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Special Call

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Presentation

Andrew Garth Schmidt
Citigroup Inc., Research Division

Thank you all for joining. I'm Andrew Schmidt. I'm Citi's Fintech research team with a focus on software. Joining me is Ashwin Shirvaikar, who leads our global fintech team. It's our pleasure to host today's discussion on bank technology with Q2, and we have a great line of folks here who can speak to all things BankTech. With us from Q2, we have Kirk Coleman, President; David Mehok CFO; and Adam Blue, CTO; and Josh Yankovich, Head of IR. Thanks again, guys, for joining us. Really appreciate it.

Kirk L. Coleman
President
Great to be here.

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Question and Answer

Andrew Garth Schmidt
Citigroup Inc., Research Division

Looking forward to a good conversation. [Operator Instructions] And with that, we're excited for a good discussion and what better way to kick off Labor Day than with the discussion on bank technology. And as a level set, I think let's start -- if we could start with the overall kind of addressable market opportunity, is there a framework to describe the overall end market for banking credit union technology and how do different types and sizes of FIS' approach technology solutions? Maybe we'll start there at the high level and then just dig into where Q2 is positioned after that. But thanks, guys.

Kirk L. Coleman
President

I'll take the first part and David, you can clean it up. How about that? So when we went public back in 2014, the addressable market for our digital banking services, it was about $3.5 billion. That has grown today to about $9 billion, and we feel like that's continuing to grow as financial institutions of all sizes continue to double down on their investments in digital banking. Along the way, through our own internal innovation efforts and acquisitions we've done both in the fraud, lending and relationship pricing arena as we've expanded our TAM to about $16 billion.

And again, we feel like that's going to be growing as we look into the future for a variety of reasons. One is that the solutions that we're putting in the market, the capabilities are right at the core of what banks are trying to do in terms of winning more customers, serving them well digitally and also driving their efficiency initiatives forward.

David J. Mehok
CFO & Principal Accounting Officer

Yes. I think what I'd add to that, Andrew, is some of what Kirk said there is sort of the underpinnings of what I believe is a pretty compelling financial model. The customer base consists of about 1,400 customers across all of our businesses, a little less than 450 customers in digital banking alone. And one of the most important stats for us, the customer is at the center of everything we do and our average customer tenure is 8 years. So obviously, once we have a customer we have great opportunity to expand with that customer over time. And it's based upon some of the products that Kirk said, we've developed and involved in some that we've acquired over the years. The average customer that we have after about a 4-year period can grow its revenue base about 50%, 54%.

So we have significant expansion opportunity once we do acquire a customer and it gives us a lot of visibility into what that subscription revenue stream is going to look like going forward. And just very quickly breaking down those revenue streams that we have subscription is the lifeblood of the business, 75% highest margin, most strategic component of our business. We have a transactional business that is approximately 11% of the business and most of that is bill pay and then we have services and other business. And that's the remaining mix of the business of roughly 14%.

Transactional and services is the areas that have been pressured recently based upon secular and market dynamics. And then the subscription business, which again, is by far the most important is where we've seen a lot of strength, and that's been indicative in terms of the results that we've shown as well as some of the leading indicators like ARR and the growth trajectory in subscription in ARR. So I think that's helpful giving you a little bit of background.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Yes, it's super helpful. And then maybe just briefly digging back a little into that piece a little bit in terms of just market segmentation. Is there, as you know, different sizes, FIs have different needs. So how do you kind of segment the market in terms of where your solutions are targeted, whether it's retail versus commercial, whether it's by asset size. And maybe that's a good segue to talking about how your products and solutions fit in and what your products and solutions address.

Kirk L. Coleman
President

Yes. Andrew, thanks for the question. So we do business with institutions of all shapes and sizes. Down to the multi-hundred billion dollar or multi-hundred million dollar banks all the way up to the largest financial institutions in the world. And so our product suite allow us to address multiple problems or opportunities that those institutions are trying to address.

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But mostly, our best customers, no matter their size, and the ones that want to use technology as a weapon not as a shield. They see it as a necessity for driving great customer experiences and for also running great institutions. And so whether that's our digital banking solutions, which runs the gamut from basic consumer functionality all the way up to very complex commercial and corporate functionality with everything in between with SMB, in particular, being a very important segment within that.

Also, on the other side of the balance sheet, our PrecisionLender and Cloud Lending solutions really addressing a lot of the loan origination pricing and servicing aspects, both for banks and alternative finance companies. So it gives us a very wide aperture in the market in terms of the types of customers that we're doing business with. We think that, that's favorable for a lot of different reasons. One is that in a kind of an ironic way, the events that happened in March with some of the crisis -- the deposits crisis that some of the banks experienced actually gave us some tailwinds because a lot of our products very directly address deposit gathering and maintaining great relationships with customers of all sizes.

We're a single platform when it comes to our digital banking business that addresses, again, all those needs that both an individual and a business owner or a large company might need and those are -- this functionality that we built over 19 years. It takes a lot of bats, you might say, to build up all the innovation that's required to serve the most complex of those customers and the most complex needs. So it's a really wonderfully diverse ecosystem of both financial institutions, credit unions, banks of all sizes and also fintechs and brands that we're doing business with.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. Super helpful. And then David, I don't know if you want to jump in?

David J. Mehok
CFO & Principal Accounting Officer

Yes. Just one thing I wanted to add is probably not surprising as the CFO, I love data. I love analytics. And one data point that is pretty towering, and it's around one of the comments that Kirk made, which is -- our customers are typically going to be using technology and our technology as a weapon versus the shield. One of the best indicators that we've seen of that in terms of our customer success in the marketplace is we began tracking the M&A activity within our customer base 2.5 years ago.

So over the last 2.5 years, there's been 231 acquisitions that have occurred within our customer base. And of those acquisitions -- mergers and acquisitions, our customers have been on the acquiring side or it's been an MOE, 213x. So 213 out of 231, our customers have been on the acquiring side. So very much indicative of our customers using our technology as that weapon versus the shield. And as you think, going forward, you believe there to be more consolidation coming, which we truly do as you get into next year and the year after, we feel that's going to be hugely advantageous for us.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. And I think some of the comments were a good segue into the next kind of set of questions, which is sort of what you're seeing in industry now and demand trends. Maybe if you could just comment on the state of industry right now in regard to community banks and credit unions. How do they think about navigating in the macro environment? And how might the risk profile of customers differ from that in SVB just on average?

Kirk L. Coleman
President

We've -- the environment has been really good for us. We've been talking about it on our earnings call now for a few quarters about the strengths of our bookings. And we think that sets us up for a good second half here in '23 that's going to carry us well into '24 and '25. Some of that is just it takes once you sell something, some of these solutions takes a little while to actually implement and for it to start generating revenue.

And that's not -- for any other reason, right? It's just -- there's a lot to do sometimes in these implementations. But we like the bookings environment the demand environment is good in terms of the problems and opportunities that financial institutions are trying to address are very much in our wheelhouse to be able to help them with. What I've seen, Andrew, is that particularly the more forward-looking institutions are kind of looking through whatever economic cycle. It's hard to quite land exactly that how long this is going to last or what shape it will take.

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But they're kind of looking through that. They're already thinking about, how do I compete on the other side of this? Where do I grow organically, what inorganic growth opportunities is going to be. In all of those circumstances, they need a really good solid deposit base. To be able to have a good solid deposit base, they have to have great digital technology. That's how all of us and business owners do all of our banking these days is the digital channel. And they want to be positioned to take advantage of whether growth opportunities exist for their financial institution for their chosen strategy.

And so they're continuing to invest through this cycle. We think the percentage of tech spend is actually increasing from a digital perspective in comparison to all other tech categories. And again, that's a pretty favorable environment. And it also makes us both strategically important and mission critical for our customers.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. Super helpful. Maybe you could just drill down on the demand trends you're seeing. Just what you're seeing currently? I know you've talked about pipeline bookings -- or I should say, pipeline bookings trending up. I guess -- maybe you could just put a finer point on the demand you're seeing and how do those demand trends compare with what you've seen historically?

Kirk L. Coleman
President

Yes. A couple of things that are maybe note worth highlighting. One is, particularly in the small- and medium-sized business and also commercial space, very strong demand for digital solutions in those spaces. These are typically the kind of the house accounts, the big operating accounts. These are the -- some of the most important relationships in any financial institution, no matter how large or small you are.

And so our catalyst suite of products very directly addresses the needs of those types of end users. And so we're seeing very strong demand from a commercial functionality perspective for commercial and SMB. Similarly, in our innovation studio the offerings we're able to provide to our customers through over -- now over 120 fintech partnerships that are available through our marketplace and partner accelerator within Innovation Studio has been a very key aspect of our wins is cited in almost every single win, I think, for the last 3 quarters.

And part of that is because of the kind of optionality that our customers believe that they're going to have going forward they'll be able to tailor the solutions they put into the market to their particular strategy. Financial institutions, geographically from a business strategy perspective, they're not just one thing. They're not homogenous. There are all kinds of different business strategies. And so within that, they want to make sure they have the kinds of flexibility that they need to be able to address very specific customer needs, and innovation studio plays a very big role in that.

It also puts us at the center of that ecosystem in terms of being able to be a partner of choice for again, many, many fintechs and providing easy integration into our customer environments. And that puts new functionality on a consistent basis out into their end users. And that's an incredibly important part of their relationship. So those things are -- in particular, are really influencing bookings and pipeline. We're seeing strong demand there.

The last one I'll mention is as institutions are managing all these relationships they have, our relationship pricing offerings, which is part of our PrecisionLender product family. We now refer to as relationship pricing. This is where they're pricing the entire relationship. So you can imagine a commercial relationship, it's got loans and deposits, fee services and all kinds of aspects many different levers for a financial institution to pool in terms of making sure that they can retain that customer but also get paid fairly for the services that they are providing, and we're seeing some strong demand there as well.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. Super helpful. Yes, consistent with a little bit trends that we're seeing as well. So that lines up very neatly. Maybe if we talk about just sales cycles and buying behavior. Obviously, there's been some fits and starts in the last couple of years, COVID-related most of it. But is it possible to talk about how clients are addressing the sales cycle? Is there hesitancy? Is it normal? Is there such urgency and then how do you think about the sustainability of that behavior?

Kirk L. Coleman
President

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Yes, I'll comment and I'll let David add on. We haven't seen sales cycles lengthening. We continue to see customers act with urgency. This is the major purchasing decision for customers. And so they're, of course, going through all the due diligence and deliberation that you would expect, but we haven't seen those cycles lengthening. If anything, I would say the buyer is getting pretty sophisticated in terms of what they want.

So their questions are really good. Right, how they make -- do their assessments, I think have become really mature, which we believe is good for us that we think we probably are good in that environment. By the same token, again, just to kind of double down on the fact that high-performing institutions are going to -- they're looking all the way through the cycle and they prepared for growth. They're thinking about what their internal talent look like, what solutions do they want to put in their hands so they can go win customers and retain business.

And so those are things that are driving some of the demand environment, which I think those conditions remain in place for some time.

David J. Mehok
CFO & Principal Accounting Officer

And the only thing I'd add is, and a lot of this culminates and sort of what we're seeing in terms of deal size. And we've talked about this in the last 2 calls, but the average ASP that we've seen in the first half of the year is up about 30% year-over-year from the first half of 2022. And if you look at the ASPs that we have exiting last year, those are up almost 80% from where they were 5 years prior.

So it's a combination of the relative breadth of product offerings that we have as well as moving upmarket in some instances and having larger opportunities with larger clients. So those things combined to really drive a lot more revenue for each one of those opportunities. Now to Kirk's point, if you take it discretely and say, okay, you've got a certain TCV opportunity relative to TCB opportunity a few years ago, cycle hasn't really changed, but because of the larger deals that we're doing, the larger the deal, the longer the cycle time will be, obviously. And that's something that we certainly have seen, but we know that going into a deal with a larger or larger customer or a bigger opportunity.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. Okay. Super helpful. And then just sticking on demand for a second. As you all well know, there tends to be a lot of inertia when they come into solutions. And it's interesting because if you think about it, with 5- to 7-year kind of terms on these digital banking deals for incumbents or across the board, there's only been a few refresh cycles. So that might imply that maybe as a further along, like banks and credit unions might be taking a closer look and kind of reevaluating versus incumbent solutions, maybe alternatives that might be best in grade or point solutions.

I guess the key question is, do you feel like that incumbent inertia is starting to break down, which might imply more opportunities each year? Or is it more kind of status quo in the current environment?

Kirk L. Coleman
President

Very simply stated, any executive team that had doubts about the value of digital pre-COVID, that's -- that is a settled matter now in terms of its importance. And then you fast forward in some of the deposits -- I don't want to call it a crisis, but some of the -- what we experienced in the spring.

And what happened is that when you have a customer that's on an incumbent solution that's maybe a little bit long in the tooth. And they -- for their own risk management, need to go look at other institutions, maybe a larger institution. They get to experience firsthand what some of that technology looks like. It can sometimes be a stark contrast and that's where we start to see a lot of CEOs sort of turning around and sort of saying, I've got to do something about my digital capabilities, right?

Because I cannot fall behind and that gap feels like it's getting wider. And because it takes a little bit of time for them to make the decision and get it implemented, like they really need to get going on that. And so we think that, that is certainly driving some of the demand. So there's still -- institutions have different business priorities, right? And so sometimes, we'll hear not yet as an answer, which, look, we'll be patient. We'll be glad to have them as customers in the future as they move on. But right now, it feels like there's a kind of a widening gap.

I'll just mention also, and this might be an interesting place to bring Adam in for a comment, which is that a key part of our solutions, and particularly digital banking solution is we have more than 1,000 integrations into these bank and credit union legacy

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environments. That's a really key thing for us, because no matter what core they're running, what all the different ancillaries that they might be using. We've built integrations into those. We have a lot of experience of doing the conversions and implementations, which really helps with change management and risk reduction and implementation and things like that.

And it's something we probably don't talk as much about, but it's an absolutely key part of our solution.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. And that was good. I'm glad you brought Adam in, because he -- can't ignore Adam because that's one of the crux of our conversations here. We had Adam here in March of -- actually March of last year talking about tech stack. And we'll get back to Adam in a few minutes. But maybe before we get to the technology side, we'll just kind of round out the sort of demand and competitive environment. I'll turn it over to Ashwin for just a few questions on the competitive environment and what you're seeing. Thanks Ashwin.

Ashwin Vassant Shirvaikar
Citigroup Inc., Research Division

Sure. Yes. Absolutely. No, this is already quite useful. But in terms of competition, if you can maybe walk through the competitive environment across your product set, different sizes, types of FIs -- or if you want to split it by consumer commercial Fintech, who do you typically see in the marketplace? And as you move upmarket with ASP start going up and so on, has the competitive set who you typically see, has that changed?

Kirk L. Coleman
President

Yes. Thanks, Ashwin. It's a great question. Definitely changes as you go upmarket. So as you get into larger institutions, I would say, around the $2.5 billion to $5 billion in asset mark that's where you really start to see the competitor landscape change. And a big reason for that is because that's kind of the size at which institutions are looking very carefully at the commercial capabilities that they have. Because if you're a $2.5 billion bank, you're thinking about being a $5 billion, if you're a $5 billion, you're thinking about being a $10 billion, and so on. And they know that to be able to -- as they get bigger balance sheets and their customers that they can bank are a little bit more complicated and sophisticated their needs grow.

And so the competitive landscape changes as you get larger. So in the consumer space, there tends to be -- maybe a broader set of players as a result. But then as you get into some of the larger, more complex institutions. Again, not that -- not super big, right, but kind of in that sort of right below $5 billion, maybe $1 billion to $5 billion mark is kind of where you start to see their needs start to change. And -- so -- and then, of course, you have the kind of the incumbents that are in many of the larger institutions.

As you get up to the very, very largest institutions, the top 5 banks, the top 10 banks, it's yet to get a very different kind of buying environment. So in our digital banking space, right, we feel really great about our ability to be able to address both the consumer -- basic consumer, everyday bread and better consumer banking that a small institution might need all the way up to very complex commercial functionality that very large institutions, over $200 billion in assets would need to be able to bank their customers.

And we've actually been recognized recently in the industry by IT most recently as having the best commercial banking solution in that regard. So that's really gratifying what we really care most about those that our customers also win awards for their -- how they're doing their banking. And that's been a positive trend for us as well. But because the competitor landscape changes throughout that, but we're there and we can compete in all those different segments and in all those different ways, it allows us to kind of meet the customer where they are, depending on where their journey is, particularly a larger customer.

Usually, you're not running dual platforms until you're over $20 billion or $25 billion, maybe $30 billion in assets. And they might have very good reasons -- internal reasons for why they might want to buy one side or the consumer or commercial and do that conversion first. And we're very happy to work with them on a kind of a split platform basis, because we believe in the long run, right, they'll be able to consolidate all their business onto our single platform because we can do that just fine for them and make sort of an easier operating environment for them and we think ultimately more efficient.

When you look at our -- some of our other product lines, our Centrix product line, which really focuses on different kinds of fraud solutions in the market, that spans all ranges of institutions up to some very, very large institutions right down through the long tail of smaller banks and credit unions. And that's -- look, frauds on everyone's mind right now. There's a lot of fraud out there. So those are solutions that are high in demand. And then lastly, I'll just mention our PrecisionLender products, our relationship pricing products.

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Historically, that has skewed -- well, there's actually a broad range, but you might sort of say that like it's definitely we have some of the largest institutions in the world pricing.

One of the largest ones, pricing their entire middle market book globally using our relationship pricing. But we also see that -- again, that demand in the smaller institutions, once they start thinking more seriously about their commercial business and the diversity that brings to their balance sheet and knowing that they need to price that well. So we feel like that, although that's a very sophisticated buyer that's buying something like PrecisionLender, we feel like that's very much in the sweet spot for what institutions are focused on right now.

Last thing I'll just mention is, fintech space is still going through some transformation, we might say, it would be one way of putting it. And so the whole ecosystem is a fairly fluid and complex place for a bank CEO or current union CEO to be able to figure out on their own. And we think through innovation studio, and the marketplace and partner accelerator business that we have within Innovation Studio really helps them address their needs and kind of decipher what might they be able to do and how to do it and simplifies the equation for them all in.

Ashwin Vassant Shirvaikar
Citigroup Inc., Research Division

That's a great description of your positioning across the spectrum there. When I think of how investors look at the space from a competitive standpoint, normally think of Jack Henry as small to made a lot of community banks and so on. I think of Fiserv as kind of little bit of small but mostly made heading to large and then FIS is mid to large and with a focus on large. But when you sort of think of, say, Jack Henry launching a banner for business, for example, right? That kind of stuff would you consider that a competitive threat in terms of FIS and all the stuff that they've been going through we get questions about displacement, right?

Are those opportunities like from a competitive standpoint for you and assuming you're probably not going to shy away from speaking of competitors?

Kirk L. Coleman
President

Yes. So astute investors will discern some of the -- what might be considered distractions within some of the large incumbents and Fiserv and FIS and look, there's a lot of things they do really wonderfully well. And so I don't -- I'm not discouraging them at all. It's just the fact of the matter is whether or not they're fully focused on the areas that we address most directly, I think that people would have to make their own assessment of whether or not they believe that. When we get to Jack Henry, you mentioned Jack Henry's market segment tends to be more in that $5 billion and below though.

Certainly, they have some business that's larger than that. When we talk about banner for business, as an example. Certainly, we would see them as a competitor and see it in the market. One thing I think it's worth noting, whether that's Jack Henry or many of the other competitors that are -- have been more traditionally smaller institution, consumer-focused is that the -- we should not underestimate the amount of time that it takes to build a full suite of commercial functionality into a digital banking platform. And that's not just a matter of understanding and knowing what the features and functions are. But you have to do it in real life. You have to do it hundreds of times over, right, so that you know all the nuances, you know all the different kinds of requirements.

You've integrated all the different kinds of systems. Right? And you are able to address kind of this really broad set of highly variable needs that commercial customers might need. So a title company needs solutions that look very different than a large manufacturer and so on. And so those kinds of capabilities just have to be built up over a very long period of time. And what we know about banks is that as they get larger, there is no such thing that's like a $10 billion consumer-only bank.

There is no such thing as a $10 billion even just only SMB. There's a few models that kind of look like that maybe. But at that size balance sheet, you really have to be winning and serving true commercial customers. And that's who they're lending to, that's who they want to lend to, their lending limits go up, and they can win some really fantastic business. But -- you can't just lend money anymore, right? You've got to be able to win all the deposits. And to win deposits, you have to have a great digital banking platform.

And so that's kind of how we sort of see that competitive landscape in terms of like who's really focused on this area, how much time in the market do they have to be able to build up that functionality that they need. And then if you're sitting in the C-suite of a prospect, you're asking yourself some very serious questions about the risk related to kind of testing out someone who's less proven with the most important and sophisticated customers that your bank might have.

Ashwin Vassant Shirvaikar
Citigroup Inc., Research Division

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Understood. Understood. A couple of questions from investors that have come in. I'm going to combine that with the question that we had on win rates. You guys have mentioned elevated win rates. I wanted to get into the drivers but also there are others, including Jack Henry, that have mentioned, pricing has become more competitive. And when we've spoken with consultants, they've also said there's more price transparency in the RFP process. So I just kind of want to talk broadly about win rates, what's important, how important is pricing? Are you seeing some of the same pricing type trends, openness and so on?

Kirk L. Coleman
President

Yes. Dave, do you want to take the -- some of the numbers, and I'll fill in with it.

David J. Mehok
CFO & Principal Accounting Officer

Yes. The win rates that we've seen recently are sort of historically high, at least in recent history, first half of the year, we were over 50% win rates. Q1 was even stronger than that. We're seeing that across the product set. And a lot of it is, again, based upon the comprehensive nature of what we're able to provide relative to others in the competitive landscape. There are either nascent in regards to that comprehensive set or as Kirk said, when you start going up market, the competitive set tends to narrow. And we feel like we have a significant opportunity as we continue to broaden the opportunities with these prospects.

So as we're seeing more and more products being added to these potential RFPs, we feel like our win rates go up, and we see that in the data behind it.

Ashwin Vassant Shirvaikar
Citigroup Inc., Research Division

Understood. Understood. In terms of this -- with regards to those elevated win rates, and you've obviously talked about single platform, right, serving both retail and commercial clients. The question is more about complexity, maybe going back to the point that you were making, Kirk. How much incremental complexity is there? How much -- what are the level of difference in banks versus credit unions higher. If you could kind of give us some of the underlying color for that?

Andrew Garth Schmidt
Citigroup Inc., Research Division

This might be a good opportunity for Adam to step into and talk about the complexity also. Yes.

Kirk L. Coleman
President

Yes. So let me set up the business context and then Adam will round it out with kind of -- from a technological perspective. So from a business context, Ashwin, what I would say about this, we just sort of think about how banking works and you start it down the smallest institutions, right? You tend to have a fairly homogenous set of business functions that you're trying to address on behalf of your users, your customers, whether that's credit union members or big customers. And right, that's consumer, it's maybe the kind of very basic business banking. That tends to be -- it's really important. There can be some high volume in there, but it's not that complex at the end of the day. It might be complex to people outside the industry, but inside the industry, it's not that complex.

As you go up market and you start thinking about larger institutions or even small institutions who have a very specific commercial focus, and we have quite a few customers that are like that. They are -- we might dub smaller institutions, but really, their business is built around commercial banking. You can't bank just one sort of commercial customers, right? You have to have a portfolio of customers, you must spread your risk out across different types of customers, different types of industries, right?

You want to have portfolio diversity as you're managing risk inside your bank. And the only way to do that is to be able to serve their needs directly. Again, where -- you can't just lend them money, right? You can't just be a great lender. You have to be able to win their deposit relationships as well. And so to be able to do that, you have to have a solution that has the requisite functional density to be able to address their needs.

Otherwise, those businesses simply can't bank with. And so -- that is the kind of functionality that just takes a long time to build up. Again, it's not -- you can intellectually know what those functions are, but it's quite different than put them in practice and have lots of implementations and so that's how I would kind of highlight that. Maybe, Adam would want to talk a little bit about what that looks like from a technological perspective.

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Adam D. Blue
Chief Technology Officer

Yes, for sure. So one of the fascinating things about a bank is that it's built up of a series of relationships that accumulate over time. Right? And so if you want to really understand the tenor and the nature of the way in which the bank relates to its community, we look at the way they operate in the small business, commercial and treasury area. And so the intersection of the customers they've acquired and the work that they do and the way they go to market, how they specialize, how they think about lending, where their particular proclivity is for entering the market, all of that shows up in commercial in a way that it really doesn't show up in retail.

And so what this means is that there are more integrations, right? And the long tail of integrations at a commercial bank is substantially both more complex and more operationally sensitive than the set of integrations around retail. It also means that you're going to need features along the lines of like real-time fraud stop, which we've had natively with our own intellectual property since 2010, 2011. And you have a new kind of scale around the end-user relationship. A complex retail customer has 5, 6, 7 accounts, maybe more if they're a bank employee. An entry-level, medium-sized corporate customer is going to be in the 100 account range.

And some of them will go as high as 1,500 to 2,500 account. The way that you have to think about both the UI and the user experience for someone with 1,500 accounts who wants to log in and see data within a couple of minutes and then start making wires and ACH transactions. It's radically different than it is on the retail side. And so when you stack up those pieces and then you think about a retail mistake is in the $200 to $1,000 range, commercial mistake is frequently in the $100,000 to $1 million, $10 million range. So the level of operational scrutiny and the level of mission criticality of that set of features is just completely different.

So on every axis that you would think about the challenge of building great experiences with software and a complex integration environment, just stretch every axis of that challenge probably by a factor of 2 or 3, and you have a problem that's an order of magnitude more complex than the retail problem.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. Yes. Thanks, Ashwin. So I think, Adam, that's a good segue in terms of how you -- how Q2 internally deals with complexity. A question we often get is whether Q2's technology architecture is single. We talked about this last year, but it's always good to rehash. Whether Q2's technology architecture is single or multi-tenant. And maybe we go through that. And then in your view, which is more competitively advantageous and why?

Adam D. Blue
Chief Technology Officer

Yes. I think the way we think about it is banks and credit unions want the intersection of flexibility to do what they need to do in their market. Security for reasons, I think they are obvious, and I'm not going to go through and then stability, right? And so when I have conversations with customers, we talk about tenancy models. We talk about our specific what we call isolated multi-tenancy model, which we've moved more and more technology to and is resonating with customers in a powerful way.

We talk about how 98.5% of our customers are on the current version of the platform. And then we have about 80% of customers on the most recent version of the UI with about 15% of those on an early adopter version. Those are the things that really matter to banks, right? One of the things that's really important, regardless of our specific tenancy model and how we deploy different components in the application, though is that we have no branch code for customers.

We had one component for one very large customer that we did some co-development on for reasons that I think we all understand, we've moved away from that with them, and we're in talks to move them back to mainline product. depending on where that relationship ends up going. But at the end of the day, the set of components that delivers the digital banking experience is the same code for every customer. The way in which we choose to deploy those varies. One of the things that, that can give us that's really powerful is a lot of flexibility in the way we operate customers and a lot of flexibility in the way we go to market with them, right?

And I think that there are participants in this space that would say, hey, we've got it all figured out and we deliver the solution in the same way for all of our customers. And that's probably true. I don't think that they would say anything that was untrue about that. What it suggests to me is they may not be entering or acquiring customers with enough sophistication and the depth of value proposition to their customer base where they actually have to do much that's very interesting or very difficult.

So our approach has been to figure out how to take the technology and make it scale by delivering the same platform product for every customer and then use Innovation Studio to allow tailoring those experiences in a way that is completely perpendicular to forward product upgrades. And that's how we're at 98.5% on current platform and 80% on current UI stack. Then in the background, there's a

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team of some of our most senior engineers that has been working through the integration stack and the baseline infrastructure of the product set to say what's the right way to take this in the public cloud?

What's the right way to do this with isolated multi-tenancy that preserves data separation but gives us all the value of multi-tenancy. And so I would say we're about 25% to 30% of the way through that now as we're another year on. You're starting to see that accelerate. And it pays off in ways that are predominantly internal for us. But what it means is that when I go talk to a customer and the sales cycle, when I go talk to a customer that's in deployment, we can talk to them about keeping their data absolutely safe and isolated but giving them the ability to take incremental releases, incremental functionality or extend the product without breaking the fundamental single platform nature of the product itself. And I think that's what customers really respond to.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. That makes a lot of sense. So moving to more configuration, obviously, there's -- it sounds like, maybe -- correct me if I'm wrong, on a go-forward basis, there's not customization of code. Is that correct in terms of having a...

Adam D. Blue
Chief Technology Officer

By way of example, we used to deliver on ACH functionality, which is crucially important. And we had an ACH component and we would build it, and then we would advance that component as we got other customers. So the customers each have their own instance of that component. So starting last summer, and this was done probably about 9 months ago, we put every single customer on a -- essentially a single instance but deployed in a container stack of one component, one set of code. So everybody was running the same code before, just different instances, depending on what their specific functionality was.

So we just flattened and collapsed all that, so as you might imagine, the operations, the support, the product management, the delivery and the engineering of ACH functionality are substantially more streamlined at this time. And so we'll keep stamping out that process for those integration components and some of the core components of the product over the next 24 to 36 months.

Kirk L. Coleman
President

And I'll just chime in on this, which -- because I think this underlies a really important point, right, which is that, because of what Adam just described by example, is the platform is constantly renewing itself, right? So it's not just one big monolithic thing, right? We kind of huge upgrade cycles, right? It is -- you're constantly renewing it at multiple levels of the tech stack, and that's what keeps the product both fresh and [indiscernible] market.

Andrew Garth Schmidt
Citigroup Inc., Research Division

Got it. super helpful. Then maybe you could talk about just add in the process to deploy new code, the velocity, which you can sort of deploy. You mentioned, I think, 98.5% on the current -- the current setup, but maybe talk about code deployment, velocity. And then just to skip ahead to ask it as kind of a, let's call it, a 2-part question, both for you and David. How holistically kind of the change that you're making and deployment to the cloud effect margin scalability over time. So kind of maybe a functional question than a high-level kind of financial model question.

Kirk L. Coleman
President

Yes. I'll leave considerations and margin for David, but I'll talk to you about how we think about the others. In its most conceptual forms, we have the pieces of software that touch the end user directly, right, UI, mobile, what have you. We have the platform itself and then we have the integration layer. So today, the integration layer has substantially moved and continues to move towards isolated multi-tenancy which means we deploy one set of wire integrations, one set of ACH integration. Core integrations, we did turn up recently with the customer in the same model, those evolve with very little, if any, customer engagement outside of a notice saying, hey, we're going to drop a new version of whatever you'll switch to it.

The middle tier of the platform works much the same way. features first must exist in the middle tier of the platform, the capabilities for them. This is where business logic, entitlements, basic workflows live. That set of code also deploys on an automated scheduled basis to customers now, both in private data center and public data center because we partnered with HashiCorp to drive a set of tooling that is cloud agnostic, which is a really important part of our strategy to avoid a specific vendor lock-in.

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This is the place where the software touches the actual end user. As you might expect, banks don't want to be surprised about what it looks like or how it works. And so we have a model we call seamless upgrade where for those customers, they have the existing version of the software in production. Then we deploy the new version of software in what we call forward environment in parallel so they can test both of them, and then we simply switch over to the other environment when they're ready.

So for customers that want to go to a new version of the UI, pick up incremental features, deploy things in innovation studio, there is a high-velocity CICD pipeline that we use, that's continuous integration, continuous delivery. And the customer makes the choice of when they drive that change to the end user. But for us, those are automated activities because they're built on this pipeline structure. And so that's how we're at 80% on current version of the product at the UI layer with 15% on an early adopter version and then about 98.5% of customers are current on everything from the UI surface and API down.

And so that's been about more years of work realistically to get to as we transitioned from some of the other models. But the nice thing about that is all of that work was done with modern container-based technology. So we deploy containers into private data center. We deploy containers into public data center. We deploy them on an active-active basis. And so we can now dial in, do I want that in AWS? Do I want it in our Dallas data center? Do I want it in another data center? And then most of the perimeter services, which are predominantly concerned with security, and routing and kind of Internet presence, those moved to Cloudflare over a year ago, and that stuff is 100% cloud-based.

And so -- just the transition over the last 24 months is pretty substantial. And so as you can imagine, what this means is that engineers have gone from fixing problems in environments to fixing problems in a baseline container set or container environment. It means that the product delivery has changed in a subtle way, but a way that's pretty powerful. And that's where we plan to get more velocity, more flexibility and more stability by leaning into these alternate models of deployment.

But just to be clear, this is not -- we took a bunch of code that we ran in a private data center and then we just picked it up and threw it into the cloud and said we're in the cloud. That was the exact opposite of how we wanted to approach this problem. So our movement towards evolved infrastructure models, has been accompanied by primary work we've done, some of it actually even under patent in coupling with the way we can go to cloud and public cloud in an effective way.

So we really rethought a lot of how we handled compute challenges and scale challenges and tailoring challenges with the customer base. And then the payoff down the road is smarter people can work more effectively on smaller parts of the problem, and that makes them more efficient. And then I'll leave that to David to talk through how that pulls through on the bottom line.

David J. Mehok
CFO & Principal Accounting Officer

Yes, Andrew, I mean, you see it in terms of our guidance and our first half results, but we're driving efficiencies throughout the organization. The efficiencies we're driving combined with the improved revenue mix and that mix skewing much more towards subscription, which is higher margin is why you're seeing the EBITDA doubling essentially year-over-year, if you take the midpoint of the guidance that we're giving this year. Specifically in what's Adam's been addressing, I think there's a long game and a short game, and the long game is sort of the cost of compute aspects of this, which we don't see really driving material benefit for 3 to 4 years.

So there's a lot of work being done in the background to make sure we do this right and do this thoughtfully Eventually, we are going to see some unit economic benefits. But short term, Adam talked earlier about some of the efficiencies that we're driving internally through all of this, that you're seeing manifest itself in the P&L now. And we're in the early innings on a lot of this. As you know, we're up about 200 basis points from a gross margin standpoint this year. We feel like there's plenty of opportunity to continue to drive that gross margin up over the coming years.

And ultimately, what we see is a P&L that's much more -- you all compare us to other SaaS players we're much more SaaS like in terms of the nature of the subscription business that we drive within Q2.

Ashwin Vassant Shirvaikar
Citigroup Inc., Research Division

If I could jump in and go back to Adam, I guess. So as it relates to serving your customers and the questions on AI. If you can talk about how Q2 has been using broadly AI, but then also talking about large language models in generative AI in terms of what you're doing today and perhaps what the path forward is?

Adam D. Blue
Chief Technology Officer

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Yes, absolutely. So if I broke kind of broadly into 2 models, predictive and generative. We've been doing predictive AI with machine learning since 2008, 2009. Our anti-fraud products are based on relatively sophisticated machine learning models and what's important about that as we enter the new era of generative AI, which is also very, very exciting is that there's an understanding in the business. I think Cathie Wood from Ark made the statement recently, which is she's interested in investing in companies that have domain expertise and deep already taxonified data because that's what will drive the success of AI.

AI as a technology is extraordinarily data hungry. We have more data over a longer period of time for a richer set of interactions than any of our competitors. And we have been focused on building models and understanding the domain of that data in a way that's different, I think, than a lot of other people have thought about it. So for us, predictive AI and traditional analytic-based AI that's driven by machine learning, we have a great handle on and we have a lot of tools and products that sit on top of that.

Generative AI has been exciting, probably in part because it is so different than the other kinds of AI that have been available. And so for us, we believe that there is a set of products, some of them that are probably internally facing in Q2, some of them that are banker-facing and some of them that are end-user facing that use different kinds of generative AI to map awareness of where a customer is in a financial journey.

Because that's really what a lot of banking and a lot of the banking interaction is about. We believe that we're well positioned to take advantage of those, and we have an entire team that is working on generating early prototypes and some things that are approaching productization, particularly internally, that take advantage of the data that we already have and have built up an exciting and interesting ways.

And because we now have data from both sides of the balance sheet, from the deposit and transaction side and from the lending and relationship management side, we think, in particular, for deeper relationships at banks, i.e. commercial relationships, we have a particular advantage in being able to bring generative AI to bear. That space is moving very rapidly. So I wouldn't want to commit to a particular feature or a particular product. But I can tell you that early on, we set aside a set of engineers with very specific, very advanced skills in this area, so they could focus specifically on saying of the infrastructure and data pool that we have today, how do we use generative AI to create experiences that are richer, more effective and more, I think, precise than many of the experienced customers are getting.

Kirk L. Coleman
President

Just to add to round that out, that risk, regulatory and security requirements and having specific firsthand knowledge of how to work with our customers on that is an important part of this journey because they're going to have to answer to their internal and external stakeholders on these matters. And we've been doing that with mission-critical strategic technology for a long time. So we feel like we've kind of won the right to be able to delve into this new area of products as well.

Ashwin Vassant Shirvaikar
Citigroup Inc., Research Division

Got it. Got it. If I can just go back to the point that you had on data and maybe combine it with the previous point, this relationship with HashiCorp and multi-cloud and infrastructure, automation, things like that. Those steps that you've taken over the last 24 months, in what way do they sort of position you perhaps better from a data perspective, if I'm understanding that appropriately and one of at least my views has been that just exactly the type of data that you're referring to, which I'll just call it private data as opposed to all the stuff that ChatGPT can use. If you could talk about the advantage of that and maybe pulling it all together.

Adam D. Blue
Chief Technology Officer

Yes. I think data in and of itself has value, but it's potential value, like potential energy, right, in the physics sense. You have to place data into a context in which a person can use data to make an effective decision in a time frame where it actually has -- makes a difference in their life for their business. So that's the important part. One of the things that's fascinating about our business is, we're there when people make financial decision. We're there when they apply for a loan. We're there when they open a new account. We're there when they make payments. We're there when they start their businesses and pursue additional lending.

So we have a footprint and application surface where we are part of people's important financial decision. That piece is really, really critical. The second piece that's important is we understand the data because we use it to drive these workflows, and we understand the data because it arises out of our systems, right? So that data has been cleansed. That data has been classified. That data has been placed into a feature-oriented taxonomy, and that's the kind of data that's very effective for generative AI as well as predictive AI.

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The last piece is -- some of the changes we've made around the way that we deliver the infrastructure and deliver some of these components, allows us to capture data in a way that's more efficient and more direct, right?

So having one point through which all of the ACH data passes, for instance, makes things like data engineering and data collection more simple. Some of the functionality on the PrecisionLender side around the way loans are priced and credit is managed at financial institutions. That's extraordinarily valuable data, right? So the key for us then is to say, as we become more mature and more sophisticated in the capturing, tagging and taxonomy of the data, and as we take our understanding of the financial domain problems that banks and bank customers really face, how do we bring predictive AI to that in a way that enriches that experience and brings people more value by helping them make better decisions, helping them be more comfortable about where they are or educating them about opportunities that are available.

And I think that's an easy sentence to say, I think. But the work it takes, the raw fingers on keyboards, product management, talking to customers, making mistakes, refining those mistakes exercise of building great products. It's something we've done for 19 years now. And so our ability to take that discipline, listen to a bank, listen to a bank customer, bring the data into play, deliver an application experience and refine that experience. That muscle is the same muscle we've had in place. We just have this fascinating, fascinating new tool we can use to try and take that to the next level.

I'll tell you when you talk about understanding a lot about an end user, and then you think about saying, well, how do I put that in a user interface, right? You can spend a lot of time swirling on that. It turns out writing a paragraph about a person and where they are in their financial journey is a really effective way to communicate. 12 months ago, I didn't have that option, right? It was charts or graphs or bars or whatever. Today, I can say, hey, ChatGPT private model that is not exposed to the public that we licensed and secure in ways that are appropriate. Can you tell me everything I need to know about this customer from this set of data in 2 paragraphs so that a call center agent can have a meaningful interaction.

Those are things we literally could not do before November of 2022. And so the shift in the availability of large language model. And look, they've got a way to go. They need a lot of power. They take up a lot of space, sometimes they hallucinate, but that's every technology in its early basis. How you put the guardrails around that? How do you figure out how to leverage that? How do you figure out how to cleanse the data? That's what will make the difference between, right, like Mazda's Wankel rotary engine and somebody with a great idea that went nowhere.

And so I think there's a multiyear arc here for making AI really relevant in the financial services space. But if you don't understand customers, if you don't understand retail and commercial, if you don't have deep integrations and well categorized data, I don't know where you're going to stand when you reach for what comes next.

Andrew Garth Schmidt
Citigroup Inc., Research Division

It's a great place to leave it. Yes.

Ashwin Vassant Shirvaikar
Citigroup Inc., Research Division

I was just going to say that is a passionate answer if I heard one.

Adam D. Blue
Chief Technology Officer

I only know one way to do it.

Ashwin Vassant Shirvaikar
Citigroup Inc., Research Division

Andrew, I'll leave it with you.

Andrew Garth Schmidt
Citigroup Inc., Research Division

And we won't weigh over guys, but I'm happy we got to this topic because that was a super interesting discussion. But thank you all for the time. Appreciate the extra time, and look forward to catch up with you soon. But great discussion. Thank you very much.

Kirk L. Coleman

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President
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