific to banking and capital markets, because of the need to honor the legacy systems that exist today, with a lot of personal information for customers; but still be willing to try to what I'd say blast out to the cloud for certain types of calculations. To be able to use that extra capacity and agility for processing information.

Well, with Azure, it's a hybrid capability. Where you can have your on-premise information intact, in the data center, but yet you can traverse out to the cloud and have that same cloud experience on prem, as well as off prem.

So that if they do at some point want to take some of that information and move it into the cloud, it's a seamless transition, a matter of several clicks.

So I think one of the things that we bring is allowing the industry to check off the list of on-prem barriers to moving the information from one area to the next. And be able to really assure the customer that their information and data is safe. But that they're getting the level of service with this new AI and cloud capability from a hybrid standpoint, to be able to do it quickly, at the speed of real time.

And real time means in less than 10 seconds, typically, all around the world.

Vince: I think I hear quite a bit about "hybrid" here. So there's still this propensity to on-premise, in their own data center, securing the data, some very vital information, banking information, transactional information and the like. But then using the cloud to enable new technologies, new capabilities, if you will.

Howard: Correct.

Vince: So hybrid will probably be around for a while in the banking and capital markets industry, is what I'm surmising here.

Howard: Yeah, I think so, because the cost to replace the legacy systems are pretty high. And, they still function really well. They're like, I call them, they're "big tanks." They just keep rolling. And they handle high volumes of transactions.

So I think what we do was found a way to honor both environments, and do it in a way that's seamless.

Vince: So if I'm a partner, why would I invest and engage in banking and capital markets with Microsoft, and are there any barriers to entry?

Howard: We love our partner network. Both from our global partners, down to our startups. And, what I would say is, the barriers of entry are typically based on what their objectives are, and where they want to go with their business.

I would say we're building a platform and continually to improve our platform to handle all elements of capabilities from cognitive services, machine learning, to the high-performance computing, and to provide that agility to be able build on, with any language, in a way that provides a level of innovation, that goes way beyond just having some standard tools.

I think what we do is we help enrich customer understanding and insights, through internal and external data sources like social, we enable banks and partners to build next-generation intelligent fraud and payment solutions. And we utilize AI to unlock those new revenue streams.

I think that's one of the biggest advantages for having Azure as a platform, is that we're not only concerned about how the technology's working and functioning. But we also want to make sure we're enabling new business models in innovative ways.

Vince: What is one thing that isn't taught, but you believe is true to successfully working with Microsoft?

Howard: I think it's collaboration. Both internal and externally. When I came to Microsoft, and coming out of banking, banking tends to be a little more hierarchical. You have big institutions; I had a big group that I would run. And you kind of grow people up into that institution. And you become that subject matter expert within that area.

Within Microsoft, it's how much you give away. It's how much, what you know, and how you help others, to meet those common objectives. And so it's very easy when there isn't a collaborative approach going on, it stands out like a sore thumb.

And I'd say the same thing with our business for external partners. The majority of our business at Microsoft is built on a partner network, for both our consumer products, for our commercial products, gaming, you name it.

And so, we have, I would say, mastered that ability, although we still have areas to improve, but we've mastered that ability to partner in order to help each other grow market share and grow revenue.

Vince: And what is the end goal for you and the team, focused on banking and capital markets?

Howard: That Azure becomes the cloud platform of choice, for all our customers and partners. A place where they can go and innovate, have seamless capabilities between their on-premise legacy systems to cloud capabilities.

And see Microsoft as an industry partner who understands what they're going through, understands the challenges and drivers of the industry. But more importantly, can lock arms with customers and partners to drive a better future for their customers.

Vince: So if I'm new to banking, or I want to learn more about Microsoft's value here, where can our listeners go to learn more?

Howard: Sure. There's two places that we'd love for them to come and visit. One is our enterprise.microsoft.com. Which is, if you go to Banking Capital Markets, you can find lots of information on how we approach the industry from an overall technology capability standpoint.

And then also, azure.microsoft.com. And go to Financial Services and Banking. And they can find more detailed how-to's, with migrating to the cloud, our cloud capabilities, more detailed for those technologies, delivery, decision makers, and really look at how Azure differentiates itself from the marketplace.

Vince: Great. And we're going to provide links for all that information in our Show Notes, Howard. So, thank you for providing that now. We'll make sure that for those of our listeners, check the Show Notes, you'll have this information and these links as well.

And for our listeners who want to reach and engage with you and the team, what's the best way for them to do so?

Howard: Sure. Two ways to do it. Through Twitter, the at sign, and then HowardBush, the number 2. And then through LinkedIn, Howard Bush on LinkedIn. I'm the only one on LinkedIn, so I would love for everyone to reach out and let's start collaborating together.

Vince: HowardBush2 on Twitter, and Howard Bush on LinkedIn. So that's easy.

Howard: Great.

Vince: Howard, I want to thank you today. I wanted to thank you in particular for taking time from your compressed schedule. I know how busy this team has been, and I've seen you all over the world, traveling and speaking about banking and capital markets. And so, looks like exciting times for you and the team.

Howard: Well Vince, I appreciate that. Thanks for the time that you've taken to help us amplify Azure. And I appreciate the insightful questions you've had today. They were great.

Vince: [inaudible 00:25:51], great times. Thank you.

David: Thank you for joining us for this episode of The Microsoft Industry Experiences Team Podcast. The show that explores how industry experts are transforming businesses with Azure.

Visit our team at aka.ms/indxp. And don't forget to join us for our next episode.