

**Anand Chandrasekher; Sr. VP, Ultra Mobility Group**

Male Voice: Ladies and Gentlemen, please welcome Anand Chandrasekher!

[Applause]

Anand Chandrasekher: Good morning. The last couple of times I've been here I've talked to you guys about where the Internet is going, what's happening on the Internet from an evolution standpoint, and what we're doing about it from a technology standpoint. What I want to talk to you about today is this: Partly I will cover where the Internet is going because I think it's important and there are some changes that I do want to cover.

But we've launched our first generation of the technology, and what I thought would be cool to be able to do is show some of the cool applications that our customers are taking advantage of with this technology and, more importantly, their customers with that technology. And I will cap it out, of course, with where we're going to take our own technology to show you where we're going to take this in the future. So let's get started.

Internet growth continues unabated. This chart here on the y-axis shows traffic on a log scale and you're seeing on the x-axis time, and it looks like we're at about an inflection point. If you look at just monthly traffic for June, worldwide Internet traffic was about three times -- a little over three times the population of the United States. That's just for the month of June, people accessing the Internet.

Clearly we're at an inflection point here. Now why do I say that? Well, it's driven certainly by some things like usage trends where people want to deal with the Internet because the fabric of the Internet and what people are doing is changing, but it's also the devices that are being used to access the Internet are also changing. So let's take a look at that.

This is usage going back over 10 years. 1999, the Internet's still fairly young. You can see the top 10 sites that get hit from an Internet standpoint, but the data here is from EBSCO as well as Alexa. Both of these companies hold global internet rankings. And you can see in 1999 some of the names that are up there -- AOL, Yahoo, Microsoft, Lycos -- Lycos is not there anymore -- AltaVista, not there anymore. But clearly search-oriented, Web-site-oriented, and that's not that long ago.

Take a look at 2005. You still see some of the familiar names -- Yahoo, Microsoft, Google, eBay. MySpace shows up in 2005, but no YouTube. Take a look at 2008, just three years later. Yahoo, YouTube, Live -- no Live in 2005, Facebook -- no Facebook in 2005, High Five - - no High Five in 2005, Wikipedia, Orchid -- no Orchid 2005. Huge change on the Internet.

Now, if you look at underlying trends here about these Web sites, what the big change is, it's social networking. And in relative terms of technology, the Internet is still very, very young. And over the next decade or so, this is still going to change dramatically. If this is any indicator of what's to come, the best is yet to come.

So let's dive again a little deeper into social networking and see what you can see there. Well, let's take a look at Facebook, '07 page hits, 52 million unique visitors; June '08, 132 million unique visitors.

Increasingly, what we find, people are using Facebook as their landing page. So it integrates not only the work environment and who they connect with and some of the newsfeeds they get from a work standpoint, but also their personal environment. So it's their landing page.

So at Intel, we have our corporate Web site, [circuit.intel.com](http://circuit.intel.com), and some of our employees aren't using Circuit as their landing page, they're using Facebook as their landing page. Clearly, they're not in my generation; slightly younger than myself. But that is a trend that's happening.

YouTube, 84 percent growth year over year, greater than 300 million unique visitors to YouTube. Now, take a look at the last one, location. That shows what's expected to happen in 2008 through 2013, clearly a tremendous amount of growth both in people that are depending on location as well as revenue that is expected to be generated based on location. Clearly, location matters when you're mobile. If you're tethered, location doesn't matter as much.

People want to be able to take these Internet experiences and take it with them. But today, there are shortcomings. We've talked about these shortcomings before. This particular survey is from Forester. It basically says people are dissatisfied with their Internet experience.

And, in fact, another recent survey effectively says 2-to-1, consumers prefer the full Internet experience over something that subtracts out portions of the Internet for them.

So we're clearly at an inflection point. And when you take the Internet, and you untether it, and you add to it the social networking and the changes that are underway, this is what we believe is going to happen to the Internet over the next several years. This is clearly a projection, but if you look at what's happened in the past, and you look at what's going on today in terms of changes, we're absolutely at an inflection point. And we think this sort of a change is not that dramatic. We think this is expected and very likely to happen.

So what I want to do is showcase to you one example of putting this together, taking the Internet, taking location, taking user-generated content, putting it all together, and let's see what's possible. And to do that, I'm going to invite up on stage Russ. Russ, you ready?

Russ: Sure am.

Anand Chandrasekher: All right.

Russ: I've got the perfect demo that illustrates exactly what you're talking about.

Anand Chandrasekher: Good to see you, Russ.

Russ: Good to see you, too, Anand. So, what we've got here is an application from a company called GyPSii. And what GyPSii is, is exactly that. It's a combination of social networking, user-generated content, and the location-based services, all coming together in one application.

So what you're going to see right here -- we're going to bring this up on the big screen as well so you can see it a little bit better -- is in the application here, I have a place on the application that places me here in San Francisco, in the city of San Francisco. And what I want to do is find out if there are any of my friends that happen to be members of GyPSii that are close by. So if I go ahead, and let's go ahead and kick this off on the big screen so we can see it here.

All right, so you can see there that I have Andrew, a friend there, that is here in San Francisco working on the show with us. And we're going to get together later to have some lunch. So what I want to do is go down and look at the search features that are offered. And here I can search for people, I can search for restaurants or whatever, just any kind of, you know, the normal kinds of points of interest.

But I really want to find things that my friends like. So I'm going to click on the next one there, and you'll see it come up with all of the different icons for all of the places that my friends have recommended. So if we go take a look at one of these, for instance this one here, we can see that that's a little chili verde restaurant not too far from here, and my friend Andrew recommended it.

So I think what we'll do is we'll go ahead and I'll send him a message later, and we'll see if we can synch up there. But, you know, this is showing how I can find my friends, and I can find places that my friends like, and they can know where I am, and we can find ways of connecting together.

But the really great thing about this application, too, is the fact that we've got this really neat user interface. They've split the user interface into two pieces and put it in left and right and made these modal menus so that you can basically click on and click off everything that you want to do with this with one single thumb tap on the user interface. Because it's very difficult to drag and drop and copy and paste and do those kinds of things with a stylus, and particularly when you're walking.

So they've created a great user interface that's really driving the way they're using this interface back on their regular Web site on the PC. So we're seeing the device's capability is enabling new usage models, and those usage models driving new human interaction with the device and making this a much more usable and real experience.

Anand Chandrasekher: That's brilliant. And that's an application that sits on a PC today, right?

Russ: Absolutely. And this is --

Anand Chandrasekher: And they ported it to this environment?

Russ: Absolutely. And this is really what makes this device come real is it lets you get these experiences on the go no matter where you are.

Anand Chandrasekher: Russ, one final question. Do you usually think about chili verde at 8:20 in the morning?

Russ: Well, you know, we were up a little late last night, so yeah, I think I am. [Laughs]

Anand Chandrasekher: Thanks.

Russ: All right, see you later.

Anand Chandrasekher: So, what you can see in that particular demonstration is it's the Internet, it's location, and it's user-generated content all coming together. By the way, the beauty of that particular application, GyPSii, is yes, he's in San Francisco so he can get the location in San Francisco, and his friend's in San Francisco. The application is smart enough that if you were sitting in Rome, Italy, and you happened to be doing the same thing, it would pull up the data that's contextual for that particular environment. Very powerful, user-based information, coupled with location, coupled with the Internet creates a lot of capabilities and opportunities that hasn't existed today.

Now, as you put all of these trends together, what happens is you start to see a spiral taking place on the Internet very similar to a spiral that we've talked about on the desktop and then the notebook side. You saw on the desktop side over the '90s, and I've talked about this with

you guys as well, in the '90s you had IT-driven and business-driven and consumer-driven and then mobile-driven, and effectively, the applications got richer and richer. As we brought out new processors, applications took more advantage of them and drained them, and we had to bring out new processors again. So basically, one beget the other, and you had this spiral.

You're seeing exactly the spiral on the Internet, text moving to pictures moving to videos moving to user-generated. And the sites are getting richer and richer and richer. What you see on the Internet today was not what you saw five years ago. And what you're going to see on the Internet in five years is not going to be what you see today. It's going to be much richer, much more contextual, much more interactive. And that's what we have to plan for collectively as an industry.

And to enable all of this, to enable this specifically in your pocket, you need four things. You need performance. Yes, surprise, an Intel executive saying you need performance. True, you need performance. Internet availability, you want all the technologies, plug-ins, extensions the Internet runs on, you want to be able to run that on your device. If you leave that off, you're getting only partially what's available out there. And users don't want that. They're voting in droves that they don't want that. And that's driven by compatibility.

And last, but not least, you need connectivity. You need broadband, wireless connectivity. That's a big deal. Without broadband connectivity, it's sort of like sipping a massive amount of data through



a very, very thin straw. So broadband makes a big difference here. All of these are necessary to enable a great experience.

We're going to talk today about the things we do from a technology standpoint to enable this experience. And first up on that is what do we to enable great performance and great application compatibility. And that all starts with Atom.

Intel Atom is our first grounds-up design for this space. And Atom really is a fundamental technology building block for us. It goes into ultra mobility, into mobile Internet devices. It goes into netbooks and nettops, which is our low-cost PC product line that Dadi and Pat talked about yesterday. It goes into consumer electronics devices, which Eric Kim is going to talk about later after me. It also goes into the embedded Internet, and Pat talked about that at length yesterday.

Atom is a fundamental technology building block that goes into all of those market segments. We thought about this four years ago and consciously put this plan in place. Atom is about 47 million transistors, about the same size, from a transistor count, as the Pentium 4. Think about that, contextually about the same number of transistors as the Pentium 4, but a fraction of the size, a fraction of the power in thermals. In fact, it is the coolest processor we've built -- pun intended. Absolutely the coolest processor we've built.

Now, you can see when you add it to the System Controller Hub what some of the capabilities are -- 400 megapixels per second film rate, HD technology, 1080p decode on HD. And I'll show you some of this

stuff. But rather than hear me talk about Atom, you know, what I thought I would do is bring up on stage here a really humble guy.

Success often has many fathers as all of you know. But it's usually hard to pick the one person who was playing an instrumental role in making Atom happen. And that one person that I would single out for making Atom happen is actually the father of Atom, is the architect, the lead architect behind this processor, [Belli Kuttanna]. So please join me and give a warm welcome to Belli. Hi, Belli.

[Applause]

Belli Kuttanna: Hi, Anand.

Anand Chandrasekher: Good to see you.

Beli Cotana: Good to be here.

Anand Chandrasekher: So, Beli, a lot of these guys don't know what an architect does. They think you might be building buildings, right? So what do you do?

Belli Kuttanna: Well, as part of the Atom architecture team, what we did was essentially evaluate what the technologies that are required to make a product like Atom, which is capable of running modern operating systems, provide the Internet experience that you have talked about, while maintaining the power and performance balance.



Anand Chandrasekher: You just baited me. So what's next?

Belli Kuttanna: Well, I think you'll have to wait and see.

[Laughter]

Anand Chandrasekher: You're not even going to tell me?

Belli Kuttanna: Yeah.

[Laughter]

Anand Chandrasekher: All right. Thanks, Belli. Very good.

Belli Kuttanna: Thank you.

Anand Chandrasekher: By the way, Belli will be doing the Technology Insight on Atom later on today. Those of you who really want to understand the guts of Atom and see how it works, feel free to attend. I think you're in for a treat. It'll be a lot of fun.

Belli Kuttanna: Thank you.

[Applause]

Anand Chandrasekher: Okay, so how do you measure performance?  
Well, if you're talking about an Internet device, loading pages is one

metric of performance. Well, let's take a look at page loading. We picked three sites -- the Sony Ericsson home page, the Ford home page, and Anywhere FM. The red bar here is a state-of-the-art Internet tablet today. The y-axis is time required to download that page, and the x-axis, obviously, the device and what it takes.

So you can see here about a 4x to 16x competitive advantage for Atom-based devices on downloading pages. Guys, this is just the beginning. If you think those pages are complex, try MySpace. If you think MySpace is complex, try some of the other pages that are being done. This complexity is not about to stop. It's just going to increase. And performance matters in this space. That's the point.

Web pages are only the beginning of why performance matters. You also want to do things on these devices that are quite different. You want performance to be able to run games. You want performance to be able to run HD videos. You want to be able to do a lot more on these mobile Internet devices as you take it with you than simply download the Web and see what it's capable of doing. So to help me show you some of what is possible, I'm going to invite Russ back on stage to put this through a demo and some of its paces. Hey, Russ.

Russ: Hi, Anand, good to see you again.

Anand Chandrasekher: All right, what do you have here?

Russ: Well, I've got something that's really cool that I thought you'd like to see. You challenged the guys to come up with a really cool example of performance on the Atom processor.

Anand Chandrasekher: I did, yes.

Russ: So I wanted to show you guys, you know, running it here from the backstage.

Anand Chandrasekher: Is it going to come on the screen?

Russ: Yes, it is. All right, so we're going to go ahead and run this from the backstage, guys. But we're running here, obviously, World of Warcraft. And what we're trying to show here is that these kinds of mobile devices are out there that are looking to be able to play these kinds of games. And like you said, they really want to have the performance. So what we decided to show you is this is an Atom processor running this game and having a really great experience using a wireless network.

Anand Chandrasekher: That really is World of Warcraft?

Russ: Yes.

Anand Chandrasekher: I don't play this, so . . .

Russ: Absolutely.



Russ: So I wanted to show you guys an example of this. We're actually running a full 1080p video stream on this small [OQO] device right here. Being able to play back video of this high quality and be able to deliver that kind of great experiences, more and more people are having more content [unintelligible] every day.

Anand Chandrasekher: [Dadi showed 1080p] running on a very high-end notebook. Is it the same chipset we have in here?

Russ: Yes -- no.

Anand Chandrasekher: We have the same chipset in here?

Russ: Well we have the same graphics performance we have in here.

Anand Chandrasekher: Very cool.

Russ: So, like I said, we've got some great new technologies that are really enabling people to get these full experiences anywhere that they happen to be.

Anand Chandrasekher: Okay, fantastic. Russ, anything else?

Russ: I think that's it for this one.

Anand Chandrasekher: Beautiful. Thanks very much.

Russ: Thanks a bunch and I'll see you in a few minutes.



Anand Chandrasekher: Thank you. So guys, what you just saw there, 1080p decode, that's the first time you're seeing it in a handheld device. World's first time, and that's a production device; that is not a demo unit, that is not [pre]-production silicon, that is production silicon that's going to get shipped, and you're seeing 1080p.

And you heard Craig yesterday talk about this is the year of HD and you're going to see HD happening in a number of products and devices, you're seeing it in pocketable devices. This is the world's first on that.

You also saw World of Warcraft. The kind of game that you just saw there, that is not possible to do on a handheld device, and you just saw that on effectively a pocketable device. So those are milestone capabilities that are silicon-enabled. And what is possible with this technology going forward is only left to the imagination of you guys in the audience and our customers and the ISVs.

Compatibility matters, so let's take a look at compatibility again. I've shown you this chart now two years running. This format of the chart looks the same. The data is not. The data has been refreshed every year. We refresh it twice a year. We refresh it in the fourth quarter and we refresh it in the middle of the year. This was most recently refreshed in July.

What's interesting about this is the picture has not changed. You can go look at this data, you can go look at the presentation I did a year

ago. You can go look at the presentation I did in front of you guys two years ago. This picture looks the same. Compatibility matters. When you move outside of the IA realm, errors increase when you're trying to run the Internet. That's the message on this. y-axis is errors, x-axis is devices, range of devices running different kinds of operating systems from a different number of vendors, and as you move out of Intel architecture your number of errors increase.

And the fact that the picture has remained unchanged for the last few years simply reinforces our point that as the Internet moves along, even as innovations happen on other architectures and platforms, the Internet evolution continues to move along, it's not stagnate, and that evolution is happening on IA. That's precisely the point. IA matters because compatibility matters.

And this is what puts that together. You have the Atom processor which is going into MIDs, netbooks and embedded environments and CE environments and will run mobile and base environments, Linux environments or Microsoft Windows environment, and basically from an ISV standpoint you write once and it runs on all of these. That's not a promise that can be delivered on another environment.

And to put that promise or rather demonstrate it, what I want to show you again is another demo. I'm going to invite Russ back up on stage. This I'm going to show you Flash 10. Flash 10 Beta was pre-released, I think, by Adobe in May. In June we showed it off at Computex. And I think you have something here you want to show off, right?

Russ: Absolutely. What I've got here is the new Flash 10 Beta that's running on a MID. And as you said, a lot of the Flash applications that are out there aren't available on some mobile devices and cell phones and that kind of thing, at least not until later. So you don't get to use all of those great capabilities as soon as you can on the PC platform.

But here we'd be able to take that code and be able to port it directly to this operating system and then be able to get this capability immediately out of the same code base. So I'd like you to come up to the [unintelligible].

Anand Chandrasekher: You want me to come up there? Okay, all right.

Russ: I'll show you an example of some Flash-based photo editing. So what I'm going to do here is go ahead and bring up my documents. Excuse me.

Anand Chandrasekher: Okay, you're just getting it set up here for the particular demo. And I'm not quite sure what you're going to show here.

Russ: Unfortunately what I did is I [fat-fingered] my demo.

Anand Chandrasekher: That never happens, right?

Russ: That never happens. Here we go. All right, so all I want to do basically is open up this picture and see if we can have somebody here to edit. I think some of us recognize this fellow.

Anand Chandrasekher: I do, but what are you going to do to him? I like my job.

Russ: Well I thought we'd have just a little bit of fun. Craig has a sense of humor.

Anand Chandrasekher: He might be somewhere here actually.

Russ: I think he is. Maybe we'll be kind. What do you think? So what I'd like to show you just really quickly is the ability within the Flash 10 environment to just be able to apply some things, filters, things like a sphere. Everybody has seen these kinds of features before, and be able to do funny things with different photos and mess around with them.

But the really cool thing here is you can of course do more normal things -- I think we should probably do that -- such as let's just crop the photo. That's something that probably most people would want to be able to go in very quickly and be able to crop a photo or be able to apply a certain kind of a filtered effect such as embossing and that kind of thing.

So very simply from within the Flash environment to be able to do these kinds of quick edits and get that kind of capability and be able to have that functionality across all these different devices and have compatibility across the devices, that's what Flash 10 is bringing to the story.

Anand Chandrasekher: Very cool, Russ, very cool.

Russ: Thank you.

Anand Chandrasekher: Great. Flash 10 Beta was introduced in May. You just saw that running here and putting it through its paces. Now, Flash is a building block that enables a lot of this happening.

Now ISVs, like game developers, have typically resisted the handset environment and the mobile environment because of the fragmentation of that environment and haven't really targeted in any major way. There are some out there. And those that are out there tend to have hits or misses in terms of getting into the marketplace. And again, I've talked about that in front of you guys in the past. I'm not going to dwell on that.

What I want to do today is I want to bring up on stage one game developer, in this case, Fuel Games, and I want to invite on stage Warren Tomlin. He's the Chief Creative Officer for Fuel Industries. Warren, can you join me on stage?

Warren is a game developer. And what I want to have Warren do is talk in his own words what they have been doing and what they see as the opportunity in this space. Hi, Warren. How are you doing?

Warren Tomlin: Hi. Good, thank you. So thanks for having us. Fuel Games and Fuel Industries is a leading interactive agency and game developer. We've been doing some pretty interesting things in the space of branded

entertainment. So I would call branded entertainment as an entertainment experience that we build with a brand. And often we refer to it internally as a 600-second spot where a typical TV commercial would last 30 or 60 seconds and we build an immersive Internet-rich experience that can last 10 minutes, on average 600 seconds.

So we want to spend a moment today talking about the content we build, but also talk about some of the challenges we've had going to mobile and some of the really exciting things that we see that Intel is doing to allow us to move into the mobile space.

It's always good to use a client example so one of our great clients is McDonald's, McDonald's Global. And so we recently launched their first digital Happy Meal in 43 markets, in 11 languages and in about 35 million units, and it's called Fairies and Dragons. So we want to show a 30-second clip for that and then talk about how we [unintelligible] Intel.

[Video plays]

Warren Tomlin: So that content, obviously for a Happy Meal toy, and it's content that we built.

Anand Chandrasekher: I think you made them hungry.

Warren Tomlin: We made them hungry? Yeah. We actually eat a lot there because they're a great client. One of the things that I should say is that's rich

content that we built for them because if you look at where kids are spending their time, boys and girls in that demographic, they're spending their time on the Web. And building rich experiences on the Web is kind of what they wanted to do.

And so we're really excited with what Intel is doing with the Atom and the MIDs because we can actually take the Web experience now outside, whether it's the family room or the bedroom or the living room, off the computer and onto the MID device.

Anand Chandrasekher: Are you able to show us?

Warren Tomlin: Yeah, sure. We're able to show you. So basically what we did is -- and I don't want to trivialize how we did this because we've had a hard time historically getting into mobile, all the different languages, all the different devices, all the different carrier latency. And so we took the same games, they're pretty advanced Flash games that we did on the Web, and we ported it to the device. And so I think we have some content that we can show on the big screen.

Anand Chandrasekher: It's running on the device backstage.

Warren Tomlin: Yeah, so it's on the MID, but it's on the device backstage. So this content would be the content that came in the Happy Meal. And normally because we're an agency we like to overstate how complicated things are to do. But this content took about a day to do, and that includes adding the touch functionality to the MID. So we're delighted to be able to take rich content for our client, port it to the

MID, add touch, and for the economy of scale is essentially zero, have a mobile device now that people can interact with. So we're really, really excited to be supporting the Atom and the Atom-based MIDs.

Anand Chandrasekher: Fantastic. Thank you very much, Warren.

Warren Tomlin: Great. Thanks for having me here.

[Applause]

Anand Chandrasekher: It takes the entire industry to build out an ecosystem, and we've been in the ecosystem building stages for the last several years. You can see here the partners we have on board already from the operating system environment as well as from the applications environment, and today we're announcing several new members as part of this ecosystem ranging from CMD, LiveCast, Orb, Move Networks, GyPSii, who you already saw, to NeuSoft.

And I want to spend a little bit of time on one of these up here, NeuSoft. You're going to see Move a little bit later and you already saw GyPSii. NeuSoft is a company in China. They do some really cool innovative, cutting-edge work. But instead of me talking about it, let me run a video and then I'd like to invite up a guest to talk about what they do. So could you run that video please?

[Video plays]



Anand Chandrasekher: Please join me in welcoming on stage chairman and CEO of NeuSoft, Dr. Lu.

[Applause]

Anand Chandrasekher: Hello, Dr. Lu, how are you?

Dr. Lu: Good.

Anand Chandrasekher: So they may not know that you are the largest software company in China, and by some measures maybe even in the world. You're very, very large. Do you want to tell them a little bit in your own words about NeuSoft?

Dr. Lu: Okay. NewSoft is a software solution and services provider. We have [13,000] employees now; 5,000 of them working in various software areas. We provide services to our top-10 global companies to provide services in healthcare, in digital home, automobile information and the entertainment system, IT products, and also in mobile devices.

Now we are set up [unintelligible] Center. It's basically a [mobile] platform. We already have got some progress. Some of our products have already come to market. We see that China is a great opportunity to us. First there's a huge demand for the MID product because of so many of the younger generation. There are 400 million mobile [phone subscribers] now, and also [China] makes a lot of those kind of devices. They need a lot of services and a lot of software inside of the equipment. So we are very happy to work together with Intel.

Anand Chandrasekher: Thank you, Dr. Lu. It's a pleasure for us to be working with you. But I think you have a special demo you wanted to show these guys today.

Dr. Lu: Yes. We are already porting some of our applications from other platforms to a [mobile] platform here, some of them like [car navigation already the] [unintelligible] platform now come to the market in China. And also we have some solutions in [public security. Policemen] use the mobile devices; you can check the license of a car. And today we show something -- two.

One is [GUI] framework. That is a basic [mobile] framework and [also] a platform. You can use that easily to build GUI. Also another one is Enterprise Solutions. We think that mobile MIDs are not only for a consumer product. There's a lot of need in [industry solutions].

Anand Chandrasekher: Okay. Are you ready to show it?

Dr. Lu: Yeah. We show that.

Anand Chandrasekher: Okay. Let's -- should we go up there?

Dr. Lu: Good.

Anand Chandrasekher: Okay. So this is the GUI?

Dr. Lu: Yeah, that is the GUI. And you can build a GUI [very fast, easily,] and also you can integrate a lot of applications in the framework. [You see that button is floating, that means you can build] a lot of [buttons]. You can [category those kind of buttons].

Also, I can show another one is for doctor personal assistant. Here you can see the doctor can use his mobile devices. You can access medical record. At same time, you can access not only text and the [data], you can access some of the imaging data, which is come from CT scanner, MRI.

You can see the three-dimension picture, which is built by CT data or MRI data. And also you can see the single-slice picture. You can zoom. You can find some diseases and maybe a cancer or something. And also the doctor can use it when the patient just gets up from the bed of CT scanner or MRI. The [unintelligible] can transfer all the data to PDA, so that doctor can put a little scanner thing in their packet and you can check in the patient side and that will be more efficient.

Anand Chandrasekher: That's brilliant.

Dr. Lu: Yeah.

Anand Chandrasekher: That's brilliant.

Dr. Lu: Also, you know, you can make some report. [Now we already use those kind of CT in one] hospital in Beijing. All hospitals use NeuSoft

solution. [And our] nurse and doctor use that, a PDA. It's really wonderful.

Anand Chandrasekher: Fantastic. Thank you, Dr. Lu. That's extremely exciting, in terms of what you're able to do with this platform.

Dr. Lu: Yeah. [We are] [unintelligible] [to importing] more of those kind of applications to mobile devices, especially in business sector. I think it's not only a consumer product. It's a business will be much more use MID product.

Anand Chandrasekher: Thank you very much.

Dr. Lu: Thank you.

Anand Chandrasekher: Thank you. Pleasure working with you. Thank you.

These are some of the customers that have already launched or are launching this quarter, and you can see these customer names -- I've shown some of these before -- we had about 35 design wins for the first generation of the platform that are coming into the market in waves. Wave one is what you're seeing right now entering into the market, wave two comes at probably the tail end of this year time frame, and then wave three will continue over the course of the first quarter of next year. What I want to do now is define the MID space a little bit for you guys.

We think about MID as multiple devices; it's not just one device. Now clearly I've shown this before in the past, in some of my financial analyst talks. I'm showing it here for the first time. We look at this space divided from a time-to-market standpoint and from a form-factor standpoint. Earliest time to market will be clearly in what we call the productivity MIDs. Some of the examples you saw in terms of when you take what Dr. Lu is doing in the enterprise side, pairing it with a MID, and putting it out in the marketplace. We call that a productivity MID.

There are also consumer MIDs. What are those? Certainly navigation devices fall into that category, entertainment devices fall into that category, gaming devices fall into that category. And then the last, but not least, is the communication MID, and you can think of this as the intersection of the smart phone and the mobile Internet device as one category. We call it the communication MID.

Our generation one product, which is what we're talking about today, which is Atom and all of its progeny, that's in the market, and it's in the market with our customers. And we take a look at productivity and what customers are doing. These are some of the customers that are out in the marketplace already with Atom-based MIDS and netbooks.

Specifically what I'd like to be able to do is showcase to you what these customers are able to do with their customers in the marketplace. So I'd like to invite up on stage to help me with this Panasonic's president, Rance Poehler. He is the president of Panasonic Computer Solutions Company. And also one of his customers, Curt Schmidt,

who is the director of applications and part of the CTU office. Hi,  
Rance. How are you doing?

Rance Poehler: Great.

Anand Chandrasekher: Good to see you this morning.

[Cross-talk.]

Anand Chandrasekher: Good to see you again. Okay, so what do you  
have for us here?

Rance Poehler: Well, Anand, I know that you talked a lot about MIDs here this  
morning. And I would like to bring to the stage a device that is  
shipping next month for enterprise and government customers. It's a  
new category of products, working with Intel, that we've created using  
Atom, called Ultra Mobile Rugged. Now, this device will allow us,  
again our government and enterprise customers, to take their images  
that are running on their normal mobile devices and run on these new  
Atom-based units.

Anand Chandrasekher: Fantastic.

Rance Poehler: And you can check it out yourself if you'd like to.

Anand Chandrasekher: Oh, \*#&@!

Rance Poehler: You can go ahead and drop it.

Anand Chandrasekher: Censor that.

Rance Poehler: So as you can see it's clearly a tough book.

Anand Chandrasekher: Yes, very much indeed. Last time I did one of those, Takigai-san nearly killed me because it was a beta unit that I had done that with, so thank you for letting me incur his wrath again.

Rance Poehler: Absolutely, absolutely.

Anand Chandrasekher: Okay. So what can you tell us about what your customers are able to do with it?

Rance Poehler: Well, this device -- and also, this is another product in the ultra mobile category that we will be aiming towards the healthcare industry. So we believe the handheld space is about a \$2.5 billion opportunity today.

Anand Chandrasekher: This is the enterprise handheld space?

Rance Poehler: Enterprise handheld. And with this we'll expand that particular market. We have many government and enterprise customers telling us they can now do applications they couldn't do before because they didn't have --

Anand Chandrasekher: Why is that?

Rance Poehler: Well, essentially they didn't have a full-blown processor, like the Atom, and they could not run a full OS. So these two ultra mobile rugged devices allow our enterprise government customers to take their applications and become more mobile.

Anand Chandrasekher: So tie into the corporate environment effectively, rather than have it be a standalone isolated --

Rance Poehler: Exactly.

Anand Chandrasekher: Okay. So, Curt, you're from BP, part of the CTU office. What have you been able to do with this technology? Can you talk a little bit about that?

Curt Schmidt: Yeah, sure. Our group is charged with bringing new digital technology into BP that can make a significant impact on the business bottom line. And one of the things we started thinking about a couple years back was how do we get the power of computing to the people who work in the field that are actually making the money? Because the people in the office have Microsoft Office, they've got calendaring, they've got chat, they've got human resources, ejob postings, etravel, everything that they need, plus the smart phones.

But getting things like this to the field is really hard. It's hard because you have to have a screen you can see outside, you have to have a keyboard that you can put information in with, you have to have some kind of network where there's no network. You have to have something you can drop, because they drop it. You have to be able to



work on it with big heavy gloves on. And you have to do all this with enough battery life to last for at least a shift, so at least eight hours.

And that sort of thing just didn't exist. We had some success with the smaller handhelds, like you see for the FedEx people working, but the screen is really small, there's no memory, there's no hard drive storage really, so a lot of things we couldn't do.

So Intel approached us a couple years ago and said, hey, if we had a ruggedized ultra mobile PC, would that be useful? I go, "Well, I don't know, let's see." We went and talked to people in the field, and they go, "Yeah, this would be really helpful for us."

So Panasonic and Intel worked together to bring this to us and we're right in the process now of taking it out in the field and seeing exactly what applications are going to work with. And the response has been absolutely tremendous.

Anand Chandrasekher: Can I put you on the spot and ask you to talk about some of the stories you narrated to me last night?

Curt Schmidt: Sure, I could give you a lot, but I would summarize that every time we go out, we have in mind to do one or two things, and people come up with 10 things. So I'm having to say, "Wait, wait. One or two right now, we'll do more later."

So a couple things that we've identified so far. We have a large facility in Louisiana that holds all of the offshore spare parts for the Gulf of



back to the plant to see if it works. And then he goes back and forth, back and forth. With this, he connects to their wireless network, he makes the change there, he looks at what happens, and he's done.

Anand Chandrasekher: That's fantastic. Very, very cool. Thank you for sharing your experiences and stories. That's really wonderful. I look forward to ramping this thing.

Curt Schmidt: Thank you.

Rance Poehler: Thanks, Anand, thank you.

Anand Chandrasekher: Any final comments?

Rance Poehler: Well, I'd say on behalf of Panasonic, we greatly appreciate the support of yourself and your team to help us bring the Atom processors to reality, these devices.

Anand Chandrasekher: Thank you. Any final comments from you, Curt?

Curt Schmidt: No, just thanks very much for your help. We think this is going to be a big help to BP.

Anand Chandrasekher: Thank you, guys. I think great stories here.

Rance Poehler: Thank you very much.

Anand Chandrasekher: Appreciate it. In addition to Panasonic, Fujitsu is just launching today, for the U.S. market, and for the markets outside of APAC, this particular product. This actually has a -- it looks like a clamshell, but the screen actually converts -- it's a bit of a convertible product. And you can see here a range of products from a number of companies -- actually the companies that I talked about earlier.

First-generation product will also go into what we call consumer MIDs, and you can see a couple of the names that have already launched. Igo is a Chinese consumer electronics manufacturer. They launched a mobile Internet device for the China market in time for the Olympics. In fact, Dr. Lu, one of the applications that he talked about was a navigation application that actually is landing on the Igo product.

You also have Ben Q, Clarion, and Lenovo I'll talk about in a second. But I want to bring up on stage Clarion's Mr. Nakamura-san. He's the general manager of Clarion. And I want him to talk about what they've been able to do with Atom technology. Nakamura-san, pleasure to have you here.

Mr. Nakamura: Yeah.

Anand Chandrasekher: Thank you.

Mr. Nakamura: I'm pretty good. Thank you. Thank you, Anand. I'm very excited to be here today. It was almost a year ago when we started working with

Intel on our version of MID. Clarion call it Mobile Internet Navigation Device or MIND.

Anand Chandrasekher: Fantastic. So can you tell us a little bit about MIND, what it does and put us through its paces possibly?

Mr. Nakamura: Oh, yes. Basically MIND is a mixture of the consumer device and the car navigation device, so it kind of has two modes, for consumer device, consumer usage and the car navigation usage. And we're, today, launching our MIND in U.S. market, and it's coming to the store near you in October.

Anand Chandrasekher: Okay.

Mr. Nakamura: So today I show you three demonstrations.

Anand Chandrasekher: Please.

Mr. Nakamura: Okay. First of all, yeah [I'm going to] show you the demonstration. First of all, I want to talk about the new user interface framework. So far the car navigation, you have a rigid, fixed, menu hierarchy. It's awkward to do anything. [That's the current] navigation system.

But because of the Atom processor performance, we can do these kind of things. The menu will follow you, okay? So like iPhone, the menu will follow you so you can feel -- it's a tangible user interface, okay? Or even you can change the shape of the menu. Take a look at that. From horizontal to [circular] or, yeah, anything you want, right? So

this kind of the new, very intuitive user interface will revolutionize the car navigation experience, okay?

Anand Chandrasekher: Very cool. Very cool, indeed.

Mr. Nakamura: The next thing I want to show you is not only these kinds of things, but also it can provide you the experience of the Internet performance. Okay, so like YouTube or MySpace, those kind of things, but, you know, because of the size of the device, the YouTube or MySpace can be optimized for this form factor.

Okay, let's take a look at the YouTube, it's here. So it's very comfortable to see the YouTube contents on this form factor, okay? So it's pretty easy. It gives you, just like a PC experience, but you can have a mobile environment as well as in-car experience.

Anand Chandrasekher: Okay. Can we see the navigation demo?

Mr. Nakamura: Yeah, of course, because this is a navigation device.

Anand Chandrasekher: Absolutely.

Mr. Nakamura: [I can show you. The last part is the] navigation. [Obviously.] Okay. Here you have navigation. Oh, let's take a look at the -- because we are now in the Moscone Center. Okay, let's have a navigation demo from Moscone Center to Golden Gate Bridge. Okay, so it can give you the turn-by-turn direction, but the [unintelligible] comes from the Internet power. So you can get the real-time point-of-interest information from

Internet. So you can get real-time traffic, those kind of things, through Internet. [Unintelligible] [over] Internet, okay?

Anand Chandrasekher: Okay. Very cool. Very cool, indeed. Thank you, Mr. Nakamura-san.

Mr. Nakamura: Yeah, thank you.

Anand Chandrasekher: What has it been like working with Atom?

Mr. Nakamura: Oh, right. Actually, Clarion experienced amazing things. From the kickoff of this project, it's actually last October, three months later, we could show you the first sample demonstration at the CES in Las Vegas. Only three months. Okay. So it's revolutionized development cycle, because the Intel Atom processor is opening the new door for us. Okay? And we are very much satisfied with the performance of the Intel Atom processor.

Anand Chandrasekher: Fantastic. Thank you very much, Nakamura-san.

Mr. Nakamura: Thank you.

Anand Chandrasekher: Pleasure indeed.

Mr. Nakamura: Yeah. Please come to the community booth and experience it today.

Anand Chandrasekher: Yeah. Thank you.

Mr. Nakamura: Thank you.

Anand Chandrasekher: One more in the consumer MID is the Lenovo product, and I'm going to have Russ come up here very quickly to show this one. Hey, Russ.

Russ: Hey.

Anand Chandrasekher: You're running back and forth. You're getting your exercise for this morning, right?

Russ: Absolutely.

Anand Chandrasekher: Okay. Let's see, what do we have here?

Russ: What we've got here is the new Lenovo Idea Pad. Hang on one second.

Anand Chandrasekher: Uh huh. So this is the one that just got launched in China, right?

Russ: Absolutely.

Anand Chandrasekher: The Beijing Olympics, yeah.

Russ: And what we're going to show here is this device playing. Here we go. It's going to be streaming some content from Move Networks. Move Networks is a new online codec that's user-streaming content. It's being used by a lot of major content deliverers --



Anand Chandrasekher: [Fat] thumbs again, possibly?

Russ: [I think so.]

Anand Chandrasekher: Don't worry about it.

Russ: So let me tell you this --

Anand Chandrasekher: Talk to it --

Russ: The Move Network Player has just been ported onto this device, and it allows these mobile devices to get access to this high-quality content for major content providers like ABC, Disney, ESPN 360, and a lot of other services like that. So you're able to stream content to these devices, and it can tailor that content to the type of device and the network and the bandwidth that you've got available to ensure that you have a great experience no matter where you are and what kind of device you're using.

Anand Chandrasekher: Fantastic. Thank you very much.

Russ: Pretty cool stuff.

Anand Chandrasekher: Great.

Russ: Thanks, Anand.

Anand Chandrasekher:

By the way, you can see it in the Helix Booth.

One way to tell that the demo is live is when you have a flaw on the showcase every now and then. So you just had it, right? If you want to actually see it, go to the demo showcase. You'll be able to see it live.

Okay. So you've effectively seen generation one go into what we call productivity MIDs and into a segment of the consumer MIDs, and what's next? What's next is effectively generation two. Generation two is Moorestown. And Moorestown we've talked about as publicly -- it will hit the marketplace on or before 2010.

And while Menlow, which is generation one, was the first low-power CPU and System Controller Hub designed from the ground up, what we're doing with Morristown is taking the idle power down by at least a factor of 10X on the overall platform. And the targeted usages here -- we want to be able to target the entire CE mobile Internet device space, handheld space, and we also want to be able to target the communication MID space or the intersection of the smart phone and the mobile Internet device.

So what we're able to do here is Moorestown is tracking very nicely against our schedules. It is quite small. Those two chips that you see up there are the two components that make up Moorestown. This little board that I'm holding in my hand here is effectively the PC board that Moorestown would sit on.

And this particular board would have all of the components necessary to build an entire mobile Internet device with the same compatibility, same capability that you saw showcased on all of these, except it's going to be in a much, much, much, much smaller form factor and will fit into my pocket.

Now, what we're also able to do with that is be able to deliver some very, very cool experiences. To give you a feel for how Moorestown is tracking, this is a wafer of the Lincroft, which is the north complex of Moorestown, and this is making its way through the fab as we speak. And engineers are waiting with baited breath to get their hands on it so they can start the debug process. So we're tracking very nicely on our Moorestown program to be able to get the product and the platforms from our customers into the marketplace on or before the 2010 time frame.

Now, to be able to utilize Moorestown, you probably want to get a feel for the kinds of capabilities and form factors it might fit into. The best way to actually articulate that and show that to you is through a short video. So if you guys could run that video, please.

[Video plays]

Anand Chandrasekher: Now, some of you might have come here expecting me to say a little bit more about Moorestown. I invite you to come to Taiwan IDF.

Internet is absolutely going mobile. No question about it. We're at an inflection point that's going to drive a lot more growth. Requirements for delivering this innovation into the pocket effectively is improvements on power while maintaining performance and compatibility, and innovation on the form factor, innovation on the usage models, innovation on the user interface, exactly like what you've seen from the likes of Panasonic, Clarion, Move, GyPSii, several other companies, NeuSoft, that we had to showcase today.

We're absolutely just at the beginning. We're excited about the opportunity that this marketplace represents, and we're extremely eager to work with all of you here to fulfill the growth opportunity that this represents.

The Helix demo showcase has a number of community members of the mobile Internet device community demonstrating their products and their technologies and their capabilities. I invite you to attend the showcase and see what they have. And the technology inside tracks, we will go into more depth on both the platform architecture innovations required to make this happen, also into a lot more detail on Atom itself. So I invite you to attend those as well. Thank you very much for your time this morning.

[End of recorded material.]