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RACING AND GAMING SUMMIT**

Afternoon Session 1

SYSTEM AND GAME TECHNOLOGIES

Moderator:

Bruce Rowe, President, Renaissance Casino Solutions, Inc.

Speakers:

Eugene Christiansen, Chairman, Christiansen Capital Advisors

James Maida, President and CEO, Gaming Labs International, Inc.

Greg Saunders, Deputy Executive Director & Chief Information Officer, New Mexico Gaming Control Board

MR. BRUCE ROWE: Good afternoon, everyone. My name is Bruce Rowe and I'm going to be facilitating this panel today. I'm going to skip the lengthy introduction of the panel. Those are all in your handouts and you can check out our CVs as you like.

But I will spend a minute to introduce the panel by name and some of their accomplishments. Jim Maida, the president and CEO of Gaming Labs Incorporated. Jim and his team run nine labs in six countries. They process over 110,000 requests for both system and game examination and certification. That makes up probably 20,000 to 25,000 new products that get examined throughout the world by his crew.

He and his team have more worldly knowledge about technology and protocol in the gaming industry than anybody else.

Also joining us is Eugene Christiansen, the chairman of Christiansen Capital Advisers, and in the back at the end of the session you're going to find a handout that was done by Eugene that I find particularly interesting.

It's a point of view about the pros and cons of system-driven games, and it's supported by some good case studies from various states that have tried it; and

some that have done well on it and some that haven't, and measured effects of both.

We also have with us Greg Saunders, the deputy executive director and chief information officer of the New Mexico Gaming Control Board. They are today running five racetracks with just about 3,000 games. And he has installed one system and is in the process of converting to another system.

So in keeping with any session that follows lunch it should be exhilarating, it should have passion, it should have at least 400 metaphors related to some sport; and so today we're going to clarify some differences and importance of technology, we're going to talk about SABAS, SDS, IGS, SACSK, TVIP, SOAP, Triple, Ds, Coax, CAT 6, XML, HMTC++ and VD.

Sound exciting? It's not. But those things are the things that influence the games that you can run, how fast you can put them on your floors, the functionality that will come with them when you install them, and ultimately the information that moves upstream to drive the business decisions that allow you to select the games and market to your customers to derive the most revenue and provide the most tax revenue to the states where you do business.

The panel agreed to let me present a few slides that are going to serve as the foundation for our discussion so that we didn't present the same thing more than once and so that we had agreement on the names.

This is a very simplistic representation of the technology that drives casinos. But for those of you that haven't purchased or been responsible for this, we hope it's educational.

It also should serve as a foundation for some of the questions that we're going to address as a panel when I sit down after the presentation with regard to the implications of various protocols, various architectures and MED and how they affected what I can and cannot do in order to be competitive.

So with that, I'm going to push this button. The thing we're most familiar with when we think about a slot machine, and if most people were asked to draw one, and 500 people that had ever been in a casino and 500 that go all the time, they would probably draw a machine with three wheels and a handle and it wouldn't be connected to anything. There would be a stand-alone random number generator game.

At the core of running any one of these businesses, whether it's class three, class two, racino, owned by Indians, owned by states is putting games in front of customers that drive the maximum amount of satisfaction for the customer, the maximum occupancy at the rates allowed by law in terms of hold percent, and have the appropriate volatility and hit frequency to provide an entertaining experience.

The vast majority of engineering, research and knowledge about what makes customers play and what they enjoy exists in class three stand-alone games. They

are all over the world. You've got majors like all ones from the U.S. plus Aristocrat, plus Konami plus Atronic that have spent years understanding this. So our first obligation is to provide the games that provide the maximum profitability and popularity to the customer.

What is then next attached to those games is typically a local accounting system; and these systems used to be optional; in '92 when Joliet, Illinois, opened was the first time these systems actually became mandated by law, and have been since.

And these systems not only do accounting but also they often do marketing, they often do bonusing, they add other value. And it is to these systems that are most often attached business information systems. The kind of things that the gentlemen from Canada, Mr. Taylor, spoke about, where is he? Feeds an enterprise data warehouse and it's looked at by companies like Commology, Mariposa, CDI.

Those are all business intelligence tools that normally connect to these systems or some other local system. We're going to come back to why that's important. But the business information systems or business intelligence systems that drive casinos are critical too in maximizing profitability.

What connects those two things is a protocol. And how many of you have ever installed a protocol?

(Show of hands)

Okay. For those that haven't, a protocol is a method of communicating. And there are different types. There's pulse, there's serial, there is XML, there are different types of protocols. But at the end of the day it is the way the communications take place between two devices. Some are complicated, some are simple.

How many people in the room know what dot dot dot dash dash dash dot dot dot means? How many, raise your hand?

(Show of hands)

How many were Boy Scouts?

(Show of hands)

That means SOS. How many people know "Save our ship?"

(Show of hands)

Everybody. One is a code and one is a language, okay? Many of the protocols we're using today are still based on systems almost like Morse Code. It is like a transition from DOS to Windows. The protocol determines not only how things are communicated but what is communicated and what is said between those two devices.

Then there's discussion of central monitoring. One way to connect central monitoring is to actually have it connect to the local accounting system. Central monitoring systems can take unfettered data, data that's not been managed or manipulated, where the local system can effectively act as a router, and all it does is transmit the exact same data to two different databases, one that resides in an upstream system and one that resides in the downstream system, there's another way to do this.

Oh, and then there's a system-to-system protocol, which may be the same or may be different in fact than what connects the games to the local host and from the local accounting system to central system.

There's another way to connect this, which is actually to wire effectively directly to the game. You often hear this referred to as the two wire system. And if you notice in here you've actually got replication of function which tends to drive IT people crazy when there's a problem.

You don't know where it is, you've got two wires and you've got two accounting systems, you've got two accounting systems that you are trying to reconcile in a real-time environment where both latency and processing can cause you to have two different outcomes, neither one of which may be inaccurate or inconsistent.

So this is kind of the standard class three migration from stand-alone games to stand-alone games that are monitored by a system locally and then passing information to a host, either directly or routed through the local system.

Now, if we look at what's also emerging in the business, or where we have results at a terminal or point of sale and the decision is at the system.

New York State we heard about this morning is an example of this; those decisions are actually made at the host and then results displayed at a terminal. Very similar to class two; by the way, you're hearing a lot about class two-type gaming.

It is a central determination system with displays acting as dumb terminals or point of sale devices. You also see some iteration of this that may involve the technologies that actually has some flexibility probably to do both, where the way it's architected you could have the system actually create the decision at the host or you can download the game individually to the remote unit. So it has the ability to cross that bridge over time.

You also then have the same thing that I talked about before, where you can have a decision at the game with a local accounting system potentially sitting simultaneously in the same facility over time. And as these technologies migrate what has been common is going to coexist to some extent in Class Three floors, and technology that's existed in Class Three floors might be desirable to have migrate into VLTs if it creates a competitive advantage from a product standpoint.

So there's a one-to-one connectivity, system-to-system connection that has to take place here. Now, this is a very short line, it's a very small line. But what we're

doing now is recreating what we had to do on the floors in the later '70s and '80s to connect individual games to that local accounting system that we previously talked about.

So what we're going to have to have now is a connection between those, and the best example of this right now that I've seen is at the Seminoles in Florida. And Charlie Lombardo and Lowell Bell, both seasoned veterans out of Class Three gaming, are building this architecture.

Here they've got system-to-system connection between multiple central determination systems using one set of accounting and they've mandated that that's the way they're going to run their business.

It's also possible to put a central monitoring system on top of this if it's desired, and this model probably is one that would be in some ways Utopia in terms of having the ultimate flexibility of being able to plug in and play almost anything on the floor that you chose to.

One of the things that people don't often understand, if you take the State of Pennsylvania as an example, they made FIT processing necessary to do 60,000 anything's.

There is nobody today in Class Three that's monitoring every event on 60,000 slot machines at a central host. The experience for that actually comes out of companies like G-Tech, Scientific Games, multimedia game people that have had the experience of running hosts that handle that many transactions.

So there's going to be this convergence of technology from large scale, widely distributed systems to stand-alone systems, where arguably there is the largest amount of variety of product to drive increased revenues.

So what we have here are these architectural options all linked together by various protocols.

And what we agreed to as a panel is to get together and have a dialogue as opposed to spend the time with each of us presenting a group of Power Point slides, so that we can actually have different opinions on the same topic, and convey those to you.

And then we will also have some time for questions at the end. The question, the fundamental business question that we believe we're trying to address is: What games and information systems provide the most integrity, security and auditability, while giving the operator, regardless of whether it is the state or a tribe or a racetrack, whoever it is, the most discretion to select the product that creates the most customer satisfaction, revenue and tax dollars.

I hope that this slide has shown you just a little bit about why this is not a simple answer, and we'll delve into that a bit more. If the acronyms didn't scare you that I had, you have — all those we're real acronyms that are used in this business and

are used every day in discussions to decide what you all will get and what functionality you'll have on your floors when you buy the various games and systems that you do.

Things like EFT, and ticket-in ticket-out. If you have SAS3-0 you're not running it. If you don't have 60 or later, you're in trouble. Best is an obsolete protocol. If you don't know those things, it can affect your future.

What are the types of systems and games available? There are a plethora of those, some displayed here, some displayed at GTE 78, some displayed at places that we may not even go today. But there are plenty of them out there.

And then why aren't protocols both an issue and an opportunity? And then at the conclusion of this, I'd like to address to each one of the panel members, what are the recommendations if you were trying to provide advice to a state that's considering getting into this, or a casino or racino that's facing some of the industry dynamics that you're talking about in panels like we had this morning, and how can some of these things help get you games and get you product at the speed of business that you need to compete?

So with that, I'm going to sit down with the group here and we're going to start some questions. Did I miss anything, guys, you want to jump in?

MR. EUGENE M. CHRISTIANSEN: No, it's very good.

MR. ROWE: The first question I'd like to pose is to Greg. Since you're an actual operator, I thought it would be great to start with the operator experience. And you run the five racetracks, right?

MR. GREG SAUNDERS: Five racetracks, yes.

MR. ROWE: And can you describe your central system topology and the values that you get out of it and some of the things that you think are the strengths and weakness of it?

MR. SAUNDERS: Sure. And I'm obviously from the State of New Mexico. We have five racetracks; and we're a very large state and the racetracks are at literally every end of the state. So one of the advantages to doing a system is to cut down on manpower and to do this the most efficient way possible.

We started out in 1999, basically you can see a state agency that started from scratch with a bunch of bureaucrats that knew nothing about gaming, and were handed a statute said, "Go regulate; go forth and regulate."

We knew nothing about it so we went out and start pulling rules, pulling information from other states to find out — much like you're doing here — how do other people do it? What are their rules? What are their regulations?

One of the things that came out fairly early is that central systems in a situation like ours made a lot of sense. So we wrote an RFP to have a central monitoring system installed. And we went through that process and clearly defined what we required.

Our state is a little different when we talk about central monitoring. Ours takes it a step further because we're actually doing central monitoring and control, because our state is — I'll call it multifaceted. We have tribal compacts that we have to adhere to.

One of the things that happened early on was the tribes said, "You may game; you may save your racing industry, you may game at the racinos, but you can only have X amount of games and you can only have X amounts of hours." So we have to guarantee that back to the tribes. In order to do that that comes back into the control site.

We turn the machines on in the morning, that was part of our requirements, we shut them off at night. We guarantee the software, we guarantee the events, we make sure that they only have X amount of machines on the floor.

Given that, there were very few systems out there that could handle what we wanted to do, the first system we installed was the VLC central monitoring system, and that came out of Bozeman, Montana. That system was actually a control system. It did everything we needed.

It had a protocol which is a proprietary protocol called the F3 protocol. That proprietary protocol required that the manufacturers make special machines for the State of New Mexico. That in itself is one of the big problems with a central system. Any time that you make yourself or your situation unique you're going to have people walking away from the table.

Our tribes had none of those problems. They could buy anything and everything that they wished to have. Our racetracks were stuck with three manufacturers at the end, and only a microcosm of their actual game libraries because of that older system.

We ran that for five full years under contract, and then looked and looked at our business model and said, "We really need something else, we need to make this a different model."

Our different model was to embrace a new protocol or something different that would allow any manufacturer to drop systems into New Mexico and still be controlled and still be monitored.

We did that. We did a new RFP and went for kind of a unique way to do it; that is, we asked for a pilot project to prove the technology. We put out a very tightly written RFP for exactly what we required and what we needed and got only one response back, and we are currently in the middle of that pilot project running the SGI Aegis system.

We opened that, we signed the contract in August. We brought up 24 machines at our Sunland Racetrack near El Paso, Texas, on the new protocol about a month ago, and it works very well.

One of the exciting things about that was we had about 700 machines down there that were all old. They like to joke that when they did their Rocking New Year's Eve Game it was still a 2000 platform. And that was up until three months ago.

They put those 24 machines on the floor, were brand new, and you can imagine a market like Sunland Park, surrounded by El Paso, by Juarez and so on, about three million people, and the only thing they had to gamble on were those 700 machines; 24 new machines created quite a stir and outperformed all the other machines by an order of magnitude.

15 days later we opened up an entire new racetrack at Hobbs, New Mexico, it's called the Zia Park, and that one is completely new to us, because it was not only brand new machines, brand new system, it was also ticket-in ticket out, which has not been done in New Mexico on the racetrack side.

And it went off virtually without a hitch, it's working beautifully. For our way and our model, a system is really required; and it works very well if you define your requirements very tightly.

MR. ROWE: I think that's a great segue to, I'd encourage you to pick up Eugene's paper on the way out. But this is the segue to cost-benefit analysis of lost revenue versus control.

And Eugene, I'd like to hand this over to you and give us some comments about, for example, Greg, on the 24 games, when you say they outperformed, is the win-per-unit twice per day or over twice per day?

MR. SAUNDERS: Not quite twice per day, but it is close.

MR. ROWE: Pretty close. So with that in mind

MR. CHRISTIANSEN: Well look, it's not surprising; as everyone in this room knows, certainly the panelists know, the machine-vending community is creating thousands and tens of thousands of games a year. What that does, what this choice does, it takes the power to decide who's going to gamble with what away from the manufacturer and gives it to the consumer, so the consumer preference among games becomes an absolutely driving controlling force as far as the operator is concerned.

And the operator would want to do what your tracks did, which is have all of those, replace those 700 old games with the 24 new games that the customer prefers, and it will be like that until the end of time as far as I can see.

It is no longer true, unless some legislator tries to make it true, that the supplier can decide you're going to play this game, no other game, and that's that.

I think jurisdictions that try to walk down that road, and I would say that New York has started out trying to walk that road, the paramount policy goal that's trying to be served here is not number one on this slide, i.e., what gaming and information systems provide the most integrity, security and auditability while giving the operator the most discretion to select product that creates the most customer satisfaction, revenue and tax dollars; that's not the controlling factor, at least in my experience in dealing with legislatures that are considering central systems.

The controlling factor there is that they want cover. They want to be able to say, "We have the ability to shut down any machine anywhere in the system any time we want for any reason. We control when the system comes up, when it goes down, etcetera and so forth."

New Mexico, in Greg's situation, that was the requirements because of language in the compacts. But it's not really the business requirement. The business, the casino in order to run, to be optimized, doesn't really have to look beyond sufficient auditability and gaming control.

And there is another template for that, the template that was developed in Nevada and in New Jersey, which is that, "We insure integrity of the game" through a system of gaming control that utilizes some of the systems that you have seen on these slides, but it is basically a set of paper controls.

So that would be my simple answer to that.

MR. ROWE: James, why don't you respond to the efficiency, for example, of system verification and authentication versus tamper-proof tape and seven locks?

MR. JAMES MAIDA: Well, I don't think we ever encourage seven locks but I feel like I'm at Wall Street with Louis Rukeyser here on my right. Much more comfort in my living room. But I think we heard a lot this morning about New York State and what we're running in New York State.

I think everybody should realize that there is a significant difference between what is being run in New York State and what is being run in Delaware, West Virginia, Rhode Island, New Mexico; and it is not because the legislators wanted to run it that way in New York. It is a constitutional requirement that it be a lottery and not be a random number generated at a machine, and that is what the state constitution requires and the state law requires.

So yes, the numbers are not as good as Seneca Nation or across-border Ontario, but it is a reason; it's because the systems are different. And they have to be finite-type games, where game outcomes are sent down and they have to be changed. And there's some artwork concerns and things like that.

So I want to make that clear, that it's very difficult to compare what we do in New York State and what we do in Delaware, New Mexico, West Virginia Rhode Island.

The other thing I think we're moving greatly towards, if anybody's monitoring, in Maine and in Pennsylvania there's currently RFPs on the way, although I can't really discuss them directly, I can say that those, both of those RFPs are moving towards the idea that we need to have standard protocols, at least between the game and the central system, so that we can now address the concerns that you talk about.

I don't think that means that what goes on in other states currently is not good or bad, because I think in those other states they were started in 1991, 1992, 1993, where quite frankly there was no SAS protocol to the degree that we have it today.

Clearly, central systems, you said in your own remarks, that they were not required until 1992, and that is correct, and they were actually not required in New Jersey until much later; and you didn't even need them, you couldn't use them unless there was less than a four percent spread, and most of the casinos were off more than four percent at the end of the day.

When you look at my lottery clients they don't accept four percent off, they don't accept one percent off, they don't accept half a percent off. So I think with the lottery industry, those that you mentioned brought to the table is bullet-proof banking-style central systems that run right, that the up time is always there.

You talked a bit about central systems. We first used them for player tracking and things like that, Bruce, and I think it's interesting that player tracking is not regulated by regulators, so it didn't need to work correctly, we didn't need to have the casino central system up 99.9 percent of the time until we got ticketing, until we got all night transaction.

Because if the system was down, "Oh, so what. We'll get our meters tomorrow, we'll get them the next day. Your player tracking information won't be updated for two days; but that wasn't critical."

Today you get a ticket out and put it in another machine, and if that system is down, what happens? The person can't get their money. So the lottery industry has given us the idea that, yes, we can have bullet-proof central systems, whether it be local central systems or at the top end, the central monitoring control system; what the gaming industry has given us is, "Hey, we really need the good games."

We need what's on the floor in Nevada, we need it in New Jersey, Mississippi and those states. So there's a tradeoff.

And I think the other trade-off in states that I'm looking at is, "Am I going to hire 400, 500, 600, 700 gaming agents or am I going to use technology to my best advantage and leverage off it?"

And I suggest in Delaware right now, I see Don Johnson, who's out here, they completely — in Rhode Island and those other states, they completely monitor the

software in the gaming devices remotely; there's no, "I got to get a trooper out to that game or somebody to review it."

So we are making great strides in where technology is helping us regulate, and we don't have to touch it, feel it, see it to regulate it, we can do it by, as you said, logically regulating. So I think as the lottery world and the gaming world converge, we're going to have more of technology helping us regulate and the bonus is going to be, we're going to get better games and the games will be able to be played, and hopefully the systems can merge together and the best lottery control system can have the best player tracking and the best accounting system and they can merge together.

So that's really how technology will serve to reduce the flow in terms of the number of staff that you need to run these things.

MR. ROWE: Here's an interesting question about player tracking and central monitoring systems that I think is something that needs to be thought through in terms of its potentially greatest impact, and that is: if the state chooses to have a central system for both monitoring and player tracking and it knows player behavior, is the state then responsible for responsible gaming initiatives?

MR. MAIDA: That would be a legal question and I'm not wearing a legal hat today.

MR. ROWE: I know it's not a protocol question but it is a question about how the implied solution you described has other effects that could occur.

MR. MAIDA: I guess what I'm describing is that the state central computer system will get all of the data but the player tracking information will still be proprietary to the local site.

MR. ROWE: But would it be at the central system?

MR. MAIDA: No, many states would not want that for Freedom of Information Act questions, for other things. But the same data stream that goes to the central system, as you know, is also used for the player tracking side.

MR. ROWE: So if you were looking at that slide which of those topologies or how would you describe it is most close to what you're suggesting?

MR. MAIDA: It would be more so on the right-hand side. Well, the left-hand side or the right-hand side. The only difference between the left and the right is wiring and how it's done. But clearly the machine's going up both; you can have two ports or one port, and then that gets us into the question as to whether it's desirable for two ports or one port, and that's really about what's available out there today.

Most machines are going to be two ports, it's not a difficult thing, but just as Greg said, he has a lot of old machines and how do you deal with that type of thing. But either setup will work.

MR. ROWE: How do you think about player tracking in a state environment with a multi-property distribution?

MR. SAUNDERS: We look at it from the standpoint of, as you said, problem gambling.

We do not collect that data. In fact, if you look at the model on the left-hand side, we have no system-to-system protocol. Our system of monitoring and control system connects directly to the game.

The second port goes out to the documenting system or player tracking system. What we do is we ensure there's no electronic funds transfers, there's very strict rules on what we would look at and say, "This is an inducement to gambling versus an actual player tracking system," and just saying "Happy Birthday" or something like that, so we do keep it very separate.

MR. ROWE: Eugene?

MR. CHRISTIANSEN: Yes. I might add that this concern on the part of the state — you know, James is absolutely right. Law and constitutional law governs; technology gets better, faster, cheaper every day, and there's a lag between those capabilities and the law.

But that concern, that state concern not to be responsible or not to have liability for compulsive gambling problems, this is also a concern of operators. One of the largest casino operators in the world which has just fantastic player tracking technology, they deliberately do not include a field in their data files for player income.

Why? Because they don't ever want to be liable to the charge that they encouraged through comps or whatever, gambling on the part of somebody who in terms of his income could not afford it.

So yeah, it's a good question. And I don't think that one's been fully thought through by anyone.

MR. MAIDA: I just want to add that again those state lotteries, those gaming jurisdictions like Greg, — Greg said he only had a few choices when he first started, seven, eight years ago, and I think you can trace that back to every racino in the environment today.

But I can also tell you that I have conversations with each of those states, and those states are saying, "Hey, we need to look at BOB, we need to look at SAS, we need to look at ways of moving our technology forward." And all of the states that I mentioned are looking at that and realizing that that's what they need to do.

But it involves central system upgrade, it just isn't, snap your fingers and it happens so. But I think they realize the benefit. And Greg — many people are looking at Greg because Greg is implementing in terms of the SAS protocol in New

Mexico; and many other people are saying, "Hey, if that works we might need to be moving towards SAS."

MR. ROWE: So when you say that you don't snap your fingers and it happens, you probably have great perspective on this, and that is: What is the gestation period for new technology in the gaming business if you think about from first approved to widely accepted?

MR. MAIDA: I think that you look at it, your first look at what you're dealing with, many lotteries when they used to procure in the early '90s they would buy a technology solution and when they changed their lottery vendor they had to change the whole technology, and that was quite difficult.

As the lottery industry moves towards the gaming industry and the gaming moves towards the lottery, the lottery clients are getting much more sophisticated in understanding, "Hey, we can replace this part," so they are looking at the protocols.

But getting back to your question about how long does it take to get it done, it depends. Ticket-in ticket-out, we had it through lab within 60 days of when it actually was announced and our jurisdiction had it first, other jurisdictions, depending on laws and statutes, it might take longer.

And there are some jurisdictions still have not implemented ticket-in ticket-out. So technology is moving faster than many regulators, and it could be 18 months between the time that it starts and when it's finally implemented.

The problem is a game title; how quickly does a game title go? In some jurisdictions if you don't replace that game six or eight weeks that game is old news and no one wants to play anymore. We heard that from Director Aubin this morning. You have to keep up with technology because by the time you put it in it's already passe.

MR. ROWE: Let's talk about the protocols and dual port issues for a moment, because I think it's very germane to this audience. In terms of the complexity of dual port, the games that are available today, do you have a feeling for the percentage of games that are available on dual port running common protocols to support central systems?

MR. MAIDA: You know, I don't. I don't know how really that is done out of a need for necessity. It is done because people need a dual port, it has to be done that way. There are certain solutions that are not bad, where you can talk maybe SAS out of both, SAS ports; we do that in ticketing environments; and that can be good.

If a system goes down the other system can continue to do ticketing, but really that is sort of a jurisdiction by jurisdiction thing, and that actually runs into the issue of, "Is that game available for me yet?"

"No, it's a special protocol so we have to redo it."

But really that determination is the business decision that suppliers have to make, whether they're going to get into a market because of technology.

MR. ROWE: And excuse me for not clarifying this point; but inside the machine on the motherboard that runs the game, on many games there's only one plug on the back to attach to, if you will. And dual port allows you to take an alternate path and transmit data, either the exact same or different from the motherboard of that game up to a central system. And so if dual port is the number one requirement in order to get a game into your jurisdiction, a large majority of products available in Class Three games today do not support dual port.

MR. MAIDA: I might also add that all the new product coming out, all the new platforms that are being released all do have ethernet boards and all do have multiple ports. I think what you're talking about is product that would have been made in the '90s and even 2000.

But what we see today is very complex gaming platforms that have these multiple ports, so you buy what's available, just new today, it's not as big of an issue as if you're trying to upgrade old games.

MR. ROWE: I'd like to open the floor to questions to the panel if we could?

Questions? Sir?

A VOICE: For Eugene; have you done any cost-benefit, Eugene, on the replacement cost of electronic gaming devices, total cost to own, given that they need to be turned over every so many days or people don't play them?

MR. CHRISTIANSEN: We haven't asked that question. It's a hard thing to generalize about, unfortunately. All of these system or even non-system gaming environments, they're all the products of specific history.

And to answer that question, you really would have to bring in someone like Bruce and you'd have to do some very careful thinking and analysis about it and then you could answer that question, you know, what is the most cost-efficient thing to do in this situation with this system.

It is very, very hard to generalize about, there are just too many different animals out there. Some rough orders of magnitude, if you think about a game that costs roughly \$10,000 and you do three conversions over the five-year useful depreciation life on that game, and they cost about \$3300 apiece, you're running about \$11 a day in daily operating costs; flat lines fully loaded.

That does not take into account the IP and the peripherals necessary to run ticket-in ticket-out, and that can add another \$3,000 to \$4,000 per game, depending on the manufacturer and your current infrastructure.

So those are kind of rough orders of magnitude. And that puts it at \$12 to \$13 a day. I think what most slot operators do is they put the fewest number of games on

the trial to mitigate risk, and then try and hold the supplier responsible in the event that it fails; try and keep them whole either by giving them a conversion or another game of similar type. And you kind of get through this slow dance period until you figure out whether you're going to have a relationship with this particular device.

The other thing too is I think that there's a lot of talk about games failing in six to eight weeks. There's many games that have been out there that are the equivalent of khakis and blue jeans, and if you don't have them you're not in the business. And they've been around for a long time, we all know what they are, every manufacturer has some.

I think the biggest change you're seeing right now that's driving the refreshment rate is the move to low denomination, multi-coin, and if you saw some of the slides this morning, a nickel and one-cent games, we're just following what Australia did, we're about roughly 10 years behind Australia.

But clearly companies like Aristocrat, who have the most knowledge in the world about low denomination, low multi-coin models to drive local play, you're seeing a lot more of that.

And in fact that was kind of a glaring observation as we looked at some of the examples this morning, is that in Delaware, New York, and I believe in Rhode Island, some of the most popular games from other manufacturers aren't even on the floors in any quantity, which goes to represent either a contractual or a technological barrier to entry for some of the highest-earning games in the country.

Any other questions? Please? Sir?

MR. KEVIN SEIDHAMEL: Two questions about the architecture. Is there a protocol that's become dominant or is becoming dominant in the industry with flexibility and understandability and cost; and if so, what is the communication of the structure? Is it Internet, is it VCM or some other communication?

MR. ROWE: The question is — and help me if I don't get this right — but is there an emerging protocol or dominant protocol.

MR. ROWE: Okay. Without getting too deep into the OSI layer here for most of the audience, the protocols that drive gaming today are dominantly an IGT protocol known as SAS that drives game-to-system connectivity. There are some vestiges of other protocols but that is the dominant one. And James, help me —

MR. MAIDA: That's correct.

MR. ROWE: — if I'm not correct. There is a recognition that SAS was not — and SAS control in terms of functional change management was turned over to GSA, the Gaming Standards Association by IGT a number of years ago, and GSA solicited input from its 70 constituent members to get the latest functionality built into that.

And then IGT has supported that initiative in terms of building a new functionality that's been asked for by industry at large into the versions of SAS that are running today.

It was a recognition by both GSA and IGT that SAS was the DOS equivalent of the operating system, and that there needed to be a new protocol written in simpler language, which is XML, extensible markup language, and does come from the IT world of PCs, and both GSA have BOB which is the XMO version of SAS, and IGT has just announced a product they're calling SuperSAS, which is a similar protocol in its structure as well as its language, being XML. So it's great that the 70 people that belong to GSA and IGT have agreed that XML is a good thing. So we're excited about that.

But as we were talking about earlier, the gestation period in the market penetration of these is slow. These things don't get adopted quickly unless there's a great business pull, like ticket-in ticket-out, and there's not a single compelling, catalytic event that's going to cause BOB or SuperSAS to just permeate the entire industry.

If you think about the normal rate of turnover, depreciation over five years, it takes roughly five to seven years to turn the entire slot inventory probably in North America given available capital, given movement in technology, a five-year flat line depression.

Do you want to add anything?

MR. MAIDA: I think that's right. I think 95 percent of the machines today use SAS. I think if I was building a new machine today I'd be implementing SAS for the short term, and then you need to go to TCIP, that's the next level where we're looking either SuperSAS or BOB, and I would make sure that I was on the right track today and looking towards the future.

But I don't think that we can expect any TCIP protocols to permeate the industry the next one to two years because you have all that product that's already on the floor. But the SAS protocol is backwards compatible and can be used in a wide variety, so that is the next phase that we're talking about today. But in two years we'll come back and it will be much further along than that.

MR. ROWE: And for the technologists, GSA's developed a thing called Serial BOB, which is backward compatible, so you can use on it existing systems, take a majority of functionality of it, upgrade your floors to CAT5 and TCIP run over current topologies, which is really important.

I think where you're going to see some of the first XML standards emerge is in the system-to-system connectivity; because as you talk about — for example, one of the biggest opportunities in racing is connecting your tote systems to your player tracking systems so you can get one image of your player to understand what's their total spend; and as you've heard discussions about entertainment, when Wynn Resorts opens up every spending transaction at any point of sale will be linked to the customer record.

If you go get a massage, if you go buy a candy bar, if you go buy a Jack Daniels and then go to the casino, they will understand the spend at every point of sale and the return on margin in each one of those outlets to create a total snapshot of customer worth, and then to use that detailed information to drive targeted marketing efforts.

And that's where in this industry I think you have a huge opportunity to look at the integrations of the tote systems; integrations of slot tracking systems, integrations of remote point sales and special events, to understand, how are your precious marketing dollars being spent and what are they yielding in these low-margin return businesses?

When you're making 80 percent on your money that hides a lot of sense; when you're operating on the 20 percent margin there's not a lot of places to hide.

So the availability of good data from links systems is critical, and I think S to S is a place where that can happen for your industry.

Other questions?

No questions about any of those acronyms? Not one?

A VOICE: I'll ask another one. Australia a while ago was talking about on one server but adjacent jurisdictions, changing the spin rates and popping up 60-minute play time messages like that. Is the existing technology capable of handling that from one server with different adjacent jurisdictions running on the same server?

MR. MAIDA: I'll try, I think you have two questions there. One is, has Australia engaged in any responsible gaming initiatives, play time, and how much you've lost; is that one of your questions?

A VOICE: That was on the Web a while ago, about two years ago they had a big PD media file, a very extensive 73-page one about input from different places with problem gambling; that was their main thing.

MR. MAIDA: They have implemented that, and I am not one to talk about problem gaming; but let me say, sometimes even the best intentions of implementing problem gambling initiatives cause more problems. For instance, they did do a study, and I'm not the one to talk about it, but there is a professor from UNLV that's just brilliant.

And for those of you who have seen him talk; or Connie Jones from IGT, who is in charge of their responsible gaming, she's spoken that sometimes you say, "Well, I'm going to slow down the reel spin rate." And what we found? People stayed longer, okay. So it didn't happen.

Or, "We're going to tell people how much they lost every 15 minutes."

And what did we find? "Oh, I lost that much? I better increment my bet to try to win it back."

So even though sometimes we try, people think about, "Hey, this is a great thing to do." It actually does cause negative unintended events.

And the second question you have is, can one server run multiple jurisdictions' machines? Was that your second question?

A VOICE: Yes when one is talking, one jurisdiction like maybe New South Wales wants the spin rate to be slower and message to pop up, the very next one over doesn't.

MR. MAIDA: I can tell that you each jurisdiction runs their own central system. In the government, we test the machines in Sydney and Adelaide, we have offices there, and I can tell you that no one government controls another government's machines, they've not implemented that yet at this point.

A VOICE: But it brings up a couple interesting questions, and one is this remote, what I'm going to call revenue management. And one of the things that Greg does is he shuts off games because it's mandated by law.

But it's interesting that in most casinos if you've got 3,000 games they're on 24 hours a day, in spite of the fact that your demand at five in the morning might really be for 150 games. And so what you're going to see emerge here in the next three years are incredible science around right-sizing casino floors, revenue management based on time of day, day of week, type of customer, and many other things that are done in many parts of our business; and especially tables.

We do stuff on the table side of our business today that we haven't been able to do in slots for the last 20 years; like measure buy-in. The first thing a good table guy does to determine the potential worth of a customer is, what's his buy-in?

And if James and I both sit down at a \$20 table; he buys in for a thousand and I buy in for a hundred, that pit guy knows instantly that we're different customers, even though we're playing the exact same game.

As you put penny games in — if a person buys in on a penny game for a hundred dollars, are they in theory worth the same as a person that buys in for \$10? Probably not.

How could you use that for marketing information? So I think one of the advantages of this central topology, whether it be at a property or on a wide-area business, is the ability to quickly test and implement things around revenue management.

So for those of you that already have this infrastructure, there's many times when it may appear to be a negative, but there may be places where it's a very positive infrastructure in order to implement things like we're talking about.

Now just quickly though, I think Eugene has in his paper kind of a linked question or comment related to what you did, and that is; Louisiana tried to implement central systems after the fact; Louisiana riverboats that is.

And I thought it might be useful for you to make a comment on that. Because I think it's relevant to Australia trying to do what Louisiana did.

MR. CHRISTIANSEN: It is. But it wasn't the riverboats' idea, it was the State of Louisiana who had the idea that, after the fact, after the fact we should connect up all the reel spring slots on all the riverboats to a central system.

This idea was in the state's mind because in 1992 Louisiana created a video poker industry, and that was a central system proposition. They were all VLC machines. James can correct me if I'm wrong, but I think it was a sui generis system, it was a one-off system that had been created.

MR. MAIDA: I think it was an IGT system and they had six or seven vendors.

MR. CHRISTIANSEN: Yes. Anyhow, that predisposed the State of Louisiana, the legislature. There was no constitutional reason for this, they were not really bound in terms of their own law to do it, but in the late '90s they decided, "All right, the video poker machines are all on the central system, therefore we will have all of the casino slots on a central system."

That proved to be a nightmare to implement, because each of the casino licensees being good businessmen already had their stand-alone randomizing devices hooked up to proprietary casino monitoring and/or control systems. So the problem really was: "Now we have to integrate all of these systems of various ages and provenances and technical characteristics to for one central system," and it turned out to be very difficult to do.

You would have problems like that in Australia, for example, if you tried to do this on a larger scale there; and I think it brings up a question that hasn't come out in this panel discussion: All of this costs money.

The technology that they can provide is not free, and there is a question here as to who pays. Who pays for this? It's fairly easy to say, as the State of New York has said to the racino operators there, that, "Well, the state will procure the system and the machines, you don't have to do that. But then there is money taken out of the gross revenue to pay for that." And that means that revenue doesn't go to the racing industry or to, in New York's case, the education budget.

This is a very important question, and I think the relevant way to pose it is, "How much integrity do you need? How much security is enough? Is it cost beneficial to buy a technology that, at least on paper or by its specs, will give you control features that you really don't need?"

I think, Bruce, you were telling me an anecdote of, I think, in Delaware, where — correct me if I'm wrong — you asked Ed, "How many times has someone utilized the feature of this system where you reach out and turn off one machine where that seems to be malfunctioning?"

The answer was, "Once."

Is it cost beneficial to have that technology? I'm not sure that it is.

MR. ROWE: So we're going to wrap up here, just do a little quick question around here and I'd like to pose to each one of the panel members, starting with Greg: So if you were starting over today, and you were able to pick the topology to run a place to maximum revenue, wherever it be, what would you select — and integrity and auditability?

MR. SAUNDERS: You're asking me a very difficult question. Being a regulator, operations are not strictly what I care about. I care about integrity of the system, integrity of the tax flow back to the state. And when I look at systems and I want to look at a system that is secure, I also want to look at a system, as we didn't before, look at a system that is going to maximize that dollar, something that is not going to restrict, something that is going to make it easy for me to run, and easy for me to do my job.

In that case when I look at that and I bundle that and looking at my model and I say, widely dispersed, text-data, things I need to do, I need a system that will draw in every manufacturer, draw in every machine those manufacturers have, but retain the control, the ability to cut off, the ability to do the things that I require.

I can't do that cost-effectively without a central system. We looked at that very carefully, we did the numbers both ways. Central system was far cheaper in New Mexico than it would be perhaps anywhere else.

Some of the districts we looked at casinos are all right together. New Mexico doesn't have that luxury. It's almost 800 miles between two of them. You cannot do that effectively unless you have a system.

Plus we wanted to build. We do not have to go after the fact and look at any money. Our events take precedence, we bill them at the end of the month, they pay it. They reconcile against their numbers, not against our numbers. We got the money in hand, we don't have to do that extra step, manpower savings.

MR. ROWE: Eugene?

MR. CHRISTIANSEN: It would depend who I was. If I were in Greg's position or I were in the position of a state lottery director I would want a central system, I would want the maximum control, I would want the maximum accountability, and I might not care very much how much that cost.

If I were an operator, I'd want the maximum flexibility to acquire games, to meet the consumer expectations in my market, and I want the maximum flexibility to configure my casino floor in a way that will allow me to take market share.

I certainly would not want to be in the position of some of the New York operators you've heard this morning, where the system sets the statewide consumer price of gambling, and I have no control over that; I can't set the price of my own product. That would be the last thing I would want.

MR. MAIDA: I think I'll just sum up by saying, first of all I was pointing out the New York system was different because of statutes, but I represent and work with regulators and lottery directors all over, and integrity's the number one thing.

And if my clients can have the integrity and have less manpower and they can collect the money and they can audit to their numbers, that's really what they're looking for.

But I have heard all day today that it's either, you can have a great central system and lousy games or great games and a lousy central system.

I think that's a false choice. I think today in 2005 you can have it all. And I think you can go out with these types of systems, and obviously Maine, Pennsylvania, those lotteries I've mentioned are out looking at new protocols; you can have the best games, you can have the best central system, you can reduce manpower and you don't have to sacrifice integrity.

And I refuse to have to sit there with a client and say, "Well, who do you want to make angry?" I think in 1993 we couldn't do it because it was all proprietary. But I still think you take the best systems from the lottery world and you put them with the best games from the gaming world, and you demand perfection, and it can be all done. And I think that's what you're going to see on the lotteries.

Racinos are the meeting place, racinos are the meeting place between Las Vegas, New Jersey, Mississippi and the lottery world; it's where it all meets, and I think you can have both.

Greg's on his way to having both, and I think the rest of our clients can, and I don't think they should have to make a choice.

MR. ROWE: And I have to agree with James. I think that we're at a point in time when this is about integration, not invention, and the pieces are out there to be hooked together. But it's up to the states and it's up to the people running the business to set the direction where you want to go, and then ensure that the pieces fit together to get you the stuff you need.

It always fascinated me when I was working at Harrah's, and at that time we had 42,000 slots, that if Gary Loveman called me and said, "Do we have the right chips in the games?"

I said, "I don't know. I'll go through all 42,000 games and I'll let you know."

He'd call back the next day and ask the same question; "Do we have the right ones?" "I don't know, we'll start over again, because somebody could have gotten in there that night."

And when you look at bill validators, if all of a sudden a counterfeit is identified, how long does it take you to find out what code you have in 42,000 games? And why can't you download a fix to that?

I mean, people fix my P.C. better than we can fix slot machines today from central anywhere. "Just plug in it, we'll send you the fix."

We've got to take the next leap to get that.

And then also this question about on-demand revenue management is where the big win is going forward. There's a huge opportunity there to maximize the investments we have on the floor.

We've used up our time, and I appreciate your patience listening to what for some people may be a boring topic, but trust me that if you don't understand some of the things we've said, find people that do as you start to think about how to compete or what to buy because it's going to influence what you take to the bank over the next five years if you don't make the right decisions.

Thank you very much.

(Applause)

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