

**Hector Ruiz**  
**Oracle OpenWorld Keynote Address**  
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Thank you, Charles, for that great introduction and for inviting me back to this keynote opening address today in Oracle Open World, the industry's most important and influential IT forum.

You know, much has happened since we were here together last year, and this morning, I would like to use our time to discuss not only the significant events of this past year, but more importantly, what these events meant for our industry and our customers. Because as the opening video implied, I believe our industry's great accomplishments now give us an opportunity -- as well as the responsibility -- to think bigger about the impact on business and the world at large of IT. A year ago, I stood before you and talked about some of the core values that I believe are fundamental to the future of our industry.

Choice. Customer-centric innovation. And fair and open competition. During the last year, we have seen how these values, when carried out, can usher historic levels of growth and innovation. A powerful example is the remarkable role of virtualization. The capacity for virtualization to revolutionize IT is really not an understatement. Virtualization is extending the tradition of information technology to allow our customers to do significantly more with less.

It is creating entirely new opportunities for our industry to address two of our most important challenges: energy efficiency in computing and affordable Internet access. And perhaps most profoundly, virtualization is accelerating the shift in control from the IT vendors to the IT customers. And this morning, Oracle's announcement of Oracle VM, based on the xen open-source hypervisor, only further demonstrates the opportunity that virtualization provides for both the IT community as well as our customers.

You know, another example of these values in action is the arrival of native quad-core processing, the quad-core AMD Opteron processor. The quad-core AMD Opteron processor raises the bar -- the bar in four key areas: one, performance, two, virtualization capabilities, three, investment protection, and fourth, energy efficiency. Each of these strengths is significant and represents an important technological advancement.

But what is most significant is how these benefits come together to create real value and real choice for our customers. And, because of the unique value that it

brings to our customers, the quad-core AMD Opteron processor will have a demonstrable, positive impact on the vitality of the x86 microprocessor market.

In my hometown of Austin, we're looking forward to the new system that is being installed at the Texas Advanced Computing Center, called TACC, a research center at the University of Texas at Austin. When TACC's new system is up and running later this year, it will be the world's largest supercomputing, with 15,000 quad-core AMD Opteron processors. The systems will offer high-performance computing for earthquake prediction and long-term climate modeling for the nation's academic and research community.

Similar to its impact at TACC, I fully expect the benefits of quad-core AMD Opteron processor to open up entirely new possibilities in the most critical industries to the global economy: healthcare, finance, entertainment, infrastructure, and government. This past year has also seen our industry take significant steps toward extending our great potential for innovation to more devices, people, and markets.

The act of computing, once limited to a desktop or a server in an office somewhere has now extended to cell phones and televisions. It was only a few years ago that those of us in the first world watched many developing countries use cellular technology to leapfrog past the necessity for creating expensive and cumbersome land-line infrastructures to make phone calls.

And over the next few years, we will see these same countries use the rapidly escalating functionality of their mobile devices to close the gap in Internet connectivity. You know, this past year we have also seen tremendous innovation beyond technology itself. With the imminent debut of the One Laptop Per Child's incredible XO device, we will see the birth of an entirely new business model to create and deliver computers to children in every corner of the world.

The XO device will change the way we think about bringing the power of our industry to the vast majority of the population who have yet to benefit from IT. Virtualization . . . native quad-core processing . . . the evolution of smart phones . . . the XO device. The list of significant achievements from this past year could go on and on.

And because I'm certain that during the next few days you will hear plenty about these great products and technologies, I'd like to use my time with you

this morning a little differently. I want to talk I with you not about technology and innovation. Instead, I want to talk with you about what all this great technology and innovation you saw on these slides behind us should inspire us to achieve as businesspeople.

You know, as an industry we spend a lot of time focused on solving technology problems. Making our data centers more energy efficiency. Lowering the total cost of ownership. Creating faster networks. Simplifying our applications. But just look at what we've created together in this past year. And at the end of the day, these great technology achievements were not just about creating better technology.

They were about creating better businesses for our customers -- more relevant, flexible and profitable businesses. In the 21st century, it doesn't matter what the business is: insurance, healthcare, entertainment, or even farming. Technology has the capacity at the very center of how these businesses are run.

Our industry's innovations are no longer mere productive tools. Now, they are the tools that will allow any business to grow, evolve and transform ourselves in this "flat" world. Given this tremendous -- and growing -- impact that we have on the way businesses are run, it is time that we think bigger about our industry's potential. And to help us think bigger, I have invited several people to join us this morning. Some by video and some in person.

And I'm going to stray from the usual IT keynote focus on technology, and instead put the focus on the business challenges and opportunities of our industry's most dynamic customers. So here's how it's going to work. During the last few weeks, we've asked three well-known companies to pose a business challenge -- not a technology challenge -- but a business challenge for the IT industry.

And following their challenges, I will invite on stage some of our industry's smartest minds to discuss how our -- our industry must respond to those challenges that our customers are asking us to address. My objective this morning is to ratchet up our ambitions, to ask us all to think bigger and more boldly about the kind of impact that we as an industry can have on these customers. So let's get started.

Our first customer video comes from Hunter Smith at Electronic Arts. Hunter is the Executive Producer of the Organized Crimes and Godfather games franchise at Electronic Arts.

## VIDEO ROLLS

Hector Ruiz: Thank you to the Hunter and the Electronic Arts team for that challenge. Now, I'd like to invite onstage an industry veteran to discuss how we, as an industry, can respond to the challenge that Electronic Arts brought up in their video. Please join me in welcome the person responsible for shaping Hewlett-Packard's overall corporate strategy and technology agenda, the executive vice-president and chief strategy and technology officer for Hewlett-Packard, Shane Robison.

Shane, just grab a seat here and let's chat a little bit. You know, Electronic Arts is clearly a leader in gaming space and they have posed an excellent question. You know, it has to do with collaboration. You know, that's a challenge many companies face today as they're global. You know, most of their talented employees can be scattered all around the world, and especially these days when we have to go and recruit people in the best places where they are, we could have engineering teams in, you name it, just everywhere.

We could have uses of technology just about everywhere. So, Shane, the question that he posed for us is a very interesting one, and I know that you have a strong point of view in this at Hewlett-Packard, and perhaps you could give us your perspective on geography and how we bring people together to help produce great results.

Shane Robison: Sure. We're partnering with a number of industry leaders in exploring the very best communications and collaboration, both infrastructure and products and services. So, in addition to looking the world of massively multiplayer games with companies like EA, and addressing those needs, we've partnered with DreamWorks.

And developed a communications and collaboration infrastructure called Halo, which is as close as you're going to get to virtual reality. And as we all want to travel less and communicate more -- this type of application infrastructure is going to be key. And the other thing is as we see more and more companies deliver their solutions and their software as a service, a lot of those applications

are focused on communications and collaboration in addition to the traditional productivity apps.

Hector Ruiz: You know, people think of gamers as extreme users, you know, people that do things that the rest of us never get to do. However, you know, it has become, I think, fairly well known that in the history of our industry, a lot of the technology and a lot of the things that gamers do eventually trickles down to the -- the mortal people like us. And companies like Electronic Arts, that are really early innovators in that technology and they -- they call that the point of the arrow.

And so, I know at Hewlett-Packard you guys have thought a lot about how this point-of-the-arrow phenomena can be used to help businesses and how to take advantage of it. So perhaps you could also share your views on that.

Shane Robison: Sure. We're very excited about the gaming space. You know, in many ways, the gamers push the edge of the envelope, whether it's processing or storage or communications. And this last year we acquired a company called Voodoo PC, uh, it's won the award every year for the last four or five years as the ultimate gaming machine. You can go on the web and you can get one for yourself, but it's the highest-end of the high-end capabilities for truly interactive gaming.

Now we've taken that technology and we've drilled that down into a new product we call Blackbird, which was announced in September, and then we, in addition, we take what we learn from those high-end gaming platforms and we bring that to market in our media center PCs and laptops. So if you look inside the Blackbird, you'll see DNA from Voodoo, so we really do take advantage of what we learn in these extreme applications and bring that to market as quickly as we can in the rest of our platforms.

Hector Ruiz: Good, Shane. You know, also, the other thing is that these gaming companies have a unique opportunity that because of the way they deal with the gaming community, they collect an awful lot of information about the customers, they have a three-dimensional view of what these customers say and do. And with so much interactivity and personalization functions that are built into today's games, these companies really have an incredible insight into these customers. The question then for us, Shane, is what would you suggest as being available to optimize all that information for them as well as for us?

Shane Robison: Well, we have really focused our software business on something we call business technology optimization. And then a new space called business information optimization. And the idea there is to take the traditional information technology stack where it's hardware, operating systems, middleware applications and provide our customers with a set of business technology management tools that allow them to manage that whole stack and optimize it around their business process requirements. And then, in addition to that, they can optimize the access and, you know, all of the different aspects of business information optimization.

Hector Ruiz: Great. Shane, the other thing is that, you know, one message that comes loud and clear in these things is that, the -- in the gaming industry, in particular, IT is no longer just an enabler, but it is really how the company's run. The IT is the soul and source of the company. The question would be is -- is it time, now, across the industry to -- to just accept and realize that IT is now an integral part of business, business strategy, business models, and all of those things that perhaps maybe we've debated a little bit too long?

Shane Robison: Well, I talk to a lot of CIOs, as you can imagine. I spend a lot of time with our customers, and one of the things that really hits home with the CIOs is for a long time, IT has been a support function, and it's really been there to support the business and support the business's success. If you look at these new businesses, whether it's interactive gaming or software as a service or delivering your -- your services to your customer through web services platforms, IT is the business. And that, I think, is a change that's just happened in the last few years, and it will continue to be a trend, where most of the most is around what you're delivering through the IT organization.

Hector Ruiz: You know, another thing about this -- this industry, that I'm sure, to some people, might be quite surprising, is it's not only growing very fast, but it's already a 40 billion market, and it's exploding globally. When you take into account not only the set top box games but the online gaming segment and all of the social functions and personalization that comes with it, man it's a challenge. What lessons have you learned in trying to address this market? In solving all of the challenges in a business that expanded so rapidly globally?

Shane Robison: Well, one of the things we've learned a lot about is the whole system. So what you see as a user is a very exciting experience on a high-end workstation or PC, but there's a lot behind that. So we've focused, both in the gaming industry and with our media and entertainment partners, on everything from the creation of the content to the management of the content, how you purpose it and repurpose it, reformat it for the -- any -- any device that you have and give you the ability to access that content anywhere, anytime, so all the way through the distribution.

And if you can't address that entire solution, then you're going to miss an opportunity.

Hector Ruiz: You know, Shane, I don't think there is another industry that has evolved as quickly and rapidly like the gaming business, and I know that HP has played a big role in this, and, uh, I want to thank you for sharing some of your thoughts and ideas with us today, and best of luck.

Shane Robison: Thanks for inviting us.

Hector Ruiz: Thank you. You know, I'd like to move, uh, from the world of gaming to America's favorite pastime. As we hear about Major League Baseball's advanced media's senior VP and CTO Joe Choti talk about how technology has helped define the business model for mlb.com. So let's look at his challenge.

## VIDEO ROLLS

Hector Ruiz: Thanks to Joe, from mlb.com, for asking us that question. And to help us think through what Joe is asking, I'd like to invite onstage a good friend of AMD, the executive vice-president of the Systems Group for Sun Microsystems, John Fowler.

John Fowler: Hey, Hector, how you doing? Thanks for having me here, Hector, today.

Hector Ruiz: John, I guess you and I have learned more about baseball than we ever thought we would.

John Fowler: Well, one of the things as, uh, as you know, sports is a very serious business. So we think of it as, uh, our pastime, but for our customers, it's a very

serious business, worth billions of dollars for their brand and their continuing subscriptions are at stake.

Hector Ruiz: You know, one of the points that Joe raised in his video was that -- that he's not worried about scalability anymore. He thinks that somehow you and I are going to come up with a hardware, software that's going to scale easily. But one of the things he's worried about is -- is, you know, how do you keep this content exciting and being able to monetize it. And he's probably more concerned about the software innovations that are coming down the pike.

John Fowler: That's absolutely true. So one of the things that's happened is the sporting properties have really moved beyond statistics and basic information about what's going on to, uh, much closer to analytics, and so one of the things that you're going to see coming from properties like mlb.com is very deep, real-time analytics available to all of the subscribers. In addition to widespread use to video and moving content, which obviously drives the scalability of the platforms tremendously. I think the interesting thing, especially to show like this, is how they're going to move into real-time analytics available -- available to all the subscribers with an enormous amount of data. That's one of the things we're working with them now on.

Hector Ruiz: You know, I know those of us who had an opportunity to see the World Series and watching it, it was impossible not to reflect on how quickly the game has changed in going global. You know, the baseball community's love for statistics, and I'm fascinated by the continuously growing ranks of foreign-born baseball players from the Dominican Republic, Venezuela, Japan, and I'm sure if we ever open up with Cuba, we'll have Cuban players in our teams.

John Fowler: That's coming.

Hector Ruiz: But, you know, I understand this World Series had a record in this department. There were 16 foreign-born players between the Boston Red Sox and the Colorado Rockies. So Joe talked about how we could sustain the growth in traffic on his website. It seems like perhaps one way would be to help him broaden this global fan base.

John Fowler: Yeah, absolutely. So what's happening, especially with the U.S. sports, as successful as they've been, they're looking to go and monetize by distributing globally, and the interesting thing is that you can move games and

you can have activities globally. But there's a more efficient way to do that, and that's with the Internet.

So obviously the Internet's already global, and there's a tremendous amount of energy taken in exporting these properties [and making available] globally. Naturally, you get into management, content protection and a wide variety of technical issues if you're going to reach the entire globe, which certainly properties like MLB are very focused on.

Hector Ruiz: You know, the other thing that struck me in Joe's comment was that they want to do everything real-time, live, practically, and therefore when somebody gets a hit or a homerun, it instantaneously goes on their website, and therefore the value of that information decays rapidly over time. How do you handle that?

John Fowler: Yeah, well, it -- not only does the value of the information decay rapidly over time, but if you miss a key baseball statistic, you'll find that baseball fans are -- are pretty strong, uh, willed about this, and they'll make you know about it very quickly. But obviously what we provide to MLB is a -- a highly-scalable infrastructure with very robust technology using Solaris, our own operating system, and virtualization technology, so that we can run not just, uh, high-scale credit card transactions in the back office of traditional ERP or CRM, but also very, very high data feed sports transactions and provide the analytics, as well as the robust infrastructure behind them.

So in my group, I'm responsible for networking storage as well as the computing servers, and we build a complete cohesive infrastructure for companies like MLB to handle the highest-scale workloads and also not miss transactions along the way because this is a very discerning audience, and your brand and your reputation depend on being absolutely exacting about -- about your information.

Hector Ruiz: And John, it seems that, at Sun have, sort of established the -- the stake in the ground in the sports arena. You have quite a few of these things going on, don't you?

John Fowler: Yeah, well, we -- we seem to have been specialized in sports, but -- but being involved in a number of other sports properties, but the interesting side effect of this is what the sports properties are doing is growing rapidly, they're scaling rapidly using multimedia content, and they also have very, very

extreme needs in terms of data protection and integrity. And that actually fits what we do, between our software stack, our management tools, and our ability to do managed services and other types of architectural health, we actually mate well to this kind of environment. So MLB is one of several sports properties we have.

The other thing that's good about sports and sports properties is it's a very good business and so obviously that's of interest to us as well.

Hector Ruiz: I mean, it's amazing how mlb.com has taken a brand like baseball, that's so steeped in tradition and custom, and successfully expanded it to the web. You know, I find it very exciting. I logged on it myself, to get an experience on it, and it's incredible what they've been able to do, and they think they've only scratched the surface. So, John, thank you for joining us and explaining a little bit to this audience.

John Fowler: Great. Well, thank you very much, Hector. Thank you.

Hector Ruiz: Thanks, John. You know, we have time for one last question. It comes from a long-standing AMD partner here in San Francisco. We're going to hear from Rick McCallum, the executive producer of the Star Wars trilogy and head of production at Lucasfilm, and see what his challenge for us is.

## VIDEO ROLLS

Hector Ruiz: You know, I've known Rick McCallum for a long time, and let me tell you, it's a joy to work with him because he's a tough cookie. He pushes you hard, and -- and [it's good] for us and our partners in -- in really pushing the technology hard. So I'd like to bring someone out who's not a stranger to this stage at all, a long-time, uh, Oracle veteran, so please help me welcome, uh, Mark Jarvis, the chief marketing officer for Dell. Hi, Mark.

Mark Jarvis: Good to see you. I'm so glad you didn't have the Godfather music for me when I came out there. I was going to have to walk really slow.

Hector Ruiz: Well, your Italian accent would have given you away.

Mark Jarvis: That's right. Exactly true.

Hector Ruiz: You know, Mark, uh, Rick raises a very interesting point. The IT industry needs to be concerned about what makes Lucasfilm successful, and -- and hopefully for many, many years to come. Uh, but what do you think, can we help him?

Mark Jarvis: Oh, I think we can -- we can help him a great deal, but, let's just -- let's just look at the audience and think about how the audience is so similar to Lucasfilm's challenge. And that is that Lucasfilm are all focused on taking a massive amount of data, assembling it into a -- a particular structure, and then delivering it to a big screen.

And everyone in the audience is focused on taking a massive amount of data, structuring it, and delivering it to small screens everywhere. So you all have exactly the same challenge. And, if you think about it, that challenge really is going to get more and more complex. For example, over the next four years, we are going to see a six-fold increase in the amount of data that businesses are going to have to deal with. You go look at the number of users, the number of users is going to triple.

There's another billion users going to come on the Internet in the -- in the next three years alone. Half a million new people log onto the Internet every day for the first time. And then you take a look at all the devices out there, there's going to be an eight-fold increase in the number of devices connected to the Internet. Which means that [there's going to be] struggling with massive amounts of data, users, and devices that you're going to have to manage. So we have, a complexity issue in the IT industry, and the only way to solve that is -- that I know -- is in two ways.

Either we've got to go breed more people, so we can have more IT people in our IT department, or we have to go and simplify information technology so that is easier to use and, uh, it doesn't cost as much.

Hector Ruiz: Real good point, Mark. You know, one of the things I know about Rick, and we heard this loud and clear in his video, it's not just about being more productive, but -- but, you know, one of the things he worries a lot about is how do you foster creativity and creating a closer connection with his customers? I know Rick told me one time that one of the keys to success in his industry is could he be as creative as he thinks? In other words, the speed of thought.

Mark Jarvis: Right.

Hector Ruiz: If he thinks it, can he creatively put it on a piece of something. And so do you think it's impossible to -- to make things that simple, that we could actually create at the speed of thought?

Mark Jarvis: Absolutely. You -- if you think about it, today, the average IT budget -- 70 percent of that budget is in maintaining the current systems that you have, and only 30 percent is spent on innovation. And what -- what we're really hearing from Lucasfilm is how do I spend more money on the innovation and less on the maintenance of systems?

Now, how do we do that? Very simple. We have to move to open systems, rather than to legacy locked in systems. We have to use open standards wherever possible. We need to completely take the entire IT lifecycle and we have to look at how we reduce the complexity from the installation right through to the maintenance and the management right through to when we're actually recycling the system and bringing in new systems into -- into the datacenter.

Hector Ruiz: Well, you know Mark, one of the things that -- in this industry that Lucasfilm is very fast changing, it's incredibly competitive, and Rick doesn't need just to keep up with that change. He needs to lead it.

Mark Jarvis: Right.

Hector Ruiz: And one of the things where we can try to help him a lot is that, we need a way he can deliver on the promise of simplifying IT. And one of the things his challenges to us is can we come up with a partnership model? And I think Mark, you know, Dell and AMD are definitely partnering to try and come up with solutions. What would we have to do differently to help customers like Rick?

Mark Jarvis: Well, there's a number of things we've been already working on. Let's -- let's take a look at a couple of examples. We've been working with you on the whole power management issue. If you take a look at the average datacenter today, the amount of power going into those datacenters is at the maximum it can possibly be, and either you're going to have to go build new datacenters as the amount of data and the amount of processing you need to go

grows, or we need to have much better power management in the current systems that we have.

So we've been working with AMD in order to deliver 40 percent less power utilization with 25 to 40 percent more performance in, uh, in -- in the quad-core processors. Another area that we've been working very closely on is the whole area of virtualization. It's going to be a big subject here at Oracle Open World this year. And in virtualization we have partnered with you in order to build a virtualization box, we call it Visa internally, within Dell.

And that box basically comes ready for virtualization, you plug it in, and two minutes later you're up and running. So it has virtualization built in, ready to go. So that -- that also simplifies IT. But then, you know, you move from the datacenter to the desktop, how do we simplify the desktop? Well, what if we put all the management of the -- the hard disc, the management of the data, we keep that in the datacenter, and we purely stream data into the desktop itself. With networks getting faster and faster, that allows us to do much better management.

And so we've been working with you, with something we call on-demand desktop screening, which will dramatically reduce the cost of running call centers or areas where you have many, many users doing very similar -- similar applications. You know, the bottom line is between Dell and AMD, we're working very hard in order to simplify IT and ultimately to deliver it to our customers so that, like Rick, they can spend more money on innovating with IT and considerably less money on maintaining IT.

Hector Ruiz: You know, I can't wait for you and I to go see Rick and tell him all these things.

Mark Jarvis: It's going to be great. Absolutely.

Hector Ruiz: Yeah. Mark, I appreciate it.

Mark Jarvis: Thank you very much, Hector.

Hector Ruiz: Once again, I want to thank our partners, Shane Robison from HP, John Fowler from Sun, and Mark Jarvis from Dell. They were very kind and

generous to be here this morning and share some of their ideas on how we can solve some of -- solve some of these very challenging IT issues.

And I want to especially thank our joint customers, Hunter Smith from Electronic Arts, Joe Choti from mlb.com, and Rick McCallum from Lucasfilm. Hearing their challenges gets us excited about the opportunities ahead of us and the responsibility that we have as an industry to solve them efficiently. Great industry forums like Oracle Open World are important for many reasons. They give us that rare opportunity to take a step back from our daily jobs and open our eyes and minds to the larger industry and the world around us.

And as you take a look around you over the next few days, you'll see that we all have a tremendous amount to be proud of. But while our industry's impact on business and the world at large cannot be overstated, I believe we have barely begun -- begun to realize our potential. Reflect for a moment on the opportunities that were presented to us in the customer videos. With Electronic Arts, we heard that IT is no longer expected to simply produce a better visual experience.

We're now being asked to enable a global workforce to create and collaborate in real-time. At mlb.com, which has seen their audience double every year since its inception, Joe said that scalability is no longer an issue. His biggest obstacle, and the challenge that he asked us to help him with, is continually creating compelling online experience that customers are willing to sign up of and pay for.

And from our good friend Rick McCallum, his challenge to us was not just about lowering his cost, but it was about helping him find rich new audiences in the face of a crumbling distribution and exhibition infrastructure. And as I listened to what they said, I heard something very important. They no longer look to the IT industry just to solve their problems. They look to our industry to create business opportunities. I think it is time that we hold ourselves to that same standard?

Let's join our customers in thinking bigger and bolder about the possibilities for our industry. Because if what we accomplished in this last year alone is any indication, a tremendous future awaits us. Thank you, and enjoy your time at Oracle Open World. Thank you very much.