**INTRO**:

Welcome to the Treasury Update Podcast presented by Strategic Treasurer, your source for interesting treasury news, analysis and insights in your car, at the gym or wherever you decide to tune in.

There are numerous events disrupting treasury and payment processes. On this episode of the Seismic Shifts in Corporate Treasury series, host Craig Jeffery talks with MUFG's VP and Senior Product Manager of Real-time Payments, Jennifer Stanley and Manager of Product Management Development Group, Sachin Thakur on faster payments. They explore key payment process pain points, examine the new payment scheme landscape, and then look at how these changes are transformative through our business to consumer case study with real-time payments. Listen into the discussion.

**Craig Jeffery**:

Welcome to the Treasury Update Podcast. Let me introduce the company and guests that are on with me. MUFG is a $2.8 trillion in assets bank. This makes MUFG the fifth largest bank in the world. MUFG is also an AFP pinnacle sponsor at the 2019 AFP event. I'm here with Jennifer Stanley. She's a vice president and senior product manager for RTPE at MUFG. She has over 20 years of experience in the financial services industry focusing on payments. She has worked at MasterCard, JP Morgan Chase, BNY Mellon and HSBC, in different payment product management capacities. Currently she is the VP Senior Product Manager for Real-time Payments for MUFG Union Bank. Jennifer holds a Master's degree in international economics from Johns Hopkins and a bachelor's degree from Stanford.

Sachin Tucker is a Director, Unit Manager in the Product Management and Development Group at MUFG. He is responsible for product development and innovation, product profitability and oversight of product risks and compliance for a product set including USD clearing, FX payments, ACH, realtime payments, check disbursement and fraud prevention services. He is the co-chair of the wires payment systems working group for MUFG Union Bank and an active member of several industry groups such as BAFT, the Payments Committee and the Swift US Cash and Trade Subcommittee as well as the Realtime Business Committee. Sachin has over a decade of experience in financial services and technology industry.

Jennifer, Sachin, welcome.

**Sachin Thakur**:

Thank you.

**J. Stanley**:

Thank you.

**Craig Jeffery**:

Let's begin with an overview. There is much talk and action on faster payment schemes across the globe. It seems every country has activity and regions do as well. And it's a much more broad approach than just covering speed in terms of faster, it's about making better payments, which requires solving far more than just the timing challenges of payments. Before we dive into the details of various faster payment initiatives, I think we should explore how he got to this point. This means we need to identify some of the triggers for these projects. Let's do an inventory of some of the recurring pain points or issues. Perhaps with a separate lens for business to consumer payments and business to business payments. Let's start with business to business. Let me just ask both of you, whoever would like to start off, maybe Jennifer, you could start. What are some of the top pain points that you see?

**J. Stanley**:

In the business to business space, I would say the top pain point with payments is reconciling the payment on the backend. This can be particularly difficult if an invoice has been renegotiated or has changed or there have been different trade terms that it just gets dictated a different price for the payments to be made.

**Craig Jeffery**:

Okay, so that's number one. Reconciliation. Making sure that they can track it to their original system, especially if there's any differences. Thank you. Sachin, do you have any business to business pain points you wanted to bring up as well?

**Sachin Thakur**:

Yeah, I think in terms of all the pain points and if I want to just categorize into a few bullet points if you will because it's we have numerous pain points that industry faces today in terms of even business to business payments. Cost being the one key driver. We just don't know, our businesses don't know what their cost is going to be, if you will, when they make a payment. Especially cross border rails. They just can't predict what the beneficiary is going to get. Lack of transparency. The businesses do not know in terms of where the payment is. Sometimes when the payment does not happen near realtime, it takes weeks. If the payment has a problem, it takes weeks, maybe even two weeks to even get the whole payment flow completed and that's just not acceptable. Uncertainty. Nobody knows or gets notification when the payment is delivered in terms of the payer or the receiver if you will. And data issues, especially with business to business, that's big.

As Jennifer mentioned, reconciliation. If the data gets dropped when it goes from one bank to another and we have maybe at least three or four banks in a chain, especially for cross border, that becomes challenging. Reconciliation becomes a nightmare. If the right payment details data is not transferred over. And those are the key pain points that most of the business to business payments have been having for years now. I would like to add that that's not happening for all payments, but even when you look at the percentage wise, any payment, even if it's one person, that slows down the business and creates nightmare for them.

**Craig Jeffery**:

There's a range of good points there. This, something that gets slowed down creates an exception process. Or if the amount's different on the receiving side, via Jennifer's a reconciliation example, it creates an exception or a defect and that adds cost, frustration and time to the equation. Those are quite interesting. I Liked the example too of information being dropped as it moves along, making it harder to, for the receiving party to know what was being paid when or why there was an adjustment. Those are some really good points. Excellent.

That covers a lot of the business to business side of the pain points for payments. Now as we shift over to business to consumer, obviously business to consumer has been pushing payments along. There's a faster expectation, more frequency, being able to handle payments on a consumer to consumer basis. And so that drives the business to consumer model and to some extent informs the expectations on the business to business side. But thinking about the business to consumer front, what are some of the pain points you see here, Jennifer?

**J. Stanley**:

I would say the main pain points that exist in the business to consumer space is that there's a gap between the expectations the consumers have these days and what businesses can bring to them in terms of payment speed and payment data. And well, a number of consumers are expecting their payments to come faster due to faster technology and greater expectations in the marketplace. Businesses are still writing checks frankly. That doesn't jive was their view of what should be happening in today's world.

**Craig Jeffery**:

If you can send a a payment to a your babysitter, to someone else for lunch in a matter of seconds, that's the expectation. Not I'm going to send a check, it takes three days for the mail and then I've got to scan it on my phone. It just is a massive gap. Okay. Are there more gaps than that?

**Sachin Thakur**:

Yeah. I think in terms of the B to C or even from C to B perspective, I think when it comes to consumers, the whole expectation changes. For them, making a payment itself is a pain point. Really to think about in a consumer industry where we need to take the whole making a payment process out of the services and so whatever services they are subscribing and if payment happens as part of the subscription of the service seamlessly, that would be ideal. The fact that if I have to go do a process to subscriber service and then to go make separate process to make a payment, that's something consumers don't like.

It has to be totally seamless and I think Uber model is a really perfect example. You get into a car, you go to a from point A to point B, you get out of the car. All the consumer has to do is basically defined from point A to point B. They don't have to follow a separate process to make a payment and that's a very good example. And any other market segment if you will, or business model that's going to adopt making payments seamless for the services offered, that will be the key driver.

**Craig Jeffery**:

I think that's a good point. That example of getting in and out of the cab and you have to fight to select the payment method with the cab driver, you might get a receipt that's the size of your thumb and you have to stick it in your pocket when you're jumping out of the cab. I don't think anybody misses that type of experience. It was painful, but like you said, it becomes part of it and then you get a receipt emailed to you, which is perfect for work. You don't have to say, "Hmm, what does this one relate to? Where did I go? How did I move from point A to point B? Was that business or personal?" You could see exactly the starting point.

And I think you bring up a good point using that ride share example. At the most recent AFP, the winner was a ride share company and one of the elements that was great was supporting this gig economy. People can take their payments not just once a day, not just once a week, but once a day or I think four times a day. You could hit the app and get money transferred to your account up to four times a day if you really needed it. It just made it so that it was a feature, not some activity. I think I'd like to ask Sachin, for you to take the lead on giving us a landscape overview of the faster payment schemes or maybe even better payment schemes. Give us a quick overview. There's too many to cover all of them but hit a few of the highlights for us.

**Sachin Thakur**:

From landscape perspective in US domestic market itself, we have so many options available. We have Venmo, we have Zelle, we have the realtime payments from Clearing House. We have recent MasterCard offering their own drills, or faster payment methods and this week itself we have Fed announcing their own faster payment and settlement rail, which is what they're calling as Fed now. there's so many options available, but we need to really take a step back and understand, what do we really mean by faster payment? And what are the problems that we are really trying to solve for? Because speed is not the only problem that this industry really wants to solve. And then evaluate which are the ones that are really going to survive in the long run, if you will. I think for me a faster payment definition is speed, interoperability, certainty 24 by seven availability and most important, provide capability to third party to offer innovative services.

I think for me a faster payment rail is the one that is going to help us in the wait, in the future. For now it's more about getting the rails laid out, but if any faster payment rail that is going to help innovate and provide value added services to innovate, to take the whole friction of making a payment go away, for me, that's the faster payment. From that aspect UKIL realtime payment and the realtime payment from Clearing House, these are the two main ones that stand out. Obviously have, we have multiples of realtime payments globally, but I'll just stick to the Clearing House RTP and UKIL realtime payment. Both offers realtime payment, speed, UKIL realtime payment is also moving towards ISO 20022 so there will be interoperability. In future I can send a payment from US to UK if you will, if that's becomes possible. There will be interoperability and I'll get confirmation certainty within seconds and both have efforts going on to provide value added services on top of realtime payments. For me, that's a key.

**Craig Jeffery**:

Interoperability, certainty, speed, and you also mentioned the ability for third parties to leverage these payment systems. Did I get that right?

**Sachin Thakur**:

Yes. It's basically that's how you will take out the friction of making payments when you are able to allow third parties to innovate and use the rails and provide services to the end users. Either be consumers, businesses and both the rails are moving towards that direction.

**Craig Jeffery**:

Yeah. Now you said something, this may be too much for this particular podcast. You talked about interoperability and you discussed a format, the ISO 20022. Now when you think about let's say a payment going from the UK to the US, there's a format requirement. Has to be delivered across the border between two different messaging platforms. There's also rules for how things settle. What does interoperability look like? How far are we away from that?

**Sachin Thakur**:

Well, I think the good thing is most of the faster payments globally are writing a common messaging protocol which is ISO 20022. UKIL realtime payments is currently not on ISO 20022 but they have concrete plans to move to ISO 20022 in next two to three years, which is great news. And again from timeline perspective when all these realtime payments globally potentially really won't talk to each other, that's a difficult one to predict because it's not just the interoperability at that point in time. It's also the cross border rules, regulations and there are in country laws that may come in. I expect maybe the G7 countries may be even the developed countries like US, UK, maybe even Australia, Canada, their faster payments might start interacting with each other in the next five years or at least I wish they do. That basically takes the whole friction out of cross border payments at least from consumer to consumer perspective or remittance perspective. But if that will happen with every other country may not be, may not be because of the in country domestic rules and regulations.

**Craig Jeffery**:

Yeah. Now I know you both of you spend so much time thinking about payments, dropping them into products that that work for your customers but but thinking ahead I think helps those of us who do a lot with payments but may not spend all our time there. With the landscape covered such and I want to turn back to Jennifer and move to a case study and part of that Jennifer is for realtime payments. Maybe you could begin and explain what realtime payments is. How it originated. Is this something that uses existing payment rails or new rails? That's a a key term. And then who runs that?

**J. Stanley**:

Sure. I would say realtime payments or RTP is definitely the first major development in the US payments infrastructure and over 40 years, but at the same time the entire market, and I'm talking about financial institutions, consumers and corporates, they've all been itching for this. First of all, RTP in some form or another is already alive in 25 countries worldwide. Japan has actually had their Zenyen system since 1973. And as Sachin mentioned, UK introduced their faster payment system in 2008. What's different in the US is that while the appetite for realtime payments and the infrastructure to support it has been simmering for years, it was only in 2016 that the Federal Reserve took steps to recommend the development of a net new realtime ubiquitous payment system to be offered through the banking system.

Accordingly, first the Clearing House began development of the RTP system using VocaLink technology in November, 2017 the first RTP was sent. Since then, increasing numbers of banks have linked up to the RTP network and today over 50% of DDA in the US are live and capable of receiving realtime payments. As Sachin also mentioned, the Fed has now jumped into the fray. They're introducing their Fed Now system which will also serve US banks with an alternate realtime payments rail. I'm not going to go through all the advantages and features of RTP but the unique data characteristics of the ISO 20022 protocol and the always on and immediately available qualities of our RTP payments lend themselves leviation of a host of friction points in today's payment processes.

**Craig Jeffery**:

Jennifer, you brought up a couple points here and I thought it might be useful to just go into them for just a moment. Just a slight discourse. As you mentioned, the Fed provided some ground rules for net new RTP and then you talked about the Clearing House and so the Clearing House is not the Fed and Fed now is different. Maybe you could just explain the Clearing House and Fed Now. Just real briefly.

**J. Stanley**:

The Federal Reserve, as most people know is the basis of our banking system here in the US and all banks in the US are members of the Fed. The Clearing House however, is a consortium of five 25 larger size banks, that work together to clear payments in the ACH wire and now RTP space. And so it's an alternate clearing mechanism, but an equally viable one and one that's since been instrumental in driving innovation in the United States.

**Craig Jeffery**:

Yeah, that's interesting. I think it's, as I've looked at payment systems in different countries, it seems that the US is the only one that seems to have an alternate for clearing checks for ACH, for wires and now for realtime payments. I don't see that in other countries. I don't know if you see that other places, but this cooperative or you said a consortium of banks can run this type of payment platform and the central bank or the Federal Reserve runs a platform that seems to be pretty unique globally.

**J. Stanley**:

I would say this has to do mostly with the size and the breadth of the United States financial institutions. There are over 5,000 banks in the United States and then on top of that there are a number of course credit unions and smaller banks and between those two groups you really have a lot of differing needs and requirements in the payment system world.

**Craig Jeffery**:

Sachin, did you have anything you wanted to add to Jennifer's comments about the two different organizations that run payment rails?

**Sachin Thakur**:

No, I think I agree with Jennifer. It has to do with the number of banks that operate in the United States alone. They are almost close to 9,000 banks and credit unions combined that participate in Fed network and I think it is key in terms of what the Clearing House provides as a services, if you will, for major banks.

**Craig Jeffery**:

As we look at a case study that might have a business to consumer flavor, I'd like you to help us understand how something like realtime payments help solve more than just a delay or a timing issue. We talked about speed is not all there is. There's other issues that have to be solved so maybe you could give us some example for a case study.

**J. Stanley**:

Sure. Again, I'm going to concentrate on the insurance industry and I'll use a B to C example and talk about insurance policy funds draw down. And in this scenario a policy holder plans on drawing funds from his whole life insurance policy after retirement. And at this time the insurance company sends his monthly annuity payments to him through RTP. As a result, the policy holder receives his payment on a monthly basis immediately and straight into his account. There is no checks to wait for and to deposit. And the insurance company on their side is able to reduce costs and time normally associated with using checks for payouts. In addition, any information about the policy itself can be included with the payment and that's very helpful not only for the insurance company in understanding what they're paying for, but also for the recipient in understanding what they're receiving.

**Craig Jeffery**:

That sounds great because it's faster, it's easier. You don't have to run to the bank, but when you say there's information on the policy itself that comes along with it, what type of information can be sent with the RTP? The value transfer?

**J. Stanley**:

Well with the breadth of a ISO 20022, really anything. Of course the policy number, the length of the term might need to be brought up. Any discounts from the payment for any reason can be also called out. Any information that's relevant to the payment being made can be included with that payment and it becomes much more easy to understand what and why you're being paid the amount you are.

**Craig Jeffery**:

The policy number, the length of payment, all this information that relates to the payment can be sent along and then the consumer might be able to read it at some point or as soon as their bank makes that available. It could include here's an 800 number to call or a website if they have questions. This is the kind of enriched information that can be passed along with the the payment information?

**J. Stanley**:

Exactly. And moreover, if the insurance company wanted to include marketing information, additional services, as you mentioned, a link to a website where they could get more information, all that could be included with that payment and it becomes an easy vehicle for the company to communicate to its policy holders.

**Craig Jeffery**:

Right. Rather than being limited to 80 characters with a PPD plus or something, there'd be much more information that could be shared is what I hear you saying.

**J. Stanley**:

Correct.

**Craig Jeffery**:

Yeah, certainly there would be a ways to communicate. Anything else that would be a transformative to business to consumer or business to business payment, whether you use a particular industry vertical like insurance.

**J. Stanley**:

Well, I wanted to talk a little bit about B to B just because that's always the holy grail of what payments are trying to achieve in this world. And I want to talk a specifically about vendor payments. This example could you apply to any industry, but in this case, I want to take the example of a bakery that orders specialty breads from a vendor. And in this case the vendor requests payment upon delivery of 100 loaves of bread by sending what's called an RFP or request for payment. In this RFP, they specify the invoice number, the PO, the type of bread. Again, whatever information they want to put in there and the bakery counters with a message, that actually 20 loaves have arrived stale and they're only going to pay for 80. The RFP then is reissued with a modified number of loaves delivered, and a modified amount to pay. The bakery responds with a payment that is reconciled immediately, deposited straight into the vendor's account and is cleared and ready for further use immediately.

**Craig Jeffery**:

This is a way of using the same rail for dispute resolution in a sense, or reconciliation of differences in what was shipped or what was shipped and received in good order.

**J. Stanley**:

Yes.

**Craig Jeffery**:

That is excellent. How far away are we from that type of enriched payment and communication experience?

**J. Stanley**:

Well, a lot of it is based on adoption and again, 51% of US accounts are able to receive an RTP, fewer number are able to send an RTP, so we're waiting for more adoption on that side. The other point of adoption and of course is the use of an RFP or request for payment and that's really what's going to change the way payments are made and requested I think in the future. And we can look a lot at a bill pay examples too in this case, but I think the once RFP becomes a norm of the payment industry, it will fundamentally change how payments are made both on the B to C and B to B side.

**Craig Jeffery**:

Instead of sending an invoice today that invoice may or the invoice information may be included in the RFP or the request for payment? Says here is what we shipped and here's the information, or how would that work?

**J. Stanley**:

That's correct. That is correct. And then it can be renegotiated. You can have dynamic discounting, you could have a host of other services involved with the ability to send an RFP immediately and have it responded to accordingly.

**Sachin Thakur**:

On the example that Jennifer mentioned, if you think about it in this whole end to end flow from B to B payments perspective. In today's world, we have the whole account payables process, a payment process and account receivable process. If you think about it, these are three separate distinct process that are followed today. With request for payment, you're combining them into and making them seamless. The whole automation happens around accounts payments process, actual payment flow itself and account receivables. And the reconciliation on both sides. It just becomes part of that payment workflow if you will. And that takes the whole friction and the inefficiencies from today's world if you will. And that's a value add if you will from RFP.

**Craig Jeffery**:

This pipeline is really a short circuiting our way to straight through processing for invoicing, negotiation, payments, settlement.

**Sachin Thakur**:

Yeah. And it's not just in domestic, even Swift is working on an RFP service capability. Obviously the adoption will take time, but again, this is just going to change the whole landscape for B to B payments in the future.

**Craig Jeffery**:

I hope we can talk about this subject in more depth in the relatively near future on the request for payment side. That's a major change and it's what we heard back in the EDI world, passing data back and forth. It's a, and the adoption of better technology for ERP systems, accounting systems, treasury systems, I think holds a lot of promise there. As we shift now to the final thought section, are there any other changes coming that will be as highly transformative in the next few years as some of the examples that you gave? Or what should we watch out for? Or finally, what advice do you have for corporate payment professionals? And let's go with Jennifer and then Sachin.

**J. Stanley**:

Well, I wanted to say a few words about Zelle because Zelle hasn't been discussed here and Zelle has been a great success story in the realtime payment space. Although Zelle's not officially a realtime payment yet. If you've made a Zelle payment, you'll notice that it actually does not come into the payee's account until several hours afterwards. But what we're going to find, I think coming up in a few months or so is the integration of Zelle and RTP. That is to say the Zelle will ride on the RTP rail so that it will truly become a realtime payment and in turn RTP will take a lot of the strengths that Zelle brings to the table. Most notably a directory of names identified and account numbers identified by a cellphone numbers or email addresses and use them in tandem to really make a very robust P to P service, which can in turn can be used for business to consumer as well.

**Craig Jeffery**:

Excellent. I'm just trying to think about how we would understand that key sentence. You said that Zelle will ride on the rails of RTP. I think five years ago we wouldn't have understood hardly anything of what that sentence means and what it means today is pretty, pretty powerful.

**Sachin Thakur**:

Yeah, totally agreed. The example that Jennifer mentioned, for me realtime payments are the first step towards a new world of payments and as Jennifer mentioned, or gave example about, alias payments. Nobody wants to share their bank accounts and providing aliases, just think about it. A decade ago, we would have never thought that I could just provide them my cellphone as a mode of payment or cellphone number as a mode of payment instead of an account number. That's what the future looks like in the, if you will. And not just email IDs or cellphone numbers, you have QR codes. Now QR codes are out there for longest time, but we have already seen this happening in Asia, mainly in China and India, where they are just changing the way the payments are made or faster payments are made if you will.

You don't really have to provide your bank account number anymore. You walk in a deli store, you just scan your app, you scan the QR code and boom, the payment happens. The alternate ID mechanism of making a payment is the innovation that is happening on top of faster payment rails, which is the key. Again, we need to have a framework that provides the speed, the certainty and the innovation capability and services or applications like Zelle will basically then be able to leverage the two realtime payments rail. In Europe itself, we have supermarkets now offering solutions on top of realtime payments rails, if you will. Where I can just walk into a supermarket with a app on my phone, scan everything that I need and walk out. The payment happens instantaneously and the benefit of that is now supermarkets can basically do a targeted marketing or offers or push out offers towards the end consumers.

You all remember we received those hefty booklets of discounts in mails. We don't even know what those are, half the times we don't even use them. Now all of sudden the supermarkets then can do like, okay, these are the brands or goods that I normally frequently buy. Maybe I should target him with some discounts and bring him to my store more often. And so these are the things that faster payments, is not just a faster payment. It's a capability to innovate on top of faster payment is what going to be the future ecosystem for payments, if you will.

**Craig Jeffery**:

Thank you, Sachin and Jennifer, for your comments and thoughts on this episode of Seismic Shifts, better payments. There are some other assets or resources that you as the listener may want to take advantage of. The AFP payments guide is sponsored or underwritten by MUFG and the current version is on API and you can go to the AFP website. This does require a membership, an online membership to access, but some really good material there. Again, thank you, Jennifer. Thank you, Sachin.

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