

>> PATTI POSS: Okay? All right, we're going to go ahead and get started. Please take your seats. We're going go ahead and get started. And before we actually begin the second panel, we have an addition to the agenda. We have a special presentation from two of our FTC staff folks here.

>> MANAS MOHAPATRA: Good morning. My name is Manas Mohapatra.

>> ANDREW SCHLOSSBERG: And I'm Andrew Schlossberg.

>> MANAS MOHAPATRA: And we are with the FTC's Mobile Technology Unit. As we heard this morning, right now is a very exciting and interesting time in the mobile-payment space. One of the things that's come up is the importance of consumers being informed as we enter this exciting new space. And so, what we've been doing in our group recently has been to take a look at some of the disclosures that are being made to consumers by some companies that are currently offering mobile-payment solutions in the United States today. And so what we're going to do today is we're going to provide some brief observations about what we saw. The purpose of our presentation isn't to draw any sweeping conclusions or come up with any recommendations. Rather, it's just meant to be a conversation starter for our later panels throughout the day on dispute resolution, security, and privacy. We did not set out to conduct an exhaustive review of all mobile-payment providers. What we were interested in doing is looking at those companies that currently allow consumers to make a payment using their mobile device or companies that allow consumers to transfer money to other consumers with their mobile device. We did not take a look at companies that allow merchants to process, for example, credit-card payments. What we were interested in, in particular, were disclosures related to dispute-resolution policies. That is, what could consumers expect if and when something went wrong. And we were also interested in company's privacy policies. So, what information are companies collecting about consumers, and who, if any, third-parties can get access to that information. Andrew has largely been reviewing these disclosures, and he's going to give us more background about who we were looking at.

>> ANDREW SCHLOSSBERG: Sure. So, we looked at 19 mobile-payment providers currently offering products and services in the United States. This is by no means an exhaustive list, and policies may have changed since our research. Now, as we've seen this morning, there are various

ways in which consumers can interact with their mobile-payments products. Of the companies that we looked at, we found that -- as you can see here. Over half allow consumers to purchase physical goods, in person, like at a grocery store or an ice-cream or coffee shop. Some allowed consumers to purchase physical goods over the Internet, like purchasing shoes from a website. Some allowed users to purchase virtual goods, like songs or games. Some allow consumers to transfer funds through peer-to-peer, like paying back a friend for dinner. And over 1/3 allow consumers to do more than one of these activities. So, we looked at various types of uses, and a large majority of the companies we looked at had mobile apps -- actually 17 of 19. And the apps are available on a variety of platforms -- Google Play, Apple, BlackBerry, and Windows. As I said, most have apps, but there are other alternatives, too, like SMS messages, transferring money to a friend through a mobile phone number, as well as through a mobile website. Now, as we know, it's still very early in this space, so other companies we looked at, there was a great deal of variety, in terms of popularity. Our ability to gauge popularity isn't perfect, but two approximations we looked at were downloads in Google Play -- ranged from as low as 500 to more than a million, and a number of ratings in Apple's app store as low as 7 to as high as 60,000.

>> MANAS MOHAPATRA: In June of last year, Consumers Union published a report that highlighted the point that the substantive legal protections available to a consumer may vary dependant on the funding source that the consumer's chosen to link to a mobile-payment service. So when we were looking at the 19 mobile-payment companies, we were interested in determining what funding sources were available to a consumer for linking. The vast majority of the companies we looked at -- 15 in total -- allowed consumers to link to either a credit or debit card. Seven allowed consumers to link into a bank account, and then a handful allowed consumers to bill to a mobile carrier. Seven of these companies allowed consumers to choose. So you could choose any of these -- one or more of these sources. Another point we were interested in observing is, who exactly would get charged when a consumer made a mobile payment? Nearly all of the companies we looked at allowed a consumer to have the mobile payment charged to an external funding source. So, for example, if I went to a store down the street and used my phone to buy a cup of coffee and a magazine, I could have the charge for that purchase actually be billed to my credit card or billed to my phone carrier. Seven of the mobile-payment providers we looked at, however, also gave consumers the ability to store some value with that. So, I, for example, could store a certain

amount of money with that mobile-payment company itself -- \$50, \$500... In that circumstance, if I went to the store and bought that coffee and that magazine, I wouldn't be billed for that purchase directly to the credit card. It would actually be taken out of my balance. Moving on to disclosures, one of the things that we were interested in examining was what companies were saying to consumers through their terms of service, or terms of use, about their dispute-resolution policy. In particular, we were interested in what companies said a consumer's total liability for unauthorized or fraudulent purchases through its services would be. So, if I lost my mobile phone and somebody ran up a couple hundred dollars of charges based on the mobile-payment solutions I had on the phone, how much would I be liable for? Would it be all of it, none of it? Would it depend? Of the companies we looked at, four companies said that a consumer would only be liable for \$50, total. About half of the companies -- 10 in total -- didn't say what a consumer's total liability would be. Now, as will likely be discussed in our next panel, that doesn't mean that a consumer doesn't have any protections. If the company hasn't made any promises to the consumer about their total amount of liability, some baseline limits established under the law may kick in. As noted in this slide, of the 10 companies that didn't mention anything about total liability, eight of them allowed consumers to link to a credit or debit card, which have certain protections related to that metric under the law. Of the companies we looked at, seven allowed multiple funding mechanisms. Now, of those seven, four said -- four provided some uniform protection. So, that is, regardless of the funding source you chose, you are going to get a uniform limit to your liability. So, two of those companies, it's \$50. For two of them, it's \$50 if you report the fraudulent charge within two days. However, three out of seven companies didn't mention what a consumer's total liability would be. And in those cases, the funding source that the consumer had actually chosen may dictate how much they'd be on the hook for. So, for example, a consumer who had linked their mobile-payment service to a credit card may have a different total liability than if they had linked it to billing to their carrier. So, we looked -- we took a look at the policies regarding total liability, based on a variety of different attributes of the companies, and the results are up here. One of the points of interest is that for the seven companies that allowed consumers to store a value with them, three said a consumer's total liability would be \$50. However, three of those companies didn't say anything about the consumer's total liability. It may be of interest for the next panel to discuss what substantive legal protections would apply, regarding total liability, for consumers who use these type of companies.

>> ANDREW SCHLOSSBERG: So, usually, a consumer must notify a company within a certain time period when he or she wants to dispute a charge. So, we also wanted to look at what exactly those time periods were for these companies. So, as you can see from this pie chart, seven of 19 companies allow 60 days to dispute a charge. So if consumers are periodically checking their statement, they have 60 days to catch anything and report it. Now, 6 of 19 companies did not say how much time consumers have. Again, like the total-liability, slides before, the amount of time the consumer actually has to notify a company but depend on the law. The next panel, on dispute resolutions, will discuss this aspect further. Of the companies that did discuss this in their policies, the time periods range from as low as 30 days to as long as up to one year. Now here we have a summary slide of the notifications broke down -- broken down by funding source -- credit card, debit card, billed a carrier, bank account, stored value, or multiple funding mechanisms. Of note here, as you can see in the first row, two of seven -- that's the stored value -- did not say about notifications but four of seven said 60 to 90 days. Also, in the second row, multiple funding mechanisms, only one of seven didn't say anything about notifications. The rest said between 30 days and one year. So, switching gears a bit, we also looked at the privacy policies of the 19 mobile-payment companies that we surveyed. Part of the reason we decided to look at privacy policies was because of our February kids app report, as well as setting up the drilling-down privacy panel later on today. In a general sense, we wanted to know what consumers are being told in privacy policies about the collection of personal information as well as what they were sharing. As you can see from this easily digestible pie chart, all 19 companies had a privacy policy on the mobile Website or app. In these privacy policies we noticed a few interesting items. 6 of 19 collected some sort of location information. 7 to 19 collected some sort of social-security number. And 7 of 19 also collected information from consumer reporting agencies. 6 of 19 collect information. That means 13 did not. Same thing for SSN and CRAs. So the reasons for collecting this information vary on the product. Location might be important to offer deals for nearby restaurants or to show vendors nearby who have -- excuse me -- accept a particular payment method. Social security might be important for detecting fraud or mitigating fraud or verification services -- you were who you said you were. Same thing with CRAs -- security, fraud detection, verification services. The security and privacy panels will certainly talk about these issues in this slide later today. And one of the things that may be discussed in these later panels is what privacy

issues arise out of the question of this type of information and whether or not this information is necessary for providing good security.

>> MANAS MOHAPATRA: In addition to examining what companies were collecting about consumers, we were also interested in understanding what privacy policies said about when, if ever, that information would be shared with third parties. What we found is that 8 of 19 companies stated they would send aggregate, nonpersonally identifiable information to third-party advertisers. A number of the privacy policies stated that consumers personally identifiable information may be shared but under a variety of different circumstances -- for example, to improve the user experience or to ensure a high-performance experience. It's not totally clear to me if this language means that a consumer's information could be shared directly with an advertiser or a data broker or someone else, but that may be something that would be worth discussing later on this afternoon. And I think that brings us to the close of our presentation. And just to repeat, our purpose here was not to draw any conclusions or come up with recommendations but, rather, to take a snapshot of some disclosures that are currently being made to consumers today in the hopes of sparking further conversation through our panels.

>> ANDREW SCHLOSSBERG: So, if you have further questions about anything that came up during this presentation, please contact us at ftcmobile@ftc.gov. It will be monitored all day throughout the workshop. And moderators may use some of your submitted questions later on. We may also respond after the workshop. Also, Manas and I will be around during the workshop all day if you have any further questions. Our next panel, on the legal landscape and dispute resolution, will start now. Thank you very much. [Applause]

>> PATTI POSS: Great. Thank you, Manas and Andrew. That was an excellent setup for this panel and has made my job quite easy. My name is Patty Poss. I am the head of our Mobile Technology Unit within the Division of Financial Practices here at -- in the Bureau of Consumer Protection at the FTC. I'm an attorney there, and I'm going to co-moderate this panel with Tom Kane, who is a senior attorney also from our Division of Financial Practices. So, this panel will examine what happens if something goes wrong with your mobile payment. What are the legal protections that are in place? Can I get my money back, and how do I go about doing that? What

law applies, as we've heard already in several mentions this morning -- what law applies often depends on the funding source that the consumer uses to put that transaction into place. So, did they connect a credit card, a debit card, is it going to be an auto-debit from their bank account, are they using a prepaid product, or a stored-value account, or a gift card? Are they tying the payment? Is it going to be a charge on their wireless carrier bill? Is it a prepaid bill or a post-paid bill? This panel is going to try and navigate us through all of those questions. As we saw on the research sides, there are often, many of the mobile-payments providers give consumers a choice of which payment to use. And they also offer different protections for consumers, sometimes on their own, as part of the -- offering that as part of their service, and we want to look at those issues, too. So, this is a tall order, but we have a great panel here today that is really quite a group of experts and have been looking at mobile payments for quite a while. We have to my left, Tom Brown, who's a partner with Paul Hastings. He's also an adjunct professor of law at the University of Berkeley Law School. We have Marianne Crowe, who's a vice president of payment strategies at the Federal Reserve Bank in Boston. We have Jörgen Gren -- oops! Sorry. We have Michelle Jun. She's a senior attorney from Consumers Union. And we have Martine Niejadlik, who is a compliance officer and vice president of customer and merchant support at BOKU. And on the end, not by least at all, is Jörgen Gren, who's the Deputy Head of Unit, Policy and Coordination, the Directorate General for the Information Society and Media and at the European Commission. So, to start off this panel, we're first going to have each of our panelists introduce themselves just briefly and give us a description of their work in this area. Okay, Tom.

>> TOM KANE: Thanks, Patty. So, my name's Tom Brown, as at least some of you know. It's good to see some of my old friends from the payment industry in the audience. Once payments gets ahold of you, it never quite lets go. I'm happy to tell all of you, I'm not here to talk about interchange. That was a job I once had, but I have I shuffled that off to others. Key is in the audience. You can take him up after this presentation is done. My background in the industry is, at this point, more than a decade long. I started at a litigator, which is why I have some props with me, which we'll come to later. But, at this point, I serve both as litigation council and as regulatory and strategic council for a number of great companies in this space. Some of those representations are public, some of them are private, and I am not here to speak on behalf of any of them here

today. I am mostly wearing my academic hat for the law school formerly known as Boalt. But don't say to Dean Edley that I said that here.

>> MARIANNE CROW: Thank you. I'm Marianne Crowe, and I work at the Federal Reserve Bank of Boston. And my background is in payment, so I'm not a lawyer, and I don't work with the regulators or the bank examiners. I work on the financial services payment side of the Fed and have been involved in the retail-payments world for many years, starting with the check, which now that we no longer have that, we had to move to another form of payment to take a look at. But our group focuses on looking at trends in electronic payments and how we moved from traditional to electronic to the Internet payments and, in the past few years, have gotten more involved in trying to understand what's going on and what's going to happen with mobile payments, particularly since our focus is on understanding and ensuring the safety and security of our retail-payment system as new channels and new payments come up. The Fed wants to know what's going on and wants to make sure that we understand the risks and potential regulatory gaps, as well as just where the group is going. So I also participate in an industry mobile work group that we've been working with for the past two or three years. And that's also helped provide, from the perspective of the industry mobile players, running from the banks to the card associations to the carriers to the regulators that we try to represent, in terms of understanding where the trends are going and what some of the issues are that we have to look at.

>> MICHELLE JUN: Good morning. I'm Michelle Jun. I'm a senior attorney at Consumers Union. I've focused on money and finance issues for quite some time, and, of late, I've been focusing on emerging payments. Am I not on? Okay. Can you hear me now? Not to give any...

>> PATTI POSS: Even a little closer.

>> MICHELLE JUN: Even closer. Okay. And so, I focus on emerging payments. I've looked mostly at prepaid cards and other forms of plastic. And, of course, of late, I've been focusing on mobile payments. And I lend different angles, since I am a consumer advocate, in terms of looking at the consumer protections that exist and may not exist in emerging field.

>> MARTINE NIEJADLIK: Hi. I'm Martine -- Oh, my God. Is that too loud? Okay. I'm Martine Niejadlik, and I'm the compliance officer for BOKU. I also happen to manage our customer support team, so if we do stuff that causes consumer problems, I hear about it on the other side, which is not fun. I come, actually, from a fraud and risk background. I'm also not a lawyer, so I used to manage the Risk and Fraud detection functions at PayPal, eBay, and Amazon, so -- Not all at the same time. During separate jobs. And prior to that, actually was in financial services, one of the early developers of the infamous FICO score, which I'm not here to talk about. But, anyway, so if you guys don't know who BOKU is, we've been around -- we actually launched in June of '09. I've been at the company since October of '08. And we primarily have been known as a mobile-billing provider, enabling people to buy stuff on the Internet using their mobile device and carrier billing as the payment method. And as Carol sort of mentioned earlier in the day, we also recently launched an accounts-based product. It's actually rolling out first in Europe, not the United States, which is related to some of the stuff we're talking about today. But, yeah, we've been in the mobile-billing space now for about three years, the company has.

>> JÖRGEN GREN: Okay. Thank you very much. And thank you for the invitation. My name is Jörgen Gren.

>> PATTI POSS: Jörgen, I think you're going to need to pull that mike closer.

>> JÖRGEN GREN: Fine, yes. Normally, I speak quite strongly, but I will try to speak a bit closer. So, thank you very much for the invitation. Right now, I'm nurturing severe jet lag, so if you see me starting sort of shooting up caffeine, don't be worried. Or nodding off, for that matter. Now, my background is basically political science, but why I'm here is because we have a very strong interest in the European Union on mobile-payments area. We have some of the most important digital economies in the world inside the European Union, and we want to pull all of the different European economies up to the level of the Nordic countries, such as Sweden and Finland and Denmark who are identified as -- by the Economist Intelligence Unit -- as some of the most forward-looking and best, if you will, digital economies in the world. I think U.S.A. was number three or four on that list and the first two were Sweden, which is my home country, and then, unfortunately, my neighboring country, which is Denmark. You know, so we have the same thing

in Europe as you have here between states. Anyway, what we want to do is to pull up the different digital economies, the different European economies to, if we can, the same level as the Nordic countries. And mobile payment is a very important thing. We want people to get out on the Internet. We want people to go digital. That's why we have a very strong interest in mobile payment. But in Europe last year, only 1% of our population used mobile payments. If you compare that to around 40% who purchased goods over the Internet. That's quite a big gap. So, why am I here? It's because I was the chair of a working group that has been working on our new green paper, which is called Green Paper on Integrated Market for Card, Internet, and Mobile Payment. And it is, shall we say, a consultative document. But it does signal sort of a policy drive inside mobile payments, as well, because we're looking there at how can we further the mobile-payment area? What are the problems that we have? We're asking the business, we're asking citizens, give us your examples. Tell us what's wrong with the area so that we can hopefully do something to solve it. I'll just give you one example. We don't have any interoperability between the different mobile-payment systems in Europe today. So, if I have an NFC-enabled phone with a Visa card on it and I want to purchase a transport ticket or a hamburger or whatever in Nice, which has got this system running. I cannot do it if I'm a Belgian citizen, if I have a Belgian mobile-payment account. I simply cannot do it. So these are the fragmented state, if you will, of the European economies, which is a problem for us. And you will see that most of the things that I will say later on a bit on the legal side, which also try to address the fragmented situation in Europe. Thank you.

>> PATTI POSS: Thank you. So, as we've discussed and has been mentioned several times already this morning, the legal protections that attach to the funding source that a consumer uses for mobile payments have some real implications. And the legal landscape is very interesting in this regard. Michelle and Tom have both agreed to give us kind of a brief tutorial, if you will, of what payments -- what legal protections are out there for a consumer who's using the various funding sources. Tom?

>> TOM BROWN: I think Michelle's going to start with the public law piece, and then I'll pick up the the private law piece, with the preface that it is important to keep in mind that this, which I'm sure you're all familiar with, is probably the most -- not probably -- is the most successful mobile-

payment application of all time. It's something that you all have, that you all know how to use, and that has some interesting attributes, particularly as relates to what you're going to hear about in terms of the attributes of the protection regimes that apply to this.

>> PATTI POSS: Michelle, I'm gonna ask you to use the other mike 'cause I think that one is just not working very well.

>> MICHELLE JUN: So, I'm going to take up the slogan that LevelUp had which was "Sesame Street" simple. And I wish that the regulations and statutes that apply to payments, by large, were "Sesame Street" simple, but that just isn't the case. And so I'll start with TILA, which is the Truth in Lending Act, and then the implementing regulations -- reg. Z, as it's known -- and the types of protections that they provide for credit cards. They offer the highest protection for consumers, in terms of what happens when there are fraudulent transactions or if there are simple errors that are made. Liability is limited to \$50. And the consumer does not have to pay for disputed items. For instance, if somebody ordered a certain couch and received a lamp instead, consumers have protections against those. And then there's the EFTA, or the Electronic Funds Transfer Act, or the implementing regs are reg. E, and they apply to debit and bank accounts. They place a cap on liability for the consumer for lost or stolen access devices. It's \$50. But the consumer must make a report within two business days. And then the liability increases to \$500, if the report isn't made within 60. And in regard to unauthorized transactions -- so those would be found on a statement or perhaps if you looked online -- and that cap is five hundred-- or, sorry. You have to make the report within 60 days in order to limit your liability. And then, after that, you may be on the hook for whatever the amount is. And another important piece of EFTA, or reg. E is the right of recredit, in which a consumer makes the report of an unauthorized transaction, and the bank needs to make an investigation within 10 business days. And if that investigation doesn't conclude, it may be extended to 45 days, in which case there's a provisional recredit, which means the consumer can then get that sum of money placed back into their account for use until the investigation is concluded. And at the conclusion of that investigation, the credit must be placed back into the account within one business day. And then I'll go into some fuzzy regions, which is prepaid. And then, of course, within prepaid, there are different kinds of prepaid -- plastic cards, and first, I'll start with payroll cards. Reg. E is extended to payroll cards, but it's called Reg. E Lite, and this is

due to the fact that paper statements aren't required so long as electronic statements are made available to consumers. And then there are the GPRs, or general-purpose reloadable cards, which are not regulated under Federal Protections as of yet. But for the most part, place is a matter of contract, and each prepaid cardholder will then have some version of what oftentimes is referred to as reg. E lite. And then we go into gift cards. As for the gift cards, the consumer protections that exist are limits on fees. The Federal law -- or, the positions are under the credit-card act, which limit fees and expiration dates. They limit fees so that fees cannot be placed until 12 months of dormancy. And expiration dates cannot happen until at least five years. And then there are a variety of state laws that apply to retailer or merchant-issued cards. And for the most case, you'll see many retailer-issued cards do not have fees or expiration dates as they apply. And then we move on to what's called DCB, or, direct-carrier billing, in which case, it would depend upon what state you live in. In terms of California, there's the California CPUC rule that exists that provides for the most part, like a chargeback right that's provided under TILA and reg. Z, where the consumer can say, "I didn't make this unauthorized charge." An investigation must be made within 30 business days. And the consumer has the right to withhold payment. So, these are any charges that land directly onto your wireless bill that are made with your mobile device. And, of course, then, outside of that scope there's the FCC and their jurisdiction over the issues of cramming, which we hope to hear from them soon, as to the rule, making as the FTC to UDAP -- so, Unfair Deceptive Practices.

>> TOM BROWN: So, gonna make it a little more complicated now. "Sesame Street" is great, but most of us graduated from sing-along TV shows a long time ago -- at least, I hope so, at least for most of our time. So, couple of things that make this a little more complicated. One is the interplay between the consumer-protection regulations that you just heard about and bank regulation. Financial institutions and, for the most part, there are financial institution sponsors for most of the instruments that we've talked about here today, have regulatory requirements related to the information that they need to collect and verify about their consumers in connection with the sponsorship of these programs. These rules have changed quite a bit over the last 18 months. The agency that's responsible for them is known as FinCEN -- Financial Crimes Enforcement Network. So, sort of a weird acronym. That's part of the Treasury Department. And those obligations have an interesting interaction with some of the requirements that we just heard about. The FDIC plays

a role because, at leaves for some instruments, you get pass-through -- what's known as pass-through FDIC insurance. So, the funds that are held in this mobile wallet may actually be protected by the full faith and credit of the United States in the event of a default by the sponsoring financial institution. They're not necessarily the non-bank intermediary, so that introduces an additional interesting interplay. And then of course -- And so, this is a little bit of a test since I'm getting to wear my academic, as opposed to my advocacy, cap today. So, how many of you have heard of either a platform industry or a two-sided market? Okay, so, this is pretty good. Like, that's more, even, I think, than have used a mobile-payment device. So, you know, rock on for the East Coast crowd. I, of course, come from San Francisco, where, I can promise you, it is not always sunny. But it is mostly cool, in many, many ways. So, as we know, when we talk about two-sided markets, that means there are two groups of constituents, right? So, we've talked about consumers on the one hand. So, what else do we need to make a payment system work? Anyone? Mallory? Merchants! Yes! Okay, merchants -- there you go. So, in thinking about how some of these consumer-protection issues work through, we need to think about the other end of the chain. And no one is ever gonna confuse me as somebody who's always stood up for merchant issues in connection with payment issues, but I think it's really important to keep in mind how these issues play out downstream. So, we have a little bit of a demonstration here. So, Marianne, I'd like you to give that to Michelle. So, it turns out Michelle and I arranged this little experiment earlier, and she was supposed to give me something beforehand and, I didn't get it. So, Marianne, I want you to give me a dollar back. I'm a victim of fraud.

>> MARIANNE CROWE: I don't have any money.

>> TOM BROWN: That's just terrible.

>> MARIANNE CROWE: No cash.

>> TOM BROWN: So, now -- right? So, I'm a victim of fraud. And this is awful. Like, what do I do? Well, I don't have immediate recourse 'cause cash -- She has title to it. This doesn't seem like the worst outcome ever, right? I mean, this is something that we're all used to dealing with. Yeah. When we talk about electronic payments, when we talk about card-based payments, when we talk

about mobile payments, we need to keep in mind that the right of consumers to dispute the transaction with the intermediary then carries downstream. And so merchants ultimately bear many of the costs and consequences of the liability shift that exists -- what we've talked so far, is between the consumer and financial intermediary. That risk and responsibility doesn't end with the financial intermediary. There are a set of contracts, then, that exist between that financial intermediary and the merchant that ultimately accepts the payment. And that's where chargeback rules come in. So, in the event that a consumer disputes a transaction that originates with a device and that falls within the scope of network rules, then the issuer has the ability to push that transaction back to the financial institution that sponsored merchant's participation, and the merchant can be called on to establish that, in fact, they did secure the customer's authorization in connection with that transaction. And then there's a further differentiation. So, in the point-of-sale world, that can be done often by presenting proof of a receipt with a signature on it or by establishing that you received a PIN authorization. We've all, I think, gone to the point of sale and entered our PINs, right? But when the card isn't present in connection with that transaction, that liability ultimately rests with the merchant. And when we think about the map of objections with respect to the existing distribution of responsibility for supporting electronic payments, there's not a lot of evidence -- at least, we didn't hear any in the FTC's earlier survey, with respect to consumer complaints. But merchants have voiced I think not unreasonable objections to the fact that they're often the ones left holding the bag when consumers dispute transactions, both with respect to real-world transactions and with respect to transactions that take place intermediated through mobile payments. So, that's a bit of additional gloss we can -- that I think helps put people -- put in context the differentiation between both the public-law distribution of these rights and then the private-law contracts that ride on top of them.

>> PATTI POSS: Great. And, Martine, do you want to talk about some of the additional protections that might come by contract that a payment-service provider might provide to consumers?

>> MARTINE NIEJADLIK: Sure. I think the first thing I want to say is I feel like I'm gonna second Kyle's point here. "Mobile payments" encompasses many, many things. They're very different businesses. They have different problems, different levels of problems. I can tell you,

from a BOKU perspective and a mobile-billing perspective -- We, by the way, are currently, in the mobile-billing world, in 66 countries, connected to 245 carriers. And we reach 3 billion people today who have to do absolutely nothing in order to use our service. It is one of the most global, safest, and private types of payments that are out there for consumers. It's private because the only thing that you have to give us in order to perform a transaction is your mobile number. We don't know your name, your address, your Social Security number, your mother's maiden name, your password, nothing. There is no account involved. And it's also very secure, particularly for the online world, and I want us to really try to think about the online and offline world separately 'cause they are very different. But it's secure because for every transaction that is done, we send a message to your handset. And you can't just come and put somebody else's mobile number in. If you do not have that handset in your hand and you can't respond to that message that we send you, you cannot perform a transaction. So, it is essentially one of the only, if not the only -- I don't know everything that's out there in the world -- payment methods on the Internet today that involves a physical device. So, it's very safe. And so, with respect to fraud -- I actually joined the company, as I mentioned, in 2008. And the original intent of my job at BOKU was going to be fraud. But I didn't really have that much of a job, frankly, doing fraud. And I started doing other things because we really don't have much fraud in the platform. And the fraud we do have is typically family or friendly kind of fraud, where somebody took somebody else's phone and did something. So, before I can answer your question, if any of you in this room do not have a password on your phone, I'm gonna ask one thing of you today before you leave, which is to put a password on your phone. You don't have to type it in to answer calls. But it will protect you if you do lose your phone. And again, that doesn't happen often. Our friend from -- What's that company? Earlier today. Anyway, he was saying that if you lose your phone, you normally figure that out within 90 seconds. So, you know, we find that, as well. There's not really a lot of lost/stolen-phone type of stuff going on. So, anyway, contractually, you know -- and Tom alluded to this earlier -- particularly, again, in the online world, merchants are reliable for fraud. And the bigger companies normally have very large fraud departments. If I made you guess, actually, how many people are in the fraud department at PayPal, I think you'd be shocked, but I'm not actually allowed to tell you. So I don't know if I could have you guess. But anyway, you know, they're having to do this. So, where the liability lives is typically where the prevention lives. At BOKU, with mobile payments, we are trying to do the right thing for consumers. So, when a consumer has

a problem and they call us, we normally fix it. And that will often involve issuing refunds. I think the other thing we have to think about is balancing the protections for consumers that are available and the ability to abuse those protections. So, frankly, I was a little aghast at the Facebook credits lawsuit that was published last week, I think, where a woman in Arizona is wanting to sue Facebook because her child made some purchases for credits with her credit card. And I thought, "Really? Is that Facebook's job to protect your credit card? Shouldn't you just not let your child take your credit card out of your wallet?" So, anyway, again, I absolutely -- You know, I'm pro-consumer and want to see protections for consumers, but having also been fraud in the fraud, you know, space, really want to see that balance with the ability to abuse. And any of you who've filed a chargeback with your credit card company know that there's a lot of documentation and a lot of process that goes on with, you know, trying to get a refund. It's not just, you call up and get a refund. So...

>> PATTI POSS: And, Michelle, did you -- Thank you. Michelle, do you want to add anything about if there's a difference between companies' published policies and what they actually do in practice?

>> MICHELLE JUN: Right. I think it was pretty much reflected in the survey that the FTC did and was presented prior to this panel. But in doing a survey -- and we have actually focused on what the wireless companies will tell you about their policies, considering that the most questionable spaces to consumer protections is with DCB, or direct carrier billing. For the most part, the wireless companies have told us that they have stronger policies than what is in print, and so how is a consumer to know what their liability is? So, it's great that the wireless companies are saying that, pretty much, "We will just give you a refund in case you are reporting an unauthorized transaction." But like I said, you're pretty much privy to whatever the customer-service representative is going to tell you on the phone. Maybe you'll get somebody knowledgeable. Maybe you don't. And we actually had some folks out in the U.S. call up their wireless companies to ask them, "What would happen if I made a purchase using Facebook credits or through Facebook credits and I didn't do it? Do I get my money back?" And we got a variety of, "Sorry, you're just out of luck," to, "Oh, yes, we'll credit you back, and don't worry about it." So, it's very important that consumers have ability to reference the policy. And if it's something that is going to be

determined by the company, then state that. If consumers have no idea as to who to turn to -- And then we were talking about the different players in the chain. And if they have no idea who to turn to, you just have a lot of finger-pointing, and I think that will be a huge barrier as to whether or not consumers will adopt.

>> TOM KANE: Great. Thank you very much, Michelle. Jörgen, can you tell us a little bit about the current state of consumer-protection law in Europe? And how does it compare or how does it differ to the status here?

>> JÖRGEN GREN: Of course. Thank you very much for giving me the floor. I just wanted to make a comment on the -- Actually, that's why I put thing thing up. Just to give you two figures about security -- I know this is gonna be discussed later on, but two figures on security for the European consumer which may relate to what you have here in the States, as well -- 88% of the European consumers are afraid to go online because of security and safety issues. So, our policy is to get people online. So, there has to be -- Well, there has to be, if we want people to get online, which is good for American business, as well, by the way -- it's not just about the purchasing experience. It's also about working on the other dimension, which is safety and security. And to start off my presentation very quickly on the consumer issues is that around half of the European consumers have absolutely no idea about the rights in the online world. And I think, actually, that's understating it a bit. But we have -- In the European Union, we have a way which is slightly different from most other places. We have what's called a shared responsibility with the member states, with 27 member states that make up the European Union. So, we will make different proposals, from a super-national level, if you will, discuss this with the member states, which is then applied directly in the member states. And we have quite a good body of consumer-protection directives and regulations in Europe today. But we used to work with what is called a minimum type of harmonization, which means that we put out different rules, negotiated this with the member states, and then let them add on top as much as they wanted, in terms of consumer protection. And this has created a very disparate, a very divergent type of system. So, we are trying to move into more maximum type of harmonization rules, if you will. And we have three new types of legislation which are coming out just last year and also this year. The first one is about online and alternative dispute resolution, which has been taken up very recently. We want to

have, for instance, a dedicated ODR platform, which is free for everybody to use. We want to have ADRs in every single member state which are actually up and working. And we want these different dispute-resolution centers to solve everything within 30 days. This is also good for the businesses, of course, 'cause we want to move roughly everything -- or most of the consumer issues -- away from the courts and into this dispute-resolution system, which is more softer. It's quicker and it's better both for the consumer and for the businesses. It's less costly for everybody, if you will. Everybody gains. It's a win-win situation, hopefully. The main thing that we have put out November last year is the Consumer Rights Directive, which is very important for us. This is an example of this maximum type of harmonization that I just mentioned. So, there's no gold-lining or silver-lining type of attitude which can be done by the member states. And this Consumer Rights Directive is very important because it goes very much into the online world and is about -- for instance, I'll just give you an example of what's in this Consumer Rights Directive. It's about -- if you put up online a price, it has to be the total cost for the purchase, the total cost. So, hidden cost, et cetera, or fees have to be calculated in the price. Airport charges, if you will -- if you have a carrier, this has to be in the price. We will put a ban on pre-ticked boxes. So, you have to sort of opt in in your boxes, rather than to have, "I want five different types of insurances with my purchase," which is already pre-ticked for you. This kind of pre-ticking, if you will, will be taken out in the European-market situation. There has to be an explicit agreement to pay. So, if you go and look at your horoscope and you then get billed for this and you didn't explicitly agree to pay, you can, of course, challenge this. You have 14 days to change your mind and withdraw from the sales contract. This is also extended to auctions -- so, eBay, for instance. And the withdrawal period -- maybe I should mention this -- starts at the moment as you receive your goods. So, it doesn't start when you buy. It starts when you receive. You have refund rights. These refund rights include delivery cost. We also have a standard-model form which we developed for all European consumers. So, there will be a standard-model form for refund, which will go out across Europe. And surcharges for paying with credit cards will be eliminated. Telephone hot lines will only have the basic rate. And then it's about the transparency and that you have clear information about what you actually buy. And when you buy digital goods, you must have clear information about whether it works on your system or not and if you can make copies of this digital good and how you can make copies of it and how you can store it. And there's also withdrawal from sales on this one, as well, but it stops as you start to download, so you can't sort of withdrawal after you

download the digital goods. So, anyway, this is also good news for businesses because there's common rules across the board. Now, Common Sales Law is the third law which I'm talking and wanted to mention for you. It's sort of a second-contract law which runs in parallel with all the member state laws. And it's an opting law. It's only for cross-border services and online goods. Or cross-border commerce -- sorry -- and online goods. It's a double opt-in. So, both the trader and the consumer needs to opt in to use this common-sense rule, which is a European law. So, it runs in parallel, if you will, in the member states with the member state law. And you can opt in or not. If you don't, then it's the member state law which will be valid. The last regulation or directive I wanted to mention to you, which is very important to mobile payments, of course, is the Payment Services Directive. It came out in 2009, and it regulates all electronic payments. All the rules are the same across the European Union. As I mentioned in my first intervention, our main problem is cross-border trade, cross-border commerce, differences between the member states, that you can't go from one member state to another and do the same thing. This is the basic problem that we have. When it comes to the Payment Services Directive, this introduces the possibility for new payment institutions alongside banks so that mobile-network operators or phone companies can actually become payment service providers. This Payment Services Directive also introduces transparency around the transactions, after, before. It allows for rebates and surcharges so that you, as the merchant, can steer the consumer towards the cheapest means of transport. It also introduces faster payments. It has to be on your account the end of the next day from when you receive the actual transaction. And then it's about refunds and rectifications. That's what we have. It actually allows for this, and responsibilities of the consumer -- I think it's around 150 Euros, which roughly is \$180 or something like that, which is your liability inside this Payment Services Directive. And let me just end with this. I've taken perhaps a bit more time than I should. The different rules in mobile payments apply, and it goes along the money trail, as we said in the previous panel. If you pay with SMS, then it's the telecom rules which apply. If you pay with a credit card, it's the Payment Services Directives which apply. We don't have any plans or any particular idea for the moment to have something particular for the mobile-payments area. Thank you very much.

>> TOM KANE: Sure. Thank you, Jürgen. Thank you very much. So, Tom and Michelle laid out the current state of legal protections for consumers making mobile payments. But now I want to ask the panel, What should the legal protections be? Should there be increased protections for

consumers? And, you know, should they, as some have recommended -- should prepaid cards and gift cards have the same protection as credit cards and debit cards? So, to try to keep this as clear as possible, I'm gonna break it down, first talk about prepaid cards, gift cards, and then carrier billing, and then, if we have any time, other funding sources. But -- So, let's talk about prepaid cards. And first, before we talk about that, I want to try to get a sense of how big this is. I mean, you know, what percentage -- Do we have figures for what percentage of consumers are using prepaid cards, other than gift cards? Anybody have an idea about that?

>> MICHELLE JUN: You know, I don't have the number top of mine, but I do know that prepaid cards are amongst the largest payment methods that are being utilized. I think the Philly Fed came out with their numbers not too long ago. Prepaid is difficult because it's utilized in different ways. But for the most part, we've been looking at it as an alternative to traditional bank accounts that are tied -- sorry -- traditional debit cards that are tied to bank accounts and believe that they should have ready protections. And the industry has pretty much embraced this already and think that, you know, if there's a lost or stolen card, somebody should have their liability capped, if there are unauthorized transactions, similarly that their liability will be capped. I think, in the direction that it's going with mobile, is that because there are so many different players in the way that -- Let's just take Google Wallet, for instance. You know, it requires certain financial institutions to come on board. It requires other processors to come on board. And a consumer is not necessarily going to have all of those things already. And It's up to the consumer to decide whether or not they they want to start opening up different accounts so that they can utilize that mobile payment. And of course the end game is to have everybody enter into the ecosystem, but as of now, I think the direction that it'll go is that more people will sign up for prepaid cards, which will make it even more important that consumers have the proper protections, in case something goes awry.

>> TOM KANE: Marianne, did you want to add something?

>> MARIANNE CROWE: Yeah. I don't know which of these -- That microphone isn't working.

>> PATTI POSS: Yeah. Use this one.

>> MARIANNE CROWE: I come at it from a different perspective because even though I work at the Fed, I do spend a lot of time talking to the industry folks who are trying to develop these products and worry about innovation being stifled by too much regulation too soon or not giving them a chance to roll out their products before they actually, you know, start to see what some of the issues are from the consumer side. But in terms of the prepaid, you know, we have the large -- as we move from card to the mobile world, you mentioned Google -- that they've put together what we call a virtual prepaid account and that they've got the contracts and relationships with the bank that they work with and with the card network. So, from the consumer perspective, it should still look to them as sort of one front when they sign up for the wallet and they use that prepaid account. And it seems like -- I haven't looked at it closely, but the language within the Google Wallet for disclosures and stuff related to reg. E -- it seems to follow what we see in the reg. E -- the regulations that are covering it for cards in the regular banking world. So, I just think we have to keep that in mind when we're innovating these products. On the other hand, you know, Google's a large company with a lot of funding behind it. As smaller startups and companies want to add a prepaid account to their service or product, then I think we get into more issues because they don't necessarily even understand what the rules are in the banking world, and they may be offering it and not be aware of what the consumer needs are. And there's a learning there on either the merchant or the mobile-provider side. They need to understand what some of the requirements are, whether it's regulatory or just best practices.

>> TOM KANE: Tom, did you have a follow-up?

>> TOM BROWN: Well, so, with respect to sizing, everything here needs to be relative. So -- And I think the figures here may be off by some non-trivial amounts, given the amount of money that actually flows in retail commerce in the United States. But I think -- rough orders of magnitude -- \$6 trillion last year in total electronic payments? I think that split is roughly 50-50, as between debit and credit. I think somewhere between 5% and 10% of that number is what we would think of as a prepaid card of one kind or another. So, we're talking in the order of magnitude of, let's just say, \$300 billion, give or take another \$100 billion or \$200 billion. So, these start to be large numbers, right? But relative to the total volume of commerce? Not big. It's then also then important to keep in mind that this concern about whether there are protections. Well, so, when a

card doesn't have somebody's card name on it, there are no protections. It's not possible to get the money back for them. It's lost. It's effectively treated as cash. When the card or the mobile or the wallet -- right? We should draw -- Think of the account that has funds in it on the phone -- just think of that as a card, right? Like, don't think of it in any other way. To the extent that the sponsor of that system has collected information that can be tied back you, for all practical purposes, you are going to be protected by at least reg. E within that system. And then to the extent that you are using a funding source like a bank account via ACH, a credit card with one of the major system logos on it, or a debit card to fund that account, you'd also have dispute rights associated with the injection of funds into that account. So, the dimensions of this problem start to seem maybe smaller. And I think before we reflexively think that there's a problem here that needs to be quashed out, I think we should think about, to what extent are we hearing feedback from the marketplace as a whole, as to whether the current distribution of liabilities is okay or not? And again, not much evidence of consumers complaining, but some significant evidence that merchants and sponsors of these programs find the current distribution to be problematic. As a competition lawyer, I can tell you that the first place I look to look for barriers to innovation and competition is -- oh, not fraud anymore. That's good. So -- is divergent regulatory rules that apply to new entrants and don't apply to incumbents, right? So, here you have the world's greatest mobile-payment application, and it doesn't have any of these restrictions or obligations that apply to stuff that I do here. And I think it has a significant distortion effects for innovation and competition. And I think we should be careful before we levy obligations here that don't apply here.

>> TOM KANE: So, Michelle do you have any response?

>> MICHELLE JUN: Of course I do. [Laughter] So, in respect to -- I just wanted to first address the growth issue. You know, everybody is going after cash because that still is the foremost way that most people pay. And we're going after people who are paying in cash, trying to figure out a creative and safe way in which people can utilize particularly low payments. And so --

>> TOM KANE: Michelle, can you move a little closer to the mike?

>> MICHELLE JUN: Oh, sorry.

>> TOM KANE: I'm sorry.

>> MICHELLE JUN: And so, in respect to prepaid and in terms of the volume, one would expect that, as more people start moving into electronic payments, they would be moving toward prepaids, if we're looking at underbanked or underserved consumers, and that volume will thereby just increase as people become more familiar with it. And I just expect that those numbers will increase because people are not carrying around cash as often as before. And thereby, they should have the same consumer protections as if I were to use my debit card that's tied to my bank account. Of course it's provided in the contracts, but that still is not as strong as if they were federally mandated. And in terms of, you know, the arguments behind cash -- and there aren't really any fraud protections behind it -- at the same time, you don't have the same stream of companies and others that are benefiting off of that cash. So, you have a lot of people who are making cash off of your cash in the electronic stream. And thereby, consumers should have protections, in terms of "Who are these funds going to and who are they being handled by?" There needs to be reassurance on the consumer's part that, if something does go wrong, you know, I have used my phone multiple times, in terms of trying to use the cool feature that I could just walk up to TSA and say, "I have my ticket here," and it fails because I can't log in or, you know, whatever. Say the same thing happens using your mobile phone and the transaction doesn't go through or you think it didn't go through when in fact it did, the wrong amount happened, but you don't have any consumer protection. So, you know, what is the novelty in that and where is the protection behind that? And the consumer should just not be stuck. So, I just encourage that, you know, innovation should go forward. But at the same time, we have to make sure that the consumer is properly protected so that the consumer really has an incentive to adopt it.

>> TOM KANE: So -- I'm sorry. I just have to follow up with Michelle. Are you -- Do you think the time is right now for adding additional consumer protections for prepaid cards or -- because we're running out of time, we'll blend it in with gift cards. Is it time to change the law now?

>> MICHELLE JUN: I don't actually think that there are necessarily huge changes for prepaid. Like I said, it's something that has existed in the payment ecosystem for quite some time. We know

the direction in which it's been going. Industry -- you know, the National Prepaid Card Association has said, you know, "Reg. E is the standard that we're going for." So, it really isn't anything new. It just needs to be federally mandated.

>> TOM KANE: And gift cards? I'll get to the other folks, but if you could just address gift cards. Do we need additional protections, in addition to the Gift Card Act?

>> MICHELLE JUN: I think it also depends on how much money is placed on the funds for the gift card. So, we have said a certain number of funds -- I believe it's \$500 -- that's placed onto the gift card to have the same types of protections as one would use debit. As for, you know, future protections, I recognize that the ecosystem is changing and we don't really know where the chips will fall. For the time being, I think we need to keep in mind that consumer protections are necessary and will be necessary and that companies will really put the consumer first, in terms of making sure that they are happy that fraud isn't occurring.

>> TOM KANE: Great. Tom and then Martine.

>> TOM BROWN: So, I'm just not gonna give up on this cash thing, right? So, the only reason that nobody else is printing cash is because there's a state monopoly on the printing of cash. There would be plenty of people who would sign up to print cash if that were not the case. Indeed, it would be an interesting experiment, actually, to see the extent to which people would rush to that sector, to the extent that the Treasury Department and the Federal Reserve Board didn't claim sole custody of that very interesting market. I, for one, would sign up. But beyond that point, I think an interesting thing to think about, given the European -- This is sort of an academic issue, in the truest and interesting most sense of the word because there's some empirical stuff that we can look at. If we hold this conference five years from now and we look at the intervention that Europe has done with respect to online commerce and the levies that it has placed with respect to mobile payments there, it'll be interesting to see the extent to which growth rates in the U.S. and Europe diverge over the next five years or converge. I will gladly place that \$1 bet on the divergent side, and I think that cash will continue to remain a more important and local commerce a larger and more significant segment of the European-community economy than in the U.S., I think ultimately to the

detriment of European consumers. But this will be an interesting, empirical test, and we can all come back in five years and check.

>> TOM KANE: Martine, and then I'm gonna turn it back over to Patty.

>> MARTINE NIEJADLIK: Okay, and I think one thing else I want to say is that, just because there's a mobile device involved doesn't mean consumers don't have protections today. I mean, many of these products are being backed or being created around cards and around bank accounts. Certainly, there are many protections in place for consumers, to the extent that they're paying, you know, with their card, through a mobile device or a mobile wallet or what have you. There's also lots of, you know, regulations around mobile marketing and mobile banking and, you know, other flavors of things that come up when we talk about mobile payments. Carrier billing, I would agree, is something somewhat new. There is a prepaid component to that, as well, but the reality is consumers are getting billed and they're paying their bill, as well, you know, through the carrier. And they're often using a bank account or a credit card, also to pay their bill. So, I think, you know, we have to think about, "When is the money actually exiting the consumer's account and how is it exiting the consumer's account and what protections are in place at that point?" -- not necessarily just, you know, the purchase and the fact that a mobile device is being used. I do -- You know, I absolutely will be the first to admit I think there's still a lot of work to be done, with respect to consumer, you know, education. They certainly don't understand all of these products yet, and they don't understand, you know, where to go and how to file disputes. I mean, we even see today that they'll contact the merchant in some cases, they'll contact us in some cases, they'll contact the carrier in some cases. And, you know, it's a little bit hard to control where the consumer is going to go to file a dispute. We make attempts in that matter. The FCC's Truth-in-Billing has helped a bit. We've seen improvements recently, in terms of the kinds of information we can disclose on the consumer's bill. Many of you may be aware of the work PayPal did with card associations so that, on your bill, it doesn't just say "PayPal" -- it says "PayPal," star, the merchant name so you can have a recollection of, "What was this thing that I bought?" Right? "I don't know what the charge is." I think we're getting closer in the carrier billing space. We are normally able to at least put BOKU's customer support number onto the bill so people can call if they don't understand what it is. But there definitely is more consumer education that needs to be

done. It's definitely better, though. Two years ago I was on a panel here in this room, and when I mentioned BOKU, nobody had any idea what we did. And last week I asked how many people knew what BOKU did, and I think everybody in the room basically knew what we did. So, it's getting better. But of course this is not the public audience, I realize. But, yeah, there's still work to be one.

>> PATTI POSS: And, Martina, I do want to follow up. We talked about carrier billing, and we have heard a lot about -- Tom was talking about complaints. We have heard a lot about cramming and unauthorized charges being placed on folks -- at least landline bills, and we're talking about wireless bills here. Do we need additional protections for consumers from cramming or unauthorized charges being put on wireless bills?

>> MARTINE NIEJADLIK: I mean, I think consumers should be protected from unauthorized charges no matter how they're being charged. Cramming certainly is a problem. It was specific to certain merchants and their behavior in how they were billing and, you know, not obtaining proper authorization, et cetera. I think that we should make companies ensure that they're obtaining proper authorization when they're billing people, and we should provide consumers avenue for dispute, if that happens. I agree with that. I'm not saying every state should go adopt exactly what the CPUC did. But, yes, I mean, I think billers should not be able to Bill in that way. I will also mention -- I promised Dax I would mention -- the CTIA, which is the Cellular Telecommunications Internet Association, also has a set of mobile financial services best practices. And folks who are, you know, involved in the mobile space and particularly mobile billing are required -- and particularly if you're involved with the carriers -- I will tell you they ensure that you are complying with the CTIA's best practices, as well as the MMA's best practices. So, it's not that there are no rules out there. You know, we certainly don't feel like we are underregulated. I will say that. I mean, we are following rules at the federal level, the state level. We're dealing with, you know, telecommunications kinds of rules, all kinds of rules. But, yes, I think, you know, specifically with respect to cramming, I see that more as a problem on the crammer side and the folks who are doing the billing and trying to control it in that way.

>> PATTI POSS: Jürgen, I saw your tent is up. Do you have something to say about cramming?

>> JÖRGEN GREN: Not really. I just want to perhaps not necessarily take up debate with Tom, but just give a few -- He prodded me, so he's forcing me -- I need to come back on this. I mean, in Europe we have the strongest digital economies in the world -- some of them, but not all of them. So, we're leading the way, if you will, when it comes to electronic means of payment. Now, I'm not so sure that, shall we say, the battle is about whether we move to electronic payment rather than cash and whether electronic payments should be treated as cash, et cetera. I mean, it's all about the growth rates that we can actually get out of this process. And let me go back a few hundred dollar years on this fantastic continent. I mean, what was it? A quarter of my population, Swedish population, came here. And when they came here, quite a few of them were actually victims of wildcat-money scams when they came. So, printing cash for private purposes has already been done, but there's a lot of fraud combined with it. That's the problem. And if you go, again, about the cash versus electronic means of payment -- but this is perhaps more into you as discussion, but from where we're sitting, the possibilities or the potentials for loss is so much greater in the electronic world than it is with cash. So, therefore -- I mean, you lose the cash, you lose what you have. You lose that cash. In terms of electronic payment, you can actually lose access to your own bank account. You can lose -- You can have payments which go way beyond, up to your credit card limits, et cetera, which can be more than what you're carrying in cash. So -- And also, on the way in which we do it in Europe -- I'll just maybe give you a few figures. When it comes to the point-of-sale terminals and EMV compliance -- we have 90% of those terminals, EMV compliance, so we use PIN & Chip 90%. And 80% of transactions in Europe are done using these very secure means. But again, I mean, I wouldn't take up the bet that you just threw down because I would see this as a more multidimensional thing when it comes to the growth-rates divergence between the U.S. and Europe in this field. Thank you.

>> PATTI POSS: And, Marianne, did you want to say something about carrier billing and protections?

>> MARIANNE CROWE: Yeah, just a couple things on the carrier billing. If I can take your mike again, Tom. First, again, just -- well, you know, supporting the need for the consumer protections, reminding that the carrier billing is still, in this country -- primarily it's Internet. It's

not physical point of sale, and from what we've heard, it doesn't seem like that's probably gonna move in that direction -- from the carrier perspective, anyway. And it's low dollars. It's micropayments. So, again, in terms of relative to overall retail commerce, it's still small and relatively insignificant kinds of things, you know, buying swords and games and things online, as well as some subscriptions -- but just to put it in perspective there. Then when you look at the carrier billers -- BOKU being one, and there are several others -- who are these intermediaries between the merchant and the consumer and the carrier -- looking at some of their disclosures and requirements for protections, they've got them, but they're not all consistent with each other. And so, again, not going as far as regulation, but going back to where the CTIA has best practices, perhaps needing to have them be stronger or push to make them more standard and consistent amongst each other and make them clearer to the consumers so that know what they're getting into when they are going through one of these direct-carrier billers for making these purchases and what they have, in terms of rights, if there are errors or problems. Making them more consistent, I think, would help a lot.

>> PATTI POSS: Great. Thank you. I just want to briefly touch -- We've talked about the unbanked and the underbanked in some of the previous presentations. But what impact does the current legal landscape have on serving such consumers? Anybody want to take a crack at that? Marianne?

>> MARIANNE CROWE: Okay. You know, putting the regulation piece aside, the opportunities that mobile can provide people who are unbanked or underbanked to bring them into financial conclusion and give them opportunities that are safer, perhaps more efficient and less costly and less risky -- mobile payment brings a lot of benefits to them in those cases, particularly, you know, being able to manage their financial accounts, to do better budgeting. The fact that -- Like we said before, people have their phones all the time. They sleep with their phones. They take them with them wherever they go. They know when they lose them. They've got 7x24 access. Earlier someone mentioned -- Well, I'm in a store, and if I can buy something, I can, you know, check to see if I have the money in my account, not only to check to see it to buy it, but to make sure I can potentially avoid an overdraft, as well. I may not make the purchase because I've checked my balance and say, "Okay, I don't have the money this time. I'm gonna control my spending or

manage my budget.” It can also help them establish a credit history if they're not comfortable going into a bank. Many people who are unbanked or underbanked -- they're that way because they either choose to be -- they don't trust banks, they don't feel comfortable -- or perhaps because of bad credit in the past, they don't have a bank or a credit card account anymore. But they can do a lot of things, and, you know, whether it's the private organizations, which, going back to prepaid and allowing the innovation to grow and have more banks, get involved in prepaid programs that are safe for the sake of the consumers -- we want that to happen. The Treasury Department is very active in replacing checks and getting people at least to either get direct deposit or prepaid cards for electronic benefit transfers right now. But they're also talking and thinking about, "How do we move that to the next step and moving to the mobile phone and being able to put those electronic benefits into a wallet, on a mobile phone, along with other regular kinds of accounts, too?" So, I think, you know, being able to have that information, being able to get alerts to tell them what's going on with their account, is also going to help them be more educated, in terms of financial inclusion and perhaps build some trust in moving to the next step. So, again, we have to balance -- They need to be protected, clearly. In their case, they need to have probably a better understanding and education of what they need to do. But at the same time, we don't want to constrain the potential providers of these providers to the underbanked because I don't think we have enough of them right now.

>> TOM KANE: Thanks. And, Michelle, if you want to respond quickly. Then we're gonna move into consumer knowledge, or perhaps lack thereof.

>> MICHELLE JUN: Sure. I think Marianne pretty much touched it a little bit, but I just wanted to underline the issue of trust with the underserved communities. For the most part, underserved folks will prefer to carry cash around because they know exactly how much is in their hand. They know that nobody else can take it, unless, of course, you get robbed. But, you know, in order to transfer this huge population and have them adopt electronic payments or mobile payments, you need to establish trust. In order to do so, you need to provide the adequate consumer protections to make sure that, you know, every penny is guaranteed, in a sense that they don't have to worry about whether or not they'll have access to the money and whether or not they'll be able to rely on whoever's holding their funds to hand it over whenever it's necessary.

>> TOM KANE: Great. Thank you. So, moving on to consumer knowledge -- so, what do consumers know about their legal protections when using mobile-payment services? For example, do they understand the differences in their legal protections when they decide which funding source to use, whether to use a credit card or a debit card or carrier billing? What do consumers know? I open it up to any of the panelists.

>> TOM BROWN: Well, you can actually do a survey in the room. I mean, so, I do this with my class at the beginning of a new session. Nobody understands this. I mean -- Yes. Very few people understand it. And it's really complicated. So, it's not a surprise that people don't understand it. I think there are some corner cases that, if you were to poll people -- and all of the people up here are experts in the field -- I think that we'd find instances in which we wouldn't actually be sure what some of the rules were. I saw somebody posed a question on a card. I'm a sort of notorious reader of other people's notes. [Laughter] I'm am a litigator, right? So, you know, it's not confidential, so -- But, you know, so, somebody, I think, posed a question, "Well, so, what if there's a chargeback, and I have a prepaid card that, let's say, has somebody's name on it? Would I be covered by network rules, with respect to the exercise of chargebacks?" And so I will tell you, I believe -- As I read the rules, I believe the answer to that is yes. Certainly, as I understand the way the Visa rules work -- and I believe that MasterCard's rules are parallel in this respect -- so long as the card is embossed with your name, then you can exercise the chargeback rights that exist under the rules. Now, American Express and Discover have their own systems. And you can have prepaid applications that exist outside of those rules. But the point is that these things start to get complicated.

>> TOM KANE: Tom, here's a card. I don't think you got a chance to read this. [Laughter] It says, "You may realize right away you've lost your phone, but how do you remember all the apps and cards and accounts stored there in order to figure out who to notify, especially if you don't get paper statements?" One of the downsides to not getting paper statements. Who wants to address that?

>> MARTINE NIEJADLIK: I can make at least one comment, which is, you know, a lot of that information today -- particularly the apps and things -- are stored in the cloud. I actually have a friend who was at my house last weekend and lost his phone. And he's the type to buy insurance, so I said, "Oh, did you buy the insurance policy?" And he was able to get his phone replaced within a couple days. And he called me just yesterday, actually, on my way here. And he told me there wasn't a single piece of data that was lost. Everything was restored. He had an app on there that had all of his passwords in it. He was very worried about that because he thought he was gonna have to put, you know, all his passwords in again. He would never remember them. But in fact, they were all still there. So, you know, I think -- Yeah, I'm not sure how much of a problem it is. I don't think that people necessarily have to notify many, many, you know, companies if their phone is lost. You know, certainly, if you have a wallet, you have cards stored there, you have no password on your phone, you know, those sorts of things, you're not doing things to protect yourself, you might be in bigger trouble. But if you take the necessary precautions, I don't think that should be a big problem for consumers.

>> TOM KANE: Okay, great.

>> MARTINE NIEJADLIK: You are all gonna put a password on your phone by the time this is over. Guaranteed.

>> TOM KANE: I have one. Marianne?

>> MARIANNE CROWE: This is probably a little bit more in the future, but when there's the true wallet or wallets that actually contain multiple payment credentials from the different card networks or bank and rewards and things, that wallet will be managed and is already being managed by -- In the Google/Isis world, they have companies called the Trusted Service Manager who will provision those wallets. But there will be oversight, hopefully from that trusted service manager that knows all the accounts and credentials you've provisioned into the wallet. So, if you lose it and then you report it immediately, they can disable it and they can wipe out stuff, but again, the information is saved, and they can restore it. But they've got all that information safely protected for you so that you don't have to go and call 20 different places. There's sort of one

single point of -- would be one single point of contact down the road to get that information restored.

>> MICHELLE JUN: Can I just make a quick point? I'm sorry. I didn't put my tent. But, you know, the average consumer probably has no idea what a TSM is, and so --

>> MARIANNE CROWE: Not right now.

>> MICHELLE JUN: Not yet, but that needs to get out there somehow.

>> MARIANNE CROWE: Absolutely.

>> PATTI POSS: Great. We are getting really close on time. I want to give everyone a chance to talk about what they think are some of the best practices for the industry here. Should we just go down the line? Tom, do you want to --

>> TOM KANE: Perhaps while they're doing it, what suggestions would you give for consumers? Sort of one last shot.

>> PATTI POSS: Yeah, combine two questions into one here -- the best tips for the industry and best tips for consumers.

>> TOM BROWN: So, I think the best tip for consumers is take advantage of this wonderful bounty of electronic payments. They make life easier in so many ways, both with respect to paying, but also with respect to receiving payments. I think, as much as I've tried to inject some of the merchant perspective into this, Mallory, I'll have to leave it for you later this afternoon. I mean, I think this is a wonderful and underappreciated aspect of this digital-commerce revolution that's taking place. So, that'd be one. With respect to industry providers -- this is gonna seem like a bit of a commercial, but I think that folks in the industry, particularly new entrants, need to understand what they're getting into. The financial-services world is the most highly regulated aspect, at least of the domestic economy, outside of the provision of pharmaceuticals. And it's easy to do things in

ways that will attract regulatory attention. And there are some great people out there in the payments bar and in the payments academia, people like Sarah Jane Hughes and others who really know how to navigate these issues. And I would encourage people who are starting up to reach out and figure this stuff out first, before plunging in. We don't have to cost that much. You know, rates can be negotiated.

>> PATTI POSS: Thanks, Tom. Marianne?

>> MARIANNE CROWE: From the consumer perspective, I guess I would just say -- and even hearing from some of the earlier people in the panels -- the younger people, in particular -- is to try to do a little bit of due diligence before you download an app or sign up for some kind of mobile financial service. Ask some questions about these things, but, you know, we've got to sort of put it in the heads of people to ask these questions and at least know what you're getting into. So, I know that ties to education, and it is difficult to do, but somehow getting them to be curious about the downfalls, as well as the positive things. And from the industry side -- you know, clearly, we talk about better disclosures and information. It's easier to see on your phone or summarizing the 20-page terms and conditions that nobody reads whether they're on the Internet, clicking "I agree," or on the one, clicking "I agree," but also to take advantage of -- These are things that are not, in my opinion, competitive. They're gonna help the industry and the consumers, overall. So, to the extent, whether it's industry groups or other kinds of groups that get together and talk about these things, is to try to exchange ideas and share some of these concerns with each other that maybe help, from a self-managed way, come up with standards and best practices that you can all benefit from, as opposed to, "This is my service or your service," but it's something that, by talking to each other, come up with ideas that'll help everybody.

>> PATTI POSS: Thank you. Michelle?

>> MICHELLE JUN: Sure. I think that, you know, immediately it's important for all of the different players to get together and really talk about the different issues that are being hashed out, especially as new players come in. As for the industry, I really hope that, at some point, it'll become "Sesame Street"-simple for a consumer to know who to contact if there's a dispute, what to

do in terms of redress. You know, for a credit card, you know to either contact the merchant or the bank that issued the card, and for a debit card, you know to contact your bank. And that should happen for the same cases for direct-to-carrier billing or, you know, other prepaid methods. And so I would like to see more uniformity, obviously, and hope that, as we move forward, consumer protections are kept in mind.

>> PATTI POSS: Great. Martine?

>> MARTINE NIEJADLIK: I guess I'll first comment from an industry perspective. And I would say, you know, sort of the philosophy BOKU's taken is we're trying to just do the right thing. So, don't do the thing that we have to do, but to think about what the right thing is to do because if we try to build emerging payment systems that are not doing the right thing -- and that's both from the consumer perspective, as well as the merchant perspective, they're just not gonna work, right? You have to be able to build a network that, you know, is providing the right balance also between the parties that are in the chain. And, you know, we try to do that, as well. Certainly, our refund policies and things have evolved over time, as we've learned about the kinds of things that can go wrong and what's the right thing to do. So, that would be my guidance for the industry, really. For consumers, it's tough, I guess. I would say, you know -- well, kind of like Marianne said, just really try to educate themselves on what these things are. I think consumers tend to get very scared of new things, the young audience, not as much. They think things are cool. I think the old audience thinks things are scary. And if you educate yourself, it changes your view on things. I know like in the early days at Amazon, when credit card fraud was, like, super, super, scary. And I used to tell my family, "Just pay with your credit card. You're totally protected." You don't have to worry about anything, even if you happen to give -- You know, try not to give it to some low Internet service who's gonna take it and do bad things with it because it'll cause you pain, but at the end of the day, you will be protected. And I think consumers need to do a little bit of research again, try to have some responsibility, and hopefully they will adopt the new payment systems.

>> PATTI POSS: Jürgen?

>> JÖRGEN GREN: Yes, thank you. From the European side, the sunny side is up. For us, it's a fantastic tool to get people out on the Internet, to get people to go digital. On the best-practice part, we've seen studies from Asia which shows that if you have a daily use of a mobile-payment app, this is when it will take off, which means that if you have a lot of people who want to buy their coffee every day or use it in transport systems, et cetera, this is the moment when mobile payments will take off. And I think we're seeing that moment now. The only thing from our side, as well as, of course, that we have to work on trust and security -- to make sure that people are gonna feel -- I know they are protected and they are very well protected. But this also needs to be communicated. They also need to feel it. And I said, again, 88% of the European population feel unsafe going online to do commerce. So, we have quite a long way to go, but again, we have very strong hopes with this. And I'll just leave you with the slogan of my commissioner, which is my highest boss, which is "Every European, digital." So, that would be my end. Thank you.

>> PATTI POSS: Thank you, Jörgen. So, we have a stack of cards here, but I realize we are the thing that's standing between everyone and lunch. And I'm gonna pass along some of these to the other groups. We did touch on a lot of them, but we'll share them with the panels for this afternoon. Thanks, everyone. I really want to thank our panelists -- just a terrific job. Thank you. [Applause] Okay. You want to go first? [Laughs]