

WLA MAGAZINE

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A hand is shown holding a wireframe globe. The letters 'ESG' are prominently displayed in the center of the globe. Surrounding the globe are several circular icons, each containing a different symbol: a dollar sign, a classical building, a handshake, wind turbines, a hand holding a plant, and a globe. The background is a blurred green field.

ESG

INSIGHTS

The exciting world of social betting

INSIGHTS

The technologies
revolutionizing
random number
generation

CSR FOR LOTTERIES AND SPORTS BETTING

Becoming a
social purpose
lottery

SPORTS INTEGRITY

Understanding
illegal betting is key
to maintaining the
integrity of sport



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VANCOUVER

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In Vancouver, attendees will find a west coast experience like none other. From its famous seawall to incredible cuisine, the city truly has something for everyone.

WLS 2022 will take place **October 16-20** at the Vancouver Convention Centre.

Don't miss out! Register now at www.worldlotterysummit.org and ensure your place at this unforgettable event.

EDITORIAL

Evolving social responsibility for global lotteries



Luca Esposito
WLA Executive Director

Over the past five years, a growing number of factors have pressed organizations to improve and demonstrate their environmental, social and corporate governance (ESG) performance. Businesses are expected to do more to have a positive impact on the communities they serve.

The COVID-19 pandemic changed the world, causing individuals and enterprises to rethink priorities, how they live and operate. After two years of lockdowns and disruptions to the global supply chain, we emerged with new expectations of how we deliver our products and services.

Accelerated digitalization and a boom in data generation have made security and fraud a top business risk. Companies and organizations must protect their operating systems from cyber breaches, to ensure resilience and continuity, as well as protect customer data privacy.

Another key influence that is driving businesses to be more sustainable overall is the powerful consumer habits of younger generations who consider ESG aspects when purchasing products and services.

Research confirms the growth of investment that organizations are making to achieve these important goals. The *Worldwide ESG Business Services Forecast 2022-2025*, by International Data Corporation (IDC) – a global provider of market intelligence for information technology, telecommunications, and consumer technology markets – estimates that spending on ESG services will reach USD 158 billion by 2025.

Social movements calling for more diversity and inclusivity in the workplace; supply chain shortages and the evolving situation in the Ukraine mean that businesses and organizations must play a greater role in addressing these issues if they want to remain relevant and benefit society at large.

The World Lottery Association provides its members with effective tools to achieve their social responsibility goals. For instance, certification to the WLA Security Control Standard (SCS): 2020, based on the ISO/IEC 27000 international standard for security techniques for information technology, also contains specific controls required by the lotteries and sports

betting operators, such as establishing effective measures to protect player personal data.

Equally, certification to our Responsible Gaming Framework enables lotteries to demonstrate that they follow global best practices and invest in their products to make sure they are as responsible as possible, while showing the direct connection between these products and the good causes that they support.

We continue to work towards attaining gender parity with our members, our President Rebecca Paul, founded the Women in Lottery Leadership (WILL) initiative. WILL aims to advance women in leadership positions in the lotteries, primarily through its mentor program, which establishes mentoring relationships that provide women with the opportunity to realize both professional and personal development.

In this issue, we will learn more about how some of our members are achieving their social responsibility goals.

We will discover what it means to be an organization with social purpose, evolving beyond corporate social responsibility and how the British Columbia Lottery Corporation (BCLC) is realizing this new approach.

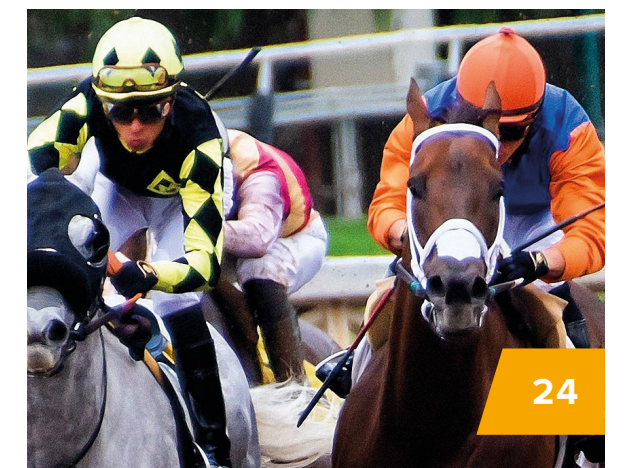
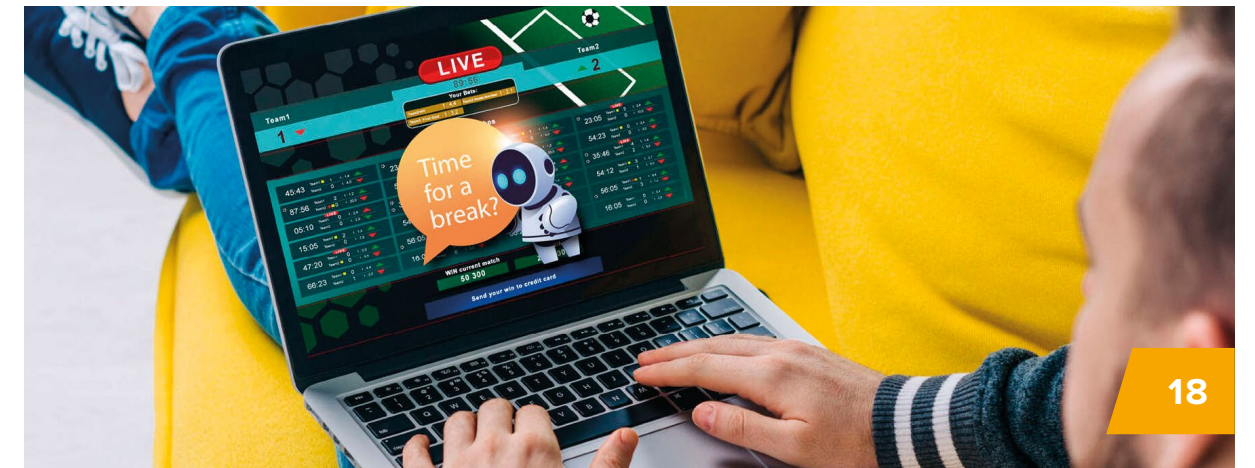
The boom of online products and services available to players around the clock has led our industry to keep innovating and offer responsible products that help players who may have gambling issues. We will hear how Norsk Tipping is winning the battle with artificial intelligence technologies.

Understanding and protecting player data is a key part of sustaining the lottery business and its future responsibly. As data privacy regulation increases, we learn from The Lottery Corporation in Australia how it is evolving its marketing strategy to be in line the new laws expected at the end of the year.

There are several ways the lotteries can improve their operations to have a positive impact on the environment. We also learn about some of the actions being taken by WLA members, Française des Jeux (FDJ) and La Marocaine des Jeux et des Sports (MDJS) in this area.

We hope you will enjoy these and other updates of ESG activities in the lottery world.

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INTERVIEW

Sustaining lotteries through ESG activities

WLA President, Rebecca Paul

As the lottery industry continues to evolve, so too does the opportunity for us to enhance our role as organizations that benefit society. The platforms for doing so have expanded, as have the focus areas where we can truly make a difference.

In recent years, organizations have become expected to play a far greater role in advancing their businesses in a responsible and sustainable manner, and to make sure all stakeholders benefit from their environmental, social and governance (ESG) activities. This concept can be achieved many ways. What are the key areas of focus for the lotteries?

Across the globe, our industry has joined countless other business sectors in expanding the benefits we bring to our communities. This timely topic was the core of the recent CIBELAE workshop in Buenos Aires, which featured lively discussion and an exchange of ideas and best practices. We learned of many initiatives that focus on environmental sustainability, ensuring a diverse and inclusive workplace culture, instilling responsible gaming practices and engaging with the community. Those pillars help define the actions we can take to leave socially conscious footprints as we stride forward.

The commitment to making a difference must be made from the top, with an in-depth policy and strategic plan to follow. Once this foundation is laid,

there is no end to our potential to be strong global citizens.

In the last two years, accelerated digitalization and the global pandemic have led to a boom in online lottery and betting products and services, which can be accessed around the clock. What measures are lotteries taking to provide a safe environment for all players and protect those who may have gambling issues, and how does the WLA Responsible Gaming Framework assist them in the process?

As technology and customer preferences continue to evolve, Responsible Gaming (RG) has gradually been instilled as a crucial element of our industry. Our suppliers, too, have embraced this necessary pillar and created strong, innovative programs across the globe that complement our work. As with other elements of Corporate Social Responsibility, it's necessary to build RG initiatives and goals into the structure of daily operations. And this is where the WLA provides a framework to which we all can aspire. Whether it's starting a program from the ground up or consistently improving RG strategies,

the carefully crafted WLA Certification process provides guidelines designed to protect the interests of players while achieving a balance between revenue, entertainment and customer expectations.

The WLA RG Framework is based on ten program elements that applicants will address through a detailed submission process. The four levels of certification each require criteria that help shape, refine and improve our RG programs. Once a submission is reviewed by WLA's Independent Assessment Panel, valuable feedback is provided to assist with continuous improvement. Certification case studies are found on the WLA website, and networking with other lotteries is encouraged to share ideas and best practices that strengthen our industry as a whole and cement our partnerships.



As technology and customer preferences continue to evolve, Responsible Gaming (RG) has gradually been instilled as a crucial element of our industry.

Diversity and inclusion in the workplace covers many aspects, one of which is addressing gender balance. The Women in Lottery Leadership (WILL) program aims to drive high-performance business growth through the advancement of women into greater leadership positions. Since starting in 2017, what have been the greatest achievements and what goals have been set for 2023?

The establishment of the WILL program represents not only the need for more gender balance in our industry, but it has created a platform from which we can make great strides. We have made progress, and participation in the WILL mentorship initiative continues to grow. Working with industry leaders, we have instituted networking events around lottery seminars and conventions. Just two years after its launch, WILL had established mentorship programs in Africa, the Asia-Pacific region and Europe in addition to North America.

Ensuring equity brings depth to any organization. It adds a well-rounded voice to internal and external discussions and ensures the very best minds of both men and women are brought together to address the challenges that society and business face.

A diverse array of perspectives gives additional insights into the issues and allows us to see around corners to find previously unknown challenges as well as opportunities. In other words, this balance is vital for a successful business as well as empowering the bright stars of the future.

Looking ahead, our plans include hosting a virtual group forum of participants in the mentorship program. This will be beneficial to the ongoing development of useful guidelines and will provide examples for future participants.

According to several global studies in 2022, cyber breaches are considered the greatest business risk. Cyber security best practices are vital for businesses to sustain their resilience and operations, and progressively viewed by investors as belonging to ESG activities. How does the WLA Security Control Standard help the lotteries and their suppliers achieve this?

As always, the WLA is a valuable resource for our collective education and exchange of best practices by utilizing the knowledge and experience of subject experts. The Security Control Standard is a globally recognized foundation for assisting lotteries in implementing structures designed to maintain the confidentiality and integrity of information—a vital key to success and trust among our audiences. This security and risk management framework relies on top lottery security professionals, who are also part of the WLA Security and Risk Management Committee.

An additional piece of this impactful guidance is that all new or updated standards must be approved by the WLA Executive Committee and ratified by the delegates of the WLA General Meeting prior to publication. The WLA Security Control Standard is just another example of how our industry's progress is achieved by

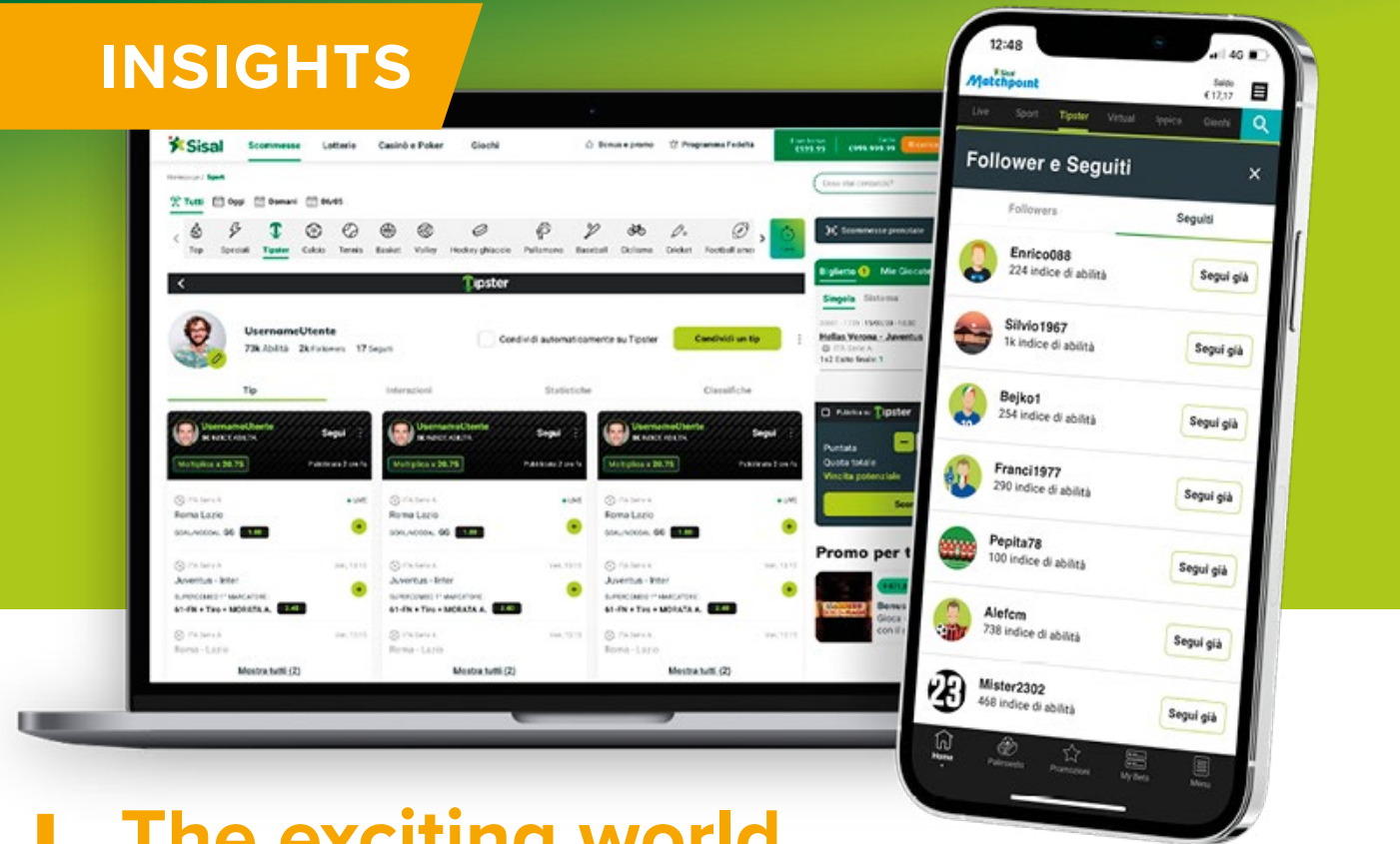
working together across the globe.

In October, the World Lottery Summit will take place in Vancouver, where the global community of lotteries, sports betting operators and their suppliers will share best practices and the latest developments to advance the industry. What steps are the organizers taking to provide as sustainable an event as possible?

Vancouver has firmly established its commitment to environmental sustainability by working with the community to address environmental challenges and develop action items that are seen in many ways. This vibrant city and the Vancouver Convention Centre are fitting choices for this year's World Lottery Summit (WLS), where sustainability and social equity will be part of the event theme. The Centre itself has earned double Leadership in Energy and Environmental Design (LEED) Platinum Certification, a prestigious achievement that, in part, is based on its green design and operating technologies used to regulate temperatures and recycle water. The list of the Centre's additional environmental awards and accolades continues, and you can learn more at its website: vancouverconventioncentre.com.

In line with this setting, we can do our part by avoiding the use of plastic at what will be a paperless event. We'll learn more about the city's initiatives during one of our tours, and we will take away lessons learned from living examples of an incredible focus on protecting the environment.

INSIGHTS



The exciting world of social betting

Over the past five years, a boom in the use of smart devices, improved connectivity, and accelerated digitalization during the global pandemic have changed the way we live, work and play. We carry out more activities online and share more of our lives through different social media platforms.

As online sports betting popularity grows, there is great scope for players to share their knowledge with friends and others who would like to learn more.

Francesco Taricone, Betting Experience Innovation Manager at Sisal, explains social betting and what Sisal is doing in this exciting new space.

What trends are you seeing in Italy in the sports betting world now?

We're seeing huge growth in online betting, which is being driven by the strong presence of live sports on traditional and web TV channels. Over the last few years there has been a progressively strong connection between betting and social media, which has given rise to a new figure: the betting influencer, aka the Tipster. In an environment where there is increased social network penetration, betting platforms are still lacking in tools

and features that allow users to interact whilst betting online. Consequently, Tipster is the answer to ride the most important trends during recent years: 69% of social network penetration and 57% of interactions regarding TV content in Italy are related to sports events.

How does Tipster work?

Tipster is a unique and innovative social betting platform integrated into a sportsbook - the first of its kind. Enhancing the talent of its users by offering them a space to share bets, tips and obtain rewards, the platform allows our customers to follow and learn from the most successful tipsters. Tipster's goal - to build a community where users can share their talent and get involved in a totally new betting experience, whilst always following a responsible gaming model - is powered by its four pillars: playability; sociability; inspiration and commitment.

Could you describe your responsible gaming model and how it applies to social betting?

Sisal's Responsible Gaming program, has been certified by and aligns with

the highest standards of The European Lotteries (EL) and the World Lottery Association (WLA) since 2011. It uses a scientific approach to analyzing a customer's profile - including psycho-behavioral analysis - to produce profiles /clusters that are recognized by the scientific community.

This forms the basis for activating the correct mitigation actions based on individual behaviors, and regardless of a specific gaming or social betting context.

Our model is constantly evolving. It examines user behavior with targeted research conducted in partnership with the most prestigious and well-respected Italian universities and relies on the support of:

1. Artificial Intelligence Tool (Algorithm - PGSI based) for evolutionary development and continuous improvement of performance aimed at identifying risky gambling behavior.
2. Working Groups, which form the backbone of the project by directly involving individual company functions and allowing an exchange between business and Responsible Gaming.

3. A strategic direction and operational feedback from the Scientific Coordination Committee on Responsible Gaming.

Tipster is aimed at all groups of players, from the experienced ones who want to showcase their skills, those who wish to improve and those seeking inspiration. Tipster's mission is to socialize the betting experience, leading by example through a responsible gaming model, where talent and knowledge ensure an entertaining and safe approach.

What kind of functions does it have?

Tipster has a range of unique and innovative features: a personal profile for every user; an advanced social interaction functionality providing users with the option to follow other tipsters and to be followed, or to add reactions and interact; a real-time tips feed ('the tipstream'); monthly rankings and challenges; special events and a loyalty program for the best tipster.

How are you getting customers to engage more and share their tips?

We get customers involved more, by offering a complete and engaging betting experience. They can copy and bet in one-click, with a real-time tips feed and a sophisticated filter system to get what they want. Moreover, there are monthly rankings and special events where they can prove their skills and receive recognition amongst the best tipsters in the community.

How do you think social betting is going to evolve in the coming years?

Tipster's strategy is customer-centric, tailored to users' needs and is evolved with them in mind. Core to Tipster is the daily focus on innovation, to ensure the continuous enhancement of the consumer experience and product features; and promotion, through incentives for different user profiles and stages of the journey to the trial to reward the most followed or inspirational tipster. These two areas of focus must guide the evolution of social betting in the coming years.

Sisal is one of the leading international operators in the regulated gaming sector and currently operates in Italy, Morocco, Spain and Turkey, with a

range that includes lotteries, betting, online games and entertainment devices. The Company operates internationally in the retail channel through a network of over 47,000 points of sale and in the online channel serving over 1.8 million consumers.

Sisal's strategy rests on three pillars: sustainability, through constant commitment to development of the Responsible Gaming program and through the offering of a secure, transparent entertainment model; digital innovation, thanks to its cutting-edge gaming platform oriented towards an omnichannel approach and inhouse software and application development expertise to grasp the opportunities offered by the digital transition; and internationalization, with the goal of being awarded contracts for new international concessions on the basis of its solid expertise.

Since 4 August 2022 Sisal became part of Flutter Entertainment plc, the world's largest online sports betting and gaming operator with a portfolio of globally recognized brands and a constituent of the FTSE 100 index of the London Stock Exchange.

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The technologies revolutionizing random number generation

By adesso

When Bitcoin reached its peak value of USD 69,000 in November 2021, blockchain and cryptocurrencies were already well known to the general public.

The questions remain, how can the gaming industry make this technology work?

How do we combine our old business processes with new technologies?

And how do we avoid competing gaming operators from outpacing us?

Blockchain technology is no longer just a decentralized and immutable database. Much has changed since it was established in 2009. Any business areas can use it, regardless of whether it provides smart contract platforms for insurers and banks, or supply chain management decentralized applications (dApps) for retailers and manufacturers.

This article discusses how blockchain can revolutionize random number drawing.

Electronic draw systems

As lotteries try to keep up with technological progress, ensure efficiency by lowering operating costs and capital investment, their use of electronic draw systems (EDSs) to run various draw game offerings is growing.

An EDS may be very sophisticated, but watching an electronic draw where a key is pressed on a computer and winning numbers appear on a screen, leaves the observer wondering where these numbers came from,

with no way to retrace the steps taken to generate the result.

Technology that disrupts random number generation

We will examine a unique and potentially disruptive approach to electronic draws with a method that meets the highest levels of security and integrity requirements by means of its unconventional and simple approach.

This method utilizes public cryptocurrency mining and blockchain technology in the generation of randomness.

This provides a new, reliable entropy source with a high level of randomness, security, integrity, transparency, traceability, and replicability in an electronic draw system.

By achieving these attributes, this new method reaches higher levels of integrity, raises the bar in electronic draws and sets new standards. The premise of and prerequisite for this method – that all aspects of the electronic draw process must be comprehensible, traceable, transparent, and reproducible by everyone – is unique in the field of electronic draws.

Trust

Players must trust the drawing of winning numbers. EDS security and integrity is hotly debated for different reasons, thus, lotteries must ensure integrity. There are two types of winning number draws: manual, in which the winning numbers, printed on balls, are drawn by a human from a spinning drum, and electronic draw systems (EDSs) where the winning numbers are drawn “randomly” by a computer, based on an algorithm.

EDSs have come into the spotlight, largely due to past fraud cases involving manipulation of EDSs or random number generators (RNGs).

Costs and efficiency

Oftentimes, big jackpot games like Powerball, Mega Millions, EuroMillions, or Eurojackpot, rely on manual draws, which currently provide the best means for the public to follow the draw and generate trust that it is fully random. Other games require daily draws (i.e., daily Keno, Pick 3, or Pick 4) or draws at a frequency of just minutes (i.e., Fast Draw Keno).

EDSs used for these types of games generally enable operational cost and resource efficiencies. However, as already mentioned, electronic draw system components risk being manipulated or tampered with where unauthorized individuals – usually insiders – manage to manipulate the system to fraudulently produce predictable results.

EDSs issues with integrity, transparency, or auditability

Different approaches to ensure security and integrity of the electronic draw process include lotteries developing sophisticated in-house solutions or use of acquired EDS products from specialized industry vendors. The solutions range from using hardware and software RNGs involving complex algorithms to the deployment of cryptographic technology.

The five pillars of electronic draws

Randomness

Regarding random number generation (RNG) by hardware or software, randomness can have varying definitions and may be perceived differently.

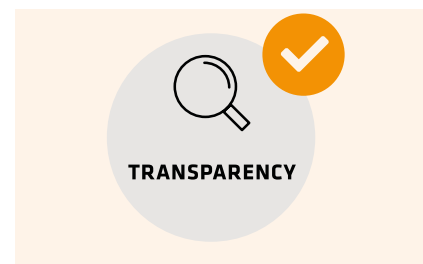
If a software algorithm is utilized, then the randomness produced relies on the source of entropy for seed generation. This entropy source provides the process randomness. The algorithm itself processes all supplied seeds the same way, and merely serves to convert entropy into humanly understandable randomness with a result that makes sense in the context of lottery games, namely the winning numbers.

Unpredictability

The requirement for a draw result to be unpredictable is a cornerstone in the draw's integrity. But what is the difference between “random” and “unpredictable”? Algorithms normally use a “random number generator” (RNG) function. The RNG delivers subsequent random numbers based on a certain start value – the “seed” – provided to the RNG. If the seed is manipulated or generated negligently, generated numbers may still appear random but may become predictable, because the RNG delivers the same sequence of numbers if the seed is the same.

Replicability and auditability

To ensure and demonstrate integrity of the draw process, it must be possible to conduct an audit of this process. Ideally, this includes the full replication or repetition of a draw. It is preferable to replicate a draw using independent machines or computers. This can serve as proof of draw integrity, but also as a detective control in support of investigations into any challenge of the draw's result.



Transparency

Transparency is the most crucial requirement. It means that anyone interested – including those outside the lottery – should be able to follow and replicate the draw results. The EDS must meet the evolving integrity requirements. The most advanced and sophisticated systems available meet some, but not all requirements, nor to the point of ensuring that the system

conceiver or developer cannot manipulate the system. Some systems have an independent audit capability, but none provides transparency that would enable random outsiders, players, and the public to replicate the draw. This is likely one of the reasons that many big lottery games are still drawn manually today and can often be followed on TV or via live streaming, providing as much transparency as possible.



Non-repudiation

The principle of non-repudiation lies at the core of transparency, where the chain of trust between the EDS components in the generation, from the seed to the final scaling of results or winning numbers, is conclusively traceable. The method must demonstrate that the draw result undeniably originates from the entropy source deployed, regardless of the steps involved. Only an open and entirely transparent system will achieve this.

Understandability

The principles mentioned above should contribute to the fact that the drawing method is understandable for any interested person or player. This is given with a manual draw, but missing from the known electronic solutions. Here the core functions are usually a black box for many, including the technically inclined.

Blockchain-based random number generator

A blockchain-based RNG utilizes public cryptocurrency mining and blockchain technology to generate randomness. It uses the hash value or Merkle root generated in the cryptocurrency mining process as a seed value for an open-source RNG algorithm and the game parameter scaling process. This seed value is stored in an indelible and tamper-proof manner, in a decentralized and publicly visible blockchain, constituting the highest possible randomness, security, integrity, transparency, traceability, and replicability in an electronic draw system.

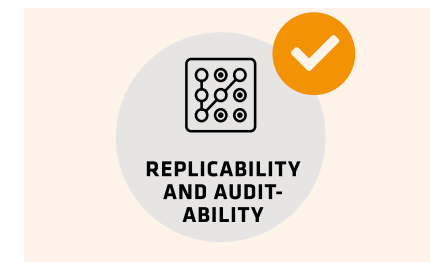
How should an EDS fulfill the five pillars of electronic draws?

Randomness

On-chain block data is used as an input to the RNG to generate each random number, proving that the result was generated fairly.

Unpredictability

The hash for a cryptocurrency block is calculated by numerous independent computers in a peer-to-peer network, under the stipulation of solving a mathematical problem (proof of work) or providing comparable proof (i.e., proof of stake). A single hash calculation is required for the successful miner. This is logged in the blockchain and cannot be manipulated. It is not possible to predict or manipulate the resulting values.



Reproducibility and auditability

Each individual step in the draw is logged, allowing inspection by a person authorized to conduct the draw. Gap-free logging of seed generation and the concomitant publication of all values for the calculation of the seed ensure that it is possible to reproduce the draw of the winning numbers at any time. An EDS should use publicly accessible, software-based random number generators. This makes it possible for lottery players to trace draws, for example.

Transparency and non-repudiation

The hash values for the blockchains should be publicly visible. This makes it very easy to confirm without repudia-

tion that the seed used was generated from the blockchains involved. The rest of the draw process can be traced, step by step.

Understandability

The factors listed above, and the simplicity of the method enable anyone to fully comprehend the entirety of the solution.

How does it work?

As for the RNG, the numeric scope to be generated in an electronic draw in most cases is only a few numbers (just the winning numbers). The maximum required is likely fewer than 100 or the range for a bingo game. Therefore the “quality” of the RNG is not decisive in a way that it distributes perfectly over millions of numbers – since that the RNG starts with a fresh seed value for each draw.

However, it comes down to finding the “perfect” seed, which also needs to be random, unpredictable, replicable, and transparent. The method below addresses this, but first, we must go a bit further afield.

What is the blockchain?

Blockchain technology, or distributed ledger technology (DLT), is a decentralized data registry that combines the security aspects of cryptography with the free internet. The members of this peer-to-peer network can be within a private circle, a company, or worldwide. Through the decentralized transaction documentation, successfully stores transactions on each computer that participates in the specific blockchain, and ensures forgery-proofness of the network. In the process, the executed transactions are recorded in so-called blocks (block) and linked (chain) together within the blockchain. As a result, key information is verified more quickly and securely than with conventional methods. Transactions are executed on the blockchain between “wallets” for

storing cryptocurrencies which are not linked to any identity or person and can be created as often as desired.

Proof of work

According to the Wikipedia, “Proof of work (PoW) is a form of cryptographic zero-knowledge proof in which one party (the prover) proves to others (the verifiers) that a certain amount of computational effort has been expended for some purpose. Verifiers can subsequently confirm this expenditure with minimal effort on their part.

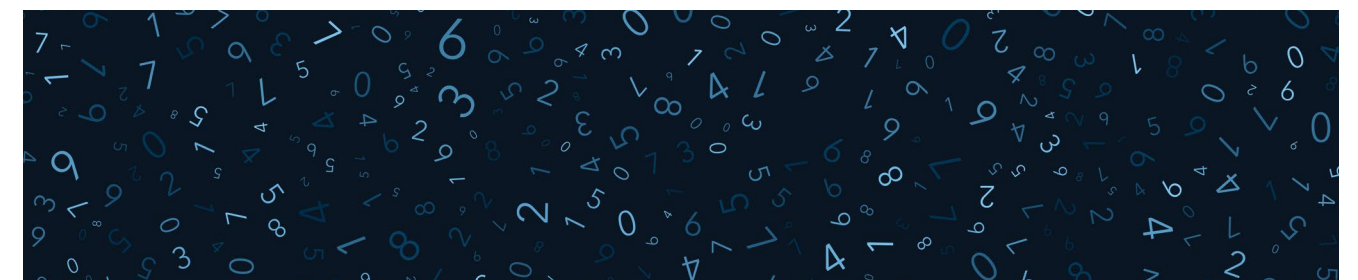
So how does mining work?

Basically, the mining of PoW cryptocurrencies is done by solving a very hard hashcash. Members of the peer-to-peer computer network mentioned above compete against each other by trying to solve the problem first. It can only be solved by using a trial-and-error approach. This is demanding and requires many resources and much energy.

The solution

adesso has invested in this technology and the adessoDraws utilizes public cryptocurrency mining and blockchain technology for randomness generation. It uses the hash value or Merkle root generated in the mining process as a seed value for an open-source RNG algorithm and the game parameter scaling process. This seed value is stored in an indelible and absolutely tamper-proof manner in any decentralized and publicly visible blockchain, which constitutes a high level of randomness, security, integrity, transparency, traceability, and replicability in an electronic draw system.

The blockchain agnostic nature of adessoDraws means it can be used with any blockchain, mining algorithm or frequency of draws. By realizing the discussed attributes, this new method achieves higher levels of integrity in electronic draws and sets new standards.





Achieving responsible gaming while generating money for good causes

Lotteries are historically custodians of national institutions, which often puts them under intense scrutiny with regards to their business models and how they generate returns to good causes. When a lottery starts its corporate social responsibility (CSR) program, it begins by reviewing its approach to responsible gaming.

The challenge any lottery faces is to maximize returns for the good causes it supports – as part of its license to operate - while at the same time minimizing any harm its products might pose to vulnerable groups.

The WLA Responsible Gaming Principles and Responsible Gaming Framework (RGF) were adopted in 2006 to do just this – protect the public and sustain revenues for public good. The seven Principles address areas of player protection, collaboration with other stakeholders, research, promotion, informed player choice, monitoring and reporting.

Different approaches

Lotteries across the globe operate under different jurisdictional requirements and business models. Some support good causes directly through their revenue streams, some pay the money that they raise into government departments, such as tax or treasury, and others are legally required to pay designated charities or non-governmental organizations. However, they all need to strike a balance between increasing sales and returns for good causes, and simultaneously ensure a healthy and sustainable play player base. When looking at successful initiatives within the WLA community, there are various examples of how a lottery can start working in this area:

Receive external recognition for your RG program

To ensure that the sale of lottery products and raising money for good causes are not causing an increase in harm for vulnerable groups, lotteries should continuously improve their responsible gaming programs. WLA member lotteries can apply for the WLA Responsible Gaming Framework (RGF) certification. Sixty-three percent of WLA members have already taken on this opportunity.

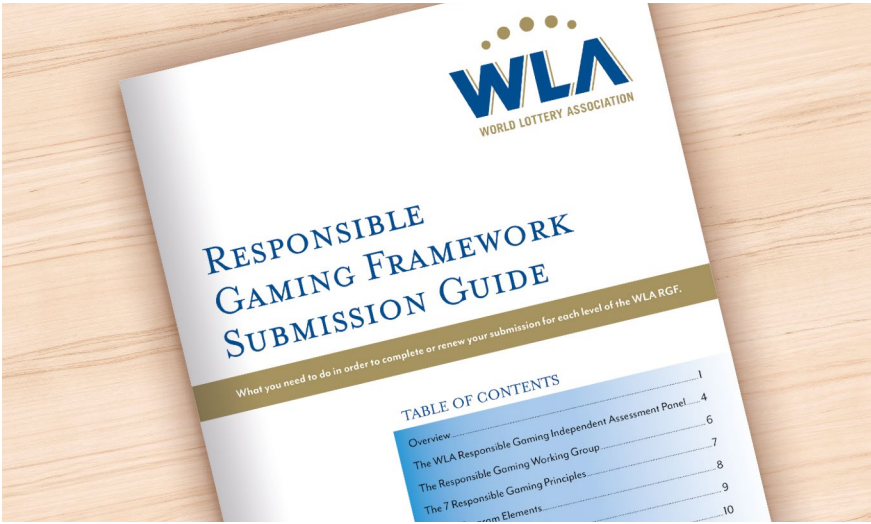
The WLA RG Framework consists of four levels of achievement and 10 program elements. It outlines how lotteries can demonstrate their level of commitment to the WLA Responsible Gaming Principles. It also allows for cultural and regional differences and is designed to complement and improve – not replace – the safeguards that individual lottery operators have in place. Many lotteries use their certification to demonstrate their robust and externally recognized approach to responsible gaming. They place logos and certificates prominently on their websites and this certification with their regulators.

Measure and communicate your sustainable gaming approach

Lotteries are not only required to say that they are not causing harm, very often they must also prove it. Some lotteries, such as Camelot UK Lotteries, regularly track the money they have raised for good causes, and the average spend on lottery products. Other lotteries promote sustainable gaming directly at the point of sale such as Svenska Spel, FDJ or Veikkaus. Generally speaking, the approaches of healthy play and/or sustainable gambling are driven forward very successfully, in particular by lotteries in North America and Europe, but also increasingly in South America and Asia.

Link designated good causes to your products or launch charitable products

When lotteries have the regulatory possibility to connect products directly with designated charitable causes, it serves as an opportunity to educate players on the link between lottery sales and a player's contribution to good causes. Several lotteries have successfully been able to demonstrate this link



either in their advertisement or via their products. A very prominent example is the London 2020 Olympic Games, which gave Camelot UK Lotteries the opportunity to launch designated products for the financial support of the games. Another successful example is Loto-Québec's Loto-o-suivant ticket, a scratch ticket that provides the opportunity to win CAD 10,000 and have the same amount donated to a Québec charitable organization of the player's choice from the CanadaHelps.org site.

Steps to achieving a successful CSR program

In conclusion, the following steps can help to improve a CSR program, including ensuring players understand the link between products and good causes; promoting sustainable gaming as part of corporate and product brands, and establishing KPIs that measure how effective and appropriate the CSR work is.

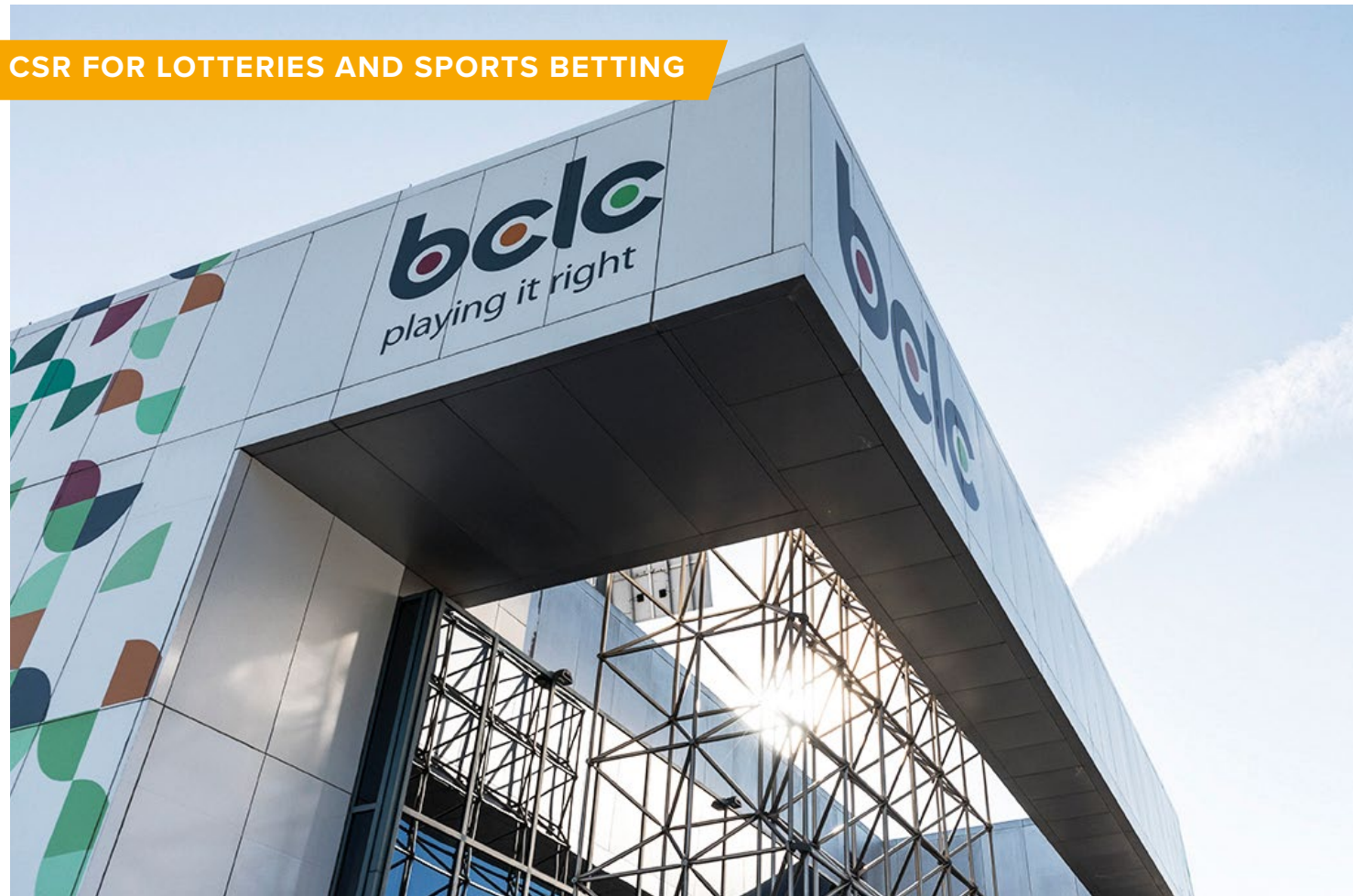


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Becoming a social purpose lottery

A social purpose company exists to make a better world, to be an engine for good, creating social benefits by the very act of conducting business. Its resulting growth is a positive force in society. Each company has a unique purpose and ability to have an impact, and when a company with social ambition prospers, so do all its stakeholders.



Peter ter Weeme, Chief Social Purpose Officer and VP for Player Experience, at the British Columbia Lottery Corporation (BCLC) discusses the journey to become a social purpose company.

What steps were taken to transition to a social purpose company?

In deciding to become a social purpose company, we have been undergoing a fundamental change in the way we view our business, to make sure everything we do aligns with our social purpose to create a better world.

I was hired in 2020 as Chief Social Purpose Officer and VP for Player Experience to oversee the process. Since we started work on this, we have reframed social responsibility and communications to what we now call social purpose and stakeholder engagement. In doing so, we have also brought the worlds of social purpose and player experience together, to create stronger alignment and value for the player.

Over the past two years, the pandemic has underscored how companies responded to employees, customers and their particular needs. Research shows that there is also a growing consideration for bigger issues, for instance climate change, the global pandemic and mental health, particularly among the Millennials and Generation Z (born mid to late 1990s to the end of 2010).

Increasingly, businesses are expected to do more to address these and other issues. We asked ourselves, what was our business role, and the answer was: we want to be part of the solution in everything that we do. In accordance with this, we have generated a social purpose goal which is that “We exist to generate win-wins for the greater good”.

What are some examples of the social purpose transition?

To achieve win-wins, we need a different approach to all decision making, for our employee experience,

with stakeholders such as our vendors, for the games we offer, and the player experience we create.

Environmental, social and corporate governance

Regarding environmental, social and corporate governance (ESG), we are working to finalize our ESG framework and an enabling policy, comprising diversity inclusion and belonging goals, stakeholder engagement goals, environmental goals and anti-money laundering requirements.

We have also redeveloped the employee lifecycle to incorporate social purpose and consider it at every stage of recruitment from the onboarding employer experience, to offboarding and what it means to be a pensioner or former BCLC employee. As an example, 25 people hired in last six months in the marketing, communications and social media departments each said that social purpose was a key driver in their decision to join BCLC.

Redeveloping Kamloops site

As we work to revitalize the employee environment, we are renovating our head office in Kamloops, located in a First Nation territory. We want to better incorporate the building, which is downtown, into the fabric of the community, by considering ecological and social aspects. This means fundamentally reevaluating what the building will look like so that it benefits BCLC employees as well as the greater community.

We are actively developing a protocol as part of our efforts to support reconciliation with First Nations living in the area, which will ensure that they are part of the project and participate in the design principles. We are also contemplating job training opportunities as part of the reconciliation strategy.

The development of the building and grounds will draw on Indigenous knowledge so that the choice of plants is useful for food security and the community. It will also have an electric vehicle charging center and use geothermal energy to replace the boiler.

New stakeholder management approach

Our board has amended its Terms of Reference to include stakeholder governance, and we are working

In deciding to become a social purpose company, we have been undergoing a fundamental change in the way we view our business, to make sure everything we do aligns with our social purpose to create a better world.

to establish a new stakeholder framework. This means systematically looking at all stakeholder activities and goals, engagement methodologies and tactics used to achieve these.

From a marketing perspective, we are moving from a “house of brands” to a “branded house”, which entails reworking the brand value proposition to incorporate social purpose. Typically, social purpose companies build movements around their social purpose, so we are working on how we may involve and inspire Millennials and generation Z, in particular, who care about the bigger issues I mentioned earlier.

Innovating our enterprise player strategy

We aim to enhance the player experience, by examining our products – pull tabs, scratch cards, casino games on- and off-line, slot games – to ensure that they are culturally appropriate and contribute to win-wins for the greater good. This process also offers a great opportunity for product innovation.

Legal

We asked our legal team to rethink its approach to any legal situation, be it a contract, employee issue, or a legal case, to see if a second or third party can also win, by the way it frames the solution. The idea is to move away from a ‘winner takes all’ mindset.

World Lottery Summit 2022

In October, we will host the World Lottery Summit in Vancouver, where sustainability and social equity will be part of the event theme. In line with this, one of our tours will show all sides of the city rather than just the high points, and from an environmental standpoint,

we are encouraging people not to bring plastic to what will be a paperless event. Additionally, the convention center has received many environmental awards for its green technologies used to regulate temperatures and recycle water.

What challenges and surprises have you experienced?

I would not say it's a challenge, but the concept of social purpose still needs to be understood. Though we have taken every employee through explanatory peer-led sessions, this won't happen overnight. It requires everyone's participation and is a long-term process. The board, shareholders and most employees are behind this evolution, but they need to see evidence that this is real. On the whole, people are responding well, and many are coming forward and asking how they can contribute and be a part of it.

We want to be part of the solution in everything that we do.

What are the key goals for the next two years?

In the next two years we want to finalize the processes I have mentioned that are already underway and develop a couple of key performance indicators around our social purpose win-wins for the greater good. Once the stakeholder framework is in place, we will ask our stakeholders to help us develop the right metrics to measure the win-wins that are being generated.

We are also collaborating with other jurisdictions and people on social purpose. We have adopted an “open source” approach and are happy to inspire other organizations and share what we know with the global lottery community.

We are also building a social purpose economy roadmap together with key members of the business ecosystem including business schools, associations, business leaders and the financial community. The greater goal is that by 2030, 25% of companies in Canada will be social purpose companies, but it could also be something for lotteries around the world to consider.



Artificial intelligence helps lotteries address problem gambling

In the last five years, there has been a boom in online lotteries and sports betting offerings. It is easier than ever to access services and products anytime, anywhere.

Ensuring responsible gaming is a high priority for lotteries around the world. Norsk Tipping, Norway's national lottery, has a clear mandate to act to prevent the negative consequences of gambling. As such, it is taking diverse steps towards achieving a safe and responsible environment for players. One of these is to use Playscan, a risk-monitoring tool for players to measure the likelihood that they will develop gambling problems.

In 2021, the Playscan Index indicated an overall healthier gaming behavior than in the previous year, demonstrating that the different actions taken to strengthen the prevention of gambling issues are working.

In an interview, Tanja Sveen, Senior Adviser for Responsible Gaming at Norsk Tipping, discussed the development of SpillePuls or Play Pulse – a digital, personal dialogue interaction, designed to prevent and reduce at-risk or problem gambling.

What is SpillePuls?

SpillePuls digital dialogue interaction aims to raise customer awareness of gambling habits and spending, create reflection, and motivate players to take action to moderate further gaming habits – if needed. Taking the example of an increase in play intensity, if a player increases his or her loss, then the objective becomes to create awareness of this increase, by getting the player to think about it and do something positive to address it, such as setting a lower personal limit.

We are lucky because in Norway, all of our customers (2.2 million) have been registered and fully identified for a long time. Our work has benefitted greatly from access to this rich player personal data and transaction history, which is also available for us to use in real time.

How have you developed the digital dialogue?

We began by using research and data analysis to identify a broad range of behavioral markers or events that can happen during play, which we know can lead to at-risk or gambling problems. Some examples of events are an increase in spending, or the amount of time spent playing.

We interviewed customers and internal resources in our games departments and considered external research, to get an understanding of the target groups and

to be able to set objectives and create a rule set. For instance, if you are a young player who has lost a certain amount of money playing online casino games, you will need to take particular action. The rule sets are embedded in the customer journey, on the website and in the app, so that when customers log in, a dialogue will pop up, depending on what they do. Some of the actions that the customer can take include reducing play time and spending limits, taking breaks or doing a self-assessment quiz.

We develop the pilots with an interdisciplinary team and are taking a step-by-step approach. We put the pilots out, have the different player groups use them, collect and finally evaluate the data, which provides us with important learning opportunities as we go along. We feel this has been a better way to build our solution, than rolling it out in its entirety without the feedback and analysis. By the end of 2022 it will be fully developed and deployed, but we are already covering a substantial part of the targeted customers.

Can you give some concrete examples of how it works?

Depending on the customers' activity, a message is sent asking if they are ready for a challenge in the form of the question: Do you spend less, the same or more money than before? This aims to get the players to reflect on their behavior. Once customers answer, SpillePuls sends them

the correct answer to the questions in a graph format, based on their personal data. Sometimes our data-based answer may not be the same as the customer's answer. Research has shown that often players may under evaluate their own habits. Then we send the normal amount spent for the players of that age group, so that they can reset their limits with another perspective. Straight after, an easy action is presented, asking customers if they want to confirm a newly recommended and lower monthly spending limit. It is quick and easy, so customers do not have to take much time to think about whether or not to take action.

Another example is for sports betting, when we see that customers have lost a lot of money in the previous year and have high odds of over 10, which gives them a low chance of winning. Once they log in, we send a message with a question, asking them if it is time to adopt a new tactic. They can click on the open message button, and we repeat the question and provide a graph summary, based on their player history, of how much money they have lost in the last 12 months, the odds average and their resulting chance of winning. We also provide further information explaining how the chance of winning is calculated (based on the most common odds that they bet on, their most common number of objects per bet and average winning percent.)

Customers are then shown how easy it is to take action to set a lower spending limit to reduce how much they will lose. They simply hit the confirm button, are praised for their positive action, and are asked for feedback on how their experience was with this message.

What were the key findings?

Feedback is key to our solution. If we want success, we need to have customer acceptance. For every interaction we ask if the information provided was relevant, useful or disruptive. So far, we have had 3000 comments and feedback from 90,000 people overall. We

have run 12 randomized control trials and tested 80 variants of interactions.

Around 70-80% of users feel the dialogue interaction is useful. The positive feedback for these pilots demonstrates overall acceptance by customers. When we started, we got around 60% of people to complete the whole action, but this increased over time.

A key learning, which we realized quickly, was that we could not expect too much of the customer in terms of answering questions and involvement. As a result, we optimized the length and degree of customer action to boost the completion rate, which is now almost 100%.

In all the pilots a significant proportion of the customers took some kind of action compared to the control groups, and in most of the pilots, at least one or several of the interactions lead to a significantly lower spending compared to the control groups.

We are very happy with these results. Development of the solution will continue, because over time, some of the actions we have now may decrease in their effectiveness. It is important to keep trying new things, collecting data, learning from it, and adjusting our solutions so that they remain useful and relevant.

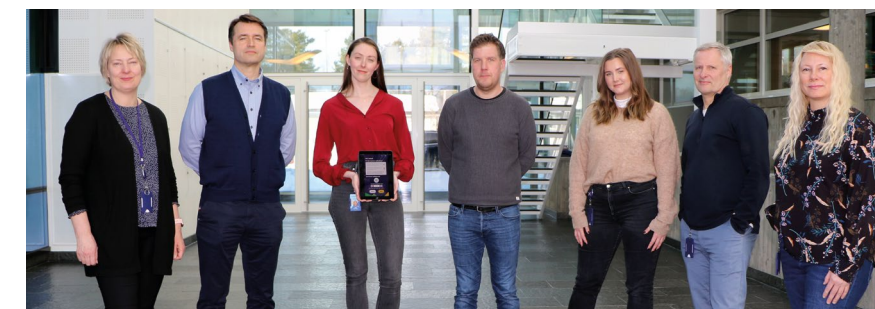
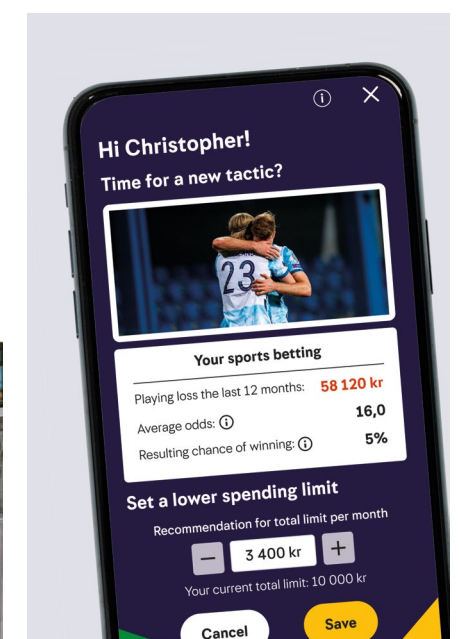
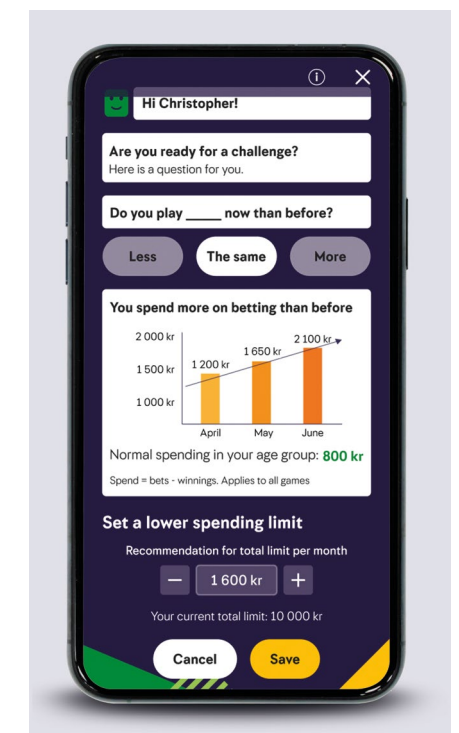
What's in the pipeline?

We believe that there is potential to create personalized initiatives aimed at players with the use of machine learning, and that this can increase the effects on the player behavior further.

Right now, we are testing personalization of dialogue variants, using machine learning models in a pilot directed at customers with a high-risk playing pattern who also increase their spending. First, we carried out a pilot set up as a randomized control trial and gathered a large dataset. Then we used this dataset to train machine learning models for each variant. Each time a customer qualifies for an interaction the model runs

through all six variants and presents the one with the highest probability that the customer will take action, like lowering the spending limit. This is a very exciting, new way to use machine learning for responsible gambling. Personalization works well in so many areas – so there are good reasons to expect that it can also increase the effects of responsible gambling measures.

It is early days, but it will be interesting to see if there is an opportunity to better target our customers with more tailored interactions and to see if we can use machine learning in bigger target groups.





Environmental impact and the lottery industry

This year, the world has witnessed extreme weather causing much damage and destruction. Europe has seen the highest temperatures on record; rainfall in South Africa has precipitated one of the most severe series of floods and landslides in a century, and prolonged drought has left millions on the brink of famine in East Africa. These are just some examples that demonstrate the urgent need for everyone – companies, governments and people – to work together and also take individual responsibility for environmental impact.

In the past, when it came to sustainability the lotteries focused on addressing societal issues and making gambling safer. With increased digitalization, a greater diversity and access to online products and services ensuring player safety has never been more important.

However, times are changing. After living through a global pandemic and more recently the impact of the war in Ukraine on the environment, the cost of energy and more broadly of living, more people, organizations and governments are rethinking how they live, operate and

the policies they develop to be more efficient and environmentally friendly.

A starting point – data is key

As is the case in many industries, lotteries around the world are at different stages of the environmental impact journey, however a good starting point is to understand the basics. What impact are their employees, offices, networks, products and services having on the environment now?

Collecting data is at the heart of beginning the process. The Greenhouse Gas (GHG) Protocol establishes comprehensive global standardized frameworks to measure and manage greenhouse GHG emissions from private and public sector operations, value chains and mitigation actions. It defines the scope of emissions as follows: Scope 1 emissions cover direct emissions from owned or controlled sources. Scope 2 cover indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain, for example business travel and employee commuting. The lotteries must consider all three and then look at broader impacts, such as waste and biodiversity.

Having the right tools and help

DigitalRG helps companies to improve their net-positive impact and increase their positive impact on society and the environment, by providing intelligent tools, training and resources starting with helping lotteries achieve responsible gaming and sustainability certification.

It is developing a carbon calculator specific to the lottery industry, that will soon be available on www.DigitalRG.com, to streamline this process when it comes to environmental measurement. These calculators allow an organization to input measurement data and calculate its greenhouse gas emissions in the form of comparable measurements. Understanding the current impact allows for specific and effective reduction plans and targets and is an essential starting point for all lotteries.

Stepping up

The unique elements of lottery operations must be directly accounted for in their environmental measurements, such as, broadly spanning retail networks. Categorized as Scope 1 Emissions, if the lottery owns the retail shops and Scope 3 if franchised, they are an integral part of carbon emissions calculations as they can create the most significant impact. By including the emissions of its network into carbon calculations, a lottery can push its environmental strategy to compete with other visionary leaders of the race against the climate emergency rather than just complying with legislation.

Française des Jeux (FDJ), lottery operator in France, has taken steps to reduce its environmental impact and has a competing strategy. In 2019, the lottery validated targets across all three scopes by aligning its carbon reduction targets with the Science Based Targets Initiative (SBTi)¹. Actions taken to achieve these objectives includes reducing on-site energy consumption, the company fleet and employee travel, as well as developing soft mobility on-site. Additionally,

¹ The Science Based Targets initiative helps companies to set and validate their GHG reduction targets in line with the overall goal, defined by the Paris Agreement, of limiting global average temperature increase to below 2°C by 2100.

FDJ engaged its suppliers in the carbon reduction process by setting an emissions target to encourage 65% of them to also make SBT targets by 2024.

FDJ has already met its initial objective to reduce Scope 1 and 2 Emissions by 20% by 2025 and has now increased this target to 50%. FDJ goes further than just measuring its own carbon emissions. For example, it also addresses biodiversity preservation, through the FSC Biodiversity Ecosystem Services projects to preserve forest biodiversity in France, which already has done so for hundreds of hectares of trees.

Lotteries can also learn from other industries that go above and beyond to reduce their environmental impact. For example, across all three scopes, Microsoft increased its commitment to go beyond being carbon neutral to being carbon negative by 2030. It also pledges that by 2050 it will remove all the carbon the company has emitted from the environment, either directly or by electrical consumption, since it was founded in 1975, a first-of-its-kind commitment. To achieve these objectives, its actions have included 100% green energy procurement for the seventh year in 2021, a Climate Innovation Fund which

commits USD 1 billion over four years into new technologies, and a Carbon Removal programme.

Lotteries empowering lotteries

In many countries, lotteries are organizations with some of the most extensive reach nationally. This could mean having the largest cross-country network or national marketing and advertising spend. Lotteries can also often play a familiar role in people's lives as a well-known and respected brand, due to their close links with good causes. But how can this power be used to create positive change?

One example doing just this is La Marocaine des Jeux & des Sports (MDJS), one of the operators in Morocco. MDJS, led by Younes El Mechrafi, has worked with the African Lottery Association (ALA) to implement an environmental policy which galvanizes members to consider their environmental impact. MDJS also signed an agreement with the Moroccan Agency for Energy Efficiency (AMEE) in 2021, which will enable it to benefit from the technical support of the AMEE, when using best practices to increase its energy efficiency. MDJS will use this to help develop its own and its partners' energy efficiency strategies.

Lastly, a final focus of its strategy is outreach to its partner Intralot. Through this, it aims to encourage the development of different measures, for example, waste management, paper consumption and sustainable procurement.

These are inspiring ideas of how lotteries can positively influence societal change and reduce environmental impact. DigitalRG.com's mission is to help lotteries achieve their environmental goals. The resources on the platform aim to continuously push members to go beyond the basics on their journey towards net positive impact, to put the environmental agenda at the core of every business decision.

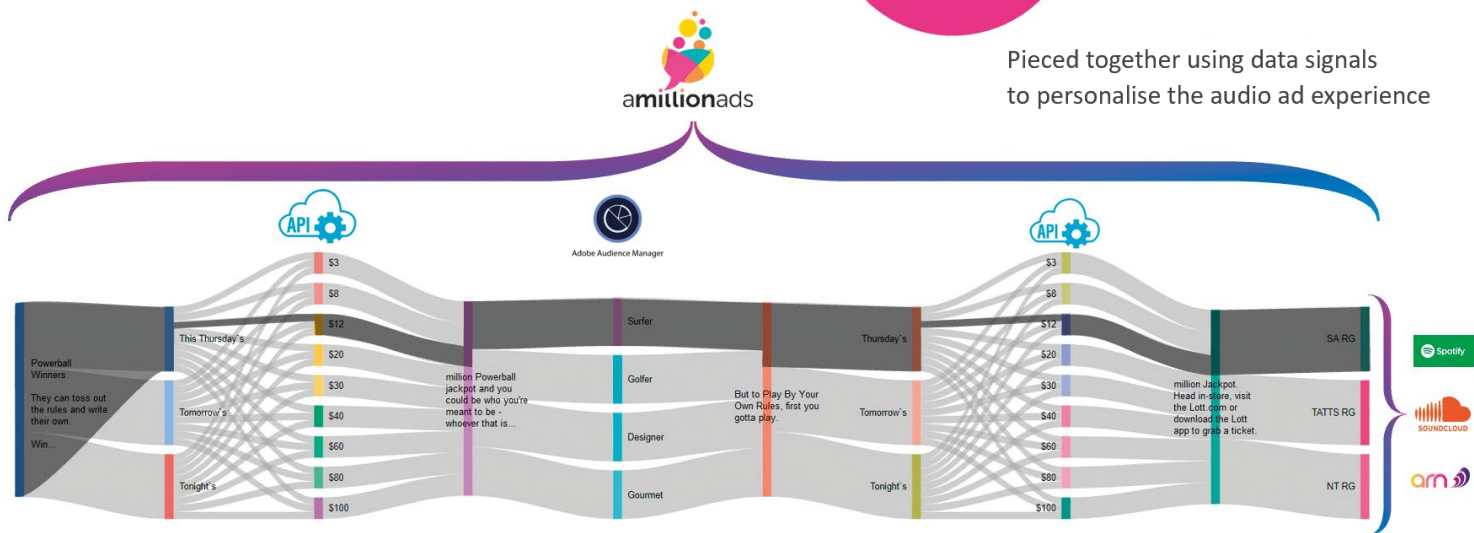
A final note

The Intergovernmental Panel on Climate Change (IPCC) Chair stated in 2022 that "We are at a crossroads. This is the time for action. We have the tools and know-how required to limit warming and secure a liveable future." As significant national and international organizations, the lotteries must take responsibility for their environmental impact. Only by every government, company and person taking action can the "human-induced... widespread, rapid, and intensifying" climate crisis be averted.



ONE SINGLE PLATFORM UNIFYING THE LOTTERY WORLD





Pieced together using data signals to personalise the audio ad experience

New Australian privacy laws change marketing approach for lotteries

Whatever we do online, we leave a digital footprint of personal data. Around the world, masses of data are generated every day, more laws are enforced to protect data privacy and the instance of data breaches continues to grow.

According to statistics by the United Nations Conference on Trade and Development (UNCTAD), over 70% of countries around the world now have data protection and privacy legislation in place. A further 9% have draft legislation; 5% have no data and 15% of countries have no data protection or privacy laws.

In 2020, the COVID-19 global pandemic struck and lockdown measures were enforced. As a result, this led to accelerated digitalization and an increase in online activity in education, work, social interaction and shopping. The more everyday activities occurred online, the more personal data was generated, exchanged, shared and stored.

This prompted the Australian government to draft the *Privacy Legislation Amendment (Enhancing Online Privacy and Other Measures) Bill 2021* to

urgently address online privacy risks and ensure that Australia's privacy laws remain relevant for the digital world, while strengthening the protection of personal information in the online space.

Organizations that provide social media and data brokerage services and large online platforms will need to comply with the new online privacy code.

Andrew Varley, Head of Performance Marketing at The Lottery Corporation, Australia, discussed what is being done to prepare for the impact of the new law, to secure a digital marketing future that will allow the development and sustainability of the lottery business.

How does the new law affect marketing activities?

Privacy is a hot topic in Australia as the government reviews the Privacy Act of 1988. With the likely changes to consent requirements, we may need to revisit our use of cookies to ensure we have the appropriate consents in place for certain data analytics activities.

In addition to change to the way we must handle personal information, our use of third parties cookies will no longer be a viable option due to changes being made by Google and other big search engines. This is

significant for our marketing activities because up until now, we have used third party cookies to create targeted and measurable digital campaigns. It is paramount that we find new ways to continue activities while respecting the laws around customer data privacy. We also know that penalties for breaches of the Privacy Act will increase significantly when the Bill is passed.

What are you doing to address the changes?

We have formed a working group to build a customer-first privacy strategy and roadmap of activities spanning across marketing, legal and privacy, and customer experience and data, to meet key performance indicators relating to large scale privacy reform and marketing industry changes.

A few of the key initiatives we are considering are allowing customers to control their preferences through a sophisticated preference centre and investigating cookie replacement solutions.

We have been reassessing our marketing approaches. Given the expected legal changes, it will be key for us to know our audiences so that we can have legal access to their personal data and consent from our customers to run targeted advertising.



Audio Everywhere

To grow our customer addressability in digital marketing, we are looking to develop third party cookie replacement solutions and introduce a preference centre to allow individuals to have more control of how we use their personal information.

What are some of the solutions you are considering?

We are considering implementing new audience and media solutions to help facilitate customer data handling. One option is UID2.0, where we connect with publishers and securely create audience segments to run

targeted advertising. These emerging solutions are providing a more private open web for customers, by relying less on outdated and unsecure third-party cookies.

Data quality is key for achieving high match rates for targeted advertising. On the publisher's side, we are noticing a shift to authenticated experiences to ensure their users' data is captured for the purpose of making this available for audience matching with advertisers.

How would the new solutions measure your audience?

Between walled gardens (such as Facebook, Google) – where the platform is closed and the platform provider has total control over content, applications, and/or media and restricts access – and the open web, relying solely on the publisher to produce your reporting will leave a large attribution gap, something cookies were able to solve to some extent. Looking forward, a multifaceted approach is required, to balance actionable insights from media mix modelling, attribution, and an audience-first measurement approach, using the control and treatment groups through the experimental method.

What other marketing activities are you running and how do they use innovative technology?

As more people consume media on the go, by listening to podcasts or play lists, audio ads can be developed and delivered through these online streaming platforms. We created variations of audio ads for every jackpot amount, without having to record it over 400 times. We achieved this by using listener data points, such as:

- Day of week (time)
- An application programming interface with our jackpot amounts.
- Location, by state, to have the correct responsible gambling messaging for the jurisdiction.
- Contextual relevance for the moment our customers signed in.

Essentially by piecing together parts of voice-over audio from these listener data points, we were able to create and deliver one seamless, personalized ad. Through a test and learn approach with small groups, we'll begin to understand what is engaging our customers.



Lottery Retail Modernisation.

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Understanding illegal betting is key to maintaining the integrity of sport

Illegal betting is a key threat to the integrity of horseracing and other sports at all levels. Over the past few years, a combination of new technologies and the global pandemic have facilitated the rapid growth and evolution of online illegal betting.

Complex in nature, in terms of defining when betting is deemed to be illegal, it is often transnational, crossing jurisdictions with different laws and regulations, involves many stakeholders, and is not easy to trace. Additionally, it is often unclear for consumers as to whether a website is legal or not.

Many stakeholders across the sports betting ecosystem work together to combat illegal sports betting and match fixing, and maintain the integrity of sport. This includes some lotteries and sports betting operators, regulators and law enforcement, sports organizations and federations, the Council of Europe, and organizations that monitor sports competitions for suspicious betting patterns, such as the Global Lottery Monitoring System (GLMS). The valuable data gathered by GLMS helps betting operators decide whether to modify their offerings, and has been used in investigations into match fixing.

One organization that is involved in combatting illegal sports betting is the Asian Racing Federation (ARF) Council on Anti-Illegal Betting and Related Financial Crime. It was established in 2017 to foster and enhance the international cooperation of horseracing and other sports organizations. The Council works with many of the aforementioned stakeholders, and provides extensive research and publications on the subject.

Martin Purbrick, Chairperson of the ARF Council, set the scene for a webinar around the Council's Report on [The State of Illegal Betting](#) that was released earlier this year.

The panelists included ARF Council members and contributors to the Report: James Porteous, ARF Council Research Head & Due Diligence & Research Manager, HKJC; Tom Chignell, Executive Manager, Racing Integrity and Betting Analysis, HKJC, and Brant Dunshea, Chief Regulatory Officer, British Horseracing Authority (BHA).

The Council works with regulators, authorities for sports and government and intergovernmental agencies, to better combat the threat of illegal betting and other financial crimes in horseracing and other sports.

"The Report provides in-depth research into the current status of illegal betting markets in relation to integrity and describes some of the related threats to racing and other sports. We have seen far greater liquidity injected into horseracing and other sports during the

pandemic. This in itself has imposed greater integrity risks because risk levels go up when liquidity does especially into lower-level competitions in racing and other sports which are not as closely monitored and where participants are lower paid – one of the key risk areas," said Purbrick.

An evolving global illegal betting market

James Porteous explained the Report's key findings and how the illegal betting market has evolved in the last five years.

"We believe this is the most comprehensive overview of an issue which is still too little understood not only by racing and other sports, but governments, law enforcement and other key stakeholders, which means anyone who loves sport and anyone who does not like organized crime and the corruption of sport. The Report seeks to inform readers about what illegal betting is, why it is bad, and why they should care about it."

The research considered around 530 websites from 61 global jurisdictions, offering a broad sample of the global market. Key findings included:

- Two-thirds of websites considered were not fully licensed and regulated (ie illegal in many jurisdictions).
- Illegal market is growing faster than the legal (+64% vs 37%).
- Horseracing occurred on 36% websites with ARF racing on 82% of these.
- Football, basketball and tennis are most prevalent sports. E-sports rapidly growing 63% of all websites.
- Cryptocurrencies are accepted by 24% or a quarter of websites and 63% or two-thirds were unlicensed.
- 73% of websites relied on third-party software and 42% used mirror websites to evade regulatory attention.

"The data confirmed what we had been seeing of the blurred lines between what is legal and what is illegal. Technology is behind the rapid advances of the last five years. Online gambling quickly adopts new technology. This is even more pronounced by operators who are not slowed

down by any regulatory oversight. Cryptocurrencies were not on the radar five years ago."

It is well known that the definition of illegal betting is a grey area, given the different laws and regulation enforcement in different jurisdictions. For instance, they may be:

1. Licensed and regulated: regulated by the jurisdiction in which they are licensed to take bets.
2. Licensed but under regulated (grey market): operators with licenses from certain jurisdictions but are under regulated since they take bets from persons located outside of these jurisdictions. They have licenses from some jurisdictions but take bets from all over the world, regardless of if they are licensed in all and regardless of prevailing legality in that jurisdiction.
3. Unlicensed and unregulated: operators with no license. Such operations are often run by organized crime.

The Report focused on where the point of sale took place and whether the operator had a license in that location, meaning that the above definitions 2 and 3 (representing 61% of the websites) were in effect considered to be illegal.

All websites saw significant growth from 2019-2021 and illegal online betting grew faster than legal online betting. There was 64% growth to unlicensed and unregulated betting websites compared to 36% to licensed and regulated betting websites which have strict license conditions and gambling regulations on the number of sports and types of bets. Illegal operators, on the other hand, had better prices, products, promotions, less operating costs and no regulation or taxes.

"A key point for regulators to understand is that well-regulated licensed operators need some flexibility to compete on a more level playing field. An overregulated and licensed sector will drive people to the illegal market."

Seventy percent of licensed websites accepted credit cards, with credit betting the norm in illegal markets, and cryptocurrencies prevalent. An important development is the growth of cryptocurrencies. These appeal to bettors because payments process rapidly and are difficult for authorities to

trace and attractive to illegal bookmakers who can easily offshore their profits, pay staff anonymously, mix funds with proceeds of crime and hide true nature of their activities.

Porteous concluded that key stakeholders in sport, government and media needed to understand these issues, noting that licensed and regulated operators brought enormous benefits to society through tax, payments to sport, employment and safeguards in place on their platforms whereas the under regulated and unregulated markets did not. They often directly funded organized crime and other criminality and facilitated problem gambling while corrupting the integrity of racing and other sports.

The explosion of white label operators

Tom Chignell expanded on the theme of white label betting operators and how they have supported the growth of illegal markets while threatening the integrity of horseracing and other sports.

It is easier than ever to set up a betting website, using off the shelf software, which provides the required functions of odds-making and risk management, live sports data feeds, live video streaming, customer relationship management, technical support and payment processing.

"Online betting through white labelling is the equivalent of a major car manufacturer building the vehicle, but allowing another company to put its logo and brand on it for sale. The supplier provides all the technology and website content, while the operator's role is limited to branding and marketing and recruiting bettors."

The Report noted that at least 73% of betting websites use one or more third party software providers and this is a problem when betting suppliers service unregulated operators supporting unregulated and illegal betting markets.

White label betting operators enter a partnership with a white label provider and operate under the provider's license, avoiding the need to obtain their own license, thus circumventing regulation.

This type of arrangement provides some legitimacy to operators typically

in Asia (where so often betting is illegal) by allowing them to present themselves as licensed and well-respected by overseas jurisdictions. It provides a way to promote their “credible” brand in Asia, for instance, by associating themselves with major European sports teams and leagues, and advertising in Chinese, Thai, Indonesian, Vietnamese and other Asian languages even though their products are illegal in most of Asia.

“Asian facing white label operators rely heavily on agents to recruit customers, facilitate account access and settle payments. This layered set up significantly complicates audit trails for race and match fixing investigations.”

Chignell also highlighted key issues such as the lack of clear ownership of white label betting operators, who do not provide sufficient problem gambling controls, consumer protection or anti money laundering (AML) controls and that such betting sites threaten the integrity of sports by:

- Not reporting suspicious betting activity or breaches of the racing or sports rules.
- Not sharing information on customers suspected of involvement in corruption.
- Failing to establish sufficient KYC processes.
- Allowing gamblers to bet with anonymity and via cryptocurrency.
- Due to use of agents, the white label betting operators themselves do not know their customers.

The vital role of monitoring sports betting

Brant Dunshea, Chief Regulatory Officer, British Horseracing Authority (BHA) talked about the unique and inter-dependent relationship of horseracing and betting and how racing has long generated revenue which supports the industry, and provides taxes which directly or indirectly assist in funding other sectors in society.

“*The State of Illegal Betting Report* underscores how important monitoring of horseracing and other sports is. The need to properly regulate activities around betting and racing has a long history, is well established in practice, and includes centuries of case law. This has enabled those responsible



for this important task, to develop and evolve processes and systems for the wagering market.”

Dunshea noted that BHA and numerous other registered racing bodies, such as HKJC and Racing Victoria in Australia, have developed internal systems and teams to monitor betting on their own racing and support other jurisdictions in this regard. Racing has a long history of controlling and managing its data, wagering and media rights, which enables the sport to have greater control over where and who offers propositions on betting products.

“As we have heard, changes to the markets in recent years have made this far more challenging and complex. Where legal operators are entitled to offer products for wagering purposes on our sport, information and intelligence is shared with them to monitor and mitigate risk. If wrongdoing is detected, we will prosecute under the rules of racing or refer to law enforcement or other relevant agencies for investigation.”

Dunshea called attention to the limited scope racing authorities have to act on any wrongdoing, where their products are offered by those operating in what *The State of Illegal Betting Report* defines as licensed and unregulated environments. The situation is complex when lay bets are made through agents and white label operators which hinders the work of the monitoring team of under or unregulated illegal betting markets.

“We believe in racing we must continue to evolve to adapt to the changes of the market and I believe racing and sports can play a very important role in helping others unfamiliar with these challenges to understand how the market has

changed, through information sessions and publications such as *The State of Illegal Betting Report*, produced by the ARF Council.”

A final thought

When asked what the greatest concerns of the illegal betting market were, the panelists concluded:

Dunshea: “We don’t fully understand the extent of what is happening in the market and that is a challenge for us. This work across Asia is indicative of what is happening in other parts of the world. In Europe we’ve begun looking for funding for additional work to better understand the nature of under and unregulated illegal market in Europe and its impact on racing and other sports. In terms of the direct challenge, it’s the traditional bet monitoring systems and functions that were built for an age that has to a certain extent passed us by.

We must now develop those systems to better deal with the new threats and challenges and continue to maintain ownership of that investment internally. No matter what sport, if you maintain that control of the monitoring function, it means you are fulfilling your responsibility as a proper regulator.”

Chignell: “I have been at the HKJC for seven years, during which I have seen an explosion of unregulated or lightly regulated racing betting operators. It’s very hard to keep up with bet monitoring, given the market size. For instance, the illegal market of one betting exchange is as big if not bigger than the HKJC’s turnover of one billion, plus every race meeting. It is imperative for us to build an intelligence network and work with other operators and stakeholders to try to keep ahead of the game.”

Porteous: “Illegal betting is the number one threat to the integrity of sports, not just racing, football, badminton, tennis, any sport. If you love sport, you should be concerned about this issue. If your sport starts being corrupted or is perceived as being so, people will lose interest and no longer want to participate. Attendance and revenues will go down and it will be more vulnerable to corruption, so becoming a vicious cycle. There have been many well-documented instances of this across the history of sport globally. The sheer scale and nature of illegal markets is very hard for people not immersed in it like me to understand, but they need to if they are involved in sport.”



Future Forward.

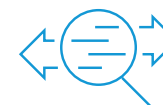
Results Driven.

Enjoy the VUE

Set your sights on the future of retail sales with the all-new Retailer Vue™ Terminal. Accepting both printed and digital media, this camera-based terminal features a distinctive open design that allows for both player and clerk interaction and enables transparent, contactless transactions.



Lower Total Cost of
Ownership



Transparent
Transactions



Future-proof
Technology

See for yourself at [IGT.com/Vue](https://www.igt.com/vue)

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*Product features may vary. Shown with optional card reader and biometric sign-on.





50 Years of Science Built into Every Game

Behind the Scenes of the World's Largest Instant Game Operations

They've been described as giant spaceships. Six-foot high rolls of paper stock weighing up to 2,000 pounds go in one end, traveling at high speed as layer by layer of coatings are applied—ultimately exiting as vibrant rolls of scratch games, each roll with a retail value of USD 1 million to USD 10 million. Sold by 112 lotteries in 47 countries, Scientific Games' instant products represent 70% of instant game retail sales globally.

The production process begins long before the rolls of paper ever hit the press, and it continues long after the forklift ferries the colorful tickets to the company's complex packaging and prize balancing process. It's a modern technology sight to behold. And it's sometimes hard to fathom the sheer magnitude of this USD 118 billion global consumer product.

Behind the scenes, visitors to Scientific Games' five instant game production facilities around the world are rare. They are escorted by security at all

times, no photos or video recordings are permitted (unless it's a highly-controlled customer tour or for educational use), and most tour participants leave with a sense of awe.

While tens of thousands of tickets are produced every minute, the security, pre and post-production processes and state-of-the-art printing technologies have been refined over nearly five decades. Within the precisely produced rolls of tickets, millions of dollars in prizes await lucky players.

Instant Game Production

Scientific Games' global scale and the unparalleled agility of its operations keep instant games moving through the design, production and retail distribution pipeline, navigating supply chain and workforce challenges that may threaten lottery inventories and beneficiary funding.

Producing up to 53 billion secure, accurate instant game tickets globally—beginning with the basic raw materials of paper and ink—is a

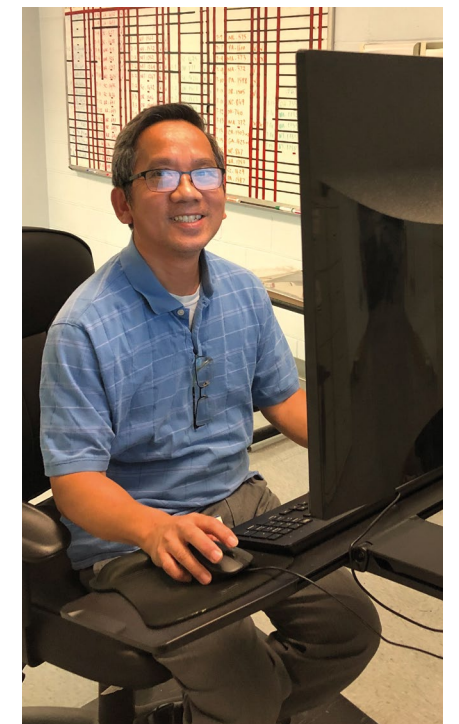
truly remarkable undertaking. The end products represent a complex blend of art and sciences—design, chemistry, mathematics, engineering, computer science, product marketing and management, robotics, and logistics. And it's all meticulously aligned to customer contracts and the governing laws in each lottery's jurisdiction.

While most of the Scientific Games production processes are proprietary, 14 primary steps take place before each uniquely coded ticket arrives at the retailer.

The company is leading the way for use of sustainably sourced and recyclable paper, water-based inks and environmentally conscious instant game production processes for energy use and waste-to-landfill.

Game Programming

Programming every game—the data that determines where all the prizes are—takes a global team of industry veterans and experts, including game developers, auditors, mathematicians, security experts, and managers. Most team members have 15+ years of experience, and operations run 24/7 in the U.S., UK, Canada, and Chile to ensure support at all times.



The global team routinely delivers 10-15 accurate, highly secure, quality games per day. The programming process has positioned Scientific Games as the leading instant game provider in the world. The process is ISO/IEC 27001 certified to meet an international set of standards that require documented policies and procedures for 133 separate security controls, and it is

controlled by proprietary Scientific Games automation systems that ensure all required procedures are followed.

From the first ticket to the last, the company's systems produce games that are confidential and display a unified integration of the prize structure and game parameters.

1. Game Software Development –

Programmers create game development software to the lottery's game specifications. The software then creates all play symbols, numbers, letters, and barcodes unique to each individual ticket.

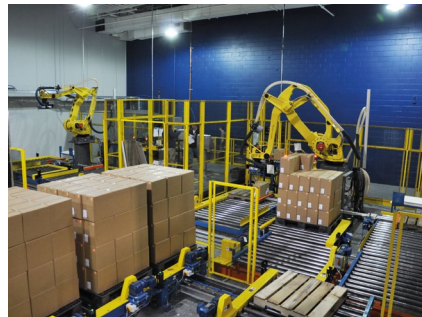
Next, independent audit programmers develop audit software that verifies every ticket number, every validation number, every play symbol, and every barcode—the individual ticket's game data—fully respects the rules in the game's 'working papers'. This includes verification of the game's play mechanics, symbol set and positioning, prize structure, rules, and parameters.

As a final step, a separate team of Scientific Games internal and external auditors test and give final approval of the game's software by reviewing reports, inspecting ticket images, testing ticket data, and using any other evidence necessary to prove adherence to all game data requirements in the working papers.

2. Game Data Production – Custom applications and security systems control the production of the game's live data. Automated applications transfer the final, approved version of the game software to the production system, and a separate suite of applications initiates and monitors the game's data production from beginning to end. The systems work together so that the data is secure and 100% confidential.

No one knows where the winning tickets are until a game is purchased and scratched to reveal the prizes. Scientific Games uses complex, highly secure processes and technologies that ensure the integrity of the game. This is proven millions of times every day as players play instant games all around the world.

Security



There is an extraordinary amount of quality and security practices involved in the company's instant game production process—from audits to game design and programming, to secure bar codes and scratch-off coatings on the physical game ticket, as well as the secure distribution of lottery games. This takes place from the moment the games are designed, programmed and produced, to the moment they are distributed in the lottery's retail network and placed on sale to the moment they are validated for a prize.

Multiple and overlapping layers of security systems protect the integrity of each and every game, including state-of-the-art firewalls, networks and other security appliances and applications. At the core of these protected layers of security systems, game data is fully encrypted using highly advanced encryption systems. All of the company's systems are subject to ongoing and independent scrutiny from expert auditors who assess security on behalf of lotteries.

Prizes are distributed in a game as randomly as possible. Patented Key Dual Security technology protects games by requiring separate 'keys' from multiple and independent parties for each game. Two keys, one created by Scientific Games, and one created by the lottery, are needed to produce valid game data. The keys control the game's random number generator which controls the shuffling of winning and non-winning tickets in the game.

The result is an unpredictable and unbiased mixture of winning and non-winning tickets. Add in the random distribution of packs from warehouses, and the millions of instant game wins around the world are random events occurring every minute of every day.

As the company that created the world's first secure instant game, Scientific Games continually develops

new systems and tools that improve the security, accuracy, and efficiency of the game development process.

Pre-production

The prepress function ensures that the final game to be delivered accurately matches the original art approved by the lottery and represented by the ticket proof. A simulated ticket—the contract proof—represents the final printed product in its most detailed, color accurate form using the industry's most realistic proof generation technology.



Because millions of tickets will be created from the plate files, Scientific Games' proofing technicians review every set of blueline proofs before the game can be plated for the press. The technicians are considered an audit team for the entire prepress process—from artwork, through working paper development, to plate file completion. They check that the game specifications were produced, and confirm that every aspect of the tickets is correct.

Game Production

Each press, or 'printing system', is an engineering marvel of technologies, integrating sophisticated imaging systems, custom designed drying and

curing units, inspection cameras, and data capture systems—all managed by expert print professionals. Offering exceptional reliability, flexibility, and capacity, each printing system has specialized capabilities that produce diverse game designs, ticket sizes, finishes, and play styles.

Once all of the internal and customer approvals are complete, actual live ticket production begins. Each system processes up to 1,000 feet of paper per minute and produces up to one million 2" x 4" tickets per hour.

As paper unwinds from the gigantic roll, it begins the process of moving through up to 21 separate print units on the press—which means it's able to handle even the most complex of games. Each unit applies a different layer or ink color on the paper.

The back of the ticket is printed, and then multiple security layers are laid down, beginning with a lower opaque black security coating that provides good adherence to the paperboard and prevents light penetration. Next, a white or tinted security primer is applied over the black coating to



create a secure, image-receptive play area. The ticket is now ready to receive the game data.

With nine presses operating worldwide, Scientific Games' global teams work together, sharing knowledge and best practices that benefit instant game

customers on six continents. At the forefront of developing the most advanced technology used in the industry today, the company continues to invest millions of dollars into instant game production, most recently increasing global production capacity by 20% with a technology expansion of the UK facility.



Shipping

At Scientific Games, the shipping department is an extension of the finishing process, responsible for the final preparation of each game so that it is received by the lottery's distribution center in good condition and ready for distribution to its retail network. Each step in the process cannot occur until the previous one has been completed in this order:

- Prize balancing, final carton labeling and stacking
- Banding and wrapping
- Final audit
- Truck loading and shipping

Controlled by the company's shipping system, a module of the overall packaging system, each step in the process is performed by trained personnel using specialized equipment and is closely monitored by managers and security.

Finished pallets of tickets are tightly stretch wrapped from bottom to top to protect the contents and provide tamper evidence should someone try to open a carton during transit to the distribution center.

Pallets are then loaded onto trucks with no other deliverables on board and per the customer profile specifications. Required shipment documents are detailed within the customer profile. Also included with every game are inventory and validation files, sent via secure transfer. These files identify all good packs within the game and allow for distribution and system transactions.

Before closing and sealing the trailer doors, shipping personnel photograph the interior of the loaded trailer. The truck is then locked and sealed.

The lottery is notified when the delivery truck leaves the Scientific Games production facility. Shipment notification is sent to the distribution center and the lottery, providing data for the game, expected arrival date and seal numbers used for the truck.

Game Innovation & Portfolio Management

With a collaborative, total portfolio management approach, the company's products are designed and produced to entertain players and drive maximum profits for lotteries of all sizes, including 19 of the Top 20 performing instant game lotteries worldwide (based on per capita retail sales).

Production capacity allows teams to conduct press trials of new products and materials that keep instant games relevant to consumers. The company's innovation teams of designers, prize structure specialists, market analysts, programmers, chemists, and technologists continuously improve and invigorate instant games to provide the newest and most entertaining lottery experiences for players around the world.



Playing For Good.

We're endlessly innovating, always evolving and firmly committed to responsible gaming. So that the future of lottery funding shines bright.



POLLARD
banknote limited

Delivering fresh player-centric games: Pollard Digital Games Studio

With new entrants in the streaming industry, Netflix has had to adapt to stay competitive by providing subscribers with the best content, such as popular previously released movies and original binge-worthy television shows. In November 2021, Netflix added gaming content to its offerings to attract a broader range of customers. Netflix and other online entertainment providers understand that great content is the driver of success.

The same is true in the lottery world; faced with competition from other forms of online gaming, pushing out engaging game content is the key to the success of an iLottery platform.

Driving digital engagement with innovative game design is at the heart of Pollard Banknote's new Pollard Digital Games Studio, which brings together knowledge of all aspects of game development to offer a new portfolio of eInstant games uniquely designed to appeal to a wide range of lottery players. These games are available worldwide and are already generating sales and excitement in Europe.

Outstanding Digital Games

With a storied history of providing outstanding lottery games, Pollard Banknote understands that great games are the key to every lottery's success. With close to 40 years of industry experience, Pollard Banknote is a proven innovator that understands

that lottery players not only want to win, but they also want to be entertained, and therefore, designs games that meet these expectations.

Since 2009, Pollard Banknote has gained expertise in creating popular digital experiences for lotteries and their players and pioneered the iLottery space in the United States through NeoPollard Interactive. From second chance apps and games to comprehensive loyalty programs, Pollard Banknote has proven its ability to provide the very best player experiences.

Given that eInstants generate the highest amount of revenue in the iLottery channel, lotteries must focus on developing strategies aimed at optimizing online game content to drive overall sales. With the launch of the Pollard Digital Games Studio, a natural next step for the company with its digital experience and deep insight into creating great games, Pollard Banknote is well positioned to support lotteries. The Studio's outstanding games will help lotteries diversify their digital portfolios to meet player expectations for entertaining, relevant content and more choice overall, creating new opportunities to grow revenue for good causes.

As Co-CEO Doug Pollard puts it, "Our company's success has been built upon a foundation of outstanding lottery games and it's exciting to see that knowledge put to use with eInstants,

part of our range of digital games meant specifically for iLottery."

Pollard Banknote's entry into the eInstant market enhances its ability to offer a comprehensive range of digital games to lotteries worldwide, delivered in the flexible, customer-centric way that Pollard Banknote is known for.

Strategic Digital Expertise and Expansion

In addition to recent acquisitions, which have increased capacity to better meet the changing digital needs of lotteries, Pollard Banknote has sought to recruit top industry talent including Shannon DeHaven and Bradley Johnson, who are leading the Pollard Digital Games Studio.



SHANNON DEHAVEN
Vice President, Digital Engagement

Shannon DeHaven, Vice President, Digital Engagement, draws on her considerable experience with the Michigan Lottery, including managing the operations of their incredibly successful iLottery program. Shannon was responsible for establishing the Lottery's overall objectives for its digital programs. Under her leadership, Michigan became the first U.S. state to achieve significant success with iLottery, setting the industry standard by which iLottery success in North America is measured.



BRADLEY JOHNSON
Director, Digital Games Studio

Bradley Johnson, Director, Digital Games Studio, has 17 years of in-depth and multi-disciplinary gaming industry experience—from game design mathematician to game studio director. With over a decade of content creation experience in iGaming, Bradley is well positioned to oversee the Pollard Digital Games Studio.

With a suite of eInstant games ready for market, including several already generating success for lotteries, Shannon and Bradley provide further insight into the Pollard Digital Games Studio and the importance of eInstants for lotteries:

What is the Pollard Digital Games Studio and what does Pollard Banknote's market entry into eInstants mean for the industry? For lotteries and their players?

Shannon: Pollard Digital Games Studio, run by our in-house eInstants game development team, builds engaging eInstant games specifically for iLottery. Working with lotteries worldwide, we appreciate that every lottery is unique and must be treated as such. Our goal is to provide the best possible mix of games to entertain a broad player base, ensuring we have games that appeal to everyone. We analyze market insights, including trends and player behaviour, to understand what resonates with players and ultimately use this data to drive decisions on new game development and existing games' enhancements.

Bradley: Our long-term sole focus on the lottery space, combined with our player-centric approach, is what sets our offerings apart from what is currently available in the market. With our team's vast lottery expertise across

channels and disciplines, we bring together critical game elements, both technical and creative, in a fresh way. We *know* lottery players, so we strive to make our games appeal to their likes and preferences.

Shannon: We also believe that great games are not only about game characteristics, but also the way they are delivered to the player. We help our lotteries execute on a unique, personalized engagement journey for their players across the sales cycle, from acquisition through the game play experience.

Bradley: Our eInstants portfolio also enables us to provide unique omnichannel opportunities to drive sales. This is important since we know that players who engage through multiple channels provide increased lifetime value for lotteries. Here, for example, we can leverage our licensed game portfolio, which includes recognizable brands that are very effective for player acquisition, to create games specifically to sell across retail and online platforms.

Shannon: Ultimately, the introduction of the Pollard Digital Games Studio creates more competition, which results in greater incentive for all companies, us included, to push themselves to offer the best products for lotteries, thereby fostering creativity, innovation, and diversity of supply.

What makes a great eInstant game?

Bradley: A great game is one that is player-centric, that is focused on providing the player with an exceptional user experience in all aspects of game design and leaves them feeling they have received value for their money. The Pollard Digital Games Studio creates experiences that meet player expectations by considering every aspect of interaction with a player including, for example, that games are easy to access and understand, play mechanics are fun and engaging, that any bonus features are exciting, and the outcome of the game is clear and instantaneous.

Shannon: Lotteries with the most success in eInstants understand that excelling in the iLottery space requires more than just taking a retail instant game and putting it online. Player expectations vastly differ between those sales channels and games must

be developed accordingly. We can help lotteries navigate those differences to provide the best game content. One of our key advantages is the incredible wealth of knowledge that lotteries can tap into through Bradley. His leadership and understanding of the key elements in developing successful eInstant games is invaluable and will help games exceed player expectations and thus drive lottery success. Bradley's background in game mathematics and game design for markets in Europe, North America, and South America includes several patents and many popular games. This experience, coupled with Pollard Banknote's knowledge of what makes a great lottery game, means that we can tailor games to lottery needs and design games that players around the world will love.

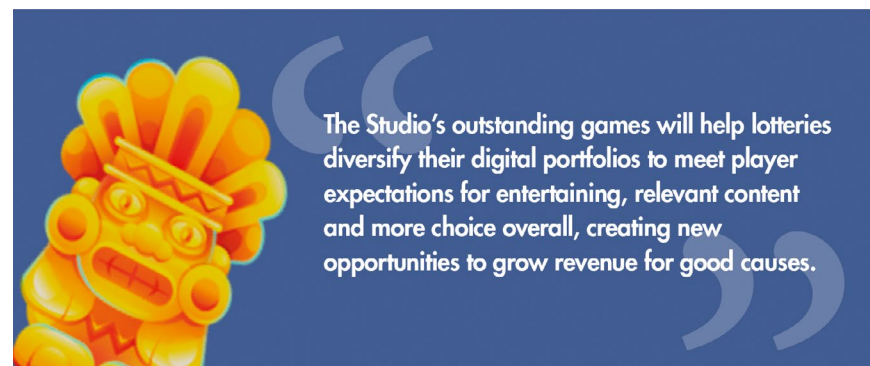
What kinds of games can we expect to see from the Pollard Digital Games Studio?

Shannon: First and foremost, our games are designed with responsible gaming principles and best practices at the forefront. Our flexibility allows us to customize game elements to adapt to specific regulations in different jurisdictions and we do thorough testing to ensure the games meet all required standards.

Bradley: We've said that diversity is a key, so we have games that appeal to a wide range of players. For example, *VIP Riches* and *Sizzling Hot 7s* are two established lottery themes that we've adapted to an eInstant format featuring number match play styles. These games were recently launched by a European lottery and quickly became player favourites, helping the lottery sell the most game portfolio tickets in a single week. *Lucky Forest* is another great game that has a more whimsical feel with enchanting graphical elements and bonus features. It was launched recently by another European lottery and sold nearly three times the average game in its first week.

What is one piece of advice you would give a lottery that has an eInstants library now?

Shannon: Beyond what we've already discussed with respect to ensuring game diversity in mechanics and presentation to appeal to a wide variety of players, lotteries must also carefully consider how to successfully market the games to players for maximized



CORPORATE NEWS

awareness and visibility. We can support lotteries in developing successful launch strategies, including consulting on effective email and CRM strategies and website positioning, to name a few.

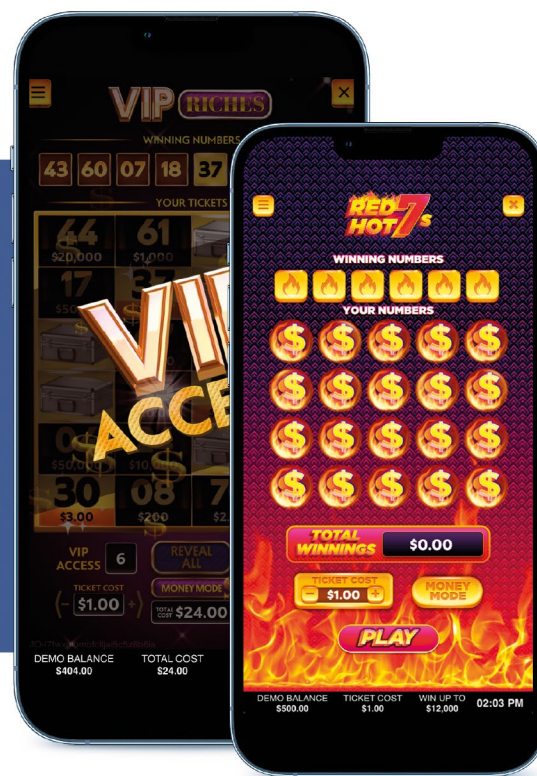
Why should lotteries not yet in the iLottery space be interested in Pollard Digital Games Studio's elstants?

Shannon: For lotteries getting ready to launch iLottery, we can help guide their elstant game and portfolio strategy to the most effective outcome—a customized iLottery channel with the best possible games to appeal to every lottery player.

Bradley: And for jurisdictions where iLottery is legislatively prohibited or still years away on the digital roadmap, it is important to note that the knowledge and insights we gather from our elstant portfolio apply to other business areas. The more we understand about player activity and preferences, the better we can personalize products to suit them. For example, what we learn from elstants can improve second chance opportunities and other digital games and products and these additional learnings can be applied to the retail channel.

PLAYER FAVOURITES

VIP Riches and Sizzling Hot 7s are two established lottery themes that we've adapted to an elstant format featuring number match play styles.



What should lotteries keep in mind when engaging with the elstants category?

Bradley: There is a big future in elstant games. They deliver player experiences that other types of iGaming do not offer to meet evolving player expectations and to ensure the continued success of the iLottery channel. Therefore, lotteries must ensure they are continually enhancing their portfolios with new games that appeal to a broad audience of players.

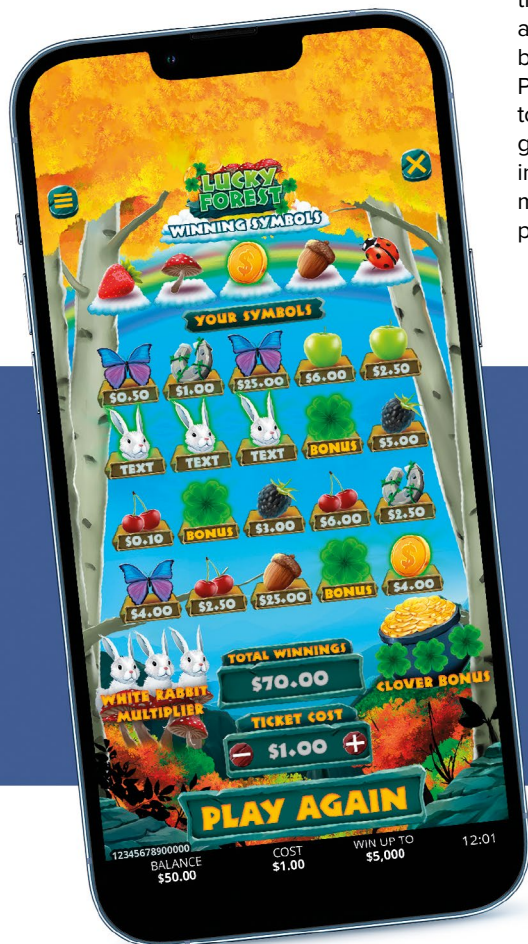
Shannon: Not only must lotteries ensure they are continually enhancing their portfolios with new games that appeal to a broad audience of players, but they should understand that the Pollard Digital Games Studio is here to help. We can provide elstant advice grounded in the expertise of our in-house team, including data insights, marketing, best practices, and game portfolios.

Bradley: Player expectations are becoming more nuanced and varied so ongoing elstant success is a matter of recognizing and actioning on ensuring your lottery has the key ingredients. These include game development driven by insights and best practices gathered from analytics at every point along the player experience. Lotteries also need games that push the envelope in terms of innovation and recognition. Taken together, it's all about player-focused marketing and the creation of a unique and entertaining journey.

Shannon: Ultimately, lotteries need to deliver more and more highly engaging experiences in a thoughtful and focused manner. And be open to continuous learning. Like we have for close to four decades, Pollard Banknote continues our journey of delivering outstanding games to our lottery customers by offering elstants and supporting services from our Pollard Digital Games Studio.

LUCKY FOREST

Sold nearly three times the average game in its first week [in market]!



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POLLARD DIGITAL
SOLUTIONS



POLLARD DIGITAL GAMES STUDIO
PRESENTS

NEW eINSTANTS

Diversify your iLottery portfolio with our new elstant games!

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POLLARD DIGITAL
SOLUTIONS



IGT | The New VUE of Retail

Retail environments continue to evolve along with consumer expectations. IGT’s sophisticated, all-new Retailer Vue™ camera-based terminal offers lotteries the flexibility and unique performance features to support a wide range of use-cases today and well into the future.

In one of the European lottery industry’s more recent competitive camera-based procurements, the all-new Retailer Vue™ terminal from IGT emerged as the winner, attesting to its appeal and unique advantages in serving present and future market needs. In fact, the thinking behind Retailer Vue™ is so advanced that IGT almost didn’t call it a terminal.

“A terminal has always sat on a counter and been used only by a retailer. And a ticket checker provides self-service to players – but that has always been a different device. One of many distinguishing features about the Retailer Vue is that it can allow retailers and players to interact easily through the same efficient unit,” said Michael Roeygaard, IGT Senior Director TouchPoints Product

Management, citing just one of many potential use-cases. With its ability to read everything from playslips and lottery tickets to ID cards and mobile devices, Retailer Vue™ is a unique, flexible retail touchpoint that can be deployed in various configurations to suit individual lottery needs, increase retailer productivity, and support a contactless player experience.

Sophisticated imaging technology accepts both printed and digital media in a wide variety of lighting conditions and retail environments. It also eliminates the need for dedicated readers and associated cables, freeing up valuable counter space.

The distinctive, open design allows for these contactless player-clerk transactions to take place seamlessly in front of the player and allows players to maintain control of their mobile devices, playslips, and tickets.

“Especially coming out of pandemic, there is a demand for digital, touchless experiences,” noted Paul Kallis, IGT Vice President Lottery Product Research & Development. “We’re doing that with Retailer Vue™ very efficiently, using one and the same reader for everything. The solid-state design also provides for silent operation and supports lower total cost of ownership, because with just one reader and none of the mechanical parts found in transport readers and fans, there is a lot less that could require repair.”

By enabling multiple scenarios for handling player-related functions, the Retailer Vue™ terminal is adaptable to

current retail models as well as those that are just emerging.

A unique and versatile tool for success, it gives lotteries the ability to deliver Connected Play – digital-at-retail experiences via players’ mobile phone and app – and evolve with changing needs for the foreseeable future:

- Digital and paper playslips
- Virtual player cards and physical player cards
- Digital and paper ticket

• Digital payment via lottery eWallet

“Our primary aim is to deliver highly relevant, future-proof solutions to support our customers’ success as they prepare to meet evolving retail and player expectations,” said Kallis. “Retailer Vue™ is a one of a kind in the market today.”

In August 2022, an agreement was announced between the Portuguese lottery Santa Casa da Misericórdia de Lisboa and IGT for 7,200 Retailer Vue™ terminals.



VUE™ the Benefits

Retailer Vue™ was designed with a focus on convenience, transparency, and improving total cost of ownership.

KEY BENEFITS

For Lotteries



- No cooling fans or motors means greater reliability, quieter operation, and lower overall total cost of ownership
- Clean aesthetics and customizable trim kits help build lottery recognition
- Interfaces with advertising displays to promote lottery products and jackpots

KEY BENEFITS

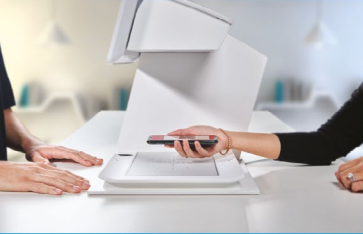
For Retailers



- Refined ergonomics and a large, intuitive, tablet-like touchscreen display make access to multiple applications and menus faster, and can reduce the learning curve for new clerks
- Accommodates a variety of IGT and third-party accessories to match retailer needs
- Provides an attractive and reliable solution to support fast and efficient sales transactions

KEY BENEFITS

For Players



- Enables players to interact directly with the terminal, increasing efficiency
- Open design and ability to read both printed and digital media in full view of the player provide greater player trust and transparency
- Players accept the use of mobile devices as a more convenient way to interact with lottery at retail

Facilitating Connected Play

Retailer Vue™ is one of many available IGT solutions to facilitate what IGT terms Connected Play, a seamless, rewarding, and immediate player-centric experience across retail and digital channels.

IGT has applied its operator experience and deep cross-functional knowledge to develop a full range of tools to enable Connected Play. This includes establishing the appropriate connections between player and retail touchpoints to provide lotteries with something the industry hasn't historically had access to: integrated retail and iLottery data. Operators can use this data to better understand player behaviors and preferences, and serve players a more personalized experience, regardless of the channel.

Connected Play is enabled and supported by all IGT terminal types, including Retailer Vue™. And importantly, Connected Play is deeply integrated into IGT's end-to-end solutions and systems, not only retail and player touchpoints.

What's more, Connected Play isn't limited to iLottery jurisdictions. A suite of IGT solutions to digitize

the retail-player experience can also provide player- and transaction-level data on retail sales.

The benefits of Connected Play include:

- Bridging the gap between anonymous retail players and known iLottery players
- Reducing friction along the path to purchase – store favorite playslips; reduce contact and paper; digital tickets; eWallet payments and prize claim
- Capturing play history and player behavior, which enables better Responsible Gaming measures and supports lotteries in making informed and responsible product decisions. To cite just one example, light registered players (semi-anonymous) can apply self- or lottery-imposed play limitations by day, week, month, etc.

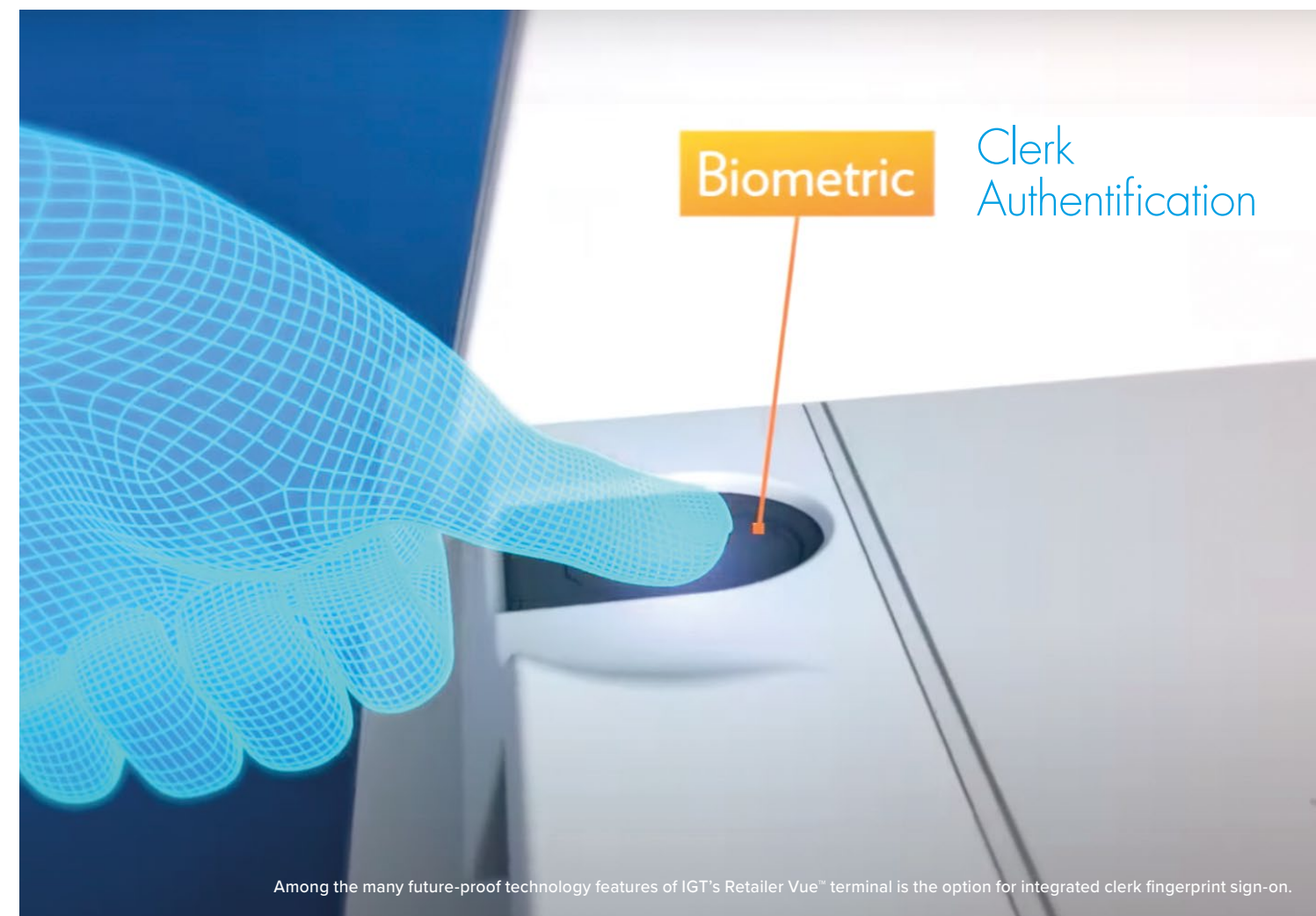
"We're always looking at retail trends and changes in consumer shopping behaviors in terms of what they could mean for our industry – taking into consideration how players shop, play, where and when they purchase, and how they interact with retailers," said Kallis.

"This isn't just a terminal, this is you being prepared for the future."

"Many lotteries are asking the same questions," added Roeygaard. "What is the new 'kit' that retailers will need? The camera terminal, the vending machine, cashless payments, smart analytics (if a player has opted-in through their device) in order to tee-up games that are most relevant based on their purchase history or demographics, and digital signage that changes based on actual consumer preferences."

While implementing Connected Play requires more than the lottery terminal, Retailer Vue™ is an important facilitator of it. As Roeygaard observes, "The 'Vue™' can enable the retail trends that we and our customers know are coming, and it can adapt to meet a variety of needs. In other words, this isn't just a terminal, this is you being prepared for the future."

For more information, contact your IGT Account Representative and see for yourself at [IGT.com/Vue](https://www.igt.com/vue).



Among the many future-proof technology features of IGT's Retailer Vue™ terminal is the option for integrated clerk fingerprint sign-on.

Enjoy the VUE™



LOWER TOTAL COST OF OWNERSHIP

Solid-state design improves reliability and provides for silent operation by eliminating mechanical parts found in transport readers and fans.



TRANSPARENT TRANSACTIONS

The open design reduces barriers between the player and clerk, allowing players to maintain control and visibility of their mobile devices, playslips and tickets.



EFFICIENT OPERATION

A compact footprint and efficient user interface reduce the movement needed to perform transactions, making them quick and convenient.



FUTURE-PROOF TECHNOLOGY

Features four available USB ports, video support for two player-facing displays, and options for integrated clerk fingerprint sign-on, as well as ID card and contactless NFC reading to meet evolving retail expectations and extend the lifecycle.

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