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What in the Heck is Going On?

Moderator:

Dr. Peter Raad, Executive Director, The Guildhall at SMU

Panelists:

Richard Hilleman, Chief Creative Director, Electronic Arts
Evan Hirsch, Executive Creative Director, THQ Inc.

Joseph Olin, President Emeritus,
Academy of Interactive Arts and Sciences

Randy Pitchford, President & CEO, Gearbox Software

Introduction by Dean John Attanasio, SMU Dedman School of Law:

DEAN ATTANASIO: I would like to welcome all of you here to this third annual international conference on video games. As you all know, this conference is a collaboration of the Guildhall at SMU, the SMU Dedman School of Law, and the Center for American and International Law. The Guildhall is the preeminent trainer of future gaming designers in the United States, and is led by my dear friend Peter Raad. The SMU Dedman School of Law is very fortunate to have one of the premier intellectual-property faculties in the United States, led by Professor Xuan-Thao Nguyen. The Center for American and International Law is a preeminent provider of not only continuing legal education, but also legal thought, and is led in part by Mark Smith, who is also a dear friend. The wonderful program that you see is a product of many very talented people. The conference is the brainchild of Professor Nguyen and Dr. Raad, and I think it is just fabulous.

It is a really interesting time in the gaming industry and it has been for quite some time. The growth numbers are pretty amazing. Price-waterhouseCoopers' Global Entertainment and Media Outlook for 2008-2012 predicted that the global gaming industry would jump from \$41.9 billion in 2007 to \$68.3 billion in 2012. PricewaterhouseCoopers also predicts the annual growth rate of 10% would best all other media sectors except online advertising and access. An October 2010 report from NPD Group on the games industry stated "in addition to the \$3.7 billion spent in the U.S. by consumers on a new physical video- and PC-game software in the first half of 2010, the total consumer spending on content via other modernization methods, including used games, game rentals, subscriptions, digital full-

^{1.} PRICEWATERHOUSECOOPERS, GLOBAL ENTERTAINMENT AND MEDIA OUTLOOK: 2008-2012 (June 2008), *available at* http://www.pwc.com/sv_SE/se/publikationer/assets/consumer_educational_book_publishing.pdf.

^{2.} *Id*.

game downloads, social-network games, downloadable content, and mobile game applications, is estimated to be between \$2.6 and \$2.9 billion."³

A wide range of interesting topics will be examined over the next couple of days, ranging from the changing climate of the video-gaming industry, video game legal issues, privacy problems and potential solutions, how to position your company for growth and sale, recent court rulings affecting the industry, digital distribution, and the orchestration of successful deals. We have a number of wonderful panels of speakers, people of national and international reputation, who I am sure all of us will enjoy listening to. I would like to thank our generous sponsors, including the law firm of Haynes and Boone, the law firm of Latham and Watkins, Games Bizware, Mary Margaret Network, and Interactive Age. I would also like to thank the key organizers of the conference and the staff of these three outstanding institutions: Mark Smith at the Center for American and International Law, Peter Raad from the Guildhall, and Professor Xuan-Thao Nguyen here at the SMU Dedman School of Law. With that, I give the podium over to the moderator for our first panel, the very talented Dr. Peter Raad.

DR. RAAD: Good morning, I am Peter Raad. Thank you all for being here this morning. SMU is fortunate to have John Attanasio as the Dean of the Dedman Law School. Thank you, John, for your leadership. I am fortunate to be associated with SMU and with the Guildhall. I would like to add my deepest thanks to our sponsors: those that came up with the money and those that came up with the in-kind. I would like to also take a moment to thank the staff—my own staff in addition to John's staff and Mark's staff at the Center.

This is a collaboration that now is in its third year. Honestly, when we did it the first year Sean Tall came over and said: "Peter, we have got to do something around this area," and we went up to the Center, spoke, and came up with this collaboration. We had no idea we would ever do it again. Because of your interest and your support, here we are in our third year. The lineup of speakers and panelists is amazing. What stunned me in the first and second year—and is going to stun us again this year—is that while we may have from one to five experts on this side of the table, we are going to have maybe twice or three times as many on the other side. The talent that is in this room is amazing, and our hope is that in the next two days the interactions and the cross-pollination that will take place between the business side, the legal side, and certainly imbued by the gaming side will be something that you take with you that will be transformative to your business for the remainder of this year.

Thank you again for being here. None of this would have happned from our side if it was not for my deputy director, Ron Jenkins, and his staff. I would like to single him out for all of the energy he has put behind this

^{3.} Press Release, NPD Group, Research Shows Additional \$2.6–\$2.9 Billion Spent On Video Game Content For First-Half 2010 (Oct. 15, 2010), available at http://www.npd.com/press/releases/press_101015.html.

conference and thank him publicly and thank you to the staff that made this possible. Thank you all very much.

Let's move on to our first panel. Now, there are long introductions that I could give, but a simple introduction would be fine. If you do not know who these people are, I am really glad you are here today, because you really should. I am going to call them over to come to the head panel here for our keynote panel: "What in the Heck is Going On?" I am going to start with Rich Hilleman. Rich is the Chief Creative Director of Electronic Arts (EA). Evan Hersch is the Executive Creative Director for THQ, Inc. Joseph Olin has been the face and voice of the video game industry as President of the Academy of Interactive Arts and Sciences, and currently as the President Emeritus of the Academy. He is someone that certainly—like the other three gentlemen on the panel-you want to get to know and you want to speak with during this conference. An old friend, Randy Pitchford who is an amazing game developer himself, is the President and CEO of Gearbox Software. Randy was one of the initial pillars of the Guildhall at SMU. It is because of people like Randy that the Guildhall exists at SMU. We are delighted to have this esteemed panel.

The title of this panel is interesting: "What in the Heck is Going On?" Some people think we have a bit of a downturn in the economy. Publishers and developers are scratching their heads and wondering what they should be doing next. Social games: should we close shop and stop doing these AAA serious endeavors, high-production-value endeavors and all move to casual games? Maybe the answer is to make better console games, maybe better AAA games. Wouldn't that be nice? Everything from the death of the video game industry as we know it to issues that are before the Supreme Court will be discussed and politely cussed at some points by a panel of industry experts. I am going to ask questions and we are going to be jumping around. We are going to, for the next hour and a half, be conversing about the legal climate, gaming consoles, tablet computing, online games, the relationship between publishers and developers, costs and profits, outsourcing, third-party consolidation, the state of innovation, and the general outlook and state of the game industry.

First, a general question to all of our esteemed panelists to get a pulse of the video game industry. Let me start with the 500-pound gorilla in the room so to speak; we cannot really avoid it. There is a case in front of the Supreme Court. Could you name one best and one worst thing that could come out of what we are going through right now? If you only have one or the other that is fine, but just one. Joseph, if you want to start us out.

MR. OLIN: I think the whole Schwarzenegger v. EMA case before the Court is probably the best test that games and interactive entertainment have as an art form, as a medium, to be validated as such.⁴ If you look through the history—knowing that I have some of the best, most learned attorneys who have probably studied the history of film and film battles to be approved and

^{4.} Brown v. Entm't Merchants Ass'n, 131 S.Ct. 2729 (2011).

validated—this is our third shot. I would like to think with the makeup of the Court, society at the time, and the fact that so many amicus briefs were filed on behalf of games, we should be able to withstand this test. It is really hard to imagine the Supreme Court invalidating and letting the circuit court's ruling be overturned. I cannot imagine that, I really cannot. I think that the good news is that games will be validated somewhat. It provides greater opportunities for people interested in the medium to express themselves in ways above and beyond just the more traditional, safe, commercial means. And it probably helps, to a certain extent, capital formulations down the road in terms of having more opportunities means more people may try to exploit that.

DR. RAAD: Randy can you see a worst-case scenario?

MR. PITCHFORD: A worst-case scenario? No. It is clear to me that this is going to work out in favor of the game industry. Maybe one dissenting opinion, when you look at the makeup of the current Court. It is really exciting, because over the years many state governments have made attempts to try to stifle our creativity, to try to impinge upon the First Amendment, and to affect our industry. Each time that has been defeated. I think when this Supreme Court case is resolved there will be very little motivation for the states to continue those attempts. That is going to save our culture and society a lot of resources, to not have to fight that fight anymore.

MR. HILLEMAN: I am maybe a little more pessimistic. I do not know the Court well enough to know how they will rule on this. I keep wondering in my head if there are a bunch of Supreme Court Justices playing Quake in the bottom of the Supreme Court as we speak, trying to figure out what is and is not violent material.

I think the cause of this controversy is not going away. Even if this case gets invalidated, I unfortunately believe there will be another one right behind it, because this is a free one for politicians. For the most part, what they are doing is taking shots at an industry that they do not participate in and in which they do not have a financial stake. For at least some portion of the political spectrum we are an easy target, and we will continue to be an easy target. That has nothing to do with the law and probably more to do with politics. Unfortunately, I think that will continue to be true. It means that if we win this case that will be great, but there will be another. But at some point in time, they may stop coming to the courtroom.

MR. PITCHFORD: I think it will happen eventually. We just heard about how the Dean of this Law School played Zelda. Someday we are going to have a President of the United States who has a Gamertag. It is bound to happen eventually.

MR. HILLEMAN: I think that is the point. It is what I call "the thin blue astro line." If you were fifteen years of age or younger when *Tempest* came out, in my opinion that defines whether you get video games. For the most part, if you are on the wrong side of that line, you do not understand—and you will not understand—in the same way we did not understand television or radio or any other of the medias beforehand.

MR. PITCHFORD: I think it is worse actually. I think it is probably the biggest generation gap in the history of all entertainment. Even when fogies had a problem with rock and roll, at least they understood the merits of music. They just did not like the content of that particular type of music.

MR. HILLEMAN: Baby boomers define that line today. Where Generation X starts and baby boomers end is pretty much where that line is today. That age is about fifty today. That means of the U.S. population, it is probably in the order of 65-70%. Most of our politicians are on the other side of that line. For a while they will continue to play this game because it works out for them politically. The day will come when it snaps back, and that is the day when they misjudge where that line is. The minute that a 70-year-old politician is railing against something a 60-year-old plays, that will stop working. That is really what matters.

DR. RAAD: Evan, before you answer the question, I want to inject something in it. The Parliament in France about two or three years back actually introduced a law that made video games an art form. As you answer the same question, is there something about our makeup in the United States of America that makes us socially view video games differently than the French do?

MR. HIRSCH: I don't think so, but clearly the French have a different cultural aesthetic way that they view anything. That is kind of what makes France a very exciting place to go visit. I think this is really more of an issue that Rich was talking about—the law is just very often behind the culture as far as the timing curve. For me it is kind of ironic that we keep talking about what is going on in business because the 500-pound gorilla is not the Supreme Court. It is really social gaming and untethered gaming with other platforms. My point is that those platforms do not have a violence problem yet. But they will have a violence problem.

MR. OLIN: It's perception because we have no definable violence line. Yours is different than mine.

MR. HILLEMAN: What Pac-Man does to those ghosts is obscene. It's cannibalism.

MR. OLIN: It is disturbing. I think that is the whole point. We have some games that are "A-Team" violence—as in no one dies and everything gets blown up in the air. And we have some games where everyone's death is gory. I think the French have a different perspective, but every country does. The funny thing is, that we in the U.S. are really still driving the industry in terms of setting the standard for pushing the realm and pushing the creative, probably just because the budgets and the creative is an industry we created. Well I say that, but I keep thinking about all that stuff that comes out of the Nordic territories like *Cut the Rope* and *Angry Birds*.

MR. PITCHFORD: Or Korea.

MR. OLIN: That is going to be a whole interesting place. I think it is more interesting what happens in the Asian societies with the levels of violence. And there is no way to tie that together to cultural violence.

MR. HILLEMAN: Or sexual content.

MR. PITCHFORD: I wonder if it is not even about violence at all. Our culture tends to be comfortable with a certain degree of violence almost.

DR. RAAD: Exactly, which makes this double standard really ironic. Because the Europeans tend to be extremely sensitive to violence, but extremely happy and comfortable with sex in movies and on television. But it is the exact opposite in the United States. We are very prudish when it comes to sexuality and we are very big on violence in forms of media. Yet, when it comes to video games the exact opposite standard is being applied.

MR. HILLEMAN: I think there is another distinction. The Japanese and the French are better at distinguishing a commercial product from a piece of fine art. They have distinctive impressions of those two and they evaluate them against different criteria. Those differences are culturally ingrained in both places. I am not sure that is true in the U.S. I think the U.S. views almost everything as a commercial product. As a result, it all gets evaluated in that context and there is not a distinction between how you treat one form of expression and another. Maybe that is a good thing or a bad thing, but I think it is a difference in culture.

DR. RAAD: But it sounds like it is going to work itself out as the society becomes more mature.

MR. HIRSCH: We are the only country of the G-20 that does not have a cabinet level position of arts or design, or things of that level. I think it is interesting—you talk about France and all these other countries we have talked about—that its government feels it is an important part to be not only a participant, but a driver of the creative industries, or just of the fine arts. We do not do that here. In fact, another easy, red-meat politician thing is to just go after the National Endowment for the Arts. I think that is some of our unique problems here. The joke is we are the only country with videogames-business and open-carry laws. That is, arguably, why none of the other countries have these problems.

MR. HILLEMAN: You forgot the drive-through liquor stores.

MR. HIRSCH: My favorite one was this one in Phoenix we used to go through in the studio down there. There was a drive-through liquor store and gun shop.

DR. RAAD: Yes, you want to stock up in one stop.

MR. HIRSCH: Absolutely. So as long as that is legal, video games are perfectly safe.

DR. RAAD: It is green this way. You do not have to waste gas going from place to place. The other 500-pound gorilla: is the tablet expanding the video game market base, or is it cannibalizing from AAA titles?

MR. HIRSCH: Yes. It was in general. I worked on Surface, before the iPad stole the imagination. I say that with absolute jealousy. What we learned is that the big issue for expanding the games business is accessibility. The interfaces tend to be terrible, but more importantly it is just that whole dexterity. The iPad and the Multi-Touch gets rid of that whole problem and it nicely expands the business. When I was at EA, we knew that every five years there was a platform transition.

MR. HILLEMAN: Not anymore.

MR. HIRSCH: Well you know what is interesting I think? Maybe it happened this year and we just did not know it is the iPad and Multi-Touch.

MR. HILLEMAN: Maybe.

MR. HIRSCH: In the history of the business, every five years a platform comes and the market leadership changes. Maybe this is it.

MR. HILLEMAN: It is a new market, not the existing one. What we used to see—those of you who do not know—is that the console business basically runs on a five-year business plan. A new piece of hardware comes out approximately every five years. It acts like a tsunami and comes through and washes away everyone's market position and resets everybody to zero. We all get to start over again. It usually works out well for us. But the process has changed in a couple of ways. Number one is that pretty much all of the platform hardware guys collapsed over the finish line. In the case of Sony, I'd argue they did not ship their actual final shipping software until two years after the hardware shipped. It took a long time for them to get done. There is no stomach at Microsoft, Sony, or Nintendo to go through this again. There is not any of the necessary economics. You may see a new console from Nintendo, but I think from the other two guys-Microsoft and Sony—you will see incremental development on their current technology. Before you see an Xbox 720, you are going to see an Xbox 540—something halfway in between. Before you see a PlayStation 4, you are going to see something that looks a lot more like a PlayStation 3 1/2.

There are a couple of reasons for that: it dramatically reduces the cost of the development of that architecture, and it dramatically reduces the cost of the software—which turned out to be the big cost this last time around. The other thing is that it does not invalidate your entire library, and that is one of the big problems for these guys. They do not want to reset their libraries.

MR. OLIN: To reset libraries within the studio side, it does not reset the knowledge base—all your 10,000 years of experience over this generation.

MR. HIRSCH: It does not double your cost anymore.

MR. HILLEMAN: Right. It took us literally four years, I would say, to get to the point where we are exercising seventy or eighty percent of the PlayStation 3. These are complicated systems that we did not fully realize, anyway. So that change has happened. What I think the iPad has done and the iPhone to a lesser extent—and even the Wii to some extent—is they have either recovered people who were gamers at one point in their life on Nintendo Entertainment Systems or other platforms, or they have introduced new people into gaming. The number one thing that the iPad does is it introduces gaming where you are. So it is the Nintendo DS for adults, in a way. What it does is to allow you to go other places with it. I do not think that that is going to displace the current market. I think it is an additive thing. These new players will redirect the momentum of the console market. It may not accelerate the way that we have seen it in the past, but for the most part folks who are showing up and playing iPad games are not the people who have bought a sixty-dollar console product in the last five years.

MR. HIRSCH: I agree with what you are saying, but what I am not convinced of is how much the kids that are growing up with the iPads eats away at what we used to just know to be money coming.

MR. HILLEMAN: The DS is in deep, deep trouble.

MR. OLIN: The number two toy for children under seven is a first- or second-generation iPod Touch, so they are our hand-me-downs. What are you going to do with a year-old iPod? You're not going to use it. You are going to give it to someone.

MR. HILLEMAN: It is not just that. They are just not interested in the DS anymore. They are just not. It is very interesting.

MR. PITCHFORD: It is too slow. You have to remove the cartridge.

MR. OLIN: There is no "cool" factor. Our children have realized that there is a "cool" factor in almost everything that they consume. There is nothing cool about a Nintendo DS in any way, shape, or form.

DR. RAAD: Even the 3-D one?

MR. OLIN: I do not think that that has the cool factor, quite yet.

MR. HILLEMAN: I love Nintendo to death, but they have definitely stepped in it this time, unfortunately. The problem with the 3DS right now is it looks like that if you are under age seven it has some ramifications for your eyesight. And the DS's current market basically runs from ages four to ten, so you are only left with about three effective years of utility. I am very concerned about how well that platform will do.

DR. RAAD: So what am I hearing you say? Is the console dead?

MR. HILLEMAN: No, I think the home console—the immersive, "fill your living room with goodness"—is still there and still important. The problem is that the growth in the gaming industry is not taking place in the living room. It is taking place away from the living room.

MR. HIRSCH: A good friend of mine, Bill Buxton, was the guy who created Multi-Touch when he was at Xerox PARC, and he had a great line. He said: "You know, for years and years and years, games are what men did in dark corners of their bedroom." And he said: "With the Wii,"—and I think he'd even say it about the iPod—"now families can do it in the bright of the living room." But he said it before the iPod—it was really about the Wii—and I think now you would just take it with you and do it out in public wherever you go. So it is no longer this thing that you do in the dark corners of your bedroom. I think that is where it gets interesting. I think if Microsoft has its way—and I think they might pull this off—the console will still be the center of your gaming universe, where you come and go through. And I think even things like Netflix are going to help that.

DR. RAAD: But you are saying that we are not going to see one every three to five years; we are going to maybe see one every God knows when.

MR. HILLEMAN: Well, maybe we never see one of those transitions again. When you compare an 8086 PC versus today's PC, they are not recognizable. That was one continuous evolutionary continuum, and I think that is probably closer to what we will see in consoles. There will not be these step functions.

MR. PITCHFORD: We will get our libraries brought forward. But there is going to be a lot of pull to deal with the problem that right now our credential sits on a physical disk, and what we'd really rather have is our credential attached to our identity through a digital account. And it is going to require some kind of transformation—even on the console side—to enact that change.

MR. HIRSCH: That is not a technological burden anymore. If they want to do that, they can do it now.

MR. OLIN: Those are business standards and practices more so than technology being a gate.

MR. PITCHFORD: In order to make it real, though, the hardware has to fundamentally change because we can circumvent it with the existing hardware.

DR. RAAD: So what is your prediction in terms of these motion-based controllers? Are they life extenders for the consoles, or are they more than that?

MR. HILLEMAN: Well, for the Wii it does not matter. It is what it is.

DR. RAAD: But what about the Kinect and Move controllers?

MR. HILLEMAN: What the Kinect has tried to do is broaden the market for Microsoft beyond its current ultra-hardcore market. Nintendo has described it as "needing Mom's permission." Microsoft has never been about Mom's permission before, so I think they are trying to build a product that Mom drives into the house as much as Dad and the kids do. And that is important for them to continue to expand their market. I think the Move for Sony is a different product. The Move is an evolutionary extent of the EyeToy stuff from literally a decade ago, and as a result it is much more mature software than it shows.

MR. PITCHFORD: I actually was first shown that tech probably about a decade ago.

MR. HILLEMAN: So it is very mature. Compared to a Kinect, at least in my opinion, the Move works better today.

MR. PITCHFORD: I think there are other factors, though, that went into that. Before Nintendo showed up with the Wii, the traditional pattern was along a vector of Moore's law:

More buttons and more power—that is how we are going to get more customers. So what the Wii did, was to provide the least expensive system—actually, it was the least powerful system—and they promised experiences and this interesting interface. And they ended up capturing the largest market share. So Sony and Microsoft have to stop for a moment and say: "Wait a minute, is it about Moore's law anymore, or have we actually gotten good enough that now it is about experiences and interfaces?" Also—going off your point about how these guys collapse at the finish line—they did not really have the stomach to go all in again. They still had research and development teams, technology teams, and hardware teams. And this is a good way to test the premise that: "Hey, wait a minute, this is about experiences;

this is about interfaces," and to utilize that mind share—that horsepower—that is very valuable to both those companies.

MR. HIRSCH: Definitely the Wii shot Moore's law in the head. It is about experience. It is no longer about pixels.

MR. HILLEMAN: There are three dynamics that dominate our business. One of them is Moore's law, which is essentially about processing power. The number of transistors on a die doubles every eighteen months. This has been very important; it has been dominant in our business since the 1970s.

The next most important law, from my perspective, is something I call Metcalfe's Law. Bob Metcalfe is the founder of 3Com, founder of the modern Ethernet. It basically describes how fast bandwidth grows. Bandwidth has doubled about every five years, if you look at it over time. It is not quite as smooth a core line as Moore's Law is, but more of a step function.

Well, the last one is the one that really undercuts it all. So at the end of the day, Moore's law is useful to a smartphone, and Metcalfe's law is useful to a smartphone. In particular, mobile bandwidth is growing faster than actual fixed-line bandwidth is in speed. Eventually it will hit its physics limits, but that will not matter.

The processor in a current smartphone device is capable of going somewhere between two and four times as fast as it is currently running. That means that it could do two to four times as much, but the reason it is not is because of the battery that is in it. And that gets to the last law that I call Tesla's law. It describes the amount of energy that can be stored in a battery. In the last century that has doubled once. One hundred years to double. The lithium polymer battery that is in a smartphone was invented for the Apollo spacecraft. There is nothing on the horizon that is going to overcome this. There is nothing. Trust me, I have built electric cars. I want it to be true. It is not true. This battery is as good as it is going to get. So as our new customers are increasingly mobile and untethered from wired bandwidth, the dynamics that are going to dominate games in the future are not Moore's law, but Tesla's law and Metcalfe's law—and Tesla's law in particular.

MR. PITCHFORD: Power can become untethered, as well, though. That is why you call it Tesla's law, right?

MR. HIRSCH: I think you're right because I think the advances of programming are going to be about managing that power when you need it, and throttling the power on and off.

MR. HILLEMAN: Just to put some context in, if you buy John Madden football for your iPhone, and you play it on an iPhone 4 today, you'll get between forty and fifty minutes of game play time. If you play Tiger Woods on it, you'll get between three and four hours. If you play Angry Birds, you'll get six or eight. Those are just differences in the way the programming uses the graphics processing unit ("GPU") inside of this content and how much of the screen it is refreshing on a frame-by-frame basis.

DR. RAAD: What about the fourth law, the law of latency? The fact of the matter is that as more and more devices are on the internet, *de facto* you are going to have higher and higher latencies. What is the effect on online?

MR. HILLEMAN: Metcalfe's law says that bandwidth doubles every five years, and so does latency. As the total number of IP devices on the net goes up, the total on-time necessary to resolve those addresses goes up. As we increase the number of devices on the net, it is going to slow things down. That means that ultra-latency-dependent software may have some issues running on completely peer-owned networks. I think both OnLive and Gaikai are going to be spending some of their time being very friendly with what I would call private network providers—people like Comcast and AT&T.

MR. PITCHFORD: You know, one of the biggest funders of OnLive is AT&T.

MR. HILLEMAN: And the simple reason is because they need dependable bandwidth to be able to deliver their product.

MR. PITCHFORD: It would be really helpful for AT&T's business if all of the ways that we consume interactive entertainment happened to have information travelling across one of their networks. So they are really happy to finance a lot of OnLive's endeavors.

DR. RAAD: So we have talked about the legal gorilla and we have talked about the console gorilla. Randy, how would you characterize the state of relations between publishers and developers at the present time?

MR. PITCHFORD: That is one statement that has not changed since I have been in this business. There is a symbiosis that everyone is dependent upon. If the creator does not want to worry about the logistics and expertise necessary to market, manufacture, distribute, and sell the game, then he depends on an expert publishing partner. And if a publisher wants to leverage a world of talent beyond the talent that is employed by that publisher, then the publisher is going to be motivated to look for such talent and engage with such talent. So that creates a necessary symbiosis. Because these stakes are getting larger, and because there are emotions involved—it is a creative business—there is always a degree of tension there. But I think those challenges have probably been the most consistent part of the business of all these things that we can possibly talk about.

DR. RAAD: As an independent developer, from your perspective it is no worse and no better than you have ever seen it.

MR. PITCHFORD: My experience has been that it has been better and better, and I think that has to do more with my studio's position in the industry rather than the industry as a whole. We have been very fortunate. The value of talent is measured by what it is produced and what it is capable of producing. So if there is a track record there and there is a belief that it will continue, then you tend to have more luck in developing those relationships.

DR. RAAD: Joseph, is that true for most independent developers?

MR. OLIN: I am going to say it is not a rare example. But it is a very small universe of independent development studios that have been able to maintain core expertise, grow their talent base, and retain their talent to be

able to advance with each successive generation. The difference between the types of titles that Gearbox was producing two generations ago is reflected in the quality of the work that is being done today in terms of *Borderlands* and how you've extended that and what is being done with *Duke Nukem*. And there are, again, a number of studios, but it is a small number.

MR. HIRSCH: Unfortunately it has gotten too small. I think the last couple of years have been kind of brutal for the independent guys.

MR. HILLEMAN: I do not agree with any of that. Sorry. So a couple of things: number one is that Randy's group has done well because Randy's group is run by grown-ups. What I mean by that is that they recognize that they are in business with a partner, and that they can make that job harder, or they can make it easier. For the most part, groups like Randy's group have understood that the job is ultimately to sell a fair amount of software to a fair amount of people. If they can do something to contribute to making that work better, they have done that. That has a lot to do with their endurance in the market today. There are a whole lot of new, independent developers who have gone into Xbox LIVE, PSN, PC downloads and lots of other things. What I have seen is that there were a fair number of people who were not grown-ups in the previous business, who went off into that thinking that this was going to be the magic elixir for all of their problems; thinking that it was always the publisher that held them down. And now I find most of those same people are complaining to me about Apple in the same terms that they used to complain to me about Electronic Arts. Most of those people have discovered they have gone from one restriction to a new restriction. In many cases they are coming back to publishers and saying: "How can you help us be better?"

MR. OLIN: It is amazing how you always bring your issues with you wherever you go. The poorly run studios are still poorly run.

MR. HILLEMAN: I think in our case, what I have seen is that folks who have gone through the experience of self-publishing on any of those platforms have a greater appreciation for what a publisher does than they ever did before. And the net effect is they show up, and they are much better grown-ups when they show up the second time because they have had to deal with that marketing problem, the financing problem, with getting paid, and they have had to deal with solving the legal issues that arise from the fact that they stepped on somebody's trademark when they did not mean to.

MR. PITCHFORD: The trick comes, though, because ultimately the creators look at our craft as art, but art has a spectrum. On one end of the spectrum is expression, and expression art only exists for the gratification of the creator. The expression artist has to get something out. That is where most of the starving artists tend to live, on that side of the spectrum. On the other side of the spectrum is commercial art, where it only exists for the consumer of it, the perceiver.

MR. HIRSCH: You have to have a client in commercial art, and with that client come conditions.

MR. PITCHFORD: Especially when you're talking about the kind of stakes of the games that I deal in. We are a business, and the fundamental rule is, you have to make more than you spend—or at least as much as you spend—or you do not get to keep going. If the people actually spending that money just set themselves over here purely on the expression side, they are just gambling.

MR. HIRSCH: Rich, what you were just saying is so true. We deal with creative sides, and it is amazing how many rooms you walk into and say: "What game are you trying to make?" And they cannot explain it to you.

MR. PITCHFORD: "Who is your customer?" That is another one. Ask them who their customer is.

MR. HIRSCH: There is a curse word I learned at Microsoft called the "value proposition." If I asked a game designer about it, he would say: "What do you mean?" And I would reply: "What do you mean, 'What do I mean?" And that is goes back to what you talked about; grown-ups or maturity or bringing craft to the table, right? For me the difference between art and commercial art or design is: art says, "I have the guts to go make my art and take my chances." We in our industry have a lot of people who confuse that with being developers or publishers; they call themselves artistes.

MR. HILLEMAN: They also want to do it at a \$20 million scale, and that is really the difference. We have not done as good a job of discriminating between commercial enterprises and a fine artist. You want to be a fine artist and express that one game you always wanted to do, the barriers to entry are low here. You have the opportunity to do that. But if you want to spend \$20 million or \$30 million building a highly immersive console game—that is not a piece of fine art. That is a pure commercial enterprise.

MR. OLIN: That is part of the challenge, though, is that we still—as a commercial medium—have less access to capital, fewer paths to capital formulation. So for an independent development studio like Randy, he has a single choice: "Which publishing house am I really going to try and pitch this to?" Because if Randy goes to a bank even in his advanced state, he's not going to get a \$20 million line of credit from anybody quite too readily because his assets . . .

MR. PITCHFORD: I could do that. Unfortunately there is interest with it. Publishers are great because they do not charge interest.

MR. HILLEMAN: There is bonded funding now that works.

MR. HIRSCH: That is actually been an exciting thing that I have seen these last couple of years.

MR. PITCHFORD: We have actually seen a game or two ship with that film financing model. You guys are actually pioneering that [gestures at MR. HILLEMAN]. You guys are jumping in headfirst on that.

MR. HIRSCH: It is a very interesting model.

DR. RAAD: There is too much love on this panel, with the state of relations between developers, apparently, and publishers. It is absolutely stunning.

MR. HILLEMAN: You did not invite Bobby [Kotick].

MR. PITCHFORD: Bobby would be a hero here, right? Didn't Activision have a record year in terms of litigation, like the most litigious year ever?

DR. RAAD: Bobby is not here to defend himself.

MR. HILLEMAN: Bobby does our business great good. Bobby has been tremendously under siege the last year or so from legal cases. Bobby has a two-word answer to most of them that I will not share in mixed company. But for the most part, Bobby has been very assertive about defending the rights really of the whole industry, so I will give Mr. Kotick a little bit of credit for that. I am not sure his motives were to defend the whole industry, but it has had that effect.

MR. PITCHFORD: No, he is doing his job. He's in the stock business, and he has shareholders that depend upon him to increase the value of those shares. By every metric you could look at, he is doing a good job.

DR. RAAD: So the third-party consolidation that people are talking about—is that being driven just by the continual rise of production costs?

MR. HILLEMAN: If you are talking about console developers, I think the core issue for us has been that at the end of those five year console transitions, you would be down to essentially a top-five market. Eighty-five to ninety-five percent of the money is in ten or twenty titles in the whole business—probably five or ten, in fact. We are at that stage now on all of the current consoles, and if we do not have a step function, in all reality it means that the business is going to consolidate to a much smaller collection of titles at the top. That is what we see today. The reason why third-party developers are suffering is because the total number of titles that makes money in the market place now is smaller than it was last year and smaller than the year before, and that is just about top-five consolidation.

MR. HIRSCH: We are at that weekend-box-office routine now, where if you do not open big, you are gone.

MR. PITCHFORD: Well, we're using the word "consolidation" in two different contexts. I think Dr. Raad intended it in the idea that at the beginning of the generation, publishers were actually gobbling up talent.

DR. RAAD: Right.

MR. PITCHFORD: Talent was kind of consolidating around all the key publishers. In this case, Rich is using the word "consolidation" to talk about which product is the revenue.

MR. HILLEMAN: The markets control.

MR. PITCHFORD: What is interesting is that at the beginning of a cycle, the correct strategy is to gobble up as much talent as possible because, like Rich said earlier, everything is zeroed out, so you want to put as many boats in the water as you can. As we get to the end of the cycle we tend to bet on the prettiest boats and the fastest boats and then sink the rest of them, and so you have really interesting things happening. You've got situations like where a few years ago Bobby [Kotick] thought Bizarre Creations was worth \$150 million or \$200 million, and just this year he decided it was worth zero, and he is just going to shutter it. EA had a similar situation with

Pandemic. John [Riccitiello] thought it was worth a couple hundred million bucks, at least twice, a few years ago. Last year, it was worth zero. What is interesting is that in that seat, those are not bad decisions. The industry moves so fast, that swing is actually reasonable in that two-to-three year time span.

MR. OLIN: Would you say the same things about our friends at Disney? MR. HIRSCH: Oh my goodness, wow, did that door move quickly.

MR. PITCHFORD: Yeah, but they are having a different kind of experience. They are viewing this whole thing, and especially mobile and new business models as wholly transformative. And so they are just kind of pushing all over on one side. That is kind of interesting.

MR. HILLEMAN: I think when we bought BioWare and Pandemic that we thought the business would be different. The good news for us is when you net the whole thing together, we're probably okay. BioWare is doing pretty well. I do not feel too bad about those buys, but the point is that there are just simply fewer shots for people to have a top-five title. If there are ten or twelve or fourteen profitable Xbox 360 titles on an annual basis, then that might be a realistic number for a frontline disk release today. You cannot simply afford twenty-five developers for those jobs.

MR. HIRSCH: We are trying hard to create these new IPs, and it is hard. It is really hard.

MR. PITCHFORD: I think it is really important for THQ's business, but honestly I am surprised you guys are trying it at the end of the generation. That is the most difficult . . .

MR. HIRSCH: I do not think THQ had a choice. I think that model died on us. The old "churn the low-quality product and the license" died.

MR. PITCHFORD: THQ is definitely dependent upon the licenses that support its business.

MR. HIRSCH: We were, and that is gone for us, fortunately.

MR. PITCHFORD: You know, there are other licenses out there, and there is an expertise to that.

MR. HIRSCH: But here is the thing: as the market consolidates or the market changes, well, you know that you have to own an experience, regardless of what platform, you have to own something.

MR. OLIN: Yeah, the problem is within the console business all experiences cost the same. *Red Dead Redemption* costs the same as *Aircraft Over Eastern Europe*. They are both \$59.95 on the shelf. One is a much higher quality experience.

MR. HIRSCH: Absolutely, and that is the point. They created a unique experience that was their own. I think they were in a position to do that.

MR. PITCHFORD: I do not think you need to own it.

MR. HILLEMAN: The reason why you can launch a new property at the beginning of a platform versus the end of a platform: at the beginning of the platform, marketing does not work. So if I spend money on television advertising, it is not nearly as important as word of mouth. Number two is that the total number of consoles available for you to sell to is too small to

make television advertising work. By the time you get to the end of the cycle, what is necessary to get a product into the top five is between \$5 million and \$10 million—maybe more—in direct television advertising. And if you want to launch a new property, it means you are going to spend a \$10 million to \$12 million nut on development of the product and a \$10 million to \$20 million nut on its sales and marketing program—just to go to market and have a chance of being a top five title. By comparison, if I am shipping a sequel, usually my marketing investments are half that. What Randy is pointing out is that if you buy a license, you essentially drive on somebody else's marketing and you do not have to pay that number. That is the context going on.

MR. HIRSCH: One thing I wanted to add to that is that at the beginning of a cycle we always talk about the tie ratio. Because you do not buy a new console and walk out with nothing to play on it. So for us as developers, it is all about being there day and date with the new console because then you've got a free ride.

MR. HILLEMAN: Tell them about tie ratios.

MR. HIRSCH: A tie ratio is for every box—for every Xbox or PS3 sold—we know people are going to walk out of the store with, I think it used to be on average three games, when they bought the console. I think it is down to two now. And that is a very important number. And then the other number that is very interesting is that the Nintendo numbers are wildly different from everybody else because the majority of games being bought per console for Nintendo tend to be made by Nintendo. Whereas, in the PS3 and the 360, they are wildly dependent on third-party developers. And they are happy to have us.

MR. HILLEMAN: That is typical of the Nintendo, just to be clear. One in four DS machines out there has only seen one cartridge in its life. Probably *BrainAge*, by the way.

MR. PITCHFORD: Probably an R4.

MR. HILLEMAN: Only in Asia. R4 is a piracy tool for the DS, by the way.

MR. HIRSCH: Coming back to us, we were trying very hard to create new IP's and the whole transmedia experience, but our license business was dead. There was no way we were going to make it through the year without a different strategy.

MR. PITCHFORD: EA makes it work. Do they own *Rock Band* and *Bullet Storm*? You can spread your bets out. Sometimes there are opportunities you can find where it is actually nice to have that flexibility. You are going to burn it and exploit it while it is there, but you can get out. Look how easily EA got out of *Rock Band*.

MR. HILLEMAN: Well, not really.

MR. PITCHFORD: Or slowed down. But much easier than if you had owned it all.

MR. HILLEMAN: I think the good news is we did not buy a bunch of hardware. But *Rock Band* has been a pretty good "in" with the music business this year, but the music business has changed.

MR. HIRSCH: We have a funny little business called MX vs. ATV which is a nice, consistent moneymaker. That is a license business because you have to license all the motorcycles and all that. That and wrestling are the two so-called unsexy licenses that we have that are reliably good licenses.

MR. PITCHFORD: I think they are sexy.

MR HIRSCH: Well, the sexy license right now is UFC, and that is been a great license for us. They are a great partner, and it is just been a great coincidence of wonderful timing and good product. It is a really good product.

MR. PITCHFORD: That is one of the other key points to this. We can talk about "are we going to play games on our consoles," but at the end of the day it is about the entertainment. We tend to move where the content pulls us.

MR. OLIN: The content's pulling you, and the audience is sort of telling you where they are. There are behaviors . . .

MR. PITCHFORD: That is when you're following.

MR. OLIN: But we are following.

MR. PITCHFORD: Some of us are trying to lead.

MR. HILLEMAN: For the new customers, we need to go to where they are.

MR. OLIN: Correct.

DR. RAAD: So the costs are going up. Let's talk about the other side of the equation. If you want to keep profits, then you have got to make things more cheaply, you have got to be more streamlined, you have got to be more careful, more thoughtful, you have got have grown-ups in the shop, et cetera.

MR. HILLEMAN: That is one model, Peter. The Las Vegas model is you figure out how to get more money out of it.

DR. RAAD: Get more money out of it, absolutely. I am going to look at one side of the equation and then the other one. But first, I am going to start with Evan. So one way that the industry has gone is this whole notion of outsourcing and trying to reduce costs and do things externally. The question I want to ask is: What is the state of outsourcing to far-east Asia? Is it working as had been anticipated or desired?

MR. HIRSCH: The conventional wisdom is it works, and I do not agree with the conventional wisdom at all. I think that yes, you can get a lot of things done quickly and cheaply in Asia. But by the time you are done bringing most of it back and tuning it to the Western sensibilities you need, it is often not the big savings you think it is. Do not get me wrong, we spend a lot of money in Asia, and we have an office over there and all it does is manage all that. But am I a fan of going to Asia for outsourcing? It is a necessary evil. I think the bigger issue, and what I preach with our creative directors, is to make your game before you make it. Figure it out, because a tremendous amount of those costs you hear about are because we threw out

half the game and made it again. And there is a tremendous amount of money spent on making assets and making assets and making assets, because our game designers and creative directors did not know what they wanted. I think the more money you spend on pre-production and getting it, the less you have to be reliant on outsourcing to get your nut down. Clearly, it costs more money to make things here. But I think if you carefully plan it and you invest in the right places, you do not have to go to Asia for everything. Now, with that being said, I think there is what I call "commodity skills" that go to Asia. For commodity skills, like basic models and textures, there is not a lot to be debating there. But for me, I have absolute conniptions every time I see our characters going out of a studio. Because that is so important to the nature of that game that I want the characters in the control of the design team locally. And that is expensive. But again, if you figure out what you are making, you only make it once or even twice, you can knock your costs down substantially, and that is much more interesting to me.

MR. HILLEMAN: I think that is really the underlying thing. I think our original assumption was that we were just going to save money. The net effect is we do not save all that much money. I think we have maybe done a little better than you guys have. But we have a Chinese studio that did about half of the new *Dead Space* project, and that is a 91-rated title.

MR. HIRSCH: But you have a lot of Westerners in that studio?

MR. HILLEMAN: And that is the net effect here. It did not end up being an outsourced title. What ended up happening was that we invested—over about a three-year period of time and multiple products—into turning a Shanghai studio that essentially was a sweatshop into a real game production studio that, frankly, could build its own products now. We saw this happen in Montreal, we have seen this happening in the work that we have done in India. In every single one of those cases, we go in looking for a particular craft, and we end up having to essentially build them out to a full team simply to allow them to produce product that fits with what we are doing. The short answer is we are building new developers.

MR. HIRSCH: I think it is going to be really something when they start making for their own domestic market.

MR. HILLEMAN: That is exactly where I was going to go. That *Dead Space* project got some fairly substantial design changes that were driven by the Shanghai team in reference to their market. Whether we'll sell a single unit of a 360 title in China, I have my doubts. On the other hand, it is not hard to believe that the PC version might figure out a way to make money in that market. It is not hard to believe that other mobile devices like Android might have a way to make money in that market. And so, what we have done is that we went looking for cost savings, and in fact what we discovered is two things. First of all, there is talent there that can create product you cannot make anywhere else. Number two is that they have insight into their domestic markets that you get for free—and if you ignore that, you are stupid.

MR. PITCHFORD: My studio is currently about two hundred people. At any given moment we have between one hundred and four hundred people that are outside of our studio that we contract. They are not just in China. We use different folks to help us from all over the world. I do not think of it as a cost-saving exercise. It is about performance and flexibility. They are non-fixed costs so I can maneuver very quickly. At the peak of that, two-thirds of my expense is outside of my studio, which means I can maneuver that wide. That is really nice in a business that is as crazy as ours.

MR. HILLEMAN: The one reset we have gotten from going all overseas is, I think the notion of what a game development team would do is they would work on a product together. So you would have the artist, the engineers, the sound people, and the designers, and they would move as one large group from one project to the next. The overseas studios that we are building nowadays do not have those expectations. They are a bunch of individual components that know they could work on literally three games in one day. And for the most part, by the way, they like it better that way. I think what it has done is that it has created a cultural change for what we can expect out of developers, at least in those communities.

MR. PITCHFORD: We have already done that internally.

MR. HILLEMAN: I was going to say, I have seen U.S. developers that are newer—a couple years or younger—that have all of the same characteristics. I think the one thing that came out of outsourcing was that it changed the way the business model for developers could work and actually added flexibility to it.

MR. HIRSCH: The other thing I have been doing is stealing from some of the visual-effects models. In the visual-effects business, if you look at any of the major films, there is probably only about thirty full-time staff on those films and everybody else comes in for run-of-show hires; we jokingly call them mercenaries. They come in for six months, and then they go away. You pay them a little bit of a premium, but they are absolute ninjas at their craft. We are doing a lot of that. A lot of my outsourcing budgets have actually been going away from Asia to these mercenary people. We come in, we hire them, sometimes we put them up in housing, and sometimes they have their own. But that is actually where things are getting interesting. I think what Randy was talking about, that is the real challenge. How do we just lower our nut between products? We call it the burden, the cost burden. That is what has really been hurting.

MR. PITCHFORD: Fixed costs versus non-fixed costs.

MR. OLIN: Going back twenty years, if you were a publisher and you did not own your IP and you did not own all your talent and your distribution, you were depressed in the market. Now it is really about what value you are bringing and where your growth is coming from. Managing your human resources becomes critical to that, moving people off your P&L.

MR. HILLEMAN: I think that is something maybe you do not quite get from the outside of our business. You see layoffs in our business, and sometimes they seem apocalyptic. I do not know the exact context of what Disney did the other day, but they just finished a really big project, and it is pretty normal to roll off a substantial portion of that team while you figure out what you do next. It does not really pay to have two hundred artists sitting around twiddling their thumbs while you figure out what you do next. Again, I do not know the specifics in this case, but when you look at the dynamics of our personnel, for instance, there will be "layoffs" at a studio that just finished a product. That is because they are reloading for whatever the next project is. That may mean fewer artists and more designers.

MR. OLIN: In the auto business, they call August "retooling month."

MR. PITCHFORD: Meanwhile, there is another project somewhere that is thinking: "We really need to ship now, and we need to load on the people."

MR. HIRSCH: I think one of the growing areas that we are trying to grow in, and the industry needs, is production management. Production management used to mean: "Well, do you have this asset built?" Now it is about: "OK, what are you going to be working on nineteen months from now when you are rolling off? Where are these guys going?" For the bigger publishers like us, that is becoming a craft and an art form.

MR. HILLEMAN: It is a four-thousand-person problem for us.

DR. RAAD: Let me go back to something that we started talking about, and it is the nightmare of an educator. You call it a binomial distribution whenever you have got a class that has basically a whole bunch of students that are not doing so well, and then on the other extreme, you have got a few that are doing extremely well. It is a bifurcated industry, basically. To pick up on something that Rich brought up, which is the whole idea that we have got these handful of games that are doing phenomenally well and they are essentially carrying the industry, and you've got all this bad stuff on the other side, then this bifurcated binomial distribution.

MR. HILLEMAN: A lot of it is good product, it just does not sell.

DR. RAAD: There is some literature out there that claims that online games, the cheap and the free play and all this stuff, are kind of sustaining the players between the big ones. Maybe in the past, they might have picked up some of these lesser games, so to speak, to stay entertained in the interim between the big ones, but that they do not do that anymore. I am going to launch this to Joseph and come back this way. Joseph, is online helping or hurting the industry?

MR. OLIN: I think overall it helps. It is another venue for interactive entertainment to be consumed. The challenges that the publishing community and the development community have are looking for financial models that allow them to balance the cost of building an experience and the revenue they can make, whether it is through advertising, shared links, or just fees. I do not think that the console business is as dead as so many people want to put out in the press. If you look at the 6% to 7% downfall year over year of the retail game business, it is all accountable. If you look at the \$1.5 billion or \$1.8 billion or \$3 billion drop, you can find \$3 billion in used-game sales as about a third of it. Downloadable content on Xbox Live, PSN, et cetera, make up almost two-thirds of it. So the online environment is going to help.

But the console model, the days of somebody buying twelve games a year from a GameStop or Best Buy at full retail of \$59.95, those are pretty much gone.

MR. PITCHFORD: I think that customer still does that. I think the new customers are doing that less. The existing customers—that guy that used to buy twelve games a year—he still buys twelve games a year.

MR. HIRSCH: No way.

MR. HILLEMAN: I think you're actually both right. I think he buys twelve games a year, but I think he buys six or seven at a GameStop second sale. That is why I think you are both right. I am going to tear apart the supposition a little and say I am not sure it is true. So if I believe that it was a cost and a checkout between the major titles going on in the consoles, then I would expect to see much better sales on PSN and Xbox LIVE than I have seen. Meaning, I would expect to see a larger component of that timespan spent on that market that is essentially at the same price point as Apple's App Store. But that is not what we are seeing. That tells me it has much more to do with the geography than the economics. That it is the fact that it is not a ten-foot, sitting on your couch experience. I finished Angry Birds because it is on my phone. I would not have finished Angry Birds if it were on my television. I would not have had time. I believe the overall business is finding its place. There is no premium game market on the App Store. There is no \$60-price-point product. Most of what is on there is a dollar or less, and in fact, predominantly, my mobile group today believes this is going to a free-to-play model.

MR. PITCHFORD: Without question. A lot of the PC stuff is going there too.

MR. HILLEMAN: For me what that means is that, if you are trying to make money in the console business, if you are trying to make money in the games business, increasingly it is going to be about making clients on all of these portable devices that talk to one big meta-game. That the console game I am playing in my living room, the scores that I accumulate there, I can also contribute to on my phone, I can contribute to on my iPad, or some other device. Or on a web browser when that is where I am. I am going to keep you engaged by having you play this big meta-game. That is the one thing we have learned from social gaming is that if you get people involved in that larger meta-game that they can participate from multiple places, from multiple devices, that you get a lot of their time. They have not been quite as successful in getting their money.

MR. OLIN: It is back to ARPU: Average Revenue Per User, as opposed to selling boxes. It is not: "I need to sell 500,000 boxes this month of this title." It is: "I am looking for *Madden* users and I want to monetize them in as many venues as possible. If there are ten more venues over the next ten years, I expect you to be there and I want your money."

MR. HILLEMAN: Or at least deepen my relationship with them. It may still be \$60, but it may be \$60 spread out over four clients.

MR. HIRSCH: I have the attitude, similar to Rich, where you give me different portals into your universe: different windows, different ways, and different entry points. Do we leverage the uniqueness of each platform to give you a different experience?

MR. HILLEMAN: You have to. You cannot build a first-person shooter on a phone. You just can't. So you are going to build an application—my joke has been we will build *Gunshop* instead, which lets you improve the accuracy and fire rate of your gun—and then you can take it back to your console title and use it. But in other cases, like *Tiger Woods*, there is no reason that the golf game you play on your phone, your iPad, your console, and your browser cannot all integrate into one experience, because I can do that game mechanic on all those devices.

MR. HIRSCH: I agree with you, too, that I do not think we are going to get \$60 in one pop anymore, I think it is going to be through multiple little pops that add up.

DR. RAAD: But you were saying earlier that you go where the customer is, and now we are hearing that the customer is mostly untethered and away and on smaller devices, and you say they play for free. How do I make my money?

MR. HILLEMAN: I do not think you play for free. I think the point is you are playing a meta-game.

MR. PITCHFORD: The freeness is about making it easier for you to allow yourself to become engaged.

DR. RAAD: So where do you charge me?

MR. PITCHFORD: The challenge is attention and engagement, and there are so many options. If you make the initial "walk through the door and have a look" free, you increase the chances they can discover your experience, discover the entertainment you have to offer, and become engaged. Once they are engaged, you can monetize them.

MR. OLIN: Look at *Black Ops*. Sixty percent or more of the people who bought that at retail bought it for the "free" experience of playing online.

MR. HILLEMAN: I think what you have to do is meet the value proposition. So I might sell them, or give them a free window with limited play time, or give them a limited asset base that they can play off of a browser, because my barriers to entry are essentially zero, and HTML 5 plus Web GL is essentially a PlayStation 2-grade console today. So I will give them that experience initially, but if you want the home console version, or the iPhone version, or the iPad version, then each one of those is an incremental cost upgrade. If you want the most immersive experience, it is going to be the most expensive. I think that is kind of where we are headed. That is what customers are selecting with their money as-is, and so pretty much we are building on what their behavior is already.

MR. OLIN: I am assuming there were a few more *Madden* units sold for \$0.99 at Christmas than at \$50.

MR. HILLEMAN: We had a great App Store year. But that being said, I believe that the best-selling app of all time is 11 million units, at an average SRP something south of \$0.99. So let's be realistic about how big that market is in dollars and cents. It is not that big.

DR. RAAD: But the consumer has a fixed budget. It sounds like you are saying that the consumer is becoming more savvy and is careful the way they are spending their money, even the hardcore ones. I want to talk about where the money is going. Someone brought up the used-game market, so let's talk about that. If a consumer has a choice between cheaper and more expensive, I do not know very many people who will choose the more expensive—particularly if it is for the same product. Speak about that, please.

MR. HILLEMAN: We have a broad collection of products, we make things like Hasbro and The Sims, which really define quite a different market than what most other people do, and they have different behaviors. We have seen some kind of odd things. We have the ability to know a little more about who is playing our games than average. For example, with Burnout we know when a second-sale customer or a third-sale customer or a fourth-sale or a fifth-sale customer is playing that product. There is just a little less of that than you think is going on. For some products, it is timeliness. For instance, for our sports products, we practically do not see very much second-sale. It turns out that nobody wants to buy John Madden Football in March. Just nobody does that. And so that means that it has a fixed window when it is vulnerable to second sale, and that fixed window is relatively short. Which means that when we look at the number of people who buy it, cycle it out, get it sold again, and cycle it out—the number of second sales that impact our first sales are pretty limited. I think for products like Call of Duty, or Medal of Honor, or Battlefield all have longer sales cycles. Those are eighteen-month-plus development titles. They are designed to be out in the market and sell for more than a year, and so they have a different window. Those products are definitely getting more impacted by second sale simply because they have more of a period of time to be vulnerable in the marketplace.

MR. PITCHFORD: It seems like the riskiest title is the good, narrative-based game—a game like *Uncharted*.

MR. HILLEMAN: Especially a short one. A five-hour game is death.

MR. PITCHFORD: The challenge is, before we have consumed the entertainment we need to ask: "Man, is it worth it for me to spend \$60 in order to have that experience?" The second I am done consuming that experience, I have had it, now the value is almost zero. So if I can get \$30 by giving it to GameStop, heck yeah.

MR. HILLEMAN: What is interesting to me is during that same period of time—during the last three years—what we have seen is that there has been a fair amount of degradation of the rental business. Meaning that we used to worry a lot about the rental business a few years ago, and it is not as bad. Some of it is because Blockbuster's in trouble. That does not help the

rental business. But in general what has happened is that second sale has gotten to the price point where rental does not make sense anymore.

MR. OLIN: And you are not worried about Gamefly?

MR. HILLEMAN: No, I think Gamefly would be good for our business if it worked. It just does not work yet.

MR. HIRSCH: I think the interesting thing that you were talking about—where you have got to keep that second or third sale out of your market—is actually the same thing about how do you monetize.

MR. HILLEMAN: Number one, I believe I am required to allow people to sell things second sale. Let me be clear, that is not the business I am in. What I am saying is that we worried about it a lot, and when we did some really hard analysis using technical data that we have, we discovered we were worrying about something way too much.

MR. PITCHFORD: It will solve itself, though. The used market will exist, but soon we will be able to participate in it—all of us will be able to. Once we get to the point where the credential is not the disc, the credential is digitally connected to our identity. I can imagine Microsoft and Sony deciding: "You know, we do not really want to destroy you, GameStop. So let's work something out where if a customer comes in and wants to give up, abandon their credential, you can resell that credential to a new customer and we will release that for a fee." And then everybody can participate again.

MR. HIRSCH: I think regardless of whether it is the platform or the user or whatever you are talking about, it is about creating the experience that people want to keep coming back to, as opposed to the five-hour throwaway experience. Whether it is the free to play or whatever, we have to continue to find ways of creating those emotional connections. That is the trick. Whether it is the free-to-play that goes with the console or it is keeping the micro-transactions, we have to keep them caring.

MR. PITCHFORD: Another good strategy is to also be one of those titles that the customer feels like needs to stay in their library. Even if they have consumed it, there is a feeling they might want to consume it again. It is kind of the difference between the films we buy on DVD versus the ones we will rent or stream on Netflix really fast.

MR. HILLEMAN: There is a very large, high-profile title that I call a "coffee table" title today. That title gets bought by between five and ten million people on an annual basis. We are able to watch how it gets played by a significant amount of people who buy it on launch date. They play it into the following Monday and they never turn it on again.

MR. PITCHFORD: Isn't that interesting? And they get to keep it—they do not sell it back, they want to know that they own it.

MR. HILLEMAN: They want to show other people that they own it. That is really what it is about. You put a coffee table book on your coffee table not for you, but to show people who come to your house that you are educated.

MR. OLIN: We can talk about games being "coffee table book" quality. We are culturally there.

MR. HILLEMAN: I think that is right. So some people define it that way. That is a good business for folks who are lucky enough to be in that business.

MR. PITCHFORD: Yes, I was just pointing out that there are other ways to do it. There are a lot of angles in this business.

MR. HILLEMAN: I think that obviously Sony and Microsoft are strong believers in digital distribution and that pretty much kills the possibility of second sales.

DR. RAAD: So what if costs continue to rise and become even more gigantic than they are now? If they start being more like producing a block-buster movie and we continue to see this third-party consolidation going forward, then what is the outlook for independent developers? I heard you refer to the fact that there are so many coming on the market that they are really being driven toward the casual games and mobile-phone games and things of that nature. Is that the outlook that we have for the industry? Very few will survive at the high end that can produce AAA titles. And then is everyone else going to be making games for surface computers? Is that what we are seeing?

MR. PITCHFORD: The pendulum always swings, if you are talking about the question of: are we going to have big independents capable of creating best in class AAA games or are we only going to have microdevelopers?

MR. HILLEMAN: Are there any of those?

MR. PITCHFORD: There are a few. You have Epic and Valve. I would put us in that class. Bungie is there once again—that is interesting right? Microsoft owned Bungie and somehow they parlayed their independence. Will a new developer like that emerge with our friends Jason and Vince, and what they are going to be doing?

MR. HILLEMAN: How independent is Valve actually? If you own your own distribution technology are you even an independent entity?

MR. PITCHFORD: Well, they are a developer but they are also now a storefront. They are not a publisher; they are a store-front and a developer.

MR. HILLEMAN: Gabe came from Microsoft. He was well taught.

MR. HIRSCH: And he built one smart business.

MR. HILLEMAN: What I see happening in our company is that we have very developed iPhone, iOS, and mobile publishers. We have very high-quality console publishers and we speak to PC markets on other things. In general, development costs are not going up anymore. They probably peaked a couple of years ago, and are coming back down a little bit—at least on the high-end consoles. No one believes they can spend \$50 million on a console product and make money.

MR. HIRSCH: Nobody wants to take that risk anymore.

MR. HILLEMAN: But two years ago they did.

MR. HIRSCH: Yes.

MR. PITCHFORD: They were afraid that they had to in order to stay in line with their competitors.

MR. HILLEMAN: Pretty much, yes. I think the place where you still see an unclear line about how much money is too much is a massively-multiplayer online game (MMO). Where people continue—present company included— to maybe spend too much money on those products today. But what we have seen inside is that for our iOS—our mobile group—the *Madden* that you play on your iPhone or your iOS is actually a dramatically different code base than what you play on your console. They are increasingly, uniquely creative on that context. So they are becoming specialists and I think that is probably the right way. It is less about the "status of your product and the rank of spending," and it is much more about your ability to build a product that moves the customer who operates on that device.

So for us, what we see is that our console developers are increasingly working with our mobile developers to build one experience that works together on both platforms. It stopped being nearly as competitive as it was. There was a period of time where I think our console guys were worried that the iPhone guys were after their business. They now increasingly recognize that both of them need each other. If you have a "freemium" model that is emerging on your mobile devices, then you better make that money someplace else. What I think is happening is that people are specializing. It is not about your ranking or grade in it. For instance, Brad Borne's Fancy Pants product, which is a PC-based, web-based Flash title, is outstanding. It is a five-star Chrome Web Store title. Having him do anything above or below that space would be moronic. This guy is great at that level.

MR. PITCHFORD: What do you think Zynga is going to ask the Bettner brothers to do with *Words With Friends*? Maybe those guys were just really good at that thing?

MR. HIRSCH: I think maybe what is happening for the publisher is that we have to learn how to connect these pieces better. Because, again, it is about that quality experience on the right platform by the right guy and making these truly connected experiences, not co-marketing experiences where it is just *Madden*, *Madden*, *Madden* or Rich's example of using the *Gunshop* on your iPhone. It is finding that sweet spot of how you connect and make a cohesive experience across the platforms and I think that is what the publishers need to be focusing on more and more so the developers can continue to be smart, independent, and creative in what they do.

MR. RAAD: I want to speak about the state of innovation in the industry and where it stands. First, as part of that, we have to talk about MMOs for just a little bit. What are the roadblocks, Joseph—and anybody else who wants to pitch in—for having something really exciting and interesting in the expanse between Farmville on one end and World of Warcraft on the other end? What is going on? Why are we not seeing something interesting between those franchises in the world of MMOs?

MR. OLIN: There are tons of them.

MR. RAAD: But where is the promise of MMOs?

MR. HILLEMAN: I think your definition of an MMO might be too narrow. The most interesting MMO in the world for me today is *Maples*-

tory—and that does not fit in any of those categories. Maplestory is the dominant MMO in China. It has more users than World of Warcraft times four. Their average revenue per user is something like \$1.50 a year—but that is a different problem.

MR. PITCHFORD: Kind of like Cross Fire.

MR. HILLEMAN: Yes exactly, that is also a big deal.

MR. PITCHFORD: But that is a shooter. However, is that an MMO?

MR. HILLEMAN: And that is kind of where I am going here. What an MMO is had a very specific definition and I think what we are doing is increasingly looking at it in a different way—which is, what is a product where the sales proposition to the customer never ends? That is kind of the notion of it. I would make the case that *The Sims* was an MMO before we even knew what an MMO was. Meaning that it used packaged goods as a distribution mechanism instead of digital distribution. It is very easy to imagine *The Sims* as that style of an MMO, where the content is incrementally released as opposed to putting out big chunks. That is a totally workable business today.

MR. PITCHFORD: The semantics problem is that there is a design experience that is implied by the term MMO, but there is another factor, which is the business model. The business model is probably more interesting to put money into.

MR. HILLEMAN: More revolutionary. I think that if you have too narrow of a definition of what an MMO is, such as specifically what World of Warcraft is doing. I am increasingly nervous that their notion of what an MMO is, is not a product that you can build after. A lot of people in this room owned Myst. When Myst came out, people in the industry like me said that this was a new category, and we all ran off and built our own version of it. There might have been fifty of those things built the year afterwards. But the net of all of their sales put together, combined with all of the sequels of Myst, does not equal what Myst sold originally. That means that at the end of the day, it was not a category. It was a product. Sometimes it is not a category, sometimes it is just a product. World of Warcraft increasingly looks to me like a product. If you tried to directly lift that notion and exactly rip off the sorcerer/guys-in-tights game, you are probably going to find that it does not play. That is why I am trying to broaden the definition of what an MMO is. Because I think that what we see is behavior in things like Farmville and things like the social products that get played on iPhones and other mobile devices. Those are all good examples of products that, to my mind, fit the notion of what an MMO is, which is a distributed, ongoing gameplay with continuous introduction of new value. There are lots of places where that is working, and lots of business models that are being used there. From free-toplay at one end of the spectrum to very expensive monthly subscriptions, all of them are working out well.

MR. PITCHFORD: The reason that World of Warcraft is not a category is because the concept of a category kind of assumes: here is a piece of entertainment that someone consumed, and after consuming it they are going

to want more like it. World of Warcraft does not work that way because you cannot consume it. No one can win World of Warcraft. You cannot beat World of Warcraft.

DR. RAAD: I want to bring questions from the audience, so I will end with this question to all of our panelists. Starting with you, Joseph, what grade would you give the video game industry in terms of innovation at the present time and why?

MR. OLIN: In terms of product innovation, I would say a B+. There are a lot of things that have happened in the last year that are really exciting and deliver even bigger and better experiences for people. As a commercial/business industry, I would give it a C- because it needs more effort.

DR. RAAD: Thank you. Randy?

MR. PITCHFORD: From my seat, I think we are adapting incredibly well. There are lots of new things that we have never had before.

DR. RAAD: You are bullish on the innovation in the industry?

MR. PITCHFORD: Yeah, from the platforms—and not just the hardware but also the software that is on the hardware—we are actually evolving the software that runs our hardware now, that is totally new. As for the games themselves, I still feel like we have not had our *Citizen Kane* yet, in terms of content. But we are working on it and it is exciting to try. We are mashing together things that we have tried before that worked. We are trying each time to sprinkle things in that no one has ever done before just to see if it works, and that excites me too. I do not want to be pinned down on a grade, so I will just leave that as an answer.

DR. RAAD: Rich?

MR. HILLEMAN: I would say that shipping products have earned a C. And a lot of it is because a big chunk of the publishing re-trenched like crazy during the recession, only down to things that they were sure about. But what I see in the labs, what I see in development, what I see in developers' shops—there is a lot of A material out there. I actually think that between the expansion of the web platform, between the iOS platforms, and what is happening with the console and online platforms, there is more new stuff than what the customers can actually consume today. And so at some level we probably have more going on than we know how to sell.

DR. RAAD: So you are bullish?

MR. HILLEMAN: Well I am pretty bullish on our innovation. I am less bullish that there are as many customers for those innovations that I wish there were.

DR. RAAD: Thank you. Evan?

MR. HIRSCH: In game terms I give us a meta-critic about high 70s. That would be a C, and the reason for that is that I think there is a tremendous amount of really exciting innovation going on, but it feels to me that we have still been doing reactive innovation over the last couple of years. I think a lot of the innovation came from the iPad forcing us to innovate. I think it came from the web forcing us to innovate. I think if we were left to our own devices, we would be building too many *World of Warcraft* clones.

MR. OLIN: Yes, but it is like the consumer is saying: "You know what? I really like this interactive stuff, but I like it here and there in five-minute segments. I do not want to lose 20 hours of my life."

MR. HIRSCH: But I think that is what is cool—the innovation is forcing us to think. It is keeping us on our toes and I think that is what is kind of fun. The joke with my buddies at work is that all the gray-hairs and no-hairs are doing alright keeping up with the kids. But thank God the kids are there keeping us healthy because otherwise we would be fat, bald, and doing nothing.

DR. RAAD: So C+ for innovation and business-wise?

MR. HIRSCH: Yeah.

MR. PITCHFORD: If you look at our content though, it is something where if you imagine your customer thinking: "Oh, I do not want to lose 20 hours of my life to this," and then the content fails. The entertainment that we should be creating is the kind that says: "I wish I had 50 hours because that is how awesome this experience is." That is what we creators have to drive ourselves towards every day.

MR. OLIN: And there are a handful of games that can fulfill those promises.

MR. HILLEMAN: Well, they bought a western this year. As Steve Nix and I know—we have been told for years that you are crazy to build westerns—anything is possible.

MR. PITCHFORD: So they proved you right?

MR. HILLEMAN: I feel like they proved us right.

DR. RAAD: All right, questions from the audience, please?

AUDIENCE QUESTION: What do you think about the expansion of licensing out new properties or potentially old properties? Do you see that as a continuing business model, or more limited towards proven IPs versus a new IP?

MR. HILLEMAN: I think the reason that we do it is because we think that we need all the help we can get to market original IPs. So when we work with partners who want to exploit that IP in other areas—whether it is writing books or whatever the context is—we believe that they help our customers find that product and deepen their involvement in it. I would say that today it is a lot less of a commercial strategy than it is a marketing strategy for us.

AUDIENCE QUESTION: This is for MR. PITCHFORD. With the recent acquisition of *Duke Nukem Forever*, what kind of IP issues have you run into—since it has been going on for so long—and what kind of lessons have you learned that you can apply?

MR. PITCHFORD: That was probably the most complicated business deal I have ever been a part of. We have had people come out of the woodwork claiming involvement. We have had artists, musicians that did songs years ago, and all kinds of stuff. It has been a lot of fun. We have found that the strategy that has worked really well for us is to say: "Look guys, we all

love *Duke* and you did too, that is why you were involved with it. We are here to bring everyone together."

There was some kid that was trying to remake *Duke 3D* using the *Unreal* engine and he put some content out there for free. We had already completed the acquisition and I had George and Scott saying, "Shut him down" and our publishing partner Take-Two saying, "shut these guys down, C&D (cease-and-desist) these guys," and I did the opposite. I said: "Hey, what if we give you a free license. We will work the license out so you can have your fun and your mod." What was interesting is that it was picked up on outlets like Slashdot and reddit. We developed a huge amount of goodwill by being friendly with people that just want to be close to *Duke* or at some point had some connection with him. And we found that by being cooperative, it actually dissolves a lot of those IP issues that come with something like this. He is legendary, but he also has this legacy of all these people involved in him, and everybody wants a piece, I guess.

AUDIENCE QUESTION: Can you describe how, and at what point in the creative process, you look for opportunities to insert advertisements in game?

MR. HILLEMAN: The short answer is that everybody that makes a product at EA is trying to get money from somebody. So if you show up and you have some way of telling an advertising story, we are generally interested. But that does not mean that it belongs. For example, in Kirby's Epic Yarn, any advertisement would be inappropriate. It is just wrong for that whole world. But if you are doing John Madden Football or FIFA, those are entertainment experiences where marketing and branding is a key part of that experience that you see, and we try to complete that look as much as possible. In that case, as much for making the aesthetics of the game represent what you expect as for the economic opportunities. Games like Need For Speed are more of an overt attempt to find advertising revenue. In those cases, we are trying to identify particular partners that want to reach the same demographics that we are after, and then we try to integrate advertisements in that context. Those designs will have advertising elements essentially blanked out that are ready to be installed on day one. And Elizabeth Harz, who runs that group for us, is out selling next year's ads already, I believe. For us, it could easily become something that feels negatively disruptive, but so far it has not. So far, every time we have added advertising to the games, we think it has improved their immersive quality. We think it has made it a better, more immersive game. It has not turned into the advertisement that shows up between every level. That is not what we have done yet.

MR. HIRSCH: There is a really cool moment that happens in the creative process, even if you are an architect. When you draw a building and you put a logo on that building, it is instantly credible. It is a great thing that you get for free. By putting recognizable logos, it brings credibility. So it is a matter of knowing what genre you are in and whether it makes sense. But yes, we are all looking for that money.

MR. HILLEMAN: In the past we would go ask permission to use those logos, and now we ask to get paid to use them.

MR. OLIN: The Marlboro/Sega suit⁵ always makes me smile.

MR. HIRSCH: Yes, I was thinking about *Need for Speed 1* and 2, when I was at EA. I do not think we even asked for licenses.

MR. HILLEMAN: No, we had to pay for some.

MR. HIRSCH: Yes, I think it was *Need For Speed 2* we had to go back and pay, and then in *Need For Speed 3* we started realizing that the dynamics were really shifting the other way—where first it was cool to have it and no one minded, and then it became this whole opportunity turned upside down. But like you said, fantasy is really hard. It is about the genre and the credibility that can you gain or you could lose.

AUDIENCE QUESTION: When do you think gaming will cross over into education or training? Do you think the problem is that it would not be viewed as gaming at that point? Why has it only been adopted by the military?

MR. HILLEMAN: We are video games. If a CEO has to sit up in front of his organization and say: "I am going to have you play a bunch of video games to make you smarter," there is a certain emotional dissonance for that CEO to do that. What I like about the U.S. military is that they do not really care about that stuff, they just care about what works. The reason we have had an impact on those guys is because it works. I think there are great opportunities in this space, and one of my favorite ideas has to do with sexual-harassment lawsuits and training of individuals who are in high-customer-contact positions. I happen to believe that you can build a coinoperated video game machine that teaches UPS drivers or FedEx drivers the proper way to behave with their customers. What is interesting about that is now I have a machine that—let's say once a month—you put your employee ID into the machine and you have to play the game to engage a score. Well the first time that one of these drivers has a sexual-harassment suit from a customer, you now go into court and pull the driver in and you pull his records and it turns out that this driver is # 3 this week among 5,000 drivers, # 16 another week out of 5,000, # 4 this week out of 5,000, and so on. You roll the machine in and show the jury how it works—show them the lessons that are learned. Suddenly you have a real chance to win that lawsuit on the he-said/she-said basis. The development cost for that particular piece of technology would be less than \$1 million. My guess is that it would pay for itself in the first six months.

That is a good example of something that we could do today. The problem is that it requires somebody to drive that. I think the driving forces in corporate America around training and innovation are not the organizations

^{5.} See Philip Morris Inc. v. Sega Enterprises, Inc. (U.S.A.), 1992 WL 18804 (S.D.N.Y. Jan. 28, 1992) (Philip Morris sued Sega for copyright violations when Sega included a Marlboro logo in one of its video games without permission).

themselves; it is their lawyers and their insurance companies. When the lawyers and the insurance companies start looking at devices and designs like this as part of their legal strategy to manage the vulnerability and risk of their organizations, I think you will see the corporations follow. I think the lawyers have to drive that.

DR. RAAD: I want to thank the panel. Thank you, Joseph. Thank you, Randy, Thank you, Rich. And thank you, Evan, for a fantastic panel. We appreciate it very much.