



EP. 53: TRANSFORMING PAYMENTS WITH GENERATIVE AI

AUDIO TRANSCRIPT

Papa Faye [00:00:00] Always keep in mind the safety, the soundness and security when it comes to deploying these tools and bringing them to market.

Keri Smith [00:00:14] Warm greetings, everyone, and welcome to another episode of our AI Leaders podcast. My name is Keri Smith, and I head up our efforts at Accenture for our banking practice globally. And I'm really delighted to have with me here today, Papa Faye. And he's going to introduce himself shortly. But we have an exciting topic regarding generative AI and payments that we're going to bring to you today. So, Papa, why don't you introduce yourself?

Papa Faye [00:00:44] Thank you for having me. Papa Faye. I lead embedded Digital solutions or channel embedded solutions at JP Morgan, which is effectively how we integrate or embed banking services into primary ERP and TMS. I'm also responsible for how we really monetize data analytics via AI and all the emerging technology. So really, really pleased and excited to be here today and have this conversation.

Keri Smith [00:01:12] Wonderful. Thanks, Papa. So, Papa, I like to tell people that I am a business builder. I come from a family of entrepreneurs and I've been in the fintech space also. So, I have been a founding member of several digital startups, and I spend a lot of time in the space of data, AI, emerging tech and working with clients around that for most of my career. And I would say with the launch of generative AI and that within market AI, for me,

having been a practitioner in the space for many years, is the first time that I've seen such, I would say, mass global embracing and adoption of this capability as well as then some really great examples right of how people are able to drive impact on it, obviously using it in a wide secure way with the right guardrails. And now as we start to think about generative AI in the world of payments, I'd love to hear from you. You know, what does it look like? What are you seeing that the inclusion of generative AI now in the space of payments?

Papa Faye [00:02:06] Yeah, absolutely. And I think it's always important to start with definitions, make sure that, you know, we align, I would say, into artificial intelligence is generally defined as the science of making machines or compute application intelligent, right? So, making them make some aspect of human intelligence, such as perceiving information or being able to extract knowledge from it and also being able to really communicate. And I think that's a language part of it, which was which will come to which out of A.I. and in general just being able to learn from experiences and so on. So, I think the way, you know, we see this is there's a pre Gen AI era and also a kind of the posture Gen AI era and then the Gen AI kind of era, right? What you describe, I think in the pre gen AI era or let's call it traditional AI era, we see that AI in payments primarily rely on rule-based systems such as machine learning techniques. And these systems could handle tasks such as fraud detection, risk assessment and even chat bots



in customer service. But generally, they had limitations in terms of the creativity and being able to adapt and contextualize, you know, some of the output. And I think, for instance, banks use predefined rules to determine if a transaction was likely to be fraudulent based on some really fixed criteria, such as the transaction amount, the location of the payroll or transactor or some type of initial pattern. So, these solutions are very commonplace today, I would say, across multiple different banks. In fact, I would even say several years ago and then at the different financial institution, I was able to design or develop an intelligent fraud detection capability that leveraged behavior, biometrics. So, you could look at patterns such as how customers navigated the banks online website, their speed of typing. If they were on a mobile device, you could look at the way they held the mobile device or the position of the device, and you could really build specific behavior profile for each of these customers and use machine learning technique to detect changes in that behavior. So for instance, let's say a treasurer starts making a payment and then suddenly they have to get up and go to the restroom as soon as they step aside, if someone else come and sit on the desk and try to continue the transaction, we would actually see a change in behavior and require them to really re-offend again. So quite a bit was already done with traditional AI in banking, I would say. And then on the other hand know Gen AI, I believe is able to produce or generate human like text and adapt in various contexts. So really bringing a lot of creativity and adaptability, which makes it very handy and in fact really useful in content generation and also in customer selection. So, we see that Gen AI tools like ChatGPT are able to handle complex tasks such as writing, essays, writing summaries for articles and books and answering questions that require a deep understanding of the context and broad knowledge as well, which it learned through a large language model. And there are all the popular examples as well, like DALLE 2 which can generate digital images simply from natural language descriptions. So, it's not perfect yet, but these technologies will definitely get

better, and especially given the intense competition in this space and the large investment that are going in the AI industry. But when it comes to payment, fundamentally I would say that Gen AI is abusing the money and the time needed for content creation. So, whether it is text with writing computer code or creating sounds bites or audio developing images, you name it, right? Even generating videos, we see now or even some combination of this. So, I would say the payment landscape is starting to see some of these effects of Gen AI. And in many and many in the financial industry, I would say also suspect that it may have a transformative change, giving a competitive advantage to early movers. And I think it would be very, very important to see how this evolves.

Keri Smith [00:06:22] That's great. I think some rich insights that you share there and, you know, this is maybe touch on a couple of points that you mentioned where you talked about, you know, in terms of some of this is not necessarily net new. It's building on the backs of things that we've already been familiar with, right in banking, in financial services. And as we're working on talking with clients and partners and doing work in market, one of the things that the benefit, I would say of being within a highly regulated industry as well, a lot of the rigor that was already done in terms of your responsible AI, your data management, your data governance, right, What information can be used for what use case? I mean, a lot of that is basically propelling right what we're doing for generative AI. As well as and obviously the investments that company had already been making within cloud and just the management and access to the box sets of information. If I think about use cases on just maybe spending more moments on that platform on the payment side. So, as we're looking across banking, right, I would say and financial services, a very common starting point that we saw within organizations was really around internal facing use cases. So looking at your knowledge management, your intelligent surge, some of



your investment research, those areas where you already have some level of AI there the NLP and broader, but also because it was internal facing typically an item that people were not happy with in organizations, meaning I want to be able to find things a lot faster, you know, and get to the right information, right? So, we found that. But I've been very encouraged and also, I'm just excited also to see a lot of applications that we're doing across the entire enterprise. Right, both in terms of operations and the front office. Right. In terms of how is it that we do better marketing, personalization, micro segmentation. So maybe I'll just ask you just on that point around payments yourself, maybe you give one or two examples of what you're seeing as some of them maybe more common use cases in the payments side where a generative AI is being applied?

Papa Faye [00:08:23] Yeah, you know, absolutely. I think there are there are many areas where we see actually pretty notable difference between Gen AI and traditional AI when it comes to payments. I think with what I would say is that with traditional AA, there was always a big focus on detecting patterns to automate a routine task. I think this is where

you have example of the some of the chat bots and banking that you know, you're kind of similar in your commonly related to those were often limited to providing very basic account balance increase or assisting with accounts set up or focusing on mostly addressing frequently asked questions. So really, they didn't really have the conversation abilities and natural language understanding that are needed for some of the more complex customer interaction. And Gen AI is really helping address some of these limitations, so-called. Right? One of the benefit is the ability to generate narrative to tell the story of your data, right? So, we can really analyze vast amounts of transaction data to provide more tailored recommendation, but also to help we personalize more some of the customer

experiences we see. So, in the example of for detection that I mentioned, we find that Gen AI can actually help a bank prevent fraud with a great accuracy by analyzing more complex patterns, using real time data, and even using unstructured data sources to end via suspicious activities. And I think this is really going to help significantly with some of the emerging trend that we see. And I think another kind of example that that comes to mind and we so early on that one of the benefit of traditional AI was also to kind of find anomalies and improve outliers and detect outliers to. Outcomes. And Gen AI also helping in this regard, right. By being really good at summarizing key information from multiple different sources, which again, is helping helping failing firms and risk assessment be able to detect fraud in being able to detect financial irregularities and or even being able to analyze data not only using the transaction, but also using trends and then the news and so on and so forth. So certainly, there are many areas where we are starting to really see the banks and the payment building on some of the traditional AI capabilities that they had in place, really expanding them with more of the human like interactions. And I think it's a really exciting development to see.

Keri Smith [00:10:55] Great. Those are really great examples Papa. Even when we were kind of just at the beginning of this conversation as well, I think you were giving some kind of clear examples, right? When we think about the evolution of that as well as and what is generative AI adding to that. And, you know, I think there's still kind of some questions that people have, right. Which is then what's the difference between AI and Gen AI? And I'd like to have you pine more on that. You know, one of the ways that I look to explain it is kind of similar to how you were talking earlier as well, which is then if you kind of think about three distinct eras or steps within the AI umbrella. One is on machine learning, right. Which was then really a large, vast amount of information.



Very quickly getting to patterns, as you mentioned, getting to insights, right. Doing your propensity models, your probability, etc... So, being able to do that, then we saw like a nice step function change when you start to go into then the deep learning realm, right? So, with self-driving cars, with speech recognition, right. With a virtual assistant and then now with generative AI, looking at, as you mentioned, a lot of that really understanding the meaning. Right. And also, I would say does general purpose models where you could actually, I couldn't take a fraud detection model and then use that for propensity or some things. I couldn't use that to then write a poem in the voice of Shakespeare. Right. But with absolutely large language models being able to have that general purpose. So, I think that creative spark, that general purpose capability that's there really allowing some of the acceleration. Right. And also, being able to have some, I would say, autonomous actions. Right. Obviously with a human in the loop. So maybe I would give some space here, Papa just to see as people are looking at the broader elements of AI and what is Gen AI any additional distinctions that you would want to make there to make that clear for our audience?

Papa Faye [00:12:50] Yeah, no, absolutely. I think another primary traditional AI use has been generalize data and make predictions to really guide decision making or make strategic decisions. And this is, for instance, where JPMorgan has a few years ago or, you know, recently rather, launched a cash for intelligence solution, which is really popular with our corporate treasurers. So effectively allowed them to understand in our lives their cash

flow with really powerful analytics, you know, that were really developed based on how this client organized and think about their business. So, it also enabled them, meaning the Treasurer, to identify, you know, unusual payments and be able to visualize changes in their business over time and really using Jp morgan's AI to kind of

forecast their cash flow positions as well. Now, even here, we feel that Gen AI can help adopt them more quickly to some of the rapidly changing financial environment. So, by using, for instance, finance specific models to augment the user experience, in other words, we believe the bank can actually create more human like and natural conversation with his customers. So, let's say having a virtual office, which is powered by the likes of ChatGPT that can actually help understand and respond, or rather, you know, generate content to a wider range of customer issuers and inquiries. Right. As opposed to currently a combination of dynamic and static response and output and I think can also help give the same to your clients more personalized advice and assistance. So, this is definitely another very important distinction and benefit that we see in the payment space that we've been excited about.

Keri Smith [00:14:40] That's great. I mean, I appreciate, I think, bringing it to life Papa with some of what you're doing at JPMorgan. Very helpful. So, you shared about that with the corporate treasurers and that example there. If what I was going to say to you as well is if there's any more examples that you want to give, that would be great. And then also what I'm seeing is as you have more corporations leveraging this, but also as you mentioned with ChatGPT, obviously people are been using that in their personal life as well. So, when I when I mentioned earlier about just a lot of the mass embracing of this, I think it's been. People have been obviously leveraging it more broadly in their personal life and seeing a lot of the impact. And then also some of the early use cases and announcements that companies were making. So, what I found a lot with a lot of organizations is there is a good energy and passion that's coming from the employee base as well. And so, there's a use case backlog on that information there. So, wanting to actually check in with you for you and your teams that you're working with as you give some good examples



around that. What are you most energized about as you think about the future in this space?

Papa Faye [00:15:45] Yeah, Yeah, absolutely. And I think just before that, just building on your point right now, I think it's a very important point because a lot of what we really build in the corporate space to a large extent try to mimic what we've seen work well in the retail space. And I think, you know, we all have a very experienced using our mobile apps with a lot of our personal banking. Right. And the idea is to make the corporate banking as frictionless as that. And I think by the same token, you know, a lot of the experimentation we have with Gen AI. To be fair, a lot of we started in our personal lives when you know, this trend began really just very prominent.

Keri Smith [00:16:23] bring our same self to work. Right. So, we have the expectation.

Papa Faye [00:16:25] Exactly same concept brings your own self to work. And I think but this is also the reason why I want to build on this point is because I think it's really important to see some of the differences, though, because, you know, one thing that I can perhaps to deal with in my personal life is the fact that, you know, Gen AI still make some mistakes so I can still use it in areas where I kind of have a decent amount of knowledge about, you know, the output that I expect. And really the consequences are not really disastrous. But when I actually try and apply that in a corporate world, then I think you have to really be careful about, you know, how you will manage some of those mistakes. Right? So potentially, you know, you can provide a great tool that generates a good content, but then the ChatGPT say something that you don't want your client to hear to their client. But I think a lot of this will eventually move aside as the technology can evolve. And especially given all the investment in this space. So that's really one area. And I think also what we're seeing is there's a lot of

misuse of Gen AI now, you know, and I think one of the things I'm really hopeful that would help us in our personal and the corporate side is that we see more and more tools that help verify the difference between human generated and AI generated, because I think unless that's really there, there'll be a lot of confusion. And I think some of these tools can be really used in a negative way. And this is really why, you know, Banks and Jp morgan I can speak about for ourselves, we really are very, very, very cautious about these tools and pay a very strong attention to data security and some of the privacy. And really ensuring that we protect our customer data from misuse and really also ensuring that, you know, there is really an ethical use of AI. And I think this is really important to us. I just wanted to add that to your point, because I do feel that that's a very important consideration as we design and build capabilities in this area.

Keri Smith [00:18:19] Let me pause there, Papa because I just want to make sure that, yeah, we spend some time on I appreciate like what you just shared as well. And what I would say is in the financial services industry and banking rights, I would say there's been a good muscle, right? We already have the muscle in terms of obviously a highly regulated industry. But how do we make sure that we have the right data protection? I talked about responsible AI a little bit earlier, but those secure guardrails. Right. And so, we see many of the clients that's kind of level one, which is how do I actually ensure that we want to be able to do the experimentation, we want to drive the innovation, but within the right boundaries. So, I 100% agree with you. And as we're speaking more and working more with clients on this one, the good news is that we're able to build on a lot of that muscle and that rigor that was already in place and know what is additive as we start to think about some of the new capabilities, right, that generative AI is bringing and do the protection there. So, you're absolutely right. And I think with all of the



passion and everything like that is grounded in a reality of wisdom. And also, then obviously making sure that we continue with the right protections as we go through it. So, thank you so much.

Papa Faye [00:19:26] Absolutely. And I think that even, you know, going back to your question, I think when we look at some of the examples that we have and JPMorgan, that's really a foundational principle, right? You know, security, safety, making sure that, you know, we're taking our time to really experiment, you know, very thoroughly before any of these tools are deployed. But I think we were already, you know, doing quite a lot in that space. So, I think actually earlier this year in May JP Morgan announced that that it was developing a ChatGPT like software service to help clients select investments or financial securities. And as you may know robot advisors have been really, really prominent in the last few years, and many of them are powered by AI algorithm. You know, they can create and manage investment portfolio for customers, make it easier for individuals to invest and grow their wealth. And there's really an opportunity with Gen-AI to really kind of expand this significantly. So, JP Morgan had already come to market on working on capabilities like that. I think closer to really know the area of the business where I sit in payments one of the some of the prototype, we've been really looking at very, very closely are how we remove friction in a lot of the client or corporate onboarding. And so, with Gen AO and I think one area where this is really important is actually when you look at the API landscape. So, you know, we really think about enabling our clients to be able to access that data via open banking APIs and so on so forth. But we find that there's still some time, a bit of friction in the onboarding process. And to be fair, many banks provide API marketplaces and sandboxes where developers can explore and experiment with that API. But sometimes it's come with a lot of documentation that is provided to a developer that they have to

really understand to consume this API. So, we are exploring prototype to see if we can really improve the experience of consuming this bank API specs or specifications without going through a lot of and long documentation or testing and where Gen AI can really help here is by simplifying the consumption of this bank API. Right. Providing user friendly natural language interfaces, you know being able to generate constant snippets, being able to automate various aspects of API integration. So, a very simple example would be, you know, being able to allow the developers to ask questions or provide instructions in natural language. So, a developer could literally ask, how do I retrieve this list of recent transactions from the bank's API and the AI or Gen AI can generate a quote right away and provide a step-by-step instruction. I think this is really, you know, an example that we're really excited about. But I think across the firm, you know, there's a lot of experimentation that's been done for the time being built. But again, always keep in mind the safety, the soundness and security when it comes to deploying these tools and bringing them to market.

Keri Smith [00:22:35] And I love that example as well. And when we look at, you know, where generative A.I. is going to have an impact across all industries. Right? What we see is that, yeah, it's going to impact, you know, 40% of all working hours across industries. But then the number gets higher when we get to financial services, right, just because of the number of language tasks there. And so, we see that banking is, you know, north of 70% in terms of the impacts. And what I mean by the impact is one is just automation, but also augmentation, right. Really enabling, you know, our employees, people to be able to just do their tasks faster. Right. And then also then to be able to focus on higher value added one. So, I think as we've seen some of the broader experimentation, even what we're doing within Accenture, how we're helping clients, I would



say that there's an enthusiasm that comes with it as well. Papa, just in terms of people seeing what's possible, right, in terms of an acceleration of this and then opening up, I would say, a lot of intellectual capacity then to be able to be redirected to other areas. Right. So, where we're kind of looking and going forward in the future, you know, I can get from kind of what you're saying here and a lot of the work that you're driving, just some of that that energy and also enthusiasm. And, you know, I assume that is also within your teams. But again, as we're kind of looking towards the future, you know, what's kind of most energizing you all as you look to the future here?

Papa Faye [00:24:02] Yeah, I think I will speak for myself, but perhaps the Accenture team, I think one area where I'm really really excited about is around conversational AI, you know, especially when it comes to corporate banking in terms of how we embed banking services in our client's ecosystem. So, we which really has been getting a lot of traction in finance in general. So traditionally large corporate would come to the bank online banking portal to do a lot of the payments and reporting, managing liquidity and so on, so forth. But I think in recent years we've seen a trend with large and complex corporates to have multiple different bank operations and so on, so forth, bank relationships to really prefer that the bank come to them. Right. And I think a lot of banks have responded to that trend by this desire to meet the clients where they are. And that really means sometimes embedding things like payment and so on in the ERPs and about source bonding tools and treasury management system that these clients have invested in to really run their own business. The idea is you can use the same tool to initiate payments, you know, to pretty much do all the activities you would come to a bank to do. And now. But what you find is, you know, there's this kind of client ecosystem platforms. They hold a lot of data, but it can also be challenging to be able to kind of find data for multiple different places for a very

simple task. You know, for instance, if you know, an assistant treasurer would like to just send a report to their management about their, you know, financial health or cash position across all the different accounts, they might potentially go and try to find data from multiple different areas and analyze it. But, you know, through virtual offices, you can actually have a ChatGPT like solution that really does all this work for them. It's like and this is one of our really exciting prototype that we've built whereby we actually, you know, tasks that would have taken 15, 20 minutes to do. You can actually really do it in like it's just a few seconds by just writing on a window. Please write an email, a summary about our financial health and cash position for my senior management right away the email comes. Dear senior Management, this is our health person. This is our accounts in this country. Based on our forecasts we might not have sufficient from this account and so on, so forth. Right? So, I think there's a huge opportunity in conversational AI in general. Right. And we see a lot of excitement in in the development of more conversational and intuitive banking experiences. And I think this AI driven virtual assistant, you know, as they continue to evolve and be more responsive and understanding, more complex client careers, I think they will make customer interaction between banks and their customers more natural and much more easy, hopefully similar to what we discussed earlier on the retail side. Well, a lot of these things, you know, are taken for granted now that that's really, you know, a trend that I'm extremely bullish and excited about up worthy. And it's probably another trend, too, that I that I'm personally very excited about, which is really put simply, is the fact that we can have more different product innovation. Right. So, one other thing designed to merge many of these capabilities is that they are actually pretty good at identifying market trends early and identifying some of, you know, customer needs. And I think this can really be used in the way we develop



new products and services that I would say we couldn't even imagine, you know, few years ago. So, I think this is really very exciting and makes me very eager to be very crucial to the evolution of these tools so that we can use to further enhance our product development innovation.

Keri Smith [00:27:50] I agree with that, Papa. I would say the future is bright. And you know, with some of the examples that you gave there too, I think there's the multi-modality that comes with the large language models also. Is this just going to be amazing, what's going to be possible? So, like you talked about conversational AI, but also being able to do the video and broader imagery that's there, it's just going to be beautiful. If you think about being able to talk about an experience that you want and then have that mocked up for you and then be able to then implement very quickly. So, I think a lot of great potential that's there as well as then I would say what happens when you provide that additional acceleration for human productivity, what's going to be possible there? Right. So, Papa I just want to say thank you so much. This has been a great conversation and I really appreciate your thoughtful sharing and also just the energy that you're giving, right, as you're talking about what you're doing, but also the possibility of the future. We appreciate your time. Thank you so much.

Papa Faye [00:28:47] Thank you. It's really been my great pleasure and honor. And hopefully it was helpful and looking forward to another opportunity for our firms to collaborate on this. I think that's really the big thing, new thing in town. So, I think many reason to be excited.

Keri Smith [00:29:01] Yes. I'll say see you in market right.

Papa Faye [00:29:03] See you in the market. And thank you so much again.

Keri Smith [00:29:06] All right. Thank you.

Copyright © 2023 Accenture
All rights reserved.

Accenture and its logo
are registered trademarks
of Accenture.