Insights Into Systems Technology

Consumers leading the way to convergence

Consumers are driving a world of innovation, integration and convergence in lottery and gaming, creating a need for world-class technology systems that has never been stronger. While previous megatrends like social media have represented a fast track to meeting changing consumer needs, innovation is largely driven by systems that offer open architecture to accommodate flexibility and a continued responsiveness to growing and changing player, lottery and industry needs.

CONNECTING PLAYERS WITH DEEPER CONTENT

At the player level, market research shows that players increasingly want to move seamlessly across verticals for gaming entertainment. The surprisingly large crossover plays out in interesting ways*:

- 50% of instant game players also play casino slot machines

- 75% of slot machine players also play lottery draw games

- 74% of slot machine players also play lottery instant games

*Source: Scientific Games Player Segmentation Study, 2015

How can industry leaders in gaming entertainment create unique offerings for customers and players in all of these verticals – slots, draw and instant games?

That's a pivotal question for Scientific Games after the company's 2013 acquisition of WMS Industries and 2014 acquisition of Bally Technologies. Building on combined strengths and synergies in 2015, Scientific Games is now looking closely at leveraging new capabilities to deepen and enhance the player's experience.

"We've already gone down the path of evaluating areas where we can leverage products, technologies and concepts that were used on the gaming side in lottery and vice versa," said Walt Eisele, Chief Technology Officer, Lottery for Scientific Games. Eisele cites bonus offerings as one example that allows casinos and other gaming operators to offer their customers as "a fun way to give out bonus points, cash, floor-wide events and links to social media. Clearly, we're the leaders in the lottery sector in terms of creating and launching loyalty and second-chance programs for a number of our customers. So leveraging some of our bonusing concepts and technology from gaming in our lottery business is something we are exploring."

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Besides the ability to offer customers more targeted and creative promotions, Eisele points to the company's deepened technical resources—and the seamless merger behind their resulting capabilities. "Our Bally acquisition came with a great deal of talent on the systems development side, and now we are leveraging this for lottery where it makes sense. Both company cultures are very well aligned."

On the interactive side, direct engagement with players offers new player insights that in turn lead to innovative ways to deliver great promotional, loyalty and eInstant content. "For example, we're not just going to simulate an instant game on a mobile phone when we deliver an eInstant game," said Eisele. "We're going to make it an interactive play experience, using some of the technologies and, more importantly, some of the design capabilities from our gaming business in order to drive a better interactive content offering."

Scientific Games' interactive lottery customers are leading the way when it comes to using mobile and web in innovative ways—and a key learning from the social media world is that winning isn't just about cash. According to Michael Lightman, Senior Vice President, Lottery Interactive Products, for Scientific Games, it's more about the opportunities to win and prizes that have meaning for the consumer.

"We can make playing lottery games more fun by creating more chances to win, because value motivates the consumer beyond cash, toward a more meaningful social game-winning experience," he said. "The ability to win points and purchase exciting products from an online store expands the value of the game and deepens the player's connection to the brand."

Building on insights along the consumer's path to purchase informs continuous content improvement and a steady stream of new products, from interactive promotions that include mobile apps and an array of freemium, second-chance, FunPlay and Skill-with-Reveal games to loyalty rewards with points and purchases, and iLottery products like e-instant games.

Lightman cites *MONOPOLY Jackpot* as the lottery industry's first linked progressive jackpot game, where players across five U.S. states use mobile and web applications to unlock the chance to win more prizes, including a weekly and monthly progressive jackpot. "This popular casino concept had never before been used with lottery instant games," he said.

He also points to the success of the Pennsylvania Lottery's *Holiday Cheer,* launched in 2014 as Scientific Games' first Skill-with-Reveal game. The fast-paced, match-three puzzle game included power-ups to more quickly increase the player's total score; after each game, players could compare scores with fellow players and friends by viewing a leaderboard.

The Pennsylvania Lottery had similar success with The *Wizard Of Oz,* an instant game with second-chance and interactive Skill-with-Reveal options.

LESSONS FROM ABROAD

In Europe, where Scientific Games customers have been selling lottery products on the internet for more than a decade, lessons learned in systems technology have finally made their way to North America.

"The complexity of systems integrating third-party systems, game content and distribution channels has been developing in Europe for years," said Patrick McHugh, Senior Vice President, Lottery Systems for Scientific Games. "That expertise is now coming to the U.S., as systems are becoming more complex." McHugh said the greatest impact could be happening in loyalty programs as well as with mobile, interactive and social gaming technology platforms. "In our U.S. contracts, our systems are bringing together all the products and services Scientific Games has to offer, including instant games, digital, mobile, internet, promotions and content. This can also include video lottery and central monitoring systems in addition to instant game systems and business intelligence systems. This may seem like a lot of technology, but in reality, it's one large, integrated system."

> ### "The market is more complex, competition in gaming entertainment is much more intense, and lotteries are evolving quickly. The need to understand data across your business has become much more important."
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McHugh said the Bally merger has led to an increase in core competencies and that cross-pollination has allowed Scientific Games to accelerate its integration of many groups, bringing more innovation and expertise to market and resulting in technology that serves more than a million lottery retailers worldwide.

"We tell our story from the perspective of consumer insights, access to retail, knowing what's happening in the marketplace from our more than 2,000 studies—all of this feeds into our technology systems," said McHugh. "The market is more complex, competition in gaming

entertainment is much more intense, and lotteries are evolving quickly. The need to understand data across your business has become much more important."

While the vast European experience may seem a bit overwhelming to lotteries in the U.S. market, keep in mind that ultimately, it all may come down to one thing: the ability to develop the clearest possible picture of players and their needs. One view of the player across verticals is critical in terms of consumer insight, product selection and promotion. "We have the capability to offer lotteries—or any customer that has a desire to operate in multiple jurisdiction verticals—one view of the player," said Eisele. "We can understand player behavior across casinos, lottery, interactive and mobile, and provide data in ways that will help them run their businesses more efficiently—and more importantly, help them give their players more of what they want."

According to Eisele, Scientific Games' Canadian customers offer a good example of what can be accomplished through the convergence of technology. "The provinces in Canada all run basically every vertical offering to their players—everything from sports to lottery to online gaming and casinos. Being in a position to offer these customers solutions to help them manage their businesses more efficiently across verticals is another key differentiator for us."

SHARING INFORMATION, PRODUCTS AND SERVICES

Convergence is not only driven by consumers and business intelligence, but also by the megatrends Scientific Games' Shared Services Platform group and iLab track across lottery, gaming and interactive. Led by Steve Beason, Enterprise Chief Technology Officer for Scientific Games, these futurist teams are tasked with developing concepts based on a holistic industry view that encompasses casinos, lotteries, mobile, web, retailers, regulators and players.

Focusing more on technical innovation over a two- to five-year period, the iLab develops technology that can be used across any or all verticals. "Once we meet with different business units to pull in a new technology, if one of the groups wants to adopt it, we'll look at whether or not we want to pull it across to other groups as well," said Beason. "When something can be used across many verticals, then our Shared Services Platform group takes over, and that is really the team that is tasked with convergence at Scientific Games."

Steve Beason, Enterprise CTO for Scientific Games (second from right, back row), and the Scientific Games iLab team at the 2015 Global Gaming Expo (G2E) in Las Vegas.

"Our Shared Services Platform group looks at what technology can be leveraged across the verticals and all three of our business units—for instance, a shared wallet that enables players to move across verticals with one form of payment that stores loyalty and financial transactions," said Beason. "The shared wallet represents convergence at a transaction level."

When convergence happens at a transaction level, as it does with the shared wallet, it intersects directly with the consumer megatrend toward cashless, electronic commerce across different channels. "There's an element of loyalty built into those wallets, because it also stores what we call player account management systems (PAMs)," said Beason.

Beason said that the natural progression from PAMs is to form convergence opportunities in terms of what each vertical wants from its systems. "At a core level, they each want commerce and knowledge about their players, their activities, loyalties and achievements."

Many of Scientific Games' customers run more than one of the company's products across several verticals. Beason said

his teams create and develop the technology needed to deliver business intelligence and new capabilities with open architecture that can accommodate change over time.

For instance, the South Dakota Lottery launched an innovation 26 years ago with video lottery terminals (VLTs). Today, 14 U.S. states have a similar version of VLTs in retail establishments such as bars, grocery stores and casinos—and several are serviced by Scientific Games' *CONNEXUS* system, a distributed game network that includes a complete suite of security features that deliver the vital information all stakeholders need to drive profits, engage players and increase operational efficiencies.

"Originally, lottery systems just monitored and reported the financial meters of the VLTs," said Steve Angelo, Vice President, Video Gaming Systems for Scientific Games. "Today, lottery operators and players demand technology and innovation that provide capabilities from business intelligence to wide-area progressives (WAPs) and integrated player rewards to responsible gaming features." Lotteries continue to upgrade their infrastructure to provide innovative products to the ever-changing player base.

"We continue to see growth in our VLT network," said Norm Lingle, Director of the South Dakota Lottery. "Innovation is very

important to us as we look to drive future growth and improve our network integrity, as well as provide new and innovative product offerings for our players. We see convergence as an important part of the South Dakota Lottery's vision."

Beason's teams also look at convergence at the player level, which spans social gaming, second-chance offerings and freemium to premium conversion. "We must also develop games across all platforms and channels," he said. "For instance, if you play a lottery instant game at home that's based on a freemium social model, you're very likely to go back into the retail outlet and play that game for real money. From a technology standpoint, we need to be able to support that."

Convergence at the retailer and lottery level, has centered on WAPs in the gaming space, which have the same mechanics as a multistate game. "In the lottery world, Powerball is a game in which smaller states could generate substantial and meaningful jackpots," said Beason. The same phenomenon is now happening at casinos that are banding together to offer larger jackpots via WAPs. "So, we're looking at doing multistate WAPs across casino properties, using the same types of technologies and features that we use in lottery and applying them to gaming."

SEEING INTO THE FUTURE

Convergence across all levels of the gaming experience begs the question of what new technologies are on the horizon, and Beason is quick to say that in the short term, we'll be seeing more in the realms of personalized, location-based advertising. "This is to engage more players as they move through the channels or venues like restaurants or casinos, cross-promoting products and services based on their proximity."

Millennials will become more engaged as gaming entertainment deepens community-based, lounge-environment and skill-based play as well. "Millennials are used to

LOTTERY AND CASINOS SHARE A MAJORITY OF PLAYERS

SLOTS GAME PLAYERS → 50% → INSTANT GAME PLAYERS

74% → DRAW GAME PLAYERS

75% → PICK3

Source: 2014 Scientific Games cross jurisdictional, motivation-based player segmentation study for Lottery and Gaming.

convenience, but they also appreciate head-to-head competition," said Beason. "This World of Warcraft generation needs games that challenge them and take them to new levels of achievement." That includes tie-ins like TV game shows, where winners in one vertical can become contestants and win experiential prizes in another.

"Virtual reality will be on hyper-drive in 2016," said Beason. "Being able to watch our *"MONOPOLY Millionaires' Club"* TV game show in a virtual environment, play the game at home for a chance to enter and go to Las Vegas for real, all while you're wearing your virtual reality headset, is going to be huge across all of our genres. Imagine playing an internet slot game like Iron Man or MONOPOLY, and the bonus round happens and you're actually walking along the MONOPOLY board game as you try to win your bonus round."

Beason predicts that the industry is going to see that lottery, gaming and interactive verticals will want to present their content through these new technologies, and his iLab is key to development of these kinds of capabilities across Scientific Games' global business.

"It's a very exciting time," he said. "We demoed the virtual reality capabilities at the North American Association of State and Provincial Lotteries 2015 conference and people were really amazed by it."

One thing he believes is certain: Convergence is a never-ending story, as megatrends and insights continue to evolve and bring new technologies to life—all based on the changing needs of well-connected, tech-savvy consumer. ∎