techlink entertainment®

Submission to: The Australian Government Productivity Commission On Gambling

Feedback to the October 2009 Draft Report

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" Our work in Responsible Gaming, specifically our Gameplan system, has been developed with the hopes of achieving an effective balance between the revenue interests of our customers and the welfare of their players globally"
(John Xidos, President and CEO, Techlink Entertainment;
Cape Breton Post, Sydney, Nova Scotia, March 19, 2009)

Introduction

" Society bristles with enigmas which look hard to solve. It is a perfect maze of intrigue"
(Eighteenth century French novelist Honore De Balzac)

On 24 November 2008, the Australian Government requested the Productivity Commission to undertake a public inquiry into Australia's gambling industries. The initial completion date was 24 November 2009, but the Government subsequently extended this to 28 February 2010 to enable more time for participants' submissions and the Commission's data gathering.

The Commission is seeking further comment on the draft report. It is calling for public submissions and will hold public hearings in November/December 2009 to provide interested parties the opportunity to discuss the draft report. Written responses should be sent to the Commission by Friday, 18 December, 2009.

The Commission will present its final report to the Australian Government on 28th February 2010 for COAG's consideration.

Techlink International Entertainment Ltd. Is a Canadian Federally incorporated company that provides products and services in the global gambling industry. The beginning of Techlink Entertainment had its roots in the earlier experience of its founding President and CEO, Mr. John Xidos, in the video lottery gaming industry. The move to forming the Techlink Entertainment company came from an early insight into the need for controls, information and protection for both players and the gaming industry as the industry expanded from supervised (bar, casino) to semi-supervised (e.g., hotel room) and unsupervised (home) gaming contexts.

Techlink Entertainment is a technology company established in 1994 in Sydney, Nova Scotia, Canada. We are recognized by the Atlantic Business Journal as a 'company to watch" in 2008, and are identified as one of the fastest growing companies in Atlantic Canada by Progress Magazine. Techlink Entertainment is

constantly working towards expansion and commercialization of an emerging Responsible Gaming product line, "Gameplan™.

Gameplan™ offers the player options for self-control by providing feedback information and tools to limit both time and money spent. Gameplan™ is proven to be effective in mitigating player risks by providing players with the information they need to make informed decisions to play responsibly, and provides them with the tools they need to limit both money lost and time spent in their gambling experience.

Techlink Entertainment respectfully submits this document as a response to Productivity Commission Draft Report on Gambling (October 2009), and as an input for consideration by the Commission during their evaluation of Harm Minimization strategies.

Situation Analysis

> *"Gambling has been fully integrated into human life since the start of recorded history"*
> (Korn & Shaffer, 1999).

The Commission correctly outlines the pressing need to respond in an effective way to implement harm minimization and pre-commitment programs. The articulated "Key points" highlight the risks being faced by the industry:

- Roughly one in ten of those would be classified as 'problem gamblers', with an additional 15 per cent experiencing 'moderate risks'.
- About 5 per cent of adults play weekly or more often on gaming machines.
- Around 15 per cent of this group are 'problem gamblers' and their share of total spending is estimated to range around 40 per cent.
- A further 15 per cent of pokie players face 'moderate risks'.
- While precision is impossible, estimates of the number of problem gamblers lie in a range around 125 000, with the estimated number of gamblers at moderate-risk ranging around 290 000.
- Rough, but conservative, calculations suggest that even a 10 per cent sustained reduction in harm could provide a gain to society of nearly half a billion dollars annually.

Historically gaming was a prohibited activity in most of the modern world. North America in particular placed gambling, as not only an undesirable pastime, but criminalized it as well. Proponents of gambling created a thirst for the excitement of risking money for a chance to win. Initially, Las Vegas, and then Atlantic City were the only legal venues to gamble.

We have established an entertainment value on the activity and as such it stood the test of time, prohibitions and depressions. It can be certain that gambling

activity will be around for much longer. The trouble occurs where individuals exceed the entertainment value and broach the world of problem gambling. In this case, the value spoken of is that not only of money, but time and social impacts.

It is now universally accepted that some level of intervention is needed for gambling systems. This has been a well-established belief for many years and several attempts have been made with no avail. Prohibition didn't work, education has helped some, but the amounts of individuals who are in need of help are still rising. The question in need of an answer now is, 'How can intervention be implemented on such a widespread area network of machines *successfully*?'

Early intervention, or increased informed activity monitoring may assist people in staying within their own self-established entertainment values. This sort of intervention has been demonstrated to be true with a RGD Field Trial conducted in Windsor, Nova Scotia, Canada in 2005 and 2006.

Gambling opportunities takes many forms, legal or illegal. It is pervasive in our society. Examples include; ticket lotteries (6/49, Tag), scratch tickets, bingos, pull-tab tickets, table games such as poker, roulette, craps, black jack, video lottery terminals, slot machines, sports-betting, odds-betting, horse racing, dog racing, off-track betting in places like casinos, racinos, gambling halls, bars, restaurants, legions, bingo halls, in some places, malls, corner stores and more prevalent now than ever, at home on the PC or wirelessly anywhere on the cell phone or PDA (Personal Digital Assistant).

A percentage of the gambling population can become addicted. This has detrimental effects on their own well-being and those around them. Studies have shown that problem gamblers have higher rates of job loss, divorce, suicide, bankruptcy, poor physical and mental health, arrest and incarceration – all of which carry high costs to the victims, their families, and society at large. These studies have found that each problem gambler negatively affects between 10-17 other people. Crimes most often associated with problem gambling are theft and fraud.

It is imperative that society implements a series of measures that will help re-balance this entertainment sector. The pervasiveness of gambling in our communities must be balanced by a pervasive system that assists individuals (citizens) in managing their gambling activity, in controlling their losses of money and time, and in minimizing the harm it inflicts on the broader community.

By banning these segments of gambling you run the risk of increasing the chances that there will be more illegal gambling. When the legal avenues

disappear, illegal avenues appear. This approach just hides the problem. The same "hurt" happens; it's just that no one can measure it now. Therefore, rather

than have gambling go illegal and underground, and governments lose control of revenues from gambling, Techlink Entertainment's technological solutions can be applied to most of the types of gambling and offer protection to both players and the government, and therefore, society in general.

Harm Minimization

> *"There should be a progressive move over the next six years to a universal precommitment system for gaming machines, using technologies that allow all consumers in all venues to set binding limits on their future play."*
> *(Australian Government Productivity Commission, October 2009))*

Techlink Entertainment supports and endorses the Commissions position to implement a program of harm minimization.

But what do we mean by "harm minimization" in the context of the gambling industry? There are a wide variety of terms emerging to describe responses to this challenge: "pre-commitment", "responsible gaming", "responsible gambling", "player choice", and "player protection". All of these terms point to a common challenge that we need to be proactive in implementing player protection systems at gambling venues in our communities.

A Confusion Of Terms

Indeed, the terms have been used in a broad array of contexts to describe techniques used to help players (customers) deal with problems that might occur. Broadly speaking, these terms have been used to describe three different types of activities:

1. A long established service at Casino venues providing player support and counselling. (Example: Harrah's "Know the Code" program).
2. A wide variety of VLT-centric modifications aimed at minimizing negative impact on players. (Examples: Pop-up messaging, limiting reel speed, time on terminal limits, etc.)
3. New technology-based services provided as a retrofit to existing gambling environment. Technologies typically used include player-tracking databases, smart cards or player tokens, electronic means for limiting access to EGMs.

All of these initiatives share ***one common objective: to provide ways to assist players in minimizing harm to themselves in a gambling venue.*** Today programs evaluating smart card applications in a gambling venue currently exist in Canada (Nova Scotia, Saskatchewan and Quebec), Europe (Norway and Sweden) and Australia (South Australia, Queensland, New South Wales, and

Victoria). There are many other player protection initiatives underway, all under the term “responsible gaming”.

It is unfortunate that terms like “responsible gaming “or “harm minimization” has generally been restricted to issues of player protection***. We believe that these terms apply equally to players, operators, regulators and governments.*** All of these entities are major participants in this industry. There is a need to open a full and comprehensive discussion of what “harm minimization” means and how it can benefit everyone in the industry, including the player; and how technology can further the end goal of each.

Oftentimes it is instructive to go to a basic premise. What exactly does the word “responsible” mean? The following definition is extracted from various dictionaries and can be found on a simple Yahoo search of the Internet.

Re-spon-si-ble
Adjective:

1. Liable to be required to give account, as of one’s actions or of the discharge of a duty or trust.
2. Involving personal accountability or ability to act without guidance or superior authority.
3. Able to make moral or rational decisions on one’s own and therefore answerable for one’s behaviour.
4. Able to be trusted or depended on; reliable.
5. Required to render account; answerable.

Techlink Entertainment looked at the definition of “Responsible” and determined that ***what was required was the accumulation of pertinent information that could be delivered to each of the “players” in the “game***”: Customers, Operators, regulators & Governments. The information, to be useful, also had to be delivered in a timely and useable format. The object of the exercise was to enable decisions to be made based on real time, accurate information; in other words, ***empowerment that would be based on knowledge, not speculation.*** By providing all participants (players, operators, regulators, and governments) with timely information we believe that we can enable them to create a sustainable, profitable, accountable, and entertaining experience.

Business Requirements for a new Technology

> *The effectiveness of the policies depends on several overarching factors:*
> - *salience: an adequate range of features —such as spending limits, warnings or player statements — that address the major problems consumers experience*
> - *leakage: the capacity of player to circumvent any pre-set limit (such as by swapping player identification devices or playing on another gambling form not covered by the pre-commitment system)*
> - *pleasure: how it affects entertainment value*
> - *burdens on occasional gamblers or those regular gamblers experiencing no control or other problems at all.*
>
> *(Australian Government Productivity Commission, October 2009)*

The challenge at this stage is to articulate in business terms what we actually need to implement an effective harm minimization program. Indeed there is a need to ***improve on basic operational processes*** to make the gambling setting more responsive to individuals' needs. There is also a need to develop ***more responsive social support framework*** that addresses issues that arise in the gambling venue. And yes, there is an opportunity at this time to ***introduce effective technological tracking and control systems*** that would be at the disposal of the players, the operators, the regulators and the government.

The Australian Government Productivity Commission has published a comprehensive set of business and social responses to the harm minimization challenge. This list touches on a broad range of operational, social and technological needs that must be addressed as the gambling industry and the gambling venue moves forward. Fundamental requirements stand out as universal characteristics:

- It should be a 'universal' scheme;
- It should involve a 'safe' default limit;
- It must invoke limits on money and time spent;
- There must be a mechanism for limiting or stopping play, through notices, by altering the game performance, by enforces pauses in game play, and by stopping play at pre-set break points;
- Players must be kept informed of their records of wins, losses and time spent; There must be a capacity for a player to 'opt-out' of pre-commitment constraints;
- Is responsive to the needs of occasional players;
- Is easy to use;
- Does not disrupt the entertainment value of the existing venues;
- Is flexible and responsive to future innovation;
- Recognizes the need for the development of national standards.

More specifically, the Australian Government Productivity Commission identified specific requirements for pre-commitment technologies:

- Identifies the particular gambler playing the machine;
- Reflects their pre-determined preferences in their interaction with the machine;
- Allows the secure storage of information:
  - To determine whether any pre-determined preference has been breached;
  - To provide, if appropriate, a player information statement of accumulated time and money spent in a given period;
  - On additional or changed preferences set by the gambler during the period of play;
  - About accumulated loyalty points, if the gambler was a member of a loyalty scheme.

The Australian Government Productivity Commission has effectively articulated the broad range of needs that must be addressed from a business, social, and regulatory perspective. However, the articulated framework for technological systems in support of these principals is not broad enough to allow meaningful technological solutions and does not articulate the broad range of technological systems available today capable of responding to the harm minimization challenge.

The Operator's Advisory Committee (OAC) of the Gaming Standards Association did take such a step when they identified specific business requirements for technological systems that can respond to the harm minimization challenge. On October 21, 2009 business requirements related to "Responsible Gaming" were published at the Gaming Standards association in three related categories:

- OAC: Player Registration Requirements;
- OAC: Player-Limit and Self-Exclusion Requirements;
- OAC: Player Communications Requirements;

It should be stated at this point that these are not requirements provided by some interest group or business entity, but ***requirements as articulated by Gaming Operators in a submission to the Gaming Standards Association***. These requirements are provided in the following sections.

<u>OAC: Player Registration Requirements:</u>

- Players must be pre-registered to participate in a program. Programs do not apply to un-carded players.
- Players may register anonymously. No name, address, or identification information is stored by the system other than in a one-way hash format.

- Players must be issued some sort of ID that uniquely identifies the player at an EGM or other gaming activity. USB flash drives and facial recognition are possible forms of ID.
- Players must present an ID to activate player-limit and self-exclusion features.
- In some regions, players must present an ID to activate game play. Participation in a program may be mandatory.
- Players must be able to register PINs that can be used to authenticate IDs.
- PIN authentication may be required to activate game play. PIN authentication may be required for some or all players.

OAC: Player-Limit and Self-Exclusion Requirements

- Players must be able to set multiple self-imposed limits for time-played and win-loss. Players must be able to set the limits at an EGM or using some other interface.
- Properties must also be able to set multiple limits for time-played and win-loss that are applicable to all players.
- Players and properties must be able to select the period over which a specific limit is enforced - such as, session, day, week, month, quarter, or year.
- Players and properties must be able to select the action that should be taken when a specific limit is reached - such as, warning, suspend money-in, suspend game-play, force cash-out, or ban from the property.
- Limits must be enforced by a host system - not an EGM.
- Limits must be enforced using data available through standard player tracking sessions. Data from EGMs and other gaming activities should be aggregated together and applied to the limits.
- When enforcing limits, win-loss must be calculated as game win, plus progressive win, plus bonus win (cashable credits only), less cashable credits wagered. Both EGM-paid and hand-paid win must be included.
- Players must be able to set multiple self-exclusion periods. Periods should include starting date, ending date, day of week, and time of day. Players must be able to set self-exclusions at an EGM or using some other interface.
- Players must be able to select the action that should be taken during the self-exclusion period - such as, warning, suspend money-in, suspend game-play, force cash-out, or ban from the property.
- Self-exclusions must be enforced by a host system - not an EGM.
- A property must be able to set mandatory cash-out limits for an EGM. If the credit meter exceeds a specific threshold, a full or partial cash-out must occur.

- Facilities must be available for communicating player-limits and self-exclusions between systems.
- Facilities must be available for communicating player tracking sessions between systems.

OAC: Player Communications Requirements

- Players must be able to view player and property limits and the aggregate time-played and win-loss towards those limits at an EGM or using some other interface.
- Players must be able to view aggregate time-played and win-loss for all selectable time periods even if a limit has not been set for the period at an EGM or using some other interface.
- A facility must exist to display other messages to a specific player at an EGM - such as, tips, offers, etc.
- Messages must be initiated by a host system - not an EGM.
- Options must exist to display messages in pop-up windows or in standard message bars on an EGM.
- Options must exist to set the colour of text and backgrounds on an EGM.

A Comprehensive Technological Response

> *"Given the Nova Scotia Gaming Corporation's stated desire to promote responsible gambling behaviours, it would seem that this device provides a powerful "tool in the tool chest" for those players seeking to do exactly that."*
> *(Bo J. Bernhard, Ph.D., International Gaming Institute, University of Nevada, Las Vegas. "Responsible Gaming Device Research Report (Copyright 2006)")*

The opening quotation in this section from Dr. Bernhard is in reference to the 6-month RGD Field Trial conducted in Windsor, Nova Scotia, Canada in 2005 and 2006. The results of this trial led to the introduction of the "Informed Player Choice" system now (2009) being deployed throughout Nova Scotia by the Nova Scotia Gaming Corporation and the Atlantic Lottery Corporation. The underlying technology being used in this initiative is the Gameplan™ System developed by Techlink Entertainment. ***The Gameplan™ System provides all of the functionality currently required by Nova Scotia and much more***.

The capability of Gameplan™ can be described as "dimmer switch" technology:

- Gameplan™ is flexible – capable of providing whatever level of RG service the customer wants;
- Techlink Entertainment has experience in implementing various levels of RG services. – Gameplan™ is equally comfortable at the low end of the "dimmer switch" (Player prior pre-commitment), the mid range of the "dimmer switch" (IPCS), or the high end of the "dimmer switch" (Windsor Trial).
- Gameplan™ can start at almost any point on the "dimmer switch" and dynamically adjust upscale and downscale according to the clients' needs.
- Gameplan™ is a knowledge system, providing information to all levels of gaming interests:
    - ***Players gain*** real-time monitoring and self-management tools:
        - Real-time feedback empowers the player to make timely and informed decisions about the time and money they commit to their gambling entertainment. Players can effectively monitor and control time and money in a truly anonymous system;
    - ***Operators gain*** insight:
        - A time-based, player centric data set provides unprecedented insight into players' needs, and insight into the use of physical assets;
    - ***Retailer sites gain*** functionality:
        - Powerful new views of daily activity provide the retailer with an insight into player preferences and a profile of how physical assets are being used in their establishment.
    - ***Regulators gain*** oversight:

- Independent financial report is available for audit purposes; player-sensitive data truly offers the assets necessary to understand negative gambling tendencies.

- ***Jurisdictions (Governments) gain*** control:
  - A time-based player-centric data store forms the basis for a wide variety of statistical analysis related to the public interest, providing an effective tool to measure gambling activity. More advanced analysis can lead to access to timely clinical information useful to addiction services and to Problem Gambling counsellors.
- ***Manufacturers gain*** an orderly migration forward:
  - Access (through licensing) to the necessary tools to convert their gaming devices to "RG ready" provides a ready solution to an emerging demand in the public for player protection technologies.

Does It Work?

The most obvious question is, "how do we know it works?"
Techlink Entertainment has been very fortunate in that we have developed an excellent working relationship with the Nova Scotia Gaming Corporation and the Atlantic Lottery Corporation. These organizations embraced the concept of responsible gaming at a very early stage and their actions have placed them at the forefront of the industry and made them worldwide leaders in the implementation of technology based responsible gaming methods.

Throughout 2009, nearly 3000 machines will have our system installed in Nova Scotia. This decision was made following extensive field trials and independent evaluations of the data collected to provide feedback on the behavioural impact of the responsible gaming features using VLT player-card information. It is important to note that ***for the first time ever, the analysis was based on "real" player data as opposed to the traditional "survey" data***.

(As background on the deployment, a Techlink Entertainment device was installed within the cabinet of every EGM manufacturer that was used in the market. (5 different machine types) and networked back to a Techlink Entertainment Central System housed in another province. The device on the EGM provides card reader and a small touch screen display for use by the player.)

The evolution of a new technology into a credible new service requires a clear demonstration that the functionality being claimed is possible, that it has been reliable, and that there is a body of evidence that supports the usefulness of the service. With respect to new implementations of technology-based responsible gaming, there is ample evidence in all of the development activity centres identified above (Canada, Europe and Australia) to support both the reliable functionality and the positive impact it has on the gambling venue.

On September 18, 2009, the Nova Scotia Gaming Corporation (NSGC) was formally awarded a Level Four certification by the World Lottery Association (WLA) for ***operating at the highest level of social responsibility standards***. Nova Scotia is one of the first gaming jurisdictions in the world to be certified at this level. They are a leader in conducting comprehensive research into player-protection programs for the gambling venue. One such project the "Responsible Gaming Device Research Project" (http://www.nsgc.ca/reDevice.php) conducted in Windsor, Nova Scotia, Canada for a 6-month period in 2005 and 2006 spawned three independent research reports:

- Responsible Gaming Device Research Report (Copyright 2006)
  International Gaming Institute, University of Nevada, Las Vegas
  Bo J. Bernhard, Ph.D.
  Anthony F. Lucas, Ph.D.
  Dongsuk Jang, Ph.D. (candidate)
- Nova Scotia Player Card Research Project (2006)
  Stage III Research Report
  Omnifacts Bristol Research
- Assessment of the Behavioral Impact of Responsible Gaming Device (RGD) Features: Analysis of Nova Scotia Player-card Data - WINDSOR TRIAL
  Final Report, February 2007
  Focal Research Consultants
  T. Schellinck, T. Schrans

These reports all point to the effective nature of this technology-based service and challenged the industry to find a way to implement this or similar player-controlled gambling management tools. There is an Executive Summary of the Focal Research Consultants Ltd. Report attached to this paper for your convenience.

Gameplan™ was developed with the knowledge that issues surrounding responsible gaming are not restricted to traditional electronic gaming machines such as video lottery terminals and slot machines. Techlink Entertainment is a Platinum member of the Gaming Standards Association and we are actively participating in the development of a standardized communication protocol that will allow for ease of implementation throughout the industry.

The opportunities that exist for all segments of the industry to base their decision-making on real information are immeasurable. Techlink Entertainment will continue to develop the sophisticated tools and systems that are required, and we will also continue to educate the industry on what is possible for everyone when they have the benefit of **KNOWLEDGE.**

Appendix A: Executive Summary – Focal Research Study

Key Findings

- **Trial of the RG features was high.**
  Among Regular VLT Players (e.g. *those who played 6+ times during the field test*) trial of the RG features was high, with the vast majority (71%) having used an RG feature in at least one play session especially My Account (68% %) and Live Action (59%). Those Regular Players who tried any features on the system accounted for 78% of all play sessions and 78% of net revenue (e.g. *total player 'out-of-pocket' expenditure*) over the course of the trial, suggesting that experimentation of the RG system was highest among the most frequent VLT players.

- **Continued use (e.g. *adoption*) of the RG features was high especially among relevant target populations such as regular players.**
  Once a player had tried the RG features, almost two-thirds, (65%), continued to use them during additional play sessions. While curiosity may have lead players to try the features, it appeared that the majority received sufficient benefit to continue to activate the features. On-going use was particularly high among the more frequent players in the Windsor-Mount Uniacke area with almost half (48%) of those characterized as Regular VLT Players (i.e. *playing 1+ times/month*) taking up regular use of the features (e.g. *RG Adopters)*. Collectively, these RG Adopters were responsible for ≈61% of all VLT play sessions and ≈61% net revenues during the six-month trial period.

- **There were specific and consistent session characteristics associated with use or adoption of the RG features.**
  Comparative analysis consistently found that use of the RG system was associated with longer play sessions, increased wagering activity (e.g. *higher amounts of money put into the machines during play*), higher winnings (e.g. *higher amounts won during play*), and higher cash-outs (e.g. *higher amounts of money cashed out during the session*). At the same time there were no changes observed in player expenditure (e.g. *the amount of money spent out-of-pocket by the player*) nor was there any change observed in the frequency of play (e.g. *rate of play*). However, there were increases in the percent of sessions ending in a positive or '*win*' outcome (e.g. *percent winning sessions*) and in the percent of money that players cashed out as a percent of the amount they put into the machine (e.g. *cashout*).

- **RG use and impact was stable and persisted over time with evidence of a decline in money spent emerging with extended use.**
  Although the field test was only six-months in length it was important to determine whether use of the features and the associated behavioral impact persisted over time, in particular as the novelty of the system declined. It was found that once players adopted use of the features, their usage pattern was consistent and stable up to 24 sessions following trial of the features, well

beyond the period when most players could be expected to be still learning the system. When specifically examined among those who played 18+ sessions during the test period, there was also preliminary evidence of a declining trend in amounts spent out-of-pocket for those sessions in which a RG feature was activated. This same trend was not observed for sessions when the player did not use the RG features. Although the trend detected for reduced expenditure was not significant during the current trial (e.g. *over six months*), the results were moving in the desired direction. Regardless, in the current study feature use and the impact of such use did not diminish over time or over repeated use.

- **There was a stronger effect for RG use observed in short sessions (<2 hours) when players typically were most likely to be in a loss situation (e.g*. minimizing money spent 'out-of-pocket' or cashing out wins*).** Longer play sessions tend to be associated more often with winning sessions, as the player is able to use winnings to extend their length of play. In contrast, shorter sessions usually occur because players run out of money sooner or reach their desired money limit. This means that shorter sessions are more often associated with losing sessions (e.g. *percent of sessions that end with the player having spent money; that is ending play with less money than they had started with*) and lower rates of cash-out (e.g. *the percent of cash the player takes out of the machine as a percent of the total amount of money they put in*). Due to this relationship, it was important to assess RG use relative to session length. As expected, cash-out rates (85%-88%) and percent winning sessions (30-32%) were higher during longer sessions of play (2+ hours), regardless of use of the RG features. Outcomes differed markedly for shorter sessions (<2 hours of play) with RG use, on average, associated with higher cash-out (□77% versus □56%) and a higher rate of winning sessions (□28% versus 20%). This same relationship was borne out when RG Adopters were compared to No-RG Players with the exception that after 30 minutes of play the cash-out rates for all RG Adopter sessions was consistently and significantly higher than rates for Non-Adopters (□81% versus 69%, p<.001).

- **When other factors associated with expenditure were controlled for (e.g. *session length, pay-out rate and amount won per session)*, the use of the RG features was found to be significantly associated with a decrease in money spent ('*out-of-pocket'*) especially for use of 'Live Action' 'My Account Year' and 'Setting Limits'**
No-RG Players (Control Group; n=247) and RG Adopters (Experimental Group; n=122) were used to test for differences in session characteristics before and after adoption of the features *(*e.g. *pre-post comparison).* A positive impact was found for use of informational RG features ('*Live Action*' and '*My Account'*) and the control RG features ('*My Money Limits*', '*My Play Limits'*, '*48-Hour Stop'*). There were no significant differences in presession profiles *(e.g. session characteristics prior to adoption*), with the exception that, on average, the RG Adopters played more often than the No-RG Players

(about every 3.2 days versus every 9.2 days). However, during the post-trial sessions, the RG Adopters had longer play sessions, won more money, and had reduced expenditure compared to the No-RG Players. Using Repeated Measures ANOVA (GLM Analysis) with covariates to control for the effects of session length, luck (e.g. *amount won per session*), and game design (e.g. *pay-out rates*), a significant effect was detected for use of most of the RG features; '*Live Action*'; '*My Account Year*' and '*My Play Limit'*. As hypothesized, those players who adopted use of the RG features reduced their expenditure as compared to the No-RG Players.

- **RG use differed by risk for gambling problems.**
  Although Problem Gamblers were just as likely to have adopted use of the '*Live Action'* feature as those players identified at lower levels of risk (□48%), the Problem Gamblers tended to use it 3-4 times more often during play and referred to the other RG features less often in comparison to use by other players. '*Live Action*' is an RG feature that provides information on the current session of play only. Players in the other segments more often accessed the '*My Account*' feature that summarizes cumulative play outcomes over time.

- **Impact of RG use differed between lower-risk and higher-risk players, although there was no evidence of increased expenditure for either group.**
  On average, players who adopted use of the RG features significantly increased session length, reduced expenditures and had no change in their frequency of play. Lower-risk players who adopted RG use (i.e. *RG Adopters*) also exhibited higher wagering activity and longer play sessions but had no change in amount spent or frequency of play, although the lower-risk players who did not use the RG features (i.e. No-RG Players) ended up spending significantly more (p=.065). Higher-risk players who adopted RG use also had increased wagering activity, slightly longer play sessions, increased cash-out, higher winnings, and, on average, reduced expenditures. For the most part, due to small sample sizes for the higher-risk testable segment (n=49), these results were not significant at the 90%+ confidence level. However, per session expenditure was found to have declined among the high-risk players at the 83% confidence interval (p=.169) although there was also an increase in frequency of play that occurred at only the 67% level (p=.332). Therefore, the findings suggest that reductions in spend could potentially be offset by increased play producing no net change for higher-risk players.

Conclusions

1. Players accepted the card based system for VLTs.
2. The RGD system provided on-going value to a significant proportion of regular players.
3. Use of the features was associated with increased play value (e.g. *longer play sessions, higher cash-outs, and more winning sessions*) and decreased amount spent.
4. There was a positive impact detected for players that was consistent with NSGC's objective '*to assist players to make more informed decisions about their gambling'*.
5. There were no significant negative RG impacts detected by risk for problem gambling, although Problem Gamblers appeared to respond to and to use the features differently and in some cases may use reductions in per session expenditures to play more often.

Recommendations

Recommendation One

Introduce a player tracking system for the multi-channel video lottery program in Nova Scotia with mandatory registration, voluntary access to the various RG features and appropriate safeguards to monitor impact on a continuous basis.

Recommendation Two

Incorporate a program communication and stakeholder education strategy to promote and support use of the RG features as play management and information tools (e.g. '*informed choice', 'play limits', 'self-exclusion')*, especially among high-risk players.

Recommendation Three

In addition to the current, voluntary RG features, consider using player tracking system to implement the capacity for an involuntary 'safety-net' that will proactively alert players to risk factors or changes in risk associated with their play patterns.

Recommendation Four

After implementing the player tracking system, gather baseline information on player behaviors (e.g. *establish benchmarks*) before activating certain RG features such as 'Live Action', in order to confirm the impact of such feature use among the various player groups.

Recommendation Five

Continue to conduct additional research to explore player behaviour and response to the system in order to inform and support VLT program management and the process for province–wide implementation.