Introduction

[00 :01 :59] Zack : This is Zack Fuss and today we are breaking down European based pay business , Adyen . Adyen was found in Amsterdam in 2006 by a group of payments entrepreneurs who had already built and sold a business in the space . Adyen was their chance to start a fresh and build a modern solution to displace the patchwork legacy system that merchants were being forced to use . To breakdown the business , I'm joined by Michael Willar, a portfolio manager at Stenham Asset Management . Our discussion covers Adyen's single platform solution in detail , the driving force behind their track record of profitable growth , and why payments isn't a winner take all market . Please enjoy this breakdown of Adyen .

A Bird's Eye View of Adyen and Payments

[00 :02 :42] Zack : So today we'll be breaking down Adyen , a large payment processing business . Despite its nearly $70 billion US market cap , it's a business that's relatively unknown by American investors . I thought a great place to start would be just briefly explain the business from a thousand feet .

[00 :03 :02] Michael : Yeah , absolutely . And thanks guys for having me on . Adyen is a payment processor that came to the markets to change not only the rules of payment processing , but the entire game itself . Today , they count the largest and fastest growing enterprises in the world as customers and across multiple different industries . So think Microsoft , Overmatch , McDonald's , Nike , just to name a few . So you might not be familiar with Adyen because they're not consumer facing , but they are likely familiar with you and one of your transactions . So Adyen is a Dutch business with headquarters in Amsterdam . It's truly global with 27 offices around the world . Their net revenue split today is 60 % Europe , about 24 % in the US and APAC and Latin America both high single digits . They currently have about 2,200 full-time employees , which is incredibly small for their age and scale , which I'm sure we'll get into , and have over a hundred different nationalities .

This is all by design . But the best way to think about Adyen is they exist to solve problems for merchants . They are a bunch of payment nerds who get excited about complexity . They go into work every single day and say , "How can we help our merchants generate more incremental revenue ?" And I think this is a good purpose to have because there are so many problems in payments today where 20 % of all online transactions are declined . And this is versus 5% in the offline world . And they are able to effectively solve these problems because they built a single platform all in house where they directly connect the card networks . This in essence is what makes Adyen unique relative to the payment processing industry . They're what you call a full stack acquirer where they've obtained a lot of the relevant local acquiring licenses around the world and now have two banking licenses in EU and the US.

And this gives merchants high probability of higher authorization rates , which is just the currency in enterprise processing , lower transaction costs , and faster settlement . But their single platform also means a merchant can scale into most major markets around the world where the turnaround is weeks or months , not years like some competitors . They'll be able to accept nearly 300 local payment methods . You'll be able to sell in any channel , all the while having access to transaction data across the payments chain . And this is again , totally different to how the industry does things . They wanted to redefine the entire industry . So no other payment process in the world today can truly say they have one single platform where they don't outsource anything and control the entire stack end to end .

[00 :05 :51] Zack : That's fantastic context . So before we dive deeper into Adyen , it'd be helpful if you could just break down how payments in general work.

[00:06:00] **Michael:** Have you ever wondered what happens when you tap your phone or card for your Monday morning coffee and in a few milliseconds it's been processed, authorized, and debited from your bank account? Perhaps you haven't thought about it too much because it just works, most of the time at least. And it's generally a frictionless consumer experience. But it's actually quite incredible, or at least I think it is. Because what happens in those milliseconds is fairly convoluted and involves a number of key players all performing different tasks. So a standard card based payment will have a few key parties involved. The first party will be you, the customer, paying for something. Then you have the merchants who accepts your money with a point of sale terminal, in the offline world, or maybe a gateway in the online world. Then the issuing bank, who will be the customers bank, and they issue a debit or credit card.

So think Barclays here in the UK or JP Morgan or Bank of America. Then you have the card networks who provide the infrastructure for the transaction to happen on. They are effectively the gatekeepers of payments and literally make the rules for participants, meaning they set the interchange fees and you need a license to operate on their network. The two largest are of course Visa, MasterCard and they process high teens of global GDP. So they're pretty big. And then lastly you have the merchant acquirers and the way you can think about them is acting on the merchant's behalf. And this is what Adyen is.

[00:07:26] Zack: Now that we have a better appreciation for all the players, take us through the flow of the transaction as to how it actually manifests.

[00:07:35] **Michael:** These transaction will be separated into the authorization phase and the settlement phase. So the process starts with the customer who inputs their credentials. And this is where the data is first captured. So this can be tapping your phone or card on a terminal or having your card on file at the online checkout. Then the transaction is relative to the merchant acquirer who will perform certain risk checks. They then send that transaction to the card networks who then speak to the issuing bank. They then validate the identity of the customer and see if they have funds and will authorize the payment. This is then sent back to the card network who sends the authorization to the merchant acquirer, who then provides the green light to the merchant. On the point of sale terminal, you will see approved and you'll have your morning coffee and receipt. The settlement phase of the transaction is not in real time and involves the merchant acquirer and the issuing bank sharing information to allow for the transaction to be on the customer's bank statement. And then the merchant acquirer will deposit the funds into the merchants bank account. I have simplified this as there can be additional participants in the chain that can all perform different tasks.

So for example, there are different merchant acquirer categories, such as front end processes sometimes called pay facts, or aggregators, like Square or PayPal, and who effectively do the authorization, but are laid on top of backend processes like first data who do the settlement for them. There are sometimes different companies who do risk management and sometimes different companies who act as a gateway. Then on the other side of the transaction, you have issuer processes like TSYS and Marqeta who sit in front of the issuing bank. Now, if this all sounds a little complicated, don't worry because it is. Adyen wanted to move away from this complexity by simplifying it and having more control end to end. So they considered all the merchant acquiring functionalities, so risk, the gateway, or the terminal and the processing and acquiring all onto one single platform. Then they'll be building up their issuing product, meaning they'll be in control of the other side of the transaction, which again, improves the service to the end merchant.

[00:09:53] Zack: All right. So let's bring this to life a bit. Can you give us an example and put numbers around the economics of a normal transaction, who captures what, why et cetera?

[00:10:04] **Michael:** I'm going to simplify the fee structure as there are differences depending on the markets, the channel, so if it was offline online, or if it was a debit or credit card transaction. So if I buy a pair of shoes from Nike for let's say $100 with my Bank of America issued credit card, who gets what? Bank of America will receive the interchange fee, which let's say is $1.50 of the $100. And that serves as the lion share of the economics of the transaction. They earn this because the risk undertaken for issuing the credit and also to fund the operational support and also to fund the rewards that we all love and know. Then the card network, so Visa, MasterCard will earn 30 cents out of the $100. And this will be a combination of assessment and data processing fees. Then last, Adyen as the merchant acquirer, they will earn what is called an acquiring market and a processing fee if the asset acted is the gateway or provided the point of sale terminal. And let's say this is 20 cents out the $100. So the total cost of buying a pair of Nike shoes with my Bank of America credit card is $2, but importantly, this $2 is paid by Nike, the merchant , and is what is called a merchant discount rates or MDR leaving Nike with $98 in net revenue .

[00 :11 :22] Zack : So perhaps we can take a step back now and look at the industry. How big is it? How quickly has it grown ? Where does Adyen fit within the payments industry broadly ?

[00 :11 :33] **Michael :** So if you just take a helicopter view of consumer to business or C2B payments , and if you look at how much digital payments is penetrated , i.e. What is not cash , it is roughly 38 to $40 trillion. There are other estimates , but the main point is that it's enormous and growing every single year. And it is growing in part because of cash being displaced around the world in real time. So 15 years ago, 75 % of C2B payments was physical cash and check . Today just under 40 %, meaning 60 % is penetrated by cards and alternative ways to pay like a account to account and so forth . I don't think it's totally unrealistic to say that digital payment penetration could increase closer to 70 % in the next eight years . So full 10 or so points from today . And Adyen is an obvious beneficiary of this trend from cash to card , because they don't act as an acquirer when you purchase your Subway sandwich with cash .

But they do participate should you buy it with Apple Pay or Alipay or Ideal , or any other payment method of your choosing . Adyen's total payment volume , or TPV as a percentage of this addressable markets , which is offline and online is still quite small . This despite Adyen being around for 16 years and our impressive scale . The reality is that enterprise processing is very fragmented . Let me try and put some numbers on this . So Adyen processed $610 billion in TPV last year, which is just under 2% market share . If you look at online and isolation , which is call it 86 % of their TPV, they market share globally today is low teens . So when thinking about the next five years , the underlying digital payment market will grow low to mid teens per year. And then on top of that , their market share is accelerating , which I think equates to a TPV base that could be over four times of where it is today .

[00 :13 :31] Zack : Is it realistic to think Adyen can process 50 , 60 % of the addressable market ?

[00 :13 :38] **Michael :** I think highly unlikely and there's a few reasons to pull out . The first is Adyen is skewed to online , but is increasingly building a larger presence in the offline world , which now counts for roughly 14 % of their TPV and is growing north of a hundred percent . The second is some domestic oriented retailer who doesn't have sophisticated needs doesn't actually need an Adyen and will always go with the lowest cost legacy provider . So this notion that incumbents are going to zero , I think is just objectively wrong . And then third , merchants historically would not use just one process for the entirety of their volumes . There are exceptions such as eBay, which is now exclusively using Adyen and got everyone's attention , including mine when they dropped PayPal back in 2018 . Even Spotify until recently was using Adyen for 74 % of their revenues . But the primary reason why a merchant won't generally use one processor is almost a hedge if you will in the event that there's a outage . They also want to keep the processes accountable by letting them compete for wallet share in terms of pricing and who can hack higher authorization rates , which they measure and react normally on a monthly or quarterly basis , meaning you could see a merchant in a specific market or channel having one or two primary processes doing the lion share , so call it 75 % or 80 % of the TPV and then one backup process of doing the residual share .

With that said , I think an interesting aspect of the enterprise market today , this is a really important point and sometimes it's lost , is that just under 70 % of volumes globally is still being processed by the legacy guys who are struggling to compete and are losing share . And if you look at the US specifically and you look at the top three merchant acquirers , they collectively process just under $4 trillion. So J.P. Morgan's Paymentech , that's the largest , they process about 1.5 trillion. Then you have FIS which owns Worldpay . Then you have Fiserv , which owns First Data , and they have a lot of joint ventures with Santander , BBVA, Citibank , et cetera . So they still process significant amounts of volume . Another point worth mentioning is that Adyen has sought to challenge the status quo in payments and trying to shift the industry to a model where they don't need so many payment systems and backups . So you could just have one or two . If they are successful in redefining the way things are done , there could very well be upside to what are share assumptions in the future .

The Founding Story and Go-To-Market Strategy

[00 :16 :17] Zack: **And so you mentioned it briefly at the onset , a very nimble team , which I think is reflective of what you've highlighted in terms of their go to market strategy and the differences and the technological advantages that they seem to have . What is it about the culture of the firm and their founding story that has led them down this path and make them so nimble against what are some large and well capitalized peers ?**

[00 :16 :41] Michael : Adyen was founded in 2006 by a small group of payment entrepreneurs and engineers , most included Pieter van der Does , who's still the CEO today , and Arnout Schuijff , who was CTO up until September 2020 when he stepped down . And all of the first seven employees at Adyen were from another payments processing business called Bibit, which Pieter and a few others started back in 1999 . And Bibit was effectively a layer on top of old banking infrastructure that was a pretty good business , but not revolutionary . They did have customers like Microsoft at the time . They then exited to RBS in 2004 , and Piet and the team had commitments to stay on there for two years during the integration process . And what was formed by this acquisition would be a business called Worldpay . Pieter tells the joke that Worldpay was the name , but Bibit was the infrastructure behind it, which is still likely in place today .

Then Worldpay was spun out of RBS during the financial crisis to private equity . Then it went public in 2015 , then was acquired by Vantiv in 2017 . And then that combined entity , if you're still following , was acquired by FIS in 2019 for $43 billion, without even Worldpay and Vantiv being fully integrated . So in effect , you had three large businesses being integrated at once . It's all pretty messy and complex stuff . It's also worth mentioning , that was the same time that other incumbents were falling over themselves to consolidate . You had First Data and Fiserv . You had Global Payments and TSYS. And these were all defensive acquisitions and less about the revenue synergies they were talking about . Let's just take a step back and think about this for a second . Pieter helped create an incumbent processor in Worldpay and spent two years inside of it. He then created a business built to eat Worldpay's lunch . So this is unique and I think important part of Adyen's story . So Pieter is what's called a round two founder , who knows better than anyone on the planet how to attack the vulnerabilities of these incumbents .

[00 :18 :50] Zack: **And I imagine that has something to do with the name and the founding story ?**

[00 :18 :54] Michael : Yeah . No, absolutely right . That's why they're called the business , Adyen . If you don't have a strong command of the native tongue in Suriname , Adyen translates to start again , as in, let's start from scratch because the existing way of doing things is broken . I think they came up with the name because one of the founder's partner's parents were from Suriname , and the name was unsurprisingly not taken . So they had an interesting name . They all had deep payments experience knowledge . They knew that the existing processing infrastructure was built decades ago and for the analog age . So they got to work and started to build . They wanted to build modern pipes for the modern world that connects directly to the card networks , with little degradation of data , and ultimately , would give the largest merchants a high probability of getting higher authorization rates . And if you speak to any large merchant verbally , they'll tell you authorization rates are what really matters because its incremental revenue .

So Adyen wanted to change the perception of processing payments to a revenue and ROI game and less so a boring commodity game done by banks that any bank could do . Let me try give you an example . If you are a merchant and you doing $100 million in turnover a month , and someone comes to you and says , "Your current authorization rate's 85 %. We can get those up to 90 because of our platform , but it might cost you slightly more , maybe even similar depending on your volume that you give us ." And if you do the back of the envelope mathematics , you'll find out that the net ROI is enormous , because increasing authorization rates by 5% on that 100 million in turnover equates to $60 million difference in incremental revenue a year . And as a payments manager or CFO, one would think you would at least be intrigued because your annual bonus will likely be a little bit bigger . So it's this whole idea of ROI. Less so , a commodity . When thinking about this , there's this great Dutch saying that my grandfather always used to say , which is, [Dutch], meaning you get what you pay for, and cheap might indeed be expensive longer term . I think that's a good way to think about what Adyen does .

[00 :21 :17] Zack: **So I think you've done a fantastic job bringing us up to speed on who does what and what the responsibilities are of the different businesses in the payment ecosystem . Clearly, the team at Adyen identified a problem 15 years ago when they founded the business . Can you help us to better understand how they went about attacking that problem and building the tools and solutions that they offer today ?**

[00:21:40] **Michael:** If we go back to 2007, that was when they processed their first live transaction. And their first customers were casual gaming businesses, actually in Germany. But the pivotal moments for Adyen was the Groupon win in 2009, which really put them on the map. And in payments, you need volume to kind of get volume. It's similar to fund management. You kind of need AUM to get AUM. They got their European acquiring license in 2012, they added their point of sale offering that same year, and that really helped them start to win more in retail and in the quick service restaurant industry. Since then, they've got more acquiring licenses in Brazil, Australia, Hong Kong. They've obtained their European banking license in 2017. They got their US banking license last year. And the business has really seen hockey stick growth with more and more logos added to the platform, with more volume and industries added. And their TPV, or total payment volume, crossed 100 billion in 2017, and that's increased over fivefold in four years.

From a funding standpoint, they started again with their own money and bootstrapped the business until 2011 when they did their Series A led by Index. And ironically, that was the first year that they became profitable. But the raise was more for, I think, introductions and network, more than the capital. And a lot of the largest and well known venture capital firms circling the Valley didn't actually want to invest in Adyen, because of the terms that they had which were quite peculiar at the time. They didn't want any investor to be on the board. They would only issue common stock, and no shares would have preferential liquidity terms or no minimum return requirements. So they actually could have raised significantly more money and certainly had higher marks. But in typical Adyen fashion, they didn't really care about the valuation. They thought it was ego. And they didn't really need the money. I think they only raised just under 300 million or thereabouts in the private market. If you compare that to Stripe and Checkout's, they've collectively raised four billion. Even in Adyen's IPO in 2018, they didn't sell any new shares. It was more just an opportunity for early investors to get the option of liquidity, which a lot of them are still invested today.

Adyen's Economics and Unusually High Profitability

[00:24:10] **Zack:** **You briefly talked about how a merchant acquirer makes money, but I want to go a bit deeper on Adyen's economics now. Could you walk us through kind of the top of the income statement for them, the key revenue drivers?**

[00:24:21] **Michael:** So let's start at the top of the model, which is their TPV they process in that given period. From there, we get down to gross revenue. This includes the full merchant discount rates, or the MDR, which we spoke about before. And that's initially paid by the merchants to Adyen, who is the merchant acquirer. And let's say that's one to 2% or 3% of a transaction, but again, varies on channel if it's a credit or debit transaction, depending on the market. Adyen's own fee includes both a settlement charge for the actual acquiring of the transaction, and is a percentage of the total value, and a processing charge, which is a fixed fee per transaction. You then net the gross revenue line out by paying over 80% of the issuing banks and card networks and are left with net revenue, which is the actual economic revenue to Adyen. So as an example, for 2021, Adyen processed 516 billion euros in TPV. They generated just under six billion from that TPV in gross revenue, and their net revenue line was just over one billion euros, implying a total take rate of 19 or so basis points from that base. This is a blended take rate, but important to note that the larger the volumes of a merchant, the more tiered volume discounts, meaning a lower cost per transaction. If you speak to the CFO, Ingo Uytdehaage, he will say over and over again, "I don't manage the business or take rates, but rather growing TPV and net revenue," which is growing, I think, 40% per annum since 2017.

[00:25:56] **Zack:** **One of the things that kind of stands out to me in this business, and just looking at their financials is, they're extremely profitable despite being a venture-backed high growth business. What is it about this business structurally that enables them to grow at such a rapid pace whilst being so exceptionally profitable at the same time?**

[00:26:16] **Michael:** The profitability of Adyen is what makes them extremely rare, given the rate of growth, as you alluded to. Today, Adyen has a 64% EBITDA margin business and converts 90% of that into free cash flow. 64% EBITDA margins puts them in the top 5% globally. If you use MSCI World Index as a proxy which has close to 1600 constituents, and they are only a few points lower than Visa, which is, conservatively, one of the greatest businesses ever created. The struggle to find more than a handful of businesses globally with high 60% EBITDA margins, growing revenue 40% plus, it just doesn't normally work like that . So why do they have such high margins ? If you go back to the model and you start with their operating expenses , which is only about 41 % of their net revenue , I say only because if you put this in perspective , there's not a insignificant amount of fast growing payments and software businesses that will have operating expenses north of %100 of revenue to engender that revenue growth . So there's a clear difference . The largest component of Adyen's OPEX is salaries to the employees , which is close to 50 % of the budget . The rest is things like office rent , travel expenses , and a bit on sales and marketing . Now, they are a large and scaled business with over half a trillion euros in TPV, and growing that 70 %, and have , as I said , 2,200 or so full-time employees . And they don't really spend much in the way of sales and marketing . So you might be thinking , what is the catch ? The catch is that 80 % of their growth comes from their existing merchant base . So when your growth is weighted towards the organic growth of the underlying merchants , plus getting more wallet share , you don't need that many employees .

To compare their full-time employee count to peers , Worldline , which is a European legacy processor , they have close to 10X the number of employees . Worldpay , today , has something like eight or eight and a half thousand employees . Even Stripe now has over 6,000 employees . So Adyen is significantly more efficient than their competitors . So this has resulted in a fair amount of operating leverage where margins have increased close to 20 % in four years . And I think they could be north of 70 % in a few years . The other reason why Adyen is so lean , is what I mentioned before . They built everything in-house and from scratch . And when I say everything , I mean everything . Their entire payment stack on a single code base to all their products . So their omnichannel product issuing , Adyen for Platforms . They even built up their own data centers around the world , instead of building on third party cloud infrastructure . This is completely different to the rest of the industry , which buys instead of building . So they do not outsource anything . So they want to control everything . And this naturally takes out a lot of their operational running costs . They even design and produce their own earnings videos , all in-house , which , if you haven't seen , they are simply a work of art .

[00 :29 :33] Zack : **So if I kind of think about the future of Adyen and the path to growth here , I guess , two questions . How is it that the growth path is going to sustain ? What are the key drivers ? And then , the defensibility of the business , their competitive advantages that they're creating and building every day, what would it take to penetrate that moat ?**

[00 :29 :52] Michael : If I think about the business in the next five to 10 years , I think there's three things that one should be excited about . The first is their omnichannel solution close to 10 years in the making and gives them a clear lead in differentiation amongst competitors . They essentially wanted to turn the clunky point of sale terminal founding shops today , which actually have zero functionality . They wanted to turn them into smart device that was allow merchants to be able to plug into their platform and they could sell across multiple different channels without having a separate system . So now these terminals will be able to work in different international markets . They'll be able to accept all the relevant payment methods . They'll allow shoppers to return items they bought online . But I think most importantly , it gives merchants access to data , which we spoke about before . Where they can now see the shopper throughout different channels , which again is just not possible with legacy infrastructure . The pandemic , as we know , they caused channels to blow and merchants ' needs changed overnight .

So enter Adyen with a fully fledged solution . And if you listen to what the retail and QSR merchants say about the solution , the Dick's of the world , the Subways , and McDonald's Columbia Sportswear , they said that was a deciding factor when they won the RFP. And you can start to see that impacting their volume mix with offline being 14 % growing 100 %. The next is the US market which also benefited from the success of their omnichannel solution . At first , the US markets was exactly easy for Adyen and they struggled to gain much traction . They were processing for US companies , mostly for their international volumes . So think Uber in parts of Europe , but never really cracked the domestic volumes . They made some personal changes on their commercial side and now their US operation is run by Brian Dammeir , who is a product guy and very highly regarded in industry .

The net of this is that the US is now 24 % on the business , which is up from just under 10 % in 2017 . And then lastly , they're issuing products which they launched in 2019 . And as I said , looks set to consolidate more of the transaction on their platform and they'll be complementary to their core acquiring solution . The target merchants will be marketplaces where the problem that can be solved is faster payouts to sellers on their platform . For OTAs it also make a lot of sense . They announced just it’s word in a business called Visma as really customers . I don't think it'll have more than single digit revenue

Adyen's Many Sources of Competitive Advantage

[00:32:45] Zack: I better appreciate how Adyen is inserting itself into the payment flow. But what I think I still unclear to me is what was so innovative about their solution? Who are they taking share from? To what extent is it just secular trends that the business is benefiting from versus their ability to lower costs and facilitate more transactions? Just what are the competitive strengths in the founding story of the business that led to this wedge that they've created?

[00:33:13] **Michael:** The payments industry is one that's seen significant consolidation, right? And especially in payment processing. If I just pick on Worldpay, they are almost an amalgamation of 18 to 20 different platforms and even more systems that have been literally glued together. And the analogy that I can give you is actually from a startup called Silverflow, which I have recently been speaking to, and they were started by ex Adyen employees. Super switched on guys. Maybe there'll be a different podcast one day about them, but the analogy that they said, it's like gluing together different car parts from different manufacturers to make one car. You might get from point A to B, but you're bound to have a lot of issues and high maintenance costs. If it breaks down, you might not be able to find the spare parts. This is not great for a merchant for a number of reasons.

The first is that when these platforms were built, they were both in the eighties and nineties and technology was just completely different. Memory, processing power, even bandwidth was extremely expensive. And these legacy platforms were built on mainframes to be economical and use only the bare minimum of the data in a transaction given the high costs. If you fast forward today, everything that was expensive is not so expensive and the big D word in data is just mission critical to merchants. Because they want to improve the customer experience. They want to generate loyalty. They want to improve rates of fraud. They want to lower their costs. Just a plethora of reasons. A lot of the merchants that have switched to Adyen have said this to me, that having access to this data is just a total game changer. Then if you think about stitching up these multiple different old platforms, it creates a lot of headaches and costs.

If you are a global company and you are selling to 50 different markets, you don't want to be dealing with 30 different platforms. It's totally different companies, almost, with different operation teams you have to separately integrate for every single market in different channel. And this often leads to higher costs, low authorization rates, makes you slower to innovate and just complicates reconciliation. So this in essence is the key difference between Adyen and the legacy processes. Again, if you listen to what merchants say that have dealt with both Adyen and the legacy players, they will tell you how bad it is. So with Adyen, again, you deal with one platform, one contract for every merchant, every channel with transparent pricing, you get access to data, and again, higher chance of better authorization rates.

[00:35:58] Zack: So it's clear that having one platform is beneficial, but it begs the question, if that's the case, why isn't that the way that everyone goes to market?

[00:36:08] **Michael:** Certainly. It's a very good question and something that I've thought about a lot. The reality is that re-platforming is simply very hard to do. So as an example, Worldpay spoke a lot about building a new platform when there were spun out of RBS. And in the five years from 2010 to 2015, and I think somewhere between 600, 700 million pounds later nothing was announced. When Advent and Bain IPOed the business in 2015, the investment thesis at the time was a new platform. But in the years post and since it was acquired and then acquired again, there hasn't been any announcement of this new platform, perhaps quite interesting and instructive. Even JP Morgan spent quite a bit of money over a number of years and still hadn't really made any traction.

So they largely tried and failed. Stripe and Checkout or trying to do it, but still outsource a few things. Even if the legacy players were able to develop a brand new and shiny platform, merchants would still have to switch out of the old platform and do a whole another integration for this new platform, which is incredibly timely and actually costly. So when you speak to them and ask them, would you do it? The answer you get is, well, I might as well just integrate with an Adyen of the world or any other modern day provider as they're probably a few years ahead anyway.

[00:37:36] Zack: **I think you've done a fantastic job framing the opportunity, but I'm having a tough time really appreciating what the secret sauce of the business is. What is their process power that allows them to continue to innovate and launch solutions that help merchants, that enable them to continue to sustain such a prolific growth piece?**

[00:37:55] Michael: I think I've spoken a lot about their single platform that they control end to end which makes them totally unique. But that interestingly is actually almost the first derivative of their culture and the people within the business. I think their culture that they have implemented is the most notable, competitive advantage that they have. And that's what they call the Adyen formula and is the north star across seven offices globally. This is largely why I think they've been so successful and drives everything in the business. What does this actually mean? It means they've structured the company from day one in such a way that's very decentralized and ensures they can be nimble to adapt to ongoing change and faster to the markets than competitors.

The Adyen formula is why they do one week release cycles, meaning they push new things on their platform, which is just unheard of in the payments industry. The norm is six months or three months, maybe one month the best. It's why Evernote said it took them three months just to stop processing Yen. Then they switched over to Adyen and they were doing 30 different currencies in two weeks. The normal integration process is you have to locally integrate with different inquiries, you have to set up different bank partners, and that's just for one channel. So for multiple different channels, right? You have to separately do the integration again, which again is just incredibly timely and can prove to be costly.

[00:39:23] Zack: **Let's dive into this a little bit more. So culture is a popular management trope that often amounts to very little. Everyone has a fantastic culture, but in many ways it tends to be survivorship bias. What is the essence of Adyen's culture and how does it manifest in the day to day work for the people that are employees at Adyen?**

[00:39:43] Michael: So they really talk a lot about making sure every decision that gets made has a high probability of being a good decision. Making small, but good decisions every day can compound over time. It also ensures that if there's a bad decision made inside Adyen it is identified immediately and is completely eradicated and they move on. So for an example, and I can kind of bring this to life, they have what they call separate work streams for new and ongoing projects. They can quickly decipher what they're doing is adding value or complete waste of time. Now, how do they do that? The laws of the Adyen formula stipulate that you report into someone who actually knows what you're working on because he or she has been there before. It also stipulates being typically Dutch and to the point. So pick up your phone and don't hide behind your email is what they often preach. And when you are on the phone shoot me straight, let's not talk about the weather. They also protect the Adyen formula at all costs. This is why they haven't done any acquisitions and won't in 16 years, which they think can destroy cultures among many other things. A board member will interview every single candidate in the last round of the process even if it's a PA working at the new Malaysia office.

They only hire one out of 171 candidates. And when they do eventually hire, they'll invest a considerable amount of time and effort into that employee and only expect to get a payback off the one year of training. So they're really not looking for your typical type A personality, who went to an Ivy league school and wants to clear over 1 million in stock options alone before he or she is 28, right? They really don't want those people and have been very quick to let them go should they start acting in a way which is not really commensurate with Adyen formula. So they want a very specific cultural profile who is excited by the prospect that as a young engineer, if you have a cool idea, maybe to get lower rates of fraud, you can get the resources behind you and make it happen to actually make a difference, right? So they've basically created an environment for really smart and creative people to thrive. Now, it does sound quite cultish because it kind of is, and this allows them a lot of employee loyalty.

[00:42:04] Zack: **You spoke to their lack of M&A the fact that they have such a keen focus on talent, but the business is extremely profitable and has prolific amounts of free cash flow. To spend a bit of time on allocation, what are they going to do with all the cash that the business is continuing to produce?**

[00:42:22] Michael: It's funny. I mean, that's a question that I think every investor has asked in over the years. And they've built up a sizable war chest of cash already just given how profitable they are, right? And by 2024 I think they'll have over 10 billion euros in cash on their balance sheet. So quite a significant sum. But despite this, I don't think we'll see much on the capital allocation front. They are not going to just throw cash at problems. They, as I said, they won't make an acquisition to help develop a new product or integrate a new tech stack. They aren't going to hire 10,000 people just to hire. I don't think they'll pay a dividend anytime soon or buy back a ton of the equity. Although I do think the latter makes a ton of sense Ingo if you're listening. And they don't really need to market all that much to generate their growth. And so I think they're just going to keep this cash on their balance sheets, because for them it shows merchants and regulators around the world that they have a sustainable and very profitable business, which can certainly help winning RFPs and licenses around the world.

A Pre-Mortem on Adyen

[00:43:37] Zack: So it's clear that Adyen is a strong business, it's highly profitable, it's growing quickly. There's a ton of operating leverage inherit in their business model. But if we were to put together a pre-mortem on the business, what would it look like as an investor? What keeps you up at night?

[00:43:52] **Michael:** What keeps me up at night about Adyen is a few things. And I think the first thing is if key employees start to leave for higher salaries offered elsewhere. And Adyen very proudly states on page 90 in their annual report that no employees earned more than 1 million euros in total compensation. This is again part of their very unique culture and is very different to the rest of the industry. To put that in perspective, they only paid 10 million euros in stock based compensation 2020, which is just under 1.5% of their total net revenue base. It's extremely low. Even Pieter, the CEO, he only made about 600,000 euros in 2020. If you compare that to US peers, those CEOs are making 15 to 20, sometimes 25 million. It's a big difference. Now, of course, Pieter has a lot of equity, but still it's extremely low. So if key developers and commercial people start to leave, that could certainly start to dilute their advantage. What I would say is to date a lot of their most important employees are still there and overall turnover remains very low. But if that begins to change, it would certainly be concerning. The next would have to be competition. The amount of capital that's been raised in the private markets in fintech and payments has been simply staggering. I think the most recent report from CB Insights put the global fintech funding at over $130 billion, which was a 160% or 170% increase from 2020. A lot of that capital has been raised in the acquiring and processing space led by Stripe and Checkout and Rapyd and a few others. I certainly do subscribe to the notion that if enough capital pours into any industry, no matter how good the business, profits can be computed away. It's just Economics 101. There are, however, some points worth considering with Adyen. Processing payments is business-to-business and is generally very sticky, unlike B2C like we've seen quite recently, and sales cycles can be a number of years.

Now, Adyen has been investing for well over a decade, and are only just now starting to see the fruits of this. Merchants will do requests for proposals, or RFPs, every three or five years, and Adyen have been increasingly winning those. Once they are plugged in, there's extremely high switching costs and will only shift volume away from Adyen should a competitor significantly outperform them from a technical standpoint. Again, I think the gap to legacy is years and it's expanding. But next-gen processes like checkouts, they certainly do talk a big game, but they've largely copied Adyen, and I don't think do anything that Adyen can't. Interestingly, the one thing that they didn't copy was their omnichannel solution, which ironically gives Adyen now a clear differentiation advantage in RFPs. Stripe is an awesome business, but country to popular belief, it's not really apples to apples when comparing it to Adyen. The most important KPI for investors to watch is for volume churn, which has remained less than 1% for pretty much the entire history. What that means in plain English is they are not losing volume. Should that begin to change, you need to ask why. Lastly, from stock standpoints, doesn't make sense to own it. Clearly, Adyen is a great business, but doesn't make it a great stock. I think that differentiation becomes more important when the game gets a lot harder, such as the environment that we are now. I think for investors, you need to make sure that can you stress more severe multiple compression from here, and do they have the growth in free cash flow per share to offset that and still generate the compelling low-teams to mid-teams return?

[00:47:55] Zack: Is there any chance that someone could build a single platform that's comparable to Adyen's? Visa and MasterCard are kicking off tons of cash, they have tons of money to invest. Why couldn't someone like that go and essentially disintermediate them?

[00:48:09] **Michael:** I think it's certainly possible, and something to monitor for investors. What I would say is that Adyen has built a lot of trust and goodwill with their merchants. They have this perception in the industry of a proven solution and one of, if not, the most innovative. I think perception in payments certainly pays and is crucially important. I can give you two examples. Speaking to merchants who work with them, they consistently say that Adyen won't make promises they can't honor, and will be very transparent and direct about what is possible in what timeline. Again, now that's Adyen formula shining through. Often, merchants will say they delivered before their timeline, and with a better customized solution than what they had first talked about. I think it's hard to lose by anything detrimental like consistent outages. Legacy competitors, they will say, "We can do this and that, and by this time, if you give us enough volume," only to fail on what they said or just do it extremely poorly. This builds trust over time, and it certainly is an intangible benefit.

Second example is how closely Adyen works with merchants to solve problems. Adyen's engineers will travel once a year to see merchants, to check in and chat about the products that he or she has built, and how they can tweak it to improve it. Again, that's just very rare. I think winning Nike's business back in 2014 or 2015 is a great example of this. Nike wanted to build a better offline solution, and Adyen allocated developers to Nike developers, and they built this fully customized application. It would be very hard for a competitor to compete with that, regardless of price. Working with the largest and fastest growing merchants gives them all this data, which they can use to continue to innovate, which I think is a clear defense mechanism, because no one has the data that Adyen has.

[00:50:11] Zack: People will likely be surprisingly more familiar with Stripe, given that Stripe's private and Adyen's public, but the businesses look very similar. You mentioned it's not an apples to apples comparison. Can you just go into detail and help us better appreciate the differences between those two businesses?

[00:50:28] **Michael:** It's an important question and you can't have a conversation about Adyen these days without talking about Stripe. But the reality is that they are just two very different businesses. Stripe, they came to the market in 2011 and said, "Look, we've created this beautiful looking front-end application where a startup with two employees can easily integrate with two lines of code, and have a cash register up and running in under two hours." It still is incredibly developer-friendly with some of the cleanest integration the payments industry has ever seen. They also wanted to be more than just a payments company and have more of a software and business building approach. For example, they have Stripe Atlas, where you can start a C-Corp in Delaware for $500. They have Stripe Press where they publish them in books. John Collison was on this podcast referencing passages from books like Cable Cowboy, which happens to be my favorite book, and Berkshire Hathaway letters from the '80s. Where if you look at Adyen, they are a bunch of payment purists and, quite frankly, nerds who geek out and get excited about trying to solve the hardest problems.

Stripe came out of Y Combinator, and so their focus was entirely on startups and native online SMEs from day one. They completely dominated the segments, especially in marketplaces with their Stripe Connect product. If you compare it to Adyen, the largest enterprises were their focus and were a global company from day one. Now, this is an important point, because your pricing for SME is a lot higher than what you can charge enterprises because of volume. The needs of a startup and, let's say, McDonald's are just so incredibly different. If you're a startup in the US, you probably are more domestic-oriented and literally only care about, "If I plug into Stripe, can you process my payments and can I earn a payout for revenue?" Stripe didn't need to be a full-stack acquirer, and was initially built on top of legacy infrastructure. Because solving problems for startups was more about front-end, whereas solving problems for enterprises meant you want more by owning the pipes and having the relevant local acquiring licenses and banking licenses. Again, this means you can have access to data, better authorization rates, and better overall service to the merchants.

[00:52:51] Zack: Headlines in their website would suggest that Stripe's going after larger enterprises, as well.

[00:52:56] **Michael:** Over the last few years, I think they started in 2017 or thereabouts, Stripe has been focused on going more upmarket to large enterprises. I think for two reasons, one the early merchants grew up and became large merchants, think Door Dash, Postmates, certainly Shopify, and they didn't want to lose them. Then second, they have significant penetration in SMEs, certainly in the US, and so this was a natural next step towards large enterprises. They've certainly made some interesting announcements which bolsters their capabilities in the enterprise space. I think they mentioned last year or the year before that the enterprise segment was now the fastest growing. They now have moved off First Data for processing and are connected directly to the card networks. My understanding is that they still have Wells Fargo and PNC as partners in the banking licenses . Maybe they do, but that takes years .

Stripe is, of course , still private , so I'm not privy to the most recent developments and happy to be corrected . But if you do listen to and speak to some of the large merchants , again , I'm not talking about SMEs and startups , I'm talking about the largest merchants and they've compared the two . Some will say Adyen is still ahead in terms of what they needed : access to number of local payment methods , higher authorization rates , omnichannel capabilities , and some instances , have actually left Stripe for Adyen . But then there are also some merchants who use both for certain markets , so there's a lot of nuance to this debate .

[00 :54 :37] Zack: **Do you think that Stripe can outcompete Adyen in enterprise , potentially ?**

[00 :54 :42] Michael : Yeah , they absolutely could in the future . I think things change and none more so in payments . But again , it's not a flip of a switch . It takes a long time . Adyen has been investing in the business for whatever decade , and now only really getting paid for it, as I said . To build a single platform , to get the licenses , it's really a long -term game . Adyen was built to solve the most complex problems for merchants . This is what they do, this is their bread and butter . They've structured the business to preempt change and future complexity , which I think will make it a hard , but certainly not impossible feat . But even if they do start to outcompete Adyen in enterprise , I'll go back to the point you made earlier , which is just crucially important , that just less than 70 % of payments volume today is still with the legacy processes who are losing market share . I wouldn't be surprised if this mix completely flips to 30 % legacy and 70 % to the Adyens , the Stripes checkouts of the world , which I think makes competition between these next -gen processes mathematically less relevant .

It's funny , I feel like there's a lot of similarities between the Messi and Ronaldo debates and Adyen versus Stripe debates . Maybe it's not such a terrible analogy , because Messi and Ronaldo both have co -existed in the same era and are both GOATs, greatest of all-times , in their own rights , if you look at the individual and team accomplishments . Ronaldo also wouldn't be Ronaldo without Messi , they've made themselves better . It's the same with Stripe and Adyen . Stripe Connect was the reason why I think Adyen created Adyen for platforms . Stripe is building out the omnichannel business , because of the success of Adyen's solution . They are better because of each other .

[00 :56 :22] Zack: **I guess if you look back and reflect upon what you've learned in your studies of the business as an investor , what can be learned ? Further, as you consider other potential investments in the financial technology and payment space , what is it that people that build in those businesses can take away from Adyen ?**

[00 :56 :40] Michael : There's quite a bit to take from the Adyen story . The first would be how important it is to implement a strong culture . The culture drives every decision every day , which I think can be the difference between being extraordinary and ordinary . But what the Adyen story shows is that it also requires almost obsessive focus to maintain it. Which I think is pretty hard , especially if you're a young business trying to scale and trying to look good and great for your investors for next year , with very little thought in regards for the next five years . Adyen has been so careful with every chess move that they've made . If you think about how they hired , how they promote largely internally , how they structured their board to have engineers on it, how they didn't sell to JP Morgan and many other bidders , pre -IPO, how they've built everything in-house , and then just throw money at problems .

What I spoke about before , when they were raising money in their private markets , how they stuck to their principles of simplicity in the cap table . They could have raised way more and a higher evaluation , I think that takes a lot of discipline . The other points , which I think fits quite well into their culture and philosophy , certainly relevant for investors , is to be long -term and to be patient . Many say it, but few actually practice it. They only report results twice a year , they don't play the quarterly game of trying to window dress revenue or EPS growth to get their annual bonus . They haven't even changed the guidance from their IPO prospectus almost four years ago , other than upgrading their margin guidance . But I think something , maybe , to end off those thoughts , an answer , is something that Peter said which I think is quite powerful . He said , "When you have a business and you want to keep the business , not exit it, your decisions start to drastically change . I think that's how you build longevity and sustainability at as a business ."

[00 :58 :35] Zack: **Well, Michael , thank you for joining us to discuss Adyen . Payments are incredibly interesting , complex , and**

dynamic space. We've really enjoyed breaking down this business and learning more about it. I feel like we're just peeling back the onion here, and that the growth of the business continues to impress a massive market opportunity. We'll be excited to continue to watch.

[00:58:55] **Michael:** Anytime, guys. That has been a lot of fun. Thanks.