



James  
Maida

Co-Founder & Chief Executive Officer,  
Gaming Laboratories International  
gaminglabs.com



# The Paradigm Shift to Demand-Side, Consumer-Driven Innovation

## PGRI Introduction:

*In years past, innovation was driven more from the supply-side, the creators of new technology and business processes. Demand was triggered by the introduction of a new product or innovation. On hindsight, it is surprising how long it took for a great new idea to go from early-adopter to mass-market acceptance. For instance, the market-place was not really requesting or even ready for small business computing when Apple launched it in the late seventies. The IBM PC was introduced in 1981 and even that was not the catalyst for mass-market embrace of desk-top computing. It took years, and the addition of spreadsheet and word apps and Microsoft Windows, for the market to recognize the power of this new technology. The mass-market embrace of the internet was similarly slow. Without an informed and sophisticated consumer base to provide a pre-existing consumer demand for these fabulous innovations, it has always taken years for an innovation to move from the launch and early-adopter stage and into the mass-market acceptance stage.*

*That seems to have changed in a big way. Now the appetite for new and improved far outweighs the consumer preference for easy and familiar. The younger demographic looks forward to the opportunity to learn how to use and apply new technological tools. Look at the warp-speed adoption of Uber technology and new online games-of-entertainment. Granted, the learning curve is not so difficult with Uber, and games are fun, but these are still the kind of changes that used to take a long time to gain mass-market adoption. The ATM was introduced in 1967, delivered profound benefits, and was not a hard technology to master. But did anyone say “wow, finally*

*I can just drive up to a window to conduct my banking transactions without the time-consuming hassle of waiting in lines for a bank teller.” It took another fifteen years for the ATM to begin its mass-market deployment. How many people looked at the horseless carriage and said “wow, now we’ll be able to move to the suburbs!” Visionary inventors of old labored in a market-place that was not ready to embrace change.*

*Not so anymore. Consider the warp-speed embrace of the Apple iPhone. Or a new online entertainment game? There is hardly any gap at all between launch and mass-market embrace. What happens as this demand-side driven innovation reshapes the games-of-chance industry? For the operator, it means that system modernization is a constant, going affair. Positioning for flexibility to adapt to rapid changes in the market-place is becoming the mission-critical competency. For the regulator, it means recasting the frameworks to enable rapid revisions that incorporate new game concepts and technologies.*

*Who better to help us sort these issues out than James Maida. Our discussion at ICE Totally Gaming Show in London drilled down on GLI’s mission to help Lottery operators, regulators and commercial innovators thrive in this exciting new environment of change and opportunity.*

*GLI was created in 1989, and since then the company has certified more than 1,757,470 items and has either consulted on and/or tested equipment for more than 475 jurisdictions. And the demand for their services continues to grow - GLI will be hiring an additional 130 to 150 technologists over the next twelve months.*

**Paul Jason:** It has always been hard for regulatory modernization to keep up with technological innovation and market-place modernization. Isn't it getting even harder to close that gap?

**James Maida:** The rate of change and innovation on the technology side of the business continues to accelerate. Combine that with new game concepts like loot boxes, Fantasy Sports, and eSports and socially networked community games

that the regulations should support, and then build in the flexibility for the gaming commissions and lottery directors to make the determinations on specific games and technologies. Of course, this puts more pressure on lottery directors and gaming boards because the guide-posts are no longer crystal clear.

On the face of it, this gives operators more leeway, more options. But a collateral

laws to explicitly prohibit Fantasy Sports - if for no other reason than it was difficult and pointless to prohibit something that did not exist. So the operators implement this new game based on their opinion that Fantasy Sports is not "gambling" and therefore is not prohibited under federal law. That leaves it up to the states to decide. The Fantasy Sports operators then lobbied the states for the right to continue to operate and many states proceeded to legalize and regulate the activity that was already being conducted anyway. From the Fantasy Sports operator perspective, this is a perfectly orderly way to enable the judicial and legislative process to decide how to classify this new activity called Fantasy Sports. No harm, no foul.

Conversely, a state lottery director operates under more rigid constraints and is likely to be rebuked for launching a non-lottery game, or even selling traditional lottery products online, without prior consent of either the legislature or the Governor. Unlike commercial operators, lottery directors can't adopt a "better to ask forgiveness than permission" approach. In fact, there have been instances where the lottery director was rebuked even when she/he did in fact have prior consent. The commercial side of the business can go ahead and implement their controversial "gray area" new idea, see if it is challenged in the courts, litigate and see how the courts decide, cease and desist where required and continue to operate where allowed. Lottery directors can't really do that. Of course, this method of vetting controversial innovations is not unique to gaming. Uber, and other pioneers of the "sharing" economy, have fine-tuned the use of this strategy. But even they did not

**“The very definition of “gambling” is under review. And add to that the willingness of the modern consumer to try these new games, switch to new brands and new venues, to migrate to the new and different. ”**

that are not easily defined and classified. The very definition of "gambling" is under review. And add to that the willingness of the modern consumer to try these new games, switch to new brands and new venues - to migrate to the new and different. Entrepreneurs are a clever breed who recognize these trend lines and are applying resources and ingenuity to challenge the status quo and the established leaders in the industry. Of course, this is true for all industries as it is for the games-of-chance industry.

Let's also recognize that the shiny new objects often do not have the staying power of Lottery and casino gaming. But we should face the reality that the rate of innovation-driven change is accelerating, that the games-of-chance market-place is being disrupted by radical new entries, and that it is not too soon for established operators of Lottery and casino gaming to assess the impacts and make adjustments to stay aligned with the consumer.

**How can regulations possibly be updated quickly enough to keep up with this rate of innovation?**

**J. Maida:** It's true that it would not be practical to hold hearings and meetings to update the regulatory framework with the introduction of every new technology and game concept. Addressing this challenge, regulatory structures are being reshaped to provide more general guidance that protects the consumer and preserves integrity and security, but in effect off-loads some of the decision-making to lottery directors and gaming commissions. Regulators first clarify the primary public policy objectives

effect is that the regulatory guide-posts for operators are becoming less clear-cut. There are now more ways to interpret regulations and a larger variety of ways to comply with the regulations. The challenge is that this flexibility introduces ambiguity and uncertainty as to how the regulators and legislators think the rules should be applied to a new technology, process, or product. For instance, legislators may deem an online offer of a product that everyone has been buying for decades, like lottery tickets, to be in violation of state statutes. And then legislators will authorize the online offer of an entirely new gaming category with unknown social costs and impacts, like Fantasy Sports. It would seem to be a very small, very do-able adjustment, to allow lottery tickets to be sold online. And a much bigger step to allow a new game like Fantasy Sports to be sold online. And yet

**“The new system (at Lotto Hamburg) also allows multi-tenancy operation in support of multiple lottery operators utilizing the same core system. This novel approach represents a paradigm shift in lottery system architecture. ”**

more states allow Fantasy Sports than allow lottery tickets to be sold online.

Let's look at the way these issues are decided. The operators of Fantasy Sports did not have legal license to implement Fantasy Sports. But, neither were there

invent it. The fact that there were no laws imposing prudent speed limits for automobiles certainly wouldn't stop Karl Benz from inventing the auto. New products, new games, new technologies are likely to fall outside of current regulations.

# ONE CONNECTION CHANGES EVERYTHING



JCM FUZION® – A PATENTED TECHNOLOGY  
THE LOTTERY, SPORTS BETTING AND MORE AT EVERY SLOT ON YOUR FLOOR

When you connect JCM's new **GEN5™** printer and **iVIZION®** bill validator to your CMS, you unleash the power of **FUZION**. Every machine on your slot floor could deliver a server-driven suite of player-focused, revenue-driving features.

**FUZION** could turn every slot machine into a multi-line profit center, with slot play, sports book wagers, promotional couponing and lottery ticket vending at your player's fingertips.

**FUZION** is at the core of the future-ready casino floor. In the meantime, from first touch to last touch, the most dependable, versatile BV/Printer combo in the business has your player experience covered.

CONNECT WITH THE FUTURE AT [JCMGLOBAL.COM](http://JCMGLOBAL.COM)



## Can't GLI help to deconstruct the attributes and functionality of the new technology or game concept to take a closer look at whether it is compliant with the intentions of regulators?

**J. Maida:** Of course, that is what we do. GLI's business is to test, review and report on gaming devices and systems against the standards established by the gaming jurisdiction. That is also one of the purposes of GLI Standards which are freely available to everyone. GLI has created a set of standards for gaming devices and technologies that most jurisdictions use as a template, a base-line point of reference that helps them jump-start the process of developing their own set of standards. The jurisdiction may use parts or all of GLI Standards to articulate their regulatory framework, but each jurisdiction determines for itself the standards that will best serve its purpose.

The GLI Standards are living documents that are revised quarterly based on feedback from regulators and from clients. Let's make it clear: GLI has not and is not imposing our standards on the industry. For one thing, public policy objectives vary and so there is no "best" standard for the

industry to apply. We would respectfully submit, though, that reference to GLI Standards should be a part of every jurisdiction's process in developing the standards that work best for them. For instance, many U.S. states want to move as quickly as possible to implement sports-betting. GLI Standards are being used to help them make sure they do not overlook something and to help expedite the whole process. In addition to casino gaming devices, there are GLI Standards for pull-tab, electronic, and bingo systems, Scratch tickets, VLT's ... 33 standards altogether with "Event Wagering" which covers sports-betting being the most recent.

## What is an example of a line-item standard?

**J. Maida:** Say you know you need to include geolocation in the wireless betting system. We describe the attributes and functionality it must have in clear technical language that enables the performance to be measured against the standard. This can get complicated because as accurate as geolocation technology is, there still needs to be a buffer zone along the border to ensure it does not mistakenly allow a bet to

come in from the other side of the border. It is these nuances that can get overlooked.

## GLI's collaboration with Lotto Hamburg seems to enlist your skill-sets for the widest range of support services and counsel.

**J. Maida:** Yes. Additionally, we were engaged by Lotto Hamburg to assist in the planning and development stages as well as execution of the modernization contracts. That instead of waiting to bring us in to test and vet just prior to implementation.

Lottery operators need to update their central systems every five to ten years. This kind of project typically begins when the existing system is no longer meeting the needs of the enterprise. You can replace it with a system that does meet the needs of the enterprise, in which case it will be obsolete almost as soon as it is turned up. Or you can replace it with a system that will be flexible, scalable to meet the needs of the enterprise five and more years from now. GLI is pleased to be a part of the Lotto Hamburg system modernization project from the earliest stages.

*Continued on page 62*

The challenge is to figure out what will be needed five to eight years from now, then clarify the investment costs and ROI for building the system platform that will enable these upgrades in the

“A collateral effect is that the regulatory guide-posts for operators are becoming less clear-cut. There are now more ways to interpret regulations and a larger variety of ways to comply with the regulations.”

coming years. It's like building a more robust foundation for a house that will be expanded later. Spend a million dollars now to save ten million later. The games-of-chance industry is, though, much more complicated than building a house. Future-proofing the business requires a deep dive to assess operational strengths and weaknesses, brand value and recognition in all the different product categories, consumer trends and local gaming culture and competition, likelihood of regulatory change and how and when that will evolve, etc. Thinking of “system modernization” as an ongoing, never-ending project positions the operator to be ready to change and adopt the newest technologies and games.

### What is GLI's role in the actual execution of the RFP itself?

**J. Maida:** The whole planning stage and run-up to the construction of the RFP is the key to success. And that is where GLI's resources and competencies apply. It is the well-conceived RFP that produces a

clear picture of how commercial partner capabilities align with the operator's needs. Of course, there is the implementation once contracts have been awarded. But the well-executed RFP positions the partnership for ongoing sustainable success. Conversely, it is hard to overcome the ball-and-chain of a partnership based on a poorly drawn RFP. GLI counsel and service can be applied to almost every aspect of operational, business, and IT optimization. I do want to emphasize that GLI does not score the RFP, ever, even when asked. And GLI does not decide policy anywhere, ever. GLI resources and skill-sets are all trained on helping the operator clarify strategic objectives, translating those into RFP specs, and helping to ensure an effective implementa-

tion. We understand technology better than anyone. But our relationships are all collaborative because we do not know local markets, local gaming cultures, and legacy relationships with retailers and gaming venues like our clients do. And we are not the ones to decide public and regulatory policy objectives. We are the ones who can connect the dots when it comes to investing in and managing technology, implementing commercial partnerships, and creating alignment to produce optimal results.

**After thirty years of service, GLI has earned a special status. The trust placed in your integrity, objectivity and technical expertise puts you in a rather unique position to help the industry.**

**J. Maida:** It is our pleasure and privilege to serve the industry. Of course, we grow and learn and benefit ourselves from the collaborative relationship we continually nurture with the entire industry. And our own mission is best served by being open and transparent in our efforts to share our resources and support the healthy sustainable development of the gaming industry as a whole. Regulators all over the world do put a lot of trust in us and we are dedicated to making sure that every single client, every single regulator, every single lottery director, everybody whose sphere of interests and influence intersects with ours receives world class customer service. ■

### GLI® to Provide Quality Assurance and Consulting Services to Lotto Hamburg in Connection with its industry-first Strategic Lottery Central System Renewal Project

Lotto Hamburg's industry-first strategic system renewal development project will lead to considerably faster time-to-market; significantly lowering test efforts and, at the same time, reducing maintenance costs. This is mainly due to a completely modular software design and architecture that will enable the lottery to configure all types and combinations of lottery games in real time and for all sales channels with just a “click of the mouse.” The new system also allows multi-tenancy operation in support of multiple lottery operators utilizing the same core system. This novel approach represents a paradigm shift in lottery system architecture.

In the current phase of the project, GLI is supporting Lotto Hamburg in the develop-

ment of business requirements together with the selected lottery systems vendor. This will lead to the creation of top-quality testing protocols, which GLI will then use to test the system being implemented against. This approach will ensure the utmost quality in the software delivery lifecycle of the vendor and a smooth development process, thus meeting project timelines, budget requirements, and the overall time-to-market objectives of the project.

“GLI brought its lottery systems renewal experience to this project, which helped us in looking past the shiny veneer of the solutions we were offered in the initial evaluation phase,” said Rainer Ballhausen, Lotto Hamburg's head of IT. “We are also happy to have GLI support our QA team in the implementation phase, which adds significant value to our quality process and allows us to internally focus on the implementation of the new system and our processes, while GLI expertly leads the QA process with the vendor.”

“Lotto Hamburg is no doubt in the vanguard among European lotteries with this multi-tenancy capable system renewal,” said Thomas Bierbach, GLI's Director of Lottery Services.

The contract for QA and testing services was awarded to GLI after it successfully provided Lotto Hamburg with independent technical verification and validation (IV&V) of vendor-offered concepts, validating that the submitted concepts would indeed meet Lotto Hamburg's technical requirements.

### Working on behalf of the Illinois Lottery, GLI® Successfully Oversees the World's First Private Manager Transition Project

Acting Director of the Illinois Lottery Harold Mays said, “GLI ensured all parties stayed informed and coordinated throughout the two-and-a-half-year-long project. We could not have successfully completed this complex transition without GLI.”