

>> TOM KANE: Good morning, everyone. Morning. Thank you very much for coming. My name is Tom Kane. I'm an attorney in the Division of Financial Practices at Federal Trade Commission. And before David Vladeck delivers his introductory remarks, I want to cover a few administrative topics. That's my job. First perhaps most important the bathrooms are across from the entrance to the conference center. Past the security desk and to the left, out there. Second, for those joining us via Webcast, if you want to submit a question, please email ftcmobile@ftc.gov. And if you're on Twitter and tweeting about the workshop, please use the hashtag #FTCmobile. Finally, if you want to submit a question card, which are in your folders, anytime during a panel, just raise your card, and a member of the workshop team in the back... Where is our workshop team member who's collecting cards? Somebody back there will collect

like a Starbucks app that allowed you to scan a code on your phone instead of pulling out cash or credit card. We also found that you could donate money to victims of natural disasters simply by sending a text message and having the donation amount added to your phone bill. But I think the real sign that mobile payments were on the way is the line of food trucks out on Massachusetts Avenue -- a great place to get lunch by the way -- started taking credit cards through readers attached by mobile phones. Once again, entrepreneurs are leading the way with technology. So it's clear that the buzz that surrounded mobile payments is growing into a roar. In a Pew Research Center report released just last week, 65% of those surveyed believe that by 2020, most people will have embraced and fully adopted using mobile payments, eliminating the need for cash or credit cards. Indeed, we'll all be using mobile phones as our wallets. And analysts project that the volume of mobile payments will nearly triple in the next three years, rising from \$240 billion in 2011 to \$670 billion by 2015. Just around the corner. So mobile payments have arrived. They're here today. And today we will learn a lot more about the different types of mobile payment technologies in the marketplace. But we will also think about how consumers are affected by the use of mobile payments and how they can protect themselves when they're using these new technologies. Now, given the enormous potential, it's no surprise that in the last few years, we've seen some of the country's biggest and best-known companies -- like Google, Intuit, AT&T, Verizon, T-Mobile, Visa, MasterCard, and mobile VeriFone -- joining the mobile parade. But in the great tradition of American ingenuity and creativity, we've also seen smaller startups like BOKU, Dwolla, and LevelUp -- vying for a seat at the table. I am pleased that representatives of all of these companies are here today to share their thoughts about mobile systems. We're also fortunate to have several leading academics, consumer advocates, and other mobile-payment experts here to contribute their knowledge. And last, but certainly not least, we want to welcome several of our friends from the international community here to share their perspectives about their countries' experience with mobile payments and what we may be able to learn from them. I want to thank our panelists for being here today. We've truly assembled an all-star team, and I'm sure we'll all benefit from their knowledge. So we will kick off today with an overview of the different mobile-payment technologies that are out there. And some of the benefits they provide, I think, are pretty damn cool. We're also intrigued by the notion that we won't need to remember to fish out those flimsy paper punch cards to get credit toward that 10th cup of coffee that Starbucks offered free. And given the hour, I'm sure we could all use an additional cup of coffee that we can get

coupons for things that we actually may want to buy, just by walking into a store. But like any new technology, consumers may not fully understand the implications of using mobile payments. For instance, what do I do if an unauthorized charge appears? How do I know that thieves can't

>> TOM KANE: You are not David Vladeck.

>> CAROL COYE BENSON: Okay. Thanks. So, good morning. I'm delighted to be ~~here~~ today and looking forward to a full day of all things mobile payments. Those of us in the payments industry have been pretty much thinking and breathing mobile for the last three to five years. And

card technology. But really not that much innovation. But when you look forward to the next 10 years, hang on. It's gonna be a bumpy ride. We're gonna see lots and lots of different kinds of payments offerings, and that's what I'll be describing to you. This is one way of looking at it. If this has been the payments world, this is what we're going to. So it's something that we have seen in many other consumer products this proliferation of choices. And so just keep that in mind as we go forward. I want to start by showing... I'm gonna show several videos. Most of them focus on the consumer payments experience. And here's one. This is from a company Isis, which is a consortium of the three largest mobile carriers in the U.S. market offering a mobile payment solution. It's being piloted this year.

gonna be cool functionality that people are gonna respond to. And one thing I think is very important is, the phone is an information device. So you're gonna have a device that, at the same time, allows the consumer to effect a payment in some way and is also a means to deliver to the consumer information about how to use that, who to call when something goes wrong, things like that. There's a lot to be said in favor of this world that we're sailing into. The downside is that, with complexity and with this proliferation of choices, there is gonna be confusion -- you know, confusion for everybody consumers, merchants, regulators, the whole ecosystem of payment. But we at Glenbrook see a lot of new payment companies. We hear about new payment ideas from established companies. And I've

card on file that, by the way, is something that's quite common today in the online domain. I would bet that most of you in the audience have a card on file at an airline or ~~amazon~~ at amazon.com or iTunes or any number of places where you regularly buy. You may have a card on file with a mobile payment provider in the same way. Or if may be your ~~bank~~ account information on file for an ACH transaction. It may be a solution that's designed to allow you to put multiple cards into the wallet of the solution, and you're gonna choose one. Or there are a few companies out there that are saying, "Let's not use the conventional payment methods. Let's not ride the rails," which is what, again, the payments industry calls it. "Let's instead do direct transfers between participants in one way or another." So, lots of variations there. What kind of security is gonna be used for the consumer to identify themselves to the phone? Is there gonna be a PIN or a password or a biometric? Or is there not gonna be anything, and instead the fraud management will be behind the scenes? Now, this next one, you have to bear with me, and I'm gonna ~~pay~~ get a little geeky for a minute. But this is a very, very important issue in the payments industry. Where is the payment data held? We all know that on a typical credit or debit card, payment data is held on the mag-stripe of that card. And if it's ~~exposed~~ stolen, there are risks. So there is one model that says, "Let's take that data and put it on a special chip on the phone, called a secure element." And that secure element is like a vault with a key, and it'll be superduper safe on that ~~secure~~ element. So, that's one vision. Another vision says, "You know, why do that? Why not just have the phone point to a server somewhere and have that payment data held in the cloud?" And then, just to make it worse, there's a third variation, which says, "Well, no, let's have that payment data be on the phone but not on the secure element. Let's just have it be on the phone in an encrypted file that perhaps the consumer themselves could ~~provision~~ provision onto the phone." So, that's a big debate in the industry. David talked about coupons -- so, the whole issue of mobile commerce. How does the payments application relate to, if at all, coupons and offers and things like that? It's a tremendous amount of the industry energy right now, is on the ~~coupon~~ offers direction. I would remind people that, right now, only 3% of Americans clip paper coupons. So you have to sort of say, "I don't know, how big is that world gonna be?" If you make it super easy for the consumer, maybe it's a lot. Maybe not. Are the devices ~~location~~ location aware? You know, is the payment service ~~location~~ location aware, is a piece of that. And then, finally, who gives you this mobile payment product? Is it your bank, your current ~~credit~~ credit company, your mobile carrier? Is it a merchant who is giving it to your directly, or is it someone else -- a third ~~party~~ party has a

>> FEMALE SPEAKER #2: You can do whatever you want. [Inaudible]

>> FEMALE SPEAKER #1: Thank you.

>> FEMALE SPEAKER #2: Yeah.

>> MALE SPEAKER #1: The best part about it is, it lets you put your credit cards on your phone and pay with your phone.

>> MALE SPEAKER #2: That's really cool. I love it.

>> MALE SPEAKER #1: Thank you. You just paid for it.

>> MALE SPEAKER #2: Oh, wow.

>> FEMALE SPEAKER #2: It's your last purchase -- \$38.06 at the container store.

>> FEMALE SPEAKER #1: Oh, my gosh! It's so cool! [Music stops]

>> CAROL COYE BENSON: That last one in particular, I hear a lot of people in the industry saying, "I don't get it. You know, the cards work perfectly fine. There's no problem here. Why do we need all this new way to pay?" I say, "You know, it doesn't necessarily have to solve a problem if it's just very, very attractive." So it's something to keep in mind. So, as I said, this is the sort of expected way forward in the developed world by the way. And when you look at these NFC

new business relationships, and new terminals, all of which can be complicated, expensive, and time-consuming to get into place. ~~Some~~ though this had been... Again, about three years ago, everybody was saying it was just a question of time before this way the way of mobile payments happening, now what we're seeing is that it is not the only game in town, that there are a lot of other mobile-payment offerings out there that present different combinations on that gameboard. So, again, David mentioned Starbucks. I used it this morning when I bought my cup of coffee. This is an example of a single-merchant application. It's a prepaid card that you've enabled onto your phone -- downloaded a Starbucks app. And it displays a QR code that the merchant's scanner same scanner that's scanning your package of madeleines or whatever you're buying -- can scan that QR code, and the prepaid card is decremented. And they have it set up with ~~auto~~ off from a credit-card or bank-account information. So, frankly, from my point of view, it works just like a debit card, but it's very convenient. So, the chairman of Starbucks said ~~that~~ they were the biggest single mobile-payments company in the world. Based on their volume, it's been extremely successful for them. Another player is LevelUp. And LevelUp, who's gonna be with us today, I understand, is also designed for multiple-merchants. But, like many of these multiple-merchants plays I'll be talking about, they're gonna have to sign up individually each merchant to participate. And here you see, they're using bar codes also, but the idea is, the merchant also has a phone or a iPad, and so there's a device scan. And this is keeping a credit or debit card in the cloud, which is charged once the authentication happens. So, let's see their video here. [Music plays]

>> FEMALE SPEAKER: With LevelUp, I can just pay with my phone.

>> MALE SPEAKER: And save money whenever I do.

>> FEMALE SPEAKER: Plus, it rewards me whenever I come back. I simply scan my phone. [Tone plays]

>> MALE SPEAKER: And a couple seconds later, I get my digital receipt, which ~~is~~ ~~me~~ how much I saved.

>> FEMALE SPEAKER: The more I come back, the closer I get to unlocking rewards. [Music stops]

>> CAROL COYE BENSON: So, you can see, a lot of these companies very heavily pushing the rewards element -- something that both consumers like and merchants like, from the loyalty aspect of it. Pay with Square we'll mention Square later on mobile acceptance. But here is a new product that Square has introduced, called Pay with Square. Also designed for multiple merchants. And here, there's an in-store alert to the merchant that a Pay with Square customer that they're dealt with has walked into the store. And a picture of the customer pops up on the merchant's iPad, so the merchant can say, "Hi, Carol, how are you?" Frankly, that would appeal to me. I love that part of it. And this... Well, sorry. Technology. [Light laughter] Aah. So, let's see their video here. [Music plays] [Horn honks]

>> MALE SPEAKER: Can you put in 9gys jo u()5(t*d53y he)-1(a)-1(v*d53suU [(M)-1(us M)-1(i)-2(n9g)

and he says it works like a dream for him -- I'm sure it makes Chipotle happy, as well. Another amusing case is Tabbedout. This is designed for the bartender to allow a consumer to open a tab at the bar and charge their drinks throughout the evening. And they have all sorts. This is an important point before I get to the funny point. The important point is, they're working on integration with the systems that bar owners use to run their bars. So they've done the back-integration. Then, they have all kinds of features, like the ability of the bartender to close out the tab and get payment even if the consumer has wandered off and not been quite able to complete that transaction, with a tip calculator and all sorts of things like that. We have with us today Dwolla -- also a multiple payment solution, designed for multiple merchants, but they're gonna have to sign each merchant up. And it's really modeled on an account-to-account transfer. This is one of the companies that is experimenting with an alternative to riding the existing credit and debit-card rails. So, take a look at their video. [Music plays] More happy consumers.

>> MALE SPEAKER: Remember when cash was king or paying by card was convenient? You know, the old days, when a misplaced wallet or checkbook meant you were financially stranded. Introducing Dwolla. Dwolla will find your location and pinpoint exactly where you make a purchase without your wallet. To make a transaction, simply select the retailer, enter your PIN, enter the amount, and send money. Vendors receive payment in a flash, and you're on your way. The same Dwolla app lets you send and receive money using Facebook and Twitter. Let's say you owe someone for dinner. Find them on your friends or contact list and transfer funds to their account, and your friend gets a message letting them know the money's been sent. It's fast, it's easy. It's a new app by Dwolla. No hidden fees, no gimmicks, just a quick and easy way to send secure payments. The new way to use cash from Dwolla. Simplifying your life, one transaction at a time.

>> CAROL COYE BENSON: Again, not the social network tie in there. Too many devices here. The thing that really reverberated through the payments industry about six months ago was when it became clear that PayPal, the major player in online commerce, with an online wallet, with well over 100 million consumer users, was entering the point-of-sale market with what PayPal calls-"in store checkout." So, it's gonna be for multiple merchants, but, again, they're gonna have to sign up, merchant at a time. The payment is made to the same online digital wallet that you use for PayPal,

for buying things at the point of sale, with multiple funding options. And what's particularly interesting about this is they're basically authentication neutral. Their lead customer, which is Home Depot, they're offering two ways of authenticating the consumer to the terminal. One is with a magstripe card that PayPal issues. This is not a Visa or MasterCard. It's just an authentication card. Or what they call empty hands, which is simply entering your phone number and a PIN into the merchant's terminal. I did that at Home Depot in California. Piece of cake. Very, very easy. So it's interesting. They're always talked about as a mobile payment application, but that actually isn't a mobile. But they've also indicated that, "Hey, when NFC technology is there in the market, of course we'll use NFC technology also." Not with that secure payment thing, because their digital wallet is in the cloud. But they're saying, "We don't care so much about the authentication." So a lot of established incumbents in the point-of-sale business looking very nervously at what's gonna happen with PayPal and how successful they'll be there. So, when we look particularly at the point of sale, this huge market, unlike the online, relatively small market. And we ask ourselves which of these kinds of payment solutions will succeed at the point of sale. These are some of the things that we think about at Glenbrook. What is the ease of consumer adoption? Consumers are getting very, very used to provisioning themselves on an instant to do whatever they want to do. So that's one factor. We also firmly believe that if you look at what has worked and not worked with consumer behavior, in payments, that convenience and financial rewards are the two biggest motivators of consumer payments behavior. What are the merchant participation requirements? How expensive is it? How difficult is it for the merchant to participate? What is the business case of the provider? How much money are they gonna make, either from the mobile payment solution or, in the Chipotle case, by increasing orders in the underlying business? How attractive are these integrated offers gonna be? How large a market will they find? How attractive will they be to merchants? To what extent will "offer fatigue" play a role for both consumers and merchants? And what about consumer confidence and security? Consumers generally have a very high level of confidence in payment systems in the United States, and that's one of the reasons why we don't see that as being a primary determinant of their behaviors, because there's a lot of trust. We enter in complicated, new models. Will that change? When we at Glenbrook look at this

do is choose the "Pay by Mobile" tab or button and choose the amount. Okay, I know I'm going to need £30 million, and I see "Premier Football" charges \$1 for that. Now all I have to do is enter my phone number. Entering my mobile, which I know from memory, is easier than entering my credit card number, security code, and address. BOKU is available for customers in over 50 countries and works for monthly subscribers, as well as prepaid customers. [Tone plays] BOKU has already sent me a text message, and all I have to do is reply "Y." BOKU's payment engines does the rest, including running safety checks to make sure I'm not going over my mobile provider's limit. [Tone plays] BOKU...

>> CAROL COYE BENSON: All right, I'll stop there in the interest of time. But there's a lot of providers on that, so that's another use case, if you will. Finally, I want to mention that there are many players out there who are offering person-to-person mobile payment solutions. Sometimes this is attached to another form of mobile payment. Sometimes it's a stand-alone. Hot Money is a product provided by a company called Fiserv, which is one of the largest providers to banks of the software and services that banks use to run their business, including online banking. And so this is a very simple payment model, but this is also a player in the mobile payments landscape. Um. Just a second. What did I do? Oh, no. Sorry. Drag it down. Not lunch. We're not at lunch yet, guys. Sorry. There. Now...

>> TOM KANE: [Inaudible]

>> CAROL COYE BENSON: [Inaudible] Did that do it? I think that did it. No? No, you can go ahead and fiddle with it, if you want.

know to call on you. That will keep you all from competing with each other and trying to grab the mike from each other. Okay, so, I'm gonna start by asking a very basic background question. Can everyone speak for just a couple of minutes about their role or interest in the mobile payment space? I'm gonna start with James.

>> JAMES ANDERSON: Okay. So, thank you very much. So, as mentioned, I run mobile product development for MasterCard. I've been doing that for about five years. MasterCard has been involved in mobile payments since 2001, and I have been part of the history that Carol

added additional features over time, like digital receipts that consumers can elect to receive, as well.

>> ROBIN LEIDENTHAL: I... Can you hear? Is it on? Okay. Thank you. I have the pleasure of working in Intuit's Payment Solutions division, which includes our mobile offering. Just by way of background, Intuit, you probably know by TurboTax or QuickBooks, Quicken. But we have a substantial payments business, as well, which includes QuickBooks Merchant and our GoPayment offering. We are focused on consumers and small businesses, and those who serve them, so accountants, healthcare providers, that sort of thing. And when we talk about small businesses, we're looking at, our target are small ~~business~~ with 50 or fewer employees, and

>> JOHN VALENTINE: Hi, everybody. My name is John Valentine, V.P. of the East Coast for LevelUp. We've been around for about a year, so I guess you could call us the new game in town. We are the pay phone app. We're the app on any phone that can access the Internet, so it's iPhone, Android, Windows Mobile, BlackBerry, even regular phones. We're the app that allows people to pay with their phone. All those different types of payment opportunities ~~we've~~ over 100,000 users have used LevelUp over the past year, particularly in one of our eight cities. So right now, we have launched on the ground. We're in Boston, Philadelphia, New York, Seattle, San Francisco, Chicago, Atlanta, and San Diego. And ~~we~~ got 1,600 merchants in our system right now. So we're growing incredibly quickly. We're doubling our user number and we're doubling our merchant number every six weeks. So things are getting very exciting in the mobile space.

>> MALINI MITHAL: Okay, thank you. And for panelists whose companies offer some kind of mobile-payment service or solution, can you discuss a little bit about what consumers can do with your service? So, let's start with John.

>> JOHN VALENTINE: Sure, sure. So, ~~we're~~ a QRcodebased mobile payment method, so all you have to do is open up the app and scan your phone against a merchant phone. It's a very simple process. We wanted to keep it "Sesame Street" simple, because the reality is, anyone can just give over cash or give over credit. But when they're paying with their phone, the first time they do it, people are clueless. "How do I do it? Do I scan it? Do I move it here, move it there?" So we want to keep it "Sesame Street" simple for people to actually ~~see~~ when they scan it, the dock will glow green, the total amount will be entered, the transaction happens, you ~~get~~ a receipt. And we built in a digital loyalty program that's very exciting for all consumers, so for every purchase you make, you ~~are~~ progress towards earning rewards.

>> ANDY HASTY: Okay, so, opportunities?

>> JAMES ANDERSON: You want the rest of it?

>> MALINI MITHAL: Yes. [Laughter]

>> JAMES ANDERSON: We were gonna work our way back.

>> MALINI MITHAL: We are. So let's go with... Okay, so it would be Robin.

>> ROBIN LEIDENTHAL: Okay. Thank you. So, I think Carol thank you for showing the

Internet. And, indeed, of course, even in programs like PayPal, at some level, of course, is competition, often, in fact, there are tens of millions, maybe hundreds of millions, of cards which have our brand embedded inside that scheme. So we participate in multiple levels. We also have a recent program looking at the other side of our network, which is how do we use mobile on the merchant side, which is, as everybody said, a very exciting space and growing very quickly. So we want to make sure that, as the potential of that gets realized, we ensure that it's safe and secure for consumers and merchants, and also, we leverage all the technologies that are available. And particularly, as we look at EMV technology coming to the U.S. to replace stripe-technology for the storage of payment credentials, we want to make sure that that's fully embraced, as well, on the merchant side, as we have mobile point of sale.

>> MALINI MITHAL: And my last background question is actually for Adam or Lauren. What prompted you to start looking at this particular space in the mobilepayments industry?

>> LAUREN SAUNDERS: Well, payments have been an area that we've worked on for a long time, and protections for consumers in the payment area is part of our bread and butter -- your rights under credit cards and debit cards. And I've been looking a lot at prepaid cards, and, obviously, this is the next phase. And we are always on the lookout for new areas that don't necessarily fit into the old pigeonholes of consumer protection, so we know we need to know more about it. A

>> ANDY HASTY: Okay, so, mobile payments is coming. It may be here already. Opportunities and challenges. Let's start with the opportunities. What are the benefits? How do mobile payments help consumers? How do mobile payments help businesses?

>> JOHN VALENTINE: I love this process. I love this process. [Laughter] So, mobile payments help consumers because it's faster, it's simpler, and you have a digital record of everything that happens. You're getting digital receipts, you're earning progress towards rewards, whether it be offers or more of a digital punch card system. Consumers like it because it's fun. Right now, there's sort of a negative or neutral reaction to handing over money to pay for

their accounts? Probably not. But if it's more easy and convenient to know what's going on inside your account, if you do it on a mobile phone. People who don't have Internet access, or aren't that comfortable using a traditional computer, but we see high levels of saturation of smartphones, even in the lower income population. And people use those smartphones for things, and they're gonna be more comfortable engaging in the electronic world and more able to if they have that access that they may not have right now.

>> ANDY HASTY: Robin?

>> ROBIN LEIDENTHAL: I would just say, on the acceptance side, that mobile payments enables tens of millions of new card acceptors. So, these small businesses, these microbusinesses, who previously may not have qualified for a traditional merchant account. So, these are the applications that are traditional in merchant acquiring, and also the cost of terminals and the complexity of managing a merchant account and all of that. So I think it opens up card acceptance or digital payments to a very large population of small businesses. And so I think it creates convenience for both the consumer and the merchant.

>> ANDY HASTY: Thank you. And James?

>> JAMES ANDERSON: Yeah, so, I think, on the consumer side, what we see beginning to happen, and happening through mobile first, though I still feel like we're sort of like the middle of the first inning -- is this kind of merging of the shopping and payment experiences into something

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>> JAMES ANDERSON: Okay, I take that. [Laughter] So, we've been working on it for 10 years, so our objective function is to make stuff secure and convenient. And it can't be ~~an~~ either. So when we write our rules and when we look at the product features that we put into it, those two objectives have to be traded off. We've written a bunch of specifications for how we think mobile payments is gonna work, particularly at proximity. And there's occasions when convenience has to win. So if you're talking about buying a cup of coffee, I agree, standing behind somebody punching PINs into phones is not probably gonna be delightful if somebody is buying a \$2 cup of coffee. But our objective function has been to enable you to use your phone to buy anything. And so if you want to buy a big green TV, it's probably not gonna be acceptable to the financial institution that's underwriting the transaction that you just pick up your phone and wave it. They

why we looked at this kind of more as an opportunity to bring in a lot of the shopping ~~people~~ that James already touched on. And I think that's really important. And something that is fundamental about this shift in paradigm from static, ~~centralized, fixed~~ infrastructure approach to payments to a much more dynamic, fluid, potentially decoupled ~~approach~~ approach to payments is the fact that you bring this whole flywheel of innovation. So everything that John's company has today or that Google has today or even probably that MasterCard has today will be different within 12 months, and it'll be different ~~again~~ 12 months after that. And I think that's one of actually the most powerful engines behind all of this, is that we do have this opportunity to bring innovation on a continual cycle. You don't need to wait to assign new pieces of plastic to people ~~introduce~~ introduce new features.

>> ANDY HASTY: Thanks, Kyle. And I think you and Adam have both raised the, "Are consumers saving money here?" with ~~energy~~ changes in the interchange fees and elastic pricing. But before we get to that question, Robin, do you have something to add?

>> ROBIN LEIDENTHAL: I just wanted to comment on the convenience question. So, I think it

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groupon or LivingSocial. There are others that have sort of a digital punch card mission, where, for every certain amount of dollars that are spent, the customer, after multiple, repeat visits, which is exactly what the merchants want, they get a few dollars in credit to use the next time they come. And customers using a bunch of different platforms have saved anywhere between 5% and 55% overall. And what happens is, the merchants are also happy because they're capturing more loyal customers, and loyal customers make up about 80% or so of a local merchant's revenue. So if they can find a way to not only capture a new customer, but also keep them coming back through mobile payments, they're gonna do it 9 times out of 10.

>> MALINI MITHAL: Okay, great. And, actually, because interchange fees have come up and we're talking about whether consumers or businesses save money on a transaction, I would love to turn to John again for a second. If you could just talk a little bit about interchange fees and the Durbin amendment. If you could just describe that for the audience and how that affects your business.

>> JOHN VALENTINE: Sure. So, interchange fees have been on the rise for the past decade. And it has hurt local merchants probably much bigger than the larger merchants, because the higher the interchange fees are, the less money that they get from all the revenue that comes from credit and debit cards.

>> MALINI MITHAL: And, John, I'm sorry. I'm gonna interrupt for just a second. Can you describe what interchange fees are?

>> JOHN VALENTINE: Oh, sure. Interchange fees are the cost of moving money, and it's based on risk, it's based on costs. And so every merchant pays a certain transaction fee for every credit card payment made. And that transaction fee goes to the merchant processor, as well as Visa, MasterCard, Discover, AmEx, all the major processors. There is a cost of doing business, if you will, when someone swipes a credit card. That's a reason why a lot of merchants will have minimum \$10 for a credit card swipe, because oftentimes they're charged a swipe fee. So if I want to buy a pack of Dentyne Ice and just a pack, and just a pack of Dentyne Ice, and I use an AmEx, well, the local merchant will probably be charged 15 cents, plus 3.5%, which, on a \$1 pack

of gum, is well over 20%, right? So that hurts the local business. The Durbin Amendment of the Dodd-Frank Act -- the new consumer protection act that just came out -- is probably one of the best things to happen to local merchants in a really long time. What it did was, it capped the interchange fee for debit cards, as well as lowered the add valorem transaction fee on the total value of the purchase. The reason why that happened was because, for debit cards, there is a lot less risk involved with making those transactions, because the money comes right from the debit account, so the money is actually in the account being moved, as opposed to a credit card, where it's AmEx's money, Visa's money, MasterCard and Discover's money. So what that has done, has lowered the interchange rate for debit cards, and it's very much in the aspirational goal of what LevelUp is trying to achieve. We're trying to achieve something, in theory, called "interchange zero," and we want interchange fees to approach and converge towards zero. And so what we see, mobile payments itself is not technically going to change interchange fees themselves. What it's going to do is, instead of me handing a credit card to a merchant and them swiping and the transaction is between them and MasterCard, now, when I use mobile payments, now instead of going directly to the big five or the big four, now there's so many more different funding options available -- LevelUp, Square, Dwolla -- there's a lot of different types of companies that are toying with a lot of new ways to move money at a rate that's much cheaper. So the Durbin Amendment is certainly one step towards that process of putting more money back in the hands of merchants as they make more sales and certainly allowing the costs to come down.

>> MALINI MITHAL: James?

>> JAMES ANDERSON: Okay. So, I just want to clarify a few terms and just make sure everybody understands. So, when a merchant decides to open up a merchant account and accept credit and debit cards, they sign up with somebody who's either a processor or an acquirer. They have a business relationship with them, and those people are enabled to accept our brands. Interchange is actually a piece of compensation that flows from a merchant, through the acquirer, to the issuer of the card. So it actually doesn't go to Visa, MasterCard, or American Express, in the case of American Express, where they are the issuer themselves. There is a fee associated for the value that we provide, as a payment network, in the authorization, clearing, and settlement functions. That is a fee that we charge to the acquirer, and the acquirer has the option to pass it on

to the merchants. So it's a mature business. It's been around for a while, and so there's a pretty sophisticated economic structure around that. I just want to make sure everybody has a sense. Now, I think what's pretty exciting, though, about what's happened and companies like Intuit have done, is that they've essentially restructured the economics, and what they've communicated out to the merchant is very different than, historically, what has been communicated to the merchant about accepting credit and debit cards, which just the description I gave you was pretty

that's MasterCard and Visa's debit network if you're going to use those more expensive rails, how much more value is being given to merchants and consumers? And it's hard to imagine -- No, it's not hard to imagine. The challenge is going to be for entities like MasterCard and Visa that want to see their rails getting used. If they have more expensive rails, for them to provide great value that offsets that additional cost. And it's not clear to me that's going to happen. But that's going to be the challenge here. And I think the lurking issue in mobile -- the huge issue -- is going to be antitrust that every one of the industries that comes together in mobile already has severe antitrust problems. Payments has it with interchange. We've had this with operating systems going back to the browsers with Microsoft. We have this with telecoms. And when you put all these industries together, I'm not sure exactly where this is going to flare up, but it's pretty much guaranteed to be a problem for mobile. And part of this is because mobile -- are network effects here that, just like in payments or telecoms, if I have a telephone and I'm the only one, it's not very valuable. If lots of other people have telephones, my telephone is valuable. Same thing with a credit card, that if merchants don't take the card, it's not valuable for me to have the card, and vice versa. We're seeing right now different systems trying to establish themselves so that they can leverage those network effects. --

of the real questions- is this

these, you know, idiosyncratic habits of given individuals, about how they do or don't spend money on iPads.

>> ANDY HASTY: I think that's a really good point. Mobile is, at its heart, a communications device that has memory and the ability to document these transactions. How is that being leveraged by mobile payments companies to ensure the accuracy of transactions or alert consumers to their purchase histories? John?

>> JOHN VALENTINE: I'll take a first stab. So it's important for the consumer to feel like this kind of goes into security a little bit to feel like mobile payments is not just secure but also accurate. And so a digital receipt is very powerful and very important in that, when I receive a receipt from a BestBuy or Starbucks transaction, I'm probably going to crumple it up and throw it away. But when I see it immediately as a push notification or email coming right to my phone within seconds after the transaction, yeah, I'm going to look at it and I'm going to make sure that it's accurate. What happens if someone steals my phone and knows my PIN to get into -- get into LevelUp? I want a way of knowing almost immediately if someone has stolen my phone. You know, if you're looking at AmEx -- if I lose my AmEx, and I may find out the next day when I get a call from AmEx saying, "Hey, someone in -- Someone's gone online and done a huge shopping spree," you know, is that -- you want to know in real time what's going on with your account. And so if you get an email receipt after every single transaction, then you know exactly how your account is being used. So it's pretty exciting to have all that data for the consumer at their fingertips. And then, on the flip side, for the merchant, now all of a sudden, the merchant has all the data and analytics for their brick-and-mortar stores that have been, in the past, only reserved to major creditcard companies, as well as, you know, online shopping sites. So now a local coffee shop can find out what their average ticket is, what zip code, where are their customers from? What's their average ticket, how often do they come back? They can find all these really interesting nuggets of data that can help their business now because of all the information that is being gathered through mobile payments.

>> ANDY HASTY: And that raises another really good point, too, where there are a lot of new mouths at the table. And this data -- what about privacy?

>> JOHN VALENTINE: Privacy is very important. Because -- [Laughter] Imagine if you were to give a payer's information right? -- to every single business where they transacted -- imagine if I used a mobile payment platform and I use my phone today five different places. I do not want five e-mails from those five merchants with offers and information-and just don't. It's got to be an opt-in situation. So all the information needs to be anonymized and security comes into play. We need consumers feeling comfortable that they can use their phone to spend in a very secure way. So those are both very important pieces.

>> ANDY HASTY: Thanks, John. Lauren?

>> LAUREN SAUNDERS: You know, privacy is obviously a big concern. It's not an area that our organization has typically worked on, but one aspect of it especially concerns us. All this information can be used to push things on consumers that aren't necessarily in their best interests. So, for example, there are prepaid cards that you can sign up for today, and suddenly you're besieged with offers for payday loans and fast cash and, you know, predatory lending. Right now, if you go onto the Internet and you search for a payday loan, you actually may get a generator website that is just going to take your private information and sell it to the highest bidder and, as the FTC well knows, perhaps pass that on to some scam operation that's going to start collecting debts that you don't even owe. All of these great offers and rewards are things that are very seductive to people, but they don't know how that information is going to be used. They don't know who that person is. Even if what they're doing is illegal, there may be laws that protect them. but they're a fly-by-night operation, they're not complying, people don't know who they are, you can't go after them, there's all sorts of information, and people tend not to think about these things. The immediacy of a discount, of a reward, can be very seductive, and people can forget about what is going to happen and have no idea what is going to happen with that information.

>> ANDY HASTY: Thanks, Lauren. Robin?

>> ROBIN LEIDENTHAL: I would just say, for Intuit, privacy and security is at the heart of what we do. We are, you know -- we're processing tax returns and payroll deposits and handling, you

know, the most intimate financial details for our consumers and small businesses. So it's something that we take very seriously. And, you know, it's - it's a core value for us.

>> ANDY HASTY: And, James?

>> LAUREN SAUNDERS: Well, that's one of the things that worries me. On the one hand, that access to information you know, the bigger screen than a little, tiny old-fashioned phone, has lots of benefits. But, you know, if you're accepting an account agreement based on what you can read on some little screen, even, you know -- not with the information that you can get on a larger computer without an attached printer, you know, you get a credit card that comes in the mail with, you know, a bunch of information. You know, you may read it, you may not, but it's there. You can refer back to it. You can stick it in your file. Same thing if you sign up for something, you know, on your desktop. On a screen, you know, what information are you going to get? Are you going to know? Are fees going to be hidden? As much as I like paying by cellphone when I park here, I was shocked the first time I did it, that it didn't even give me an app that said, "Okay, you're authorizing \$5." You know, I don't even know -- because I haven't taken the time to go back and look at my credit card statement, you know, were any fees added? There's all sorts of things that could happen that you may have a better idea of knowing if you do it on a desktop, but on a little screen, something you can't save and access later, it's quite scary.

>> ANDY HASTY: Kyle?

>> KYLE ENRND y. --l2-TJ og(t)-2(hi) W1(uaP <<(r)-2(t)-2(hi)-2(t)]TJ g \$5.c-1(pn t)-2(n

confirming that you want to do it, and then, after the fact the receipt for wanting to do that. And then, for us, one of the things that we've done with Google Wallet that's very unique for Google i

>> ANDY HASTY: Thanks, James. Kyle, who -- who are these additional parties, and what issues does that raise?

>> KYLE ENRIGHT: So I think James did a pretty good job describing some of the additional parties or many of the additional parties. I guess, just because it's sort of come up previously when we were talking about additional mouths at the table, the one thing I'd say is, the difference between holding this conference in a place like Washington, D.C., and a place like Silicon Valley is the perspective of, are we bringing more mouths to the table, which raises costs, or are we bringing more innovators to the table, which provides consumers with value, choice, features, similarly for merchants. And I think that's just mean, Carol's from Silicon Valley. People can talk to her

much more efficient, much more transparent for consumers, and a lot more innovation and choice.

>> MALINI MITHAL: And, actually, let's focus also on the second half of the question. So, are there more mouths to feed? And as Kyle pointed out, that could be causing a lot of innovation. If it is causing costs, what types of costs are associated with the fact that there are so many parties -- additional parties that may be involved in the mobile payment system? Adam?

>> ADAM LEVITIN: Well, you know, I think, listening to Kyle's comments, you know, I don't disagree with him that I think there's a question of emphasis that Kyle sort of mentioned, all these

opposed to credit cards. You have, you know, LevelUp and Google, where more transactions are going through the credit card systems, with Citi MasterCard and the credit cards that we accept. So all you have to do is follow where the money is flowing to determine how the cost structure is going to change and who is playing at the table. Now, we've got a host of, you know, probably 10 solid mobilepayment platform options right now, and there's certainly going to be consolidation in the future to what is actually working for the consumer. But that's exactly where you have to look at to determine, are there more mouths at the table, are there less? It's all about the flow of money.

>> JAMES ANDERSON: So, I just have to correct one thing. So, Isis can speak for itself, but Isis is not planning to bill to the telephone bill. They're actually going to use Visa, MasterCard, American Express, and Discover accounts within the Isis Wallet.

>> JOHN VALENTINE: Yeah, yeah, yeah.

>> MALINI MITHAL: So, I am receiving a lot of questions from the audience, or we are, about privacy and security, which are also two topics we're going to be covering more in depth later this afternoon, so I'm going to save your questions for those panels. And we're going to move on to our next topic, which is the popularity of mobile payments, any barriers to adoption. Actually, I wanted to talk about a recent Fed study that was released just -- Federal Reserve study -- that was released just last month. And it found that 87.3% of those surveyed had not made a mobile payment in the last 12 months. Actually, one of the authors of the study is here today, Max Schmeiser, and he's brought copies of the study with him, so if you're interested in more about the study, it's outside on our table when you walk in. But I wanted to then pose this question to the group -- how popular are mobile payments in the U.S. right now? How widespread are they? Robin?

>> ROBIN LEIDENTHAL: I would -- So, from our perspective with GoPayments, we've had huge uptake in that mobile product. So it's -- it's extraordinarily popular with our business base. And it just continues to grow at a phenomenal rate.

>> MALINI MITHAL: Okay. Great. Kyle?

>> KYLE ENRIGHT: Yeah, and I think just in terms of terminology, we should be as clear as possible what we mean when we say mobile payments. So there are, you know, lots of transactions being conducted from a mobile phone, which is not necessarily an ecommerce purchase transaction, just like you would from your laptop or desktop or whatever device. So, PayPal, I think, has publicly stated some numbers in their earnings releases that they're doing something on the order of \$4 billion, annually, and they expect that roughly to double again this year. Obviously, lots of other players beyond PayPal. Lots of people buy stuff from Amazon or songs, what have you, from iTunes, lots of stuff through the Google Play Marketplace, et cetera. So that is, oftentimes, lumped into this definition of mobile payments, because those are purchases from a mobile device, as opposed to, and distinct from, a lot of the stuff, for example, the problem that Google Wallet tries to address, which is paying for things in the physical world in lieu of cash or standard plastic card transactions. Those are, you know -- If you look globally -- Japan, lots of adoption, lots of usage. And, you know, pretty much outside of Japan, not a whole heck of a lot. Thpayme oba J B y TA, y1(2r, nky T gl)-[3(erA, y yppos)1(2r, yCn-1(ym)bl)-2(oty1(2r, nky T-1.72c

the room, raise your hand if you've used either Dwolla or Google Wallet or PayPal at Home Depot or LevelUp before. All right. So, I think it's an interesting audience, but it's about 25% to 30%. So, as you can probably see, we're very much in the nascent stages of mobile payment acceptance.

>> JAMES ANDERSON: So, our experience, and we've done a lot of market research and we've done inhome research where we've talked to people and tried to understand kind of the psychology of this trend in what we've been trying to promote. Our experience and learning is pretty straightforward, which is that the adoption of mobile payments is actually heavily tied to people's engagement with their mobile phones and much less to their engagement around payments, because, frankly, most people aren't very engaged around payments. It's not, like, a super thing, other than for people who make their living doing it, like me. And so it really correlates heavily with engagement with mobile, and I think that's really the driver of the age skew that John was mentioning, which is that, you know, people who are into their phones have, you know, 4,800 apps running, though

>> ANDY HASTY: Thanks, James. We're running out of time, so I want to move to the next topic

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everyone on the same page to agree on, "Here is the procedures, here's how we're going to move in coordination, here's how we're going to figure out if there is a problem that needs to be addressed and then what the solution should be."

>> ANDY HASTY: Thanks, Adam. And, John, I think you mentioned that merchants need education here as much as consumers do. Can you sort of elaborate on that a little bit?

>> JOHN VALENTINE: Exactly. If the merchant can't speak to the security features of a new platform or doesn't understand it fully themselves, how are they going to be able to accept payments on that? It's incredibly difficult and time-consuming for merchant education, just as much it is for consumer education. All of these mobile payment companies that are sitting right next to me have spent years and so many dollars making sure that the systems are as secure as humanly possible, and we need to push that information out, not just to the consumer to make them

chip-based technology, and that's what's embedded -- embodied and embedded in PayPal. So, from our point of view, it's always been a global project.

>> MALINI MITHAL: Okay. Thanks, James. A question for LevelUp. If LevelUp strives for Interchange Zero, what payment processing systems do they see as being able to provide this?

>> JOHN VALENTINE: Sure. "Us," hopefully. Hopefully. Now, Interchange Zero, we -- what we're trying to do is we're trying to create more efficient processing, whether that be through bundling or through-