



CENTRE FOR THE
ADVANCEMENT OF
BEST PRACTICES

INSIGHT 2009

Play Information &
Management System



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PREAMBLE

THE RGC CENTRE FOR THE ADVANCEMENT OF BEST PRACTICES is a division of the Responsible Gambling Council, which promotes the identification and adoption of best practices to reduce the incidence of problem gambling. The Centre undertakes independent research and analysis of best practices in responsible gambling, prevention and risk reduction measures.

RGC wishes to thank the Gaming Policy and Enforcement Branch (B.C.), the British Columbia Lottery Corporation (B.C.), the Alberta Gaming and Liquor Commission, the Saskatchewan Liquor and Gaming Authority, the Manitoba Lotteries Corporation, the Ontario Lottery and Gaming Corporation and the Atlantic Lottery Corporation for the financial support for this investigation and report.

RGC also thanks the many individuals who contributed to the Review. These include Techlink Entertainment for providing the technology used in the focus groups, the focus group participants from across Canada and the technology specialists and experts from North America, Europe and Australia who attended the Insight Forum 2008.

While this project results from the contributions of many, the RGC assumes responsibility for its content.

EXECUTIVE SUMMARY

Responses to problem gambling lie on a spectrum. At one end, are universal strategies that focus on the general population, for instance, to raise awareness of the risks associated with gambling and ways to avoid these risks. At the other end, are interventions with individuals showing signs of problematic behavior. There is, as well, a growing middle-region of this spectrum. This includes what this report terms “play information and management systems” – features or tools that can be incorporated into electronic gaming machines and, potentially, other forms of gaming, to enable players to more easily keep track of their play and manage their gambling decisions.

To date, the use of player cards is the most common vehicle for the introduction of these play information and management systems. Typically, EGMs in gaming environments are equipped with a card reader providing access to a central server where play information is stored. The swipe of the card in the card reader links players to their personal information, which can be accessed through the EGM. The cards themselves can resemble credit cards with magnetic strips or other devices such as USB keys or scan-tags. An alternative is the “smart card” where a player’s personal information is stored on the card itself through a microchip. Similar to the central computer option, personal information can be accessed via touch-screens on the EGM.

Several jurisdictions, including Norway, Sweden, some of the Australian States and the Province of Nova Scotia, have implemented varying models of play information and management systems with positive and encouraging results. Many other jurisdictions are now actively investigating their potential usefulness.

This report examines the use of play information and management systems, recognizing that they are still in an early stage of development and not fully operational in any form of venue-based gaming.

INFORMATION GATHERING

In preparing this report, the RGC Centre for the Advancement of Best Practices gathered and analyzed information from a wide range of sources, including research literature and evaluative studies, interviews with technology experts, focus groups with regular gamblers and an RGC Insight Forum, bringing together a wide spectrum of participants to identify and explore the key issues with regard to play information and management systems. These included the configuration and content of features, the technological demands of establishing such systems, the acceptability of cards by the gambling public and a host of implementation topics. Among the most important issues were the players’ privacy concerns associated with the collection and storage of information and the issue of mandatory versus voluntary use of player cards.

The review also benefited from the considerable information and advice provided by those who have direct experience in designing and implementing play information and management systems in Australia, Sweden, Norway and Nova Scotia.

THE TYPICAL FEATURES OFFERED IN PLAY INFORMATION AND MANAGEMENT SYSTEMS

While there is some variation in the content and mechanics of the Play Information and Management Systems currently in place, virtually all offer players some combination of the following five features:

1. **Play Activity Report:** A historical record of the amount of time and/or money the player has spent within a given time period.

2. **Current Session Feedback:** A running total of time and/or money spent during an active session.
3. **Limit Setting:** The opportunity to set time and/or money limits prior to participation in gambling.
4. **Timeouts:** The ability for players to ban themselves from gambling for a certain period of time.
5. **Risk Assessment:** An assessment of a gambler's risk level based on play patterns or a self-administered test.

LEARNING FROM EXPERIENCE

This report draws heavily on the experiences of four jurisdictions that currently have, or will have, such a system in place: Nova Scotia, Sweden, Norway and Australia. While there is variation in how these jurisdictions have configured their systems, they have all introduced tools designed to enable players to keep track of their play and manage their gambling decisions.

1. NOVA SCOTIA

In 2009, Nova Scotia is implementing a province-wide player card system for its video lottery network, called the Informed Player Choice System (IPCS). The IPCS is the product of a lengthy pilot and evaluation project that started with a pilot test of the Responsible Gaming Device (RGD) – a VLT player card that provides the following features: play activity summary, money and time limit setting and timeouts. The RGD was subject to an 18-month three-study evaluation on the impact on VLT players' attitudes and behaviors. Positive findings reported from all three studies led to the decision to launch an updated version of IPCS in 2009.

2. SWEDEN

As a part of its responsible gambling strategy, Sweden launched a player card, Spelkortet (literally: player card), for its online poker website, lottery tickets and bingo. Card use is mandatory for online gaming but optional for lottery tickets and bingo. The play management features offered through the card are money and time limit setting, timeouts and risk assessment. In addition, the Spelkortet card allows players to transfer money onto the card from their bank accounts and winnings to be automatically transferred into the players' bank accounts.

3. NORWAY

In Norway, VLTs (which are referred to as Interactive Video Terminals, or IVTs) were privately operated until 2003 and subsequently taken over by the state-owned gaming provider, Norsk Tipping.

Under the new system introduced by Norsk Tipping, a player card is now mandatory for IVTs and online games, and optional for lottery tickets. The card offers the following features: play summaries, money and time limit setting, timeouts and risk assessment (although play summaries and timeouts are not available for online games and lottery tickets). All cards have a universal money spending limit but players are able to set lower limits. The system is cashless in that player cards are used to make gaming transactions. Players can transfer money between the card and the account.

4. AUSTRALIA

Following several government inquiries into the possible effectiveness of play management systems (which were first flagged as a possible tool to help gamblers

manage by the Productivity Commission in 1999), several states are now encouraging operators to adopt such systems.

Card-based EGM play has spread to many states, often through government mandates to provide play summaries and limit-setting tools for players. Gambling venues in Victoria, Queensland, South Australia and New South Wales have, or are developing, play management systems; none, however, are state-wide. Most of the systems have been additions to pre-existing loyalty club programs and cashless EGM systems.

WOULD THE INTRODUCTION OF PLAY INFORMATION AND MANAGEMENT SYSTEMS BE USEFUL IN CANADA?

On the whole, the existing experimentation and research provides considerable room for optimism. The research demonstrates player support for using technology to assist gamblers with their play. Gamblers from the RGC focus groups also felt that there would be many benefits for the introduction of some form of player card system that used technological innovations to help reduce the risk of gambling problems. This optimism was echoed in the discussions of the Insight Forum.

However, it is quite clear that there are a number of very important considerations and caveats that are critical to the introduction of any form of play information and management system. The considerations fall into three categories: the features to be offered, the protection of privacy and implementation issues.

FEATURES TO BE OFFERED

One of the most important considerations when designing a play information and management system is the careful planning of the features to be included. The features discussed in this report are primarily intended to be tools for the player. Most often, they are preventative, i.e., intended to help players to maintain awareness of their play and to keep it within safe bounds. Sweden, on the other hand, does include a self-assessment feature that will allow players to receive direct feedback about their play, or permit the gaming corporation to monitor their play and provide them with feedback. This latter tracking feature is undoubtedly the most potentially contentious.

1. PLAY ACTIVITY REPORT

The goal of providing an account of an individual's play activity is to provide accurate information so that gamblers can make informed choices about their gambling. Studies from several jurisdictions show that gamblers support the idea of having reports of their play activity. It is, in fact, the most used of the features.

Play activity reports do not necessarily have to be provided exclusively through a card-based system while the player is actively playing the machine. In fact, it may be preferable for players to be able to access such information online as they would access their banking records.

2. CURRENT SESSION FEEDBACK

Current session feedback is a real-time running total of time and/or money spent during an active session. Players receive information in the form of a "play meter" that allows them to see their spending in real time. The obvious goal of such feedback is to keep players aware of their spending on an ongoing basis. Such feedback can be configured in several ways with respect to the depth of information provided but, at a minimum, it usually enables players to see how much money they have won or lost within a current playing session.

3. LIMIT SETTING (PRE-COMMITMENT)

The purpose of a limit-setting feature is to enable gamblers to decide how much money and time they will spend before they gamble. Many years ago, the Australian gambling research pioneer, Mark Dickerson, pointed out the difficulty in making rational decisions while caught up in the excitement of gambling. Limit Setting, or pre-commitment, allows players to decide what they intend to spend in advance and thereby reduce the chance that they will overspend their limits. Limit-setting options are usually associated with an action taken at the beginning of gambling session at a gaming venue, but such pre-commitment could also be completed online in the future.

In general, the limit-setting capacity of player cards allows players to preset time and/or money limits for a session, day, week, month or year.

It is one thing to set a limit, but another to reach it. Typically, when players reach their limit, the system must notify them. In the case of EGMs, the machine can do this by locking players out (i.e., stopping the machine). This would always have to be preceded by some form of information to the players that they were reaching the limit they set.

It is very important that players not be embarrassed when they reach their preset play limits. They may be playing with friends or a spouse, or in other circumstances that demand a discrete approach to ending their play.

The Insight Forum and focus groups conducted as part of this analysis spent considerable time on the issue of warnings or pop-up messages and shutdowns. Several options were discussed. One option, the least intrusive, would be to provide a pop-up message and players could determine whether they wanted to take action or ignore the message. Another option would be a warning and a small grace period over the limit that had been set, followed by a shutdown. Some suggested players reaching their limit might go somewhere in the venue such as a kiosk to reset their limit. There was a clear consensus in both the focus groups and the forum that a limit is a limit. When a player reaches the predetermined limit, they should not be allowed to continue gambling for that session.

4. TIMEOUTS

Through timeouts, players can use the technology to ban themselves from play for a certain period of time. There was strong support in RGC's focus groups for the timeout feature. When told that it could be possible with player cards to restrict play for a period of time, many said that they would use the option and thought it would give them an opportunity to "cool off" and take a break. This is another option that could be set up on-site or over the Internet.

5. RISK ASSESSMENT

Risk assessment offered as a play information and management feature involves providing gambling-risk information that is specific to the player. Such a risk assessment can be implemented in several ways with varying degrees of complexity.

The assessment can be done as an onscreen self-test (available in Sweden and Norway) where players answer a survey about their gambling and other related questions. The survey assesses the players' risk level for problem gambling based on their self-reported responses.

The other type of risk assessment currently in place in Sweden is a computer-based play analytics program that analyzes a player's actual play activity. Using a computer algorithm, the program is able to calculate a player's problem gambling risk level. Those who are gambling problematically, or are at risk of gambling problems, can be alerted.

Beyond the two approaches to the risk assessment process itself, there are two general ways that the information generated from computer-based analysis can be used. It can be provided to a player only or, with a player's approval, it can be provided to the gaming provider.

The provision of self-assessment tools and feedback to players for their own use is much less contentious than the operator-tracking alternative.

Making players' risk assessment information available to gaming operators may raise liability concerns that are beyond the scope of this study. However, the system capable of gathering extensive play information for marketing purposes is essentially the same system that would be able to track and assess problematic player behavior. So the issue of liability may already be on the table as the new analytical technologies are brought on stream.

PROTECTION OF PRIVACY

The success of any player card system will depend to a large extent on the assurance of security and privacy for the player. The issue of privacy is one of the most commonly cited in the evaluations of current card-based systems and in the RGC focus groups as a barrier to the acceptance of player cards. Players have reported concerns that information will be used by the operator to track their data to encourage more spending, or by governments in a host of ways, including the investigation of tax returns and claims.

It is critical that great attention and technological resources are paid in order to create a secure and private system. It is also equally important that players perceive the system to be private, secure and reliable.

KEY IMPLEMENTATION ISSUES

The features of any play information and management system are only part of the picture. At least equally important are the issues associated with the implementation. These issues can be grouped into the following five general areas:

- Mandatory versus voluntary use
- Ease of use
- Technological implications and requirements
- Incentives, marketing and promotions
- Economic costs

1. MANDATORY VERSUS VOLUNTARY USE

Play information and management systems can be implemented on either a voluntary or a mandatory basis. If it is mandatory to use a card, players must use the card in order to play. Mandatory use of a card, however, does not necessarily require a person to use the features to play. The system could be structured so that the actual use of the features would be voluntary.

The debate around voluntary versus mandatory use pertains mostly to use of the card itself. The mandatory use of any card is rare in the Canadian context. The only examples that readily come to mind are universal programs such as drivers' licenses and health cards – both associated with government requirements. These cards come with significant and obvious associated benefits attached. They are not attached to a consumer product. They are legally mandated. Player cards, as discussed in this report, are not universal or legally mandated. They do not, in themselves, come with immediate and obvious benefits to all who use them. They are a safety measure.

A mandatory card gives all players the opportunity to use, or not use, the available features. It integrates the decisions about safer play options directly into the games. If card use is not mandatory, some will choose to use the cards and some will not. This will create a gaming environment where those who have chosen the cards can easily circumvent them simply by opting to play without the card. This undermines the rationale for using a card in the first place. As well, if cards are purely voluntary, there could be a negative perception associated with those who choose to use them. These people could be seen as people with gambling problems or people less able to control their gambling.

Beyond the direct options for the player, the introduction of a mandatory player card presents opportunities for gaming providers to more effectively reduce the risk of access by patrons who are self-excluded or young people under legal age limit.

Yet there are dissenting views. Gamblers in some studies have expressed concern about the mandatory use of player cards. Some people in the RGC focus groups did not like the idea of additional cards. A few of those who disagreed with mandatory cards did so vigorously.

Most jurisdictions that currently have, or are introducing, mandatory player card systems have introduced them on a voluntary basis and then transitioned them to mandatory status. The phase-in approach was also endorsed by several participants at RGC's Insight Forum, who suggested that player cards would need to be phased in over a period of five years in order to facilitate the significant change in players that has to take place. One Insight Forum participant compared the phase-in to the experience in automated banking where it took "a long time for people to acquire the behavior to get used to bank cards; it didn't happen over night."

2. EASE OF USE

It is important that the decisions and features incorporated in any card be set up in a manner that maintains as much simplicity as possible. Excessive or complicated information options will undermine the overall use of any technology. Moreover, ease of card enrollment is essential. On the gaming floor, staff typically has little time to explain the card and convince a person to enroll. If a player decides to enroll, enrolment must take place quickly and conveniently, while allaying any potential concerns and issues (e.g., privacy).

Perceived problems among card users, particularly in the early stages, can undermine the successful employment of the system in the long run, regardless of how good the concept may actually be.

Many gaming venues attract visitors from beyond the local community (e.g., destination gaming venues). Some of those players may be regular patrons, particularly from the United States, where player cards are not required and local alternative gambling venues are available. Others may be occasional or one-time visitors. Requiring these players to use a card, or the feature, may be inconvenient and burdensome, particularly if they play only once or just a few times. A mandatory policy for card and/or feature use would be seen as restrictive, inconvenient and bothersome to them.

If cards were mandatory, foreign visitors would need to be provided with an easily accessed temporary card. This would mean some form of registration process involving identification and the issuing of a single-use card.

3. TECHNOLOGICAL IMPLICATIONS AND REQUIREMENTS

Most of the discussion in this report has focused on the "content" of play information and management systems, i.e., the types of information available to the player, the choices the player could make, the structure of the decision process and so forth. It is very important

to recognize that in spite of the considerable work undertaken to date, the widespread rollout of such systems is only in its infancy.

While well beyond the scope of this report, the development and implementation of play information and management systems represents a very significant technological challenge. Their introduction requires a myriad of programmatic and technical decisions regarding the choices to be offered, how to structure those choices, how to communicate complex concepts in straightforward ways and many more.

The demands of these tasks, as well as the integration of new features within gaming machines and, potentially, kiosks and online will require countless hours of careful architecture planning and development. The technological demands of such systems cannot be overestimated.

4. INCENTIVES, MARKETING AND PROMOTIONS

The introduction of player cards, whether mandatory or voluntary, as well as the use of features, presents many challenges for gaming operators. One of the biggest challenges is persuading players to use the features. Gaming safety features, like seat belts and many other safety measures, are not rewarding in themselves. Players who do not believe they will ever have a problem will not see immediate benefits.

In the focus groups and the forum there was a widespread consensus that the introduction of features would need an extensive and well-crafted promotional strategy including incentives – if possible, incentives that do not encourage further spending (e.g., providing coupons for refreshments, merchandise or entertainment).

Some gaming providers, including Norsk Tipping and Svenska Spel, have included certain gambling-related incentives such as free games or access to restricted games as incentives to promote the use of card features. In March 2009, Norsk Tipping introduced a new incentive, Grassrootshare, that allows players to register their cards directly with their favourite local cause, and Norsk Tipping will contribute five percent of the stake to that team or organization.

One Versus Two Cards

In many jurisdictions and venues, player loyalty cards are now used as a marketing tool to provide players with rewards and to encourage more play.

The introduction of a new player card system with responsible gambling features would potentially introduce an additional card for the customers.

Most larger-sized gaming venues have some type of a loyalty program whereby players can earn additional goods, services and other items of value based on their play activity. Player activity is typically monitored and tracked through a card-based system that offers players rewards or credits based on their play. Sweden and Norway have both play information and management features and loyalty features on their player cards.

Card-based player loyalty programs provide an existing technological infrastructure that can add on features, particularly play activity reports. This is because such programs are account-based and already monitor play activity for marketing purposes. In addition, the presence of such programs within a gaming establishment increases the chance of gaining player trust, because players are already used to having their play activity tracked. Privacy was not a major concern among RGC focus group participants who had player loyalty cards and were accustomed to having their activity tracked.

Since adoption of a new card would likely take considerable initiative and persuasion over several years, it appears more desirable to combine the features of the player card with the loyalty card (where loyalty cards currently exist).

The single card approach would also have implications for the mandatory versus voluntary issue in that a single, multi-purpose card could be created with the potential for the player control features, even if a player only chose to use the promotional features at first.

Account Based Play

In Norway and Sweden the use of a card with play information and management features has been linked to account-based play. That means that a player's card has three roles. It incorporates play safety features, loyalty features and a player account. The integration of these uses has pros and cons. On the pro side, it gives the players much greater incentives to use cards including the play information and management features. Gaming providers have much greater scope to provide incentives to players to use these features. It is also much more likely that players will accept a card that has multiple uses and perceived benefits.

On the other hand, the integration of a player account could present an ethical dilemma in that it could make it easier for a gambler with problems to access funds.

This problem, however, is a two-edged sword. Player accounts allow players to transfer funds from bank accounts to their gambling accounts and vice-versa. Could this not add to and, perhaps, facilitate a gambling problem? A lot depends on the way such accounts are set up. With careful structuring, account-based play could become a useful tool to help the gambler and the operator create another layer of safety measures. Where players set up play accounts, they make a decision about how much they wish to use for gambling. The gaming provider is also a party to the account, since they are the account-holding institution. The structuring of player accounts is important and can be a further support for the gambling public. Accounts can build in a variety of safeguards such as deposit limits and transfer limits. They can prohibit increases in player accounts or instant cash transfers during gambling sessions. They can identify acceptable sources of funds and limit transfers that are, in fact, adding to debt, e.g., transfers from lines of credit or credit cards.

5. SYSTEM COSTS

To implement a card system, a number of significant costs are involved, including the development of new machines, replacement or conversion of existing machines, the cost of the cards (or USB or RFID systems), the registration process, staff training and potential revenue declines.

Because of the proprietary nature of the card systems, there is only limited information available on the cost of introducing play information and management systems.

Nova Scotia estimates that the system will cost approximately \$25 million over five years. Norway has recently released a new generation of VLTs of which the development and implementation cost \$144 million. It also cost an additional \$63 million to develop the new games for the system.

THE LAST WORD

The introduction of play information and management features would undoubtedly benefit those players who actively use the features to help them control their play. Like all safety measures, they would help some of the people some of the time. A lot of the success of such measures would be dependent upon the way they were constructed and the way they were marketed to the gambling public.

Play information and management systems represent a new and rapidly evolving field – one that is likely to look quite different five years into the future. It is therefore critical that any decisions about these systems ensure future flexibility in the way the systems are configured and offered to customers. Executed well, they have the potential to put excellent tools in the hands of players and have minimal impact on those who choose not to use them.

BACKGROUND

Responses to problem gambling lie on a spectrum of approaches, all designed to minimize the potential harms associated with gambling. At one end, are universal strategies that focus on the general population, for instance, to raise awareness of the risks associated with gambling and ways to avoid these risks. At the other end, are interventions with individuals showing signs of problematic behavior. There is, as well, a growing middle-region of this spectrum comprised of tools designed to enable players to keep track of their play and their gambling decisions.

This report examines this emergent and rapidly evolving field, referred to herein as “play information and management systems.”¹ This analysis occurs at a time of considerable interest in this trend. The experiences of jurisdictions that have implemented play information and management systems, variously referred to as “pre-commitment,” “smart cards” and “card-based play,” have demonstrated positive and encouraging results. Play information and management systems build on emerging technologies to fill an important gap in the problem gambling safety net, placing greater control in the hands of the individual gambler.

The concept of pre-commitment first emerged in the gambling field in the 1990s. Referring to EGM gambling, Dickerson (2003a; 2003b) reasoned that the ability to make rational decisions about play was impaired by the emotional and physiological responses associated with gambling. To counteract this problem, Dickerson suggested that decisions about spending limits be made prior to actual participation in gambling. The Australian Productivity Commission (1999) identified player cards as a tool for assisting gamblers to manage their play and set limits prior to gambling.

Since this early theorizing, the notion of pre-commitment has expanded beyond the original concept to incorporate a number of additional features. This review examines five play information and management features associated with gambling on electronic gaming machines (EGMs):

1. **Play Activity Report:** A historical record of the amount of time and/or money the player has spent within a given time period.
2. **Current Session Feedback:** A running total of time and/or money spent during an active session.
3. **Limit Setting:** The opportunity to set time and/or money limits prior to participation in gambling.
4. **Timeouts:** The ability for players to ban themselves from gambling for a certain period of time.
5. **Risk Assessment:** An assessment of a gambler’s risk level based on play patterns or a self-administered test.

To date, the use of player cards is the most common vehicle for the introduction of these play information and management systems. Typically, EGMs in gaming environments are equipped with a card reader providing access to a central server. The swipe of the card in the card reader links the player to their personal information, which can be accessed through the EGM. The cards themselves can resemble (in form and function) credit cards with magnetic strips or other devices such as USB keys and scan-tags that function with near-field radio frequency technology. Player cards that function as access keys to the central server can enable the player to use a range of self-monitoring and control features such as limit setting and timeouts.

¹ The review reported in this document was originally titled “Pre-commitment and Player Card Technologies.” The title of the project was changed to more accurately reflect the outcome and emphasis of the study. While player card technologies are central to the implementation of any play information and management system, the technology is a vehicle to an end. This report is primarily focused on the purpose and features of the system, not the technical requirements.

An alternative is the “smart card” where a player’s personal information is stored on the card itself through a microchip. Similar to the central computer option, personal information can be accessed via touch-screens on the EGM. One of the areas of difference between storing personal data on a central server versus a smartcard is security. If a player loses their smart card, they also lose all of the personal information that has been stored.

In addition to decisions about the actual technology, and the associated costs of modifying machines, there are a number of other implementation issues that need to be considered by any organization or jurisdiction considering the introduction of any form of play information and management systems. Among the most important are players’ privacy concerns associated with the collection and storage of information and the issue of mandatory versus voluntary use of the cards and the embedded features.

This report examines the current and potential use of play information and management systems, recognizing that this aspect of responsible gambling programs is still in an early stage of development and not fully operational in any form of venue-based gaming.

In this review, RGC Centre for the Advancement of Best Practices gathers and analyzes the information that is currently available. That information comes from a wide spectrum of sources to identify and address the issues of most importance with regard to player card systems; specifically, the configuration and content of features, the protection of privacy and a host of implementation decisions.

INFORMATION SOURCES

This analysis and report draws on numerous sources to understand the intricacies of play information and management systems.

LITERATURE AND TECHNOLOGY

To set the stage for this review, RGC staff conducted a thorough examination of the academic research and governmental reports related to player cards and responsible gambling features in Canada and around the world. To become familiar with the technologies that had been developed to date, interviews were conducted with individuals who had extensive experience with responsible gambling technology development, research and implementation both in Canada and abroad. For an overview of some of the technology companies that offer play management systems, please refer to Appendix A.

JURISDICTIONS WITH PLAY INFORMATION AND MANAGEMENT SYSTEM EXPERIENCE

This report draws heavily on the experiences of four jurisdictions that currently have, or will have, such a system in place: Nova Scotia, Sweden, Norway and Australia. While there is significant variation in how these jurisdictions have configured their systems, they have all introduced tools designed to enable players to keep track of their play and their gambling decisions.² The reader is encouraged to consult Appendix B for a detailed description of the systems in each jurisdiction.

1. NOVA SCOTIA

In 2009, Nova Scotia is implementing a province-wide player card system for its video lottery network, called the Informed Player Choice System (IPCS). The IPCS is the product of a lengthy pilot and evaluation project that started with a pilot test of the Responsible Gaming Device (RGD) – a VLT player card that provides the following features: play activity summary, money and time limit setting and timeouts. The RGD was subject to an 18-month three-study evaluation on the impact on VLT players' attitudes and behaviors. Positive findings reported from all three studies led to the decision to launch an updated version of IPCS in 2009.

NSGC is implementing the IPCS with a voluntary enrolment model, where players can choose to register in the system or continue to play without using a card. Extensive evaluation of the IPCS has started, with the full evaluation expected to be completed in 2011. All of the findings reported on Nova Scotia's player card experience in this report are taken from the evaluation of the earlier RGD.

Research/Evaluation

- Omnifacts Bristol, 2005, 2007
- Bernhard, Lucas & Jang, 2006
- Schellinck & Schrans, 2007

The evaluations in Nova Scotia involved a four-stage process that analyzed VLT player perceptions, opinions and gambling behavior in relation to the RGD in various contexts. In the Bernhard et al (2006) study, five focus groups were conducted with gamblers in Las Vegas, Nevada in order to gauge their impressions of playing a gaming machine with an attached RGD. The research occurred in a laboratory setting. The Omnifacts Bristol (2005; 2007) studies present findings from surveys, focus groups and play data from

² These systems are different from those offered in jurisdictions such as Saskatchewan, Switzerland and the Netherlands where the gaming provider gathers the player data and can track play patterns that may indicate that the player is having a problem.

panelists taking part in Stage 1 (a small group test) and Stage 3 (a larger field test) of the four-stage evaluation process. Stage 1 investigated the RGD's usability and functionality. Stage 2 tested system modifications incorporated after the Stage 1 research. Stages 3 and 4 examined the RGD's effectiveness in encouraging responsible VLT play. Schellinck and Schrans (2007) analyzed actual play data for all RGD users within the field test setting (i.e., Stage 3) and sought to assess the impact of RG feature use on VLT play activity.

2. SWEDEN

As a part of its responsible gambling strategy, Sweden launched a player card, Spelkortet (literally: player card), for its online poker website, lottery tickets and bingo. Card use is mandatory for online gaming but optional for lottery tickets and bingo. The play information and management features offered through the card are money and time limit setting, timeouts and risk assessment. The Spelkortet card allows players to transfer money onto the card from their bank accounts and winnings to be automatically transferred into the players' bank accounts.

Unlike Nova Scotia's RGD, it is mandatory that players set money and time limits while playing on Svenska Spel's poker website. Players can, however, set whatever money or time limits they please. So, for instance, they can choose to set a limit so high that it effectively disables the limit-setting feature (e.g., by setting a time limit of 24 hours per day, or by setting an unreachably high money limit).

Svenska Spel believes that players tend to respect limits that they set themselves more than limits that are imposed on them (Strom, 2008a).

Research/Evaluation

- Internet Poker Committee, 2008

The Internet Poker Committee was tasked with evaluating Svenska Spel's Internet poker site and investigating, in particular, the use and effectiveness of the features. The committee surveyed approximately 1,000 Internet poker players who played on Svenska Spel's poker site. The survey data was analyzed with the poker players' actual play data to assess the use and effectiveness of the features.

3. NORWAY

In Norway, VLTs (which are referred to as Interactive Video Terminals, or IVTs) were privately operated until 2003 when alarm over the lack of responsibility by VLT operators led the Norwegian parliament to grant exclusive VLT operating rights to Norway's state gambling operator, Norsk Tipping. In the interests of social responsibility and in line with several new restrictive policies on VLT gambling,³ Norsk Tipping decided to employ a player card system that allows both government and self-regulation of players.

Under the new system, a player card is mandatory for IVTs and online games, and optional for lottery tickets. The card offers the following features: play summaries, money and time limit setting, timeouts and risk assessment (although play summaries and timeouts are not available for online games and lottery tickets). All cards have a universal money spending limit, but players are able to set lower limits. The system is cashless in that player cards are used to make gaming transactions. The cards are linked to a player's bank account and money can be transferred between the card and the account.

Research/Evaluation

- Sjolstad 2008a, 2008b, 2009

³ These policies include decreased venue access, prohibition of cash or credit VLT play; betting and prize limits; daily and monthly loss limits; and mandatory cooling off periods (Australasian Gaming Council, 2009).

The information presented in this report on Norway's play card system was obtained primarily through personal communication with Arve Sjolstad, Communications Manager, Norsk Tipping, his RGC Forum presentation (Sjolstad, 2008a; 2008b) and a brief executive summary of a pilot project that evaluated their new Interactive Video Terminals in 2008 (Sjolstad, 2009). The full report has yet to be translated into English.

The pilot project included 16 terminals in four towns in the district around the lake Mjøsa (Hamar, Elverum, Stange and Lillehammer) from August 26th to November 30th 2008. Figures and data were taken from Norsk Tipping's player database, accounting system and a qualitative field study carried out by Research International in November 2008. The evaluation included measuring card and feature use and testing measures to limit problem gambling.

4. AUSTRALIA

Most gambling in Australia is run by private organizations and regulated by individual state governments, which results in a variety of RG policies and programs across the country. Following several government inquiries into the possible effectiveness of play management systems (which were first flagged as a possible tool to help gamblers manage their betting by the Productivity Commission in 1999), several states are now encouraging operators to adopt such systems.

Card-based EGM play has spread to many states, often through government mandates to provide play summaries and limit-setting tools for players. Gambling venues in Victoria, Queensland, South Australia and New South Wales have, or are developing, play management systems; none, however, are state-wide. New South Wales, for example, has a voluntary system that is provided on a venue-by-venue basis. Most of the systems have been additions to pre-existing loyalty club programs and cashless EGM systems.

Research/Evaluation

- McDonnell-Phillips, 2006
- Nisbet 2005a, 2005b, 2006, 2009a, 2009b
- Independent Pricing and Regulatory Tribunal, 2004
- Independent Gambling Authority, 2005

There are currently no publicly available evaluations of play management systems in Australia,⁴ although there have been two studies examining pre-commitment perceptions and behaviors. McDonnell-Phillips (2006) conducted a survey of gamblers across Australia in order to study their perceptions of pre-commitment technologies. In total, 482 surveys were conducted, with approximately 60 respondents from each Australian state/territory jurisdiction. Nisbet (2005a; 2005b; 2006; 2009a; 2009b) conducted a series of studies on pre-commitment and cashless gambling technologies in New South Wales. These studies have relied on in-depth interviews with key stakeholders (including manufacturers, community and social welfare groups, gambling venue managers and regulators), as well as gamblers.

Although not evaluative research, there were major inquiries into player card technologies that informed player card policy and discussion in Australia. The Independent Pricing and Regulatory Tribunal (2004) study looked at the potential impact of pre-commitment and player cards as part of a larger literature review of the efficacy of a wide variety of responsible gambling initiatives. The Independent Gambling Authority (2005) review investigated how smart card technology might be implemented to significantly

⁴ Queensland is currently conducting field trials for their card technology (Australasian Gaming Council, 2009)

reduce problem gambling. In seeking to answer this question, the Authority solicited submissions from a range of stakeholders including venue operators, technology developers, and social health and problem/responsible gambling advocates.

RGC FOCUS GROUPS

RGC Centre for the Advancement of Best Practices conducted focus groups across Canada in order to study gamblers' perceptions and opinions of play management systems.

The RGC's study consisted of 15 focus groups with EGM players in six provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario and Prince Edward Island). Six focus groups were conducted with casual gamblers, four with frequent gamblers and five with mixed groups of frequent and casual gamblers. Focus group sessions lasted about two hours and consisted primarily of a brief presentation showing how pre-commitment and player feedback technology can work, followed by a group discussion on some of the issues surrounding this technology. The focus group sessions also included pre- and post-focus group questionnaires to assess gambling behavior and impressions of the technology.

INSIGHT FORUM

The RGC Centre for the Advancement of Best Practices conducted a two-day forum in Toronto with the participation of international experts on responsible gambling technologies, including researchers, operators, regulators, policy makers, treatment providers and gamblers. The list of participants is located in Appendix C.

During the Forum, representatives from Nova Scotia, Sweden and Norway shared their experience testing or implementing play management technologies. These presentations were followed by sessions where the attendees discussed and explored the factors that might impede and/or facilitate the implementation of play management system features. Extensive notes were taken during all parts of the forum and key themes were identified.

EXPERIENCE AND RESEARCH - SYSTEM FEATURES

This chapter provides an overview of research observations and player feedback related to the use of play information and management system features and perceived and actual impact on gambling behavior.

PLAY INFORMATION AND MANAGEMENT SYSTEM FEATURES

The following section examines findings and experience related to each of the five play management features.

1. PLAY ACTIVITY REPORT

The play activity report is a historical summary of a person's gambling. The period covered can range from a summary of the previous session to a summary of a specific past time period (i.e., day, week, month or year). Various summary options are possible, including time expended, deposits (cash-in) and withdrawals (cash-out), wins and losses and spending-limit status or updates (i.e., how close a player is to spending limit). As it is fairly easy and common for gamblers to lose track of their gambling time and money expenditures, the play activity report provides them with an accurate accounting.

Reports from several jurisdictions show that gamblers appreciate the idea of play activity reports. Most participants in the RGC focus groups held across Canada (88 percent) reported they would like to get a summary of their gambling for a specific period of time. In Sweden, gamblers told Svenska Spel that the play information and management system feature they most wanted added was one that would provide a history of their financial results. Svenska Spel has since implemented the feature. Similar high interest in play activity reports was expressed in a player card study in Australia, which found that 67 percent of respondents believed that the information would help them to manage expenditures (Nisbet, 2005a).

Further support for this feature comes from field research conducted in Nova Scotia. The field test trials of the Nova Scotia RGD show play summaries to be the most popular feature used, with 68 percent of regular gamblers viewing the day, week or month summaries (Schellinck & Schrans, 2007). In the RGD panel study that followed players over a six-month trial period, several panelists described the play summary features as an "eye opener," helping them to appreciate how much money they were spending on VLTs. Support for play summaries was strongest among frequent gamblers (Omnifacts Bristol, 2005).

While gamblers seem to support a play activity report feature, some researchers have raised the possibility that play activity reports may inadvertently prompt some players to attempt to recover losses, once they see how much they have lost (Bernhard et al., 2006; Schellinck & Schrans, 2007). For instance, nine percent of players in the Nova Scotia panel study reported gambling more to try to win back losses after seeing their account summary (Omnifacts Bristol, 2007). This concern was echoed by one participant in a statement made in the RGC focus groups regarding a play summary report:

You could look at it and you might say I have to recover all this money that I lost [...] like you have to go back and win it.

Others have suggested that this feature could feed irrational beliefs and gambling myths. Some focus group participants in Bernhard et al.'s (2006) study in Las Vegas stated that they would use the play summary feature to "determine" which machines were "hot". In the RGC focus groups, one participant suggested the play activity reports could help him win:

If this printout could show me how much I could win on a certain machine, it would help me.

Ensuring that players understand how the feature should and shouldn't be used is an important aspect of implementation. Research with Australian gamblers found accessibility and promotion to be important factors in using this feature. In a study of gamblers in New South Wales, while gamblers found the reports beneficial, few requested them, even at a venue where it was possible to request a report through a terminal on the gaming floor (Nisbet, 2005a). The study's author speculates that demand for the play activity reports is related to their promotion and that, at this particular venue, the availability of the play history reports was not mentioned.

2. CURRENT SESSION FEEDBACK

Whereas the play activity report provides an account of what has occurred in the past, current session feedback provides a real-time account of what is happening within the player's current play session. A current session report provides the player with information on the amount of money won or lost and the amount of time spent gambling. Even during a current session, gamblers often underestimate the amount they have gambled. In the RGD panelist study, participants spent three- and seven-times more time and money, respectively, than they estimated (Omnifacts Bristol, 2007).

In the field-testing of the Nova Scotia RGD, 59 percent of regular players obtained current session feedback, at least once. Individuals with gambling problems were more likely to use the current session feedback, while gamblers without problems were more likely to use the play activity reports. The ability to view their current session information appeared to have helped some individuals with gambling problems to stay on budget and reduce the amount spent per session. The decrease in session expenditures, however, was offset by an increase in frequency of play (Schellinck & Schrans, 2007).

3. LIMIT SETTING

Limit setting is a feature that enables a player to set time and money limits. It is often referred to as pre-commitment. The rationale behind this feature is that it can be difficult for people to make rational and informed decisions while gambling due to, for example, overriding emotions and misperceptions about gambling expenditures. Limit setting acts as a guard against making decisions that could lead to overspending (Dickerson, 2003a). Dickerson (2003a) emphasizes that it is important for gamblers to set limits away from the gambling floor, before starting to gamble. Many of RGC's focus group participants said that they would like the option to set their limits at home, possibly online:

*If you have people winning all around you [...] it gets kind of crazy.
So it would be good to have that limit set at home.*

Findings from various studies point to a willingness of many gamblers to use a limit-setting feature. An Australian survey of attitudes towards player cards found that 47 percent of regular gamblers indicated they would try setting limits when playing EGMs (McDonnell-Phillips, 2006). In RGC's focus groups, the vast majority (84 percent) of participants indicated that they were at least somewhat likely to pre-commit to a money limit if this type of feature was available. As well, two-thirds (67 percent) indicated that they were at least somewhat likely to commit to a time limit.

The actual use of limit-setting features varies widely depending on the jurisdiction and the particulars of the play information and management system. In the Nova Scotia RGD field test where the player card was mandatory and features were optional, 11 percent of

gamblers tried the pre-commitment feature at least once during the six-month trial period (Schellinck & Schrans, 2007). However, the panelist research study on the RGD found that overall use of this feature decreased throughout the six-month trial period (Omnifacts Bristol, 2007), suggesting little repeated use of limit setting.

Use of the limit-setting feature was much higher in the evaluation results of Sweden's online poker player card. Although money and time limit setting are technically mandatory for this card, the function is essentially voluntary because players can set them so high that they are unreachable. With this option, 67 percent of players set practical money limits and 59 percent set practical time limits, suggesting that the majority of players were willing to use the feature to limit their time and money expenditures (Internet Poker Committee, 2008). Furthermore, of the players who had reached their limits, 63 percent reported that they did not play with another poker website and 68 percent did not change their limits (Internet Poker Committee, 2008).

Norway's VLT player card system also has a mandatory limit-setting requirement to play VLTs but, unlike Sweden, imposes a universal limit on all cards (i.e., 2,200 NOK/month [\$390 CDN]). Players can set limits below this amount if they choose. Among players, 1.3 percent opted to set a lower limit (Sjolstad, 2008a).

Players tend to prefer setting money limits over time limits and to prefer shorter time limits (session, day, week) over longer periods (month, year) (McDonnell-Phillips, 2006; Internet Poker Committee, 2008). RGC focus group participants also preferred shorter limits. Some focus group participants reasoned that they did not want to hit a limit early and be unable to gamble.

If you set a limit for the year, it's a good chance it'll be gone by February. You could lose it in the first two weeks.

It has to be a daily limit, because if you set a monthly limit, you can lose it all in one day.

Say you set your limit here in [city], you spend your monthly limit in a couple of weeks, hit it, and then friends come in and want to gamble.

Despite the preference for shorter limits, there was a consensus in the focus groups that having options in specifying the length of limits was very important (see also McDonnell-Phillips, 2006).

When players reach a limit, they must be notified. The machine can either simply shut down, or provide a pop-up message telling them their limit has been reached. Pop-up messages may reduce the frequency of excessive spending by high-risk players (Schellinck & Schrans, 2004). In the RGC focus groups, however, gamblers thought that pop-up messages alone would be insufficient to stop them from gambling if they were engrossed in EGM play. Many participants wanted the machine to stop after their limit had been reached, and thought that this would help them to control their gambling:

I need something to stop me, and not someone just telling me to stop.

My point is for me to be helped. I need a card that will set certain limits. I don't need alert, alert, alert.

If a player is to be notified through some form of alert such as the pop-up message, most (54 percent) would prefer to see the alert onscreen, five percent would prefer to hear the alert and 15 percent would prefer to both see and hear the alert. The Nova Scotia RGD study participants expressed concern that alert messages and other related sound effects could draw unwanted attention to the player (Omnifacts Bristol, 2005).

Participants in the RGC focus groups were somewhat divided about what should happen once a limit had been reached. Almost half (46 percent) preferred to have the game stop automatically, while 37 percent preferred being able to reset their limit. If gamblers are able to reset their limits, a cooling-off period may first be required before the limits are reset. The majority of gamblers from the survey of EGM and TAB gamblers in Australia felt that there should be a mandatory break before being able to reset their limits, although the break should be relatively brief (e.g., 24 hours) (McDonnell-Phillips, 2006).

But could limit setting lead players to gamble more than they would without a limit? The Australian Gaming Council (2005) suggested that gamblers may set higher limits in order to keep their gambling options open. Others have suggested that gamblers may spend more money just to use up their limit (Bernhard et al., 2006; Schellinck & Schrans, 2007). A participant in the RGC focus groups raised this issue as well:

I might think I didn't go this week. I better go and spend all my money on gambling because I've still got all this money left.

However, the evaluation results from the Nova Scotia RGDs did not find evidence of gamblers spending more because of self-set limits (Schellinck & Schrans, 2007).

4. TIMEOUTS

The timeout function allows people to block themselves from playing for a specific time period. It can be used as a “cooling off” measure for players who need an immediate break from gambling or as a means to manage gambling during certain periods (e.g., holidays, payday).

RGC's focus group participants supported the idea of a timeout option. When asked if they would use a player card to restrict play for a period of time (24, 48 or 72 hours) or to ban themselves from playing on certain days or for a period of time, about half of the participants said they were at least somewhat likely to use this feature. Although half said they were not at all likely to use the timeout, or would never use it, even those participants strongly supported timeout as an option for players.

Data on the actual use of a timeout feature from Nova Scotia, Sweden and Norway shows that it is less popular than features such as play activity reports and limit setting. In the Nova Scotia RGD field test, two percent of regular players used the timeout feature during the six-month trial period (Schellinck & Schrans, 2007). Similar usage rates were found in Sweden (five percent) and Norway (two percent) (Internet Poker Committee, 2008; Sjolstad, 2009). The lower usage may be due to the relatively specific appeal of the timeout feature. Based on the experience from Sweden, timeouts are more common among those with gambling problems (Internet Poker Committee, 2008), a relatively small proportion of all gamblers.

Similar to spending limits, players prefer shorter (48 hours) over longer timeouts (Australian Gaming Council, 2005; McDonnell-Phillips, 2006).

This preference for shorter timeouts is consistent with the results from Nova Scotia's RGD field test, where most players (94 percent) who temporarily excluded themselves did so for either the rest of the day or for 48 hours. The researchers raised the possibility, however, that players may have been testing out the shorter timeframes with the intention of selecting a longer time at a later date (Schellinck & Schrans, 2007).

Research on Sweden's Spelkortet suggests that players do abide by a timeout. Three quarters of players who used the timeout feature, and were excluded from the Swedish poker site, stated that they did not play on other online poker sites (Internet Poker Committee, 2008).

5. RISK ASSESSMENT

There are many ways to offer players the opportunity to assess their own level of risk. One approach is the onscreen self-test (available in Sweden and Norway), where players complete a survey about their gambling behavior and other related issues (e.g., relationships with family, work, etc.). Their gambling risk level is subsequently assessed based on their responses. The other type of risk assessment (see Sweden) is a computer-based play analytics program, which analyzes actual play activity that has been tracked electrically through the player card system. Using a computer algorithm program, this assessment calculates players' problem gambling risk level based on their actual play patterns.

According to the RGC focus group feedback, the majority of participants (58 percent) indicated that they would like to receive alerts and information about their gambling risk level. When asked how they would like to be notified if they were assessed to be at-risk, the most common ways were through an onscreen pop-up message (40 percent), a player activity report (35 percent) and a responsible gambling staff member (14 percent). Some participants found the option of having a staff person, or an onscreen alert informing them of a possible problem, to be an invasion of their privacy.

Research on the risk assessment tools in Norway and Sweden suggests that use of these tools is relatively low. The findings from Norway's recent evaluation show that two percent of VLT players completed the online self-test for its VLT players (Sjoldstad, 2008b). In Sweden, where players can opt to have the *Playscan* risk assessment tool turned on to monitor their playing behavior, 10 percent of players chose to turn on the program (Strom, 2008a; 2008b). According to an evaluation of Sweden's Internet poker site, 16.4 percent of players took the self-test risk assessment at least once, and the test was more commonly taken by at-risk players than non-risk players (24.4 percent versus 13.5 percent) (Internet Poker Committee, 2008). Similar to the relatively low use found for timeouts, the lower interest in risk assessment tools may be due to their specific appeal to a relatively small population of gamblers, that is, those who may be worried about their gambling.

There is some limited evidence to suggest that risk assessment information may change a player's gambling behavior. In the research conducted in Sweden, 43.8 percent of players who were identified as experiencing problems or being at-risk of experiencing problems through the self-test risk-assessment tool, said that they had reduced their gambling in response to the results (Internet Poker Committee, 2008).

6. PLAYER ADOPTION OF FEATURES

Data from jurisdictions that have fielded play information and management systems shows considerable variation in actual usage. Prior to the cards becoming mandatory, 92 percent of players in Norway voluntarily used the cards (Sjoldstad, 2008a). In Sweden, where players can effectively disable the mandatory limit-setting feature (by, for example, setting time limits of 24 hours a day or unreachable money limits), most players set realistic time and money limits with the limit-setting feature. During the six-month trial in Nova Scotia, 33 percent of all players used a feature. Usage was most common among regular players (71 percent), the group that accounted for the largest majority of playing time on the machines (78 percent of all play sessions) (Schellinck & Schrans, 2007). In Australia, card use is relatively less common, although state governments are starting to encourage gaming venues to adopt play information and management systems. In two New South Wales Clubs, for instance, only 0.02 percent and 3.8 percent of players used the cards (Nisbet, 2005a). The variability in usage rates is likely related to differences in implementation, a topic that will be discussed in detail.

In a survey study of Australian gamblers, approximately 40 percent of respondents felt that card-based play would help them manage their spending, while 40 percent disagreed (Nisbet, 2005b). In RGC's focus groups of EGM gamblers, participants had mixed reactions to a demonstration of a play information and management system card. Some felt that the card would help them be more aware of their gambling expenditure and to control their gambling. Several participants thought the "shock" value provided from the play activity report might scare them into changing their behavior. Others doubted whether the features would be enough to overcome the often-intense involvement associated with gambling. A few participants suggested that a play information and management system would not help people who already have gambling problems, but may help others from developing future problems. Focus group participants looking at Nova Scotia's RGD expressed similar views about its potential effectiveness. These focus groups came to a rough consensus that the RGD probably would not help players with gambling problems, but that it might help prevent non-problem and at-risk gamblers from developing problems (Bernhard et al., 2006).

Few studies have examined the impact of play information and management systems on actual gambling behavior. The evaluation of Svenska Spel's online poker site shows that gamblers who play exclusively at Svenska Spel have a lower rate of problem gambling than online poker players on other sites – eight percent of all online poker players have gambling problems, compared to three percent of Internet poker players who played exclusively at Svenska Spel (Internet Poker Committee, 2008). This result needs to be viewed with caution and cannot be taken as evidence that the play information and management system decreases problem gambling rates. Svenska Spel gamblers may not represent the population of online gamblers. For instance, Svenska Spel has a higher percentage of women and older players, and a lower percentage of regular players (those who play poker for at least two hours per week). It is also possible that players who value play information and management systems are more likely to play at Svenska Spel.

The evaluations of the Nova Scotia RGD provide some interesting and, at times, conflicting results. In the Omnifacts Bristol panel study (2005) approximately 80 percent of the participants reported that the play card helped them spend less, reduce their amount of time playing and reduce their gambling frequency during the initial nine-week trial stage. Schellinck and Schrans' (2007) analysis of the actual player data, however, found different results. In their analysis, frequent card use was associated with longer sessions and more money deposited into the machines. It was, however, also associated with higher winnings per session, a higher percentage of profitable sessions and more cash-outs. Notably, there was no change in the amount of money lost (Schellinck & Schrans, 2007). A similar pattern was found with participants who used the features in the laboratory study. While they deposited more money and played longer, they lost the same amount as those who did not use the features (Bernhard et al., 2006).

EXPERIENCE & RESEARCH – IMPLEMENTATION ISSUES

There are several critical issues that are highlighted in the research that need to be carefully addressed in the successful implementation and effective operation of play information and management systems. This chapter takes a close look at the key implementation issues and examines approaches to address these issues.

KEY CONSIDERATIONS

The introduction of a new technology, or the implementation of change, will usually face some resistance. In the research, players show the most resistance to the mandatory use of cards in play information and management systems. They also express significant concerns over privacy and confidentiality.

1. MANDATORY VERSUS VOLUNTARY

The jurisdictions that have implemented, or are implementing, play information and management systems have adopted several different approaches to the introduction of player cards and associated features:

- Voluntary use of both cards and features (New South Wales, Australia)
- Mandatory use of cards and voluntary use of features (Nova Scotia RGD)
- Mandatory use of cards, mandatory use of limit feature with self-set limits, voluntary use of other features (Sweden)
- Mandatory use of cards, mandatory limits, voluntary use of additional self-set limits (Norway)

Most discussions of whether a play information and management system should be mandatory or voluntary tend to fall on the side of the mandatory use of cards (or whatever device is used to access the system) and the voluntary use of features (Bernhard et al., 2006; Schellinck & Schrans, 2007; Responsible Gambling Council, 2006). A mandatory card gives all players the opportunity to use or not to use the available features. It integrates the decisions about safer play options directly into the games. If card use is not mandatory, some will choose to use the cards and some will not. Those who have chosen the cards can easily circumvent any card restrictions by simply opting to play without the card. This undermines the rationale for using a card in the first place. As well, if cards are purely voluntary there could be a negative perception associated with those who choose to use them. These people could be seen as people with gambling problems or people less able to control their gambling.

Beyond the direct options for the player, the introduction of a mandatory player card presents opportunities for gaming providers to more effectively reduce the risk of access by patrons who are self-excluded, cheaters or young people under the legal age limit.

Nonetheless, some gamblers have expressed reservations about the mandatory use of player cards (Omnifacts Bristol, 2005; Bernhard et al., 2006). A mandatory policy can be perceived as a threat to individual rights and liberty, as implied by this member of the RGC focus groups:

I don't think it's a question of inconvenience; it's just another intrusion of authority on a person.

To some extent, concerns regarding a mandatory card appear to be culturally based (Parke, Rigbye & Parke, 2008; Bernhard et al., 2006). While mandatory use may be viewed as a threat to personal liberty and freedom in a North American context, it may be more acceptable in other jurisdictions that are more comfortable with greater governmental regulation and intervention. Hence, the mandatory use of cards is more acceptable in Norway and Sweden. In Norway, for example, the mandatory card policy is understood as a way of balancing personal and societal responsibility (Sjolstad, 2008a) and not as a threat to personal liberty.

If a jurisdiction wishes to use a mandatory system in a climate that may be resistant to such a system, experience from other jurisdictions suggests the system might best be slowly phased in from a more acceptable voluntary system first. All jurisdictions that have, or are introducing, mandatory player card systems have introduced them on a voluntary basis, and then transitioned to a mandatory card use system. Norway, for example, introduced voluntary player cards in 1992 and waited 15 years before making them mandatory. Most players (92 percent) signed up for the card during the voluntary phase (Sjolstad, 2008a).

The idea of a transition process was endorsed by participants at the Insight Forum, who suggested that player cards would need to be phased in over a period of five years, in order to facilitate the necessary attitudinal change in players. The phase-in period allows time for players to gain experience with the technology, and gives gaming providers time to make the technology changes, to promote the card system and to educate players. One Forum participant compared the phase-in to personal banking services, saying, “It took a long time for people to acquire the behavior to get used to bank cards; it didn’t happen overnight.”

2. PRIVACY OF INFORMATION

From the player perspective, the most important issue associated with a play information and management system is the perceived threat to a player’s privacy and confidentiality. In one survey of Australian gamblers’ attitudes towards player cards, approximately one-third reported that they would be “extremely concerned or very worried” about privacy implications (McDonnell-Phillips, 2006). These concerns may be even greater among high-risk groups (Nisbet, 2005a; Independent Gambling Authority, 2005).

The precise nature of these privacy concerns is expressed in a multitude of ways. Some players are concerned that tax inspectors would have access to player spending and might question tax returns based on the amount of money gambled (Omnifacts Bristol, 2005; Bernhard et al, 2006; Nisbet, 2005a). Others voiced concerns about their gambling information being divulged to family members, or having other players present when they hit their limit:

I wouldn't want my children finding out in ten years time what I spent.

Most people are watching everyone else's machine more than their own. The last thing I want is someone beside me seeing that I'm about to get toasted.

In her analysis of player acceptance of play information and management systems, Nisbet (2005a, 2006) concluded that player perception of the security and reliability of the card was more essential to gaining acceptance than perceptions about the card’s ability to manage gambling expenditures. She recommended that to increase players’ motivation to use a card and its features, the provider must actively educate potential customers about the security and reliability of the card.

3. CARD-TRANSFERRING

Resistance to play information and management systems may motivate some players to think of ways of getting around using them. One of the ways that has been highlighted in the literature is card sharing and the use of fake cards, particularly in situations where card use is mandatory (see Omnifacts 2007; Bernhard et al., 2006; Schellinck & Schrans 2007). If the integrity of the card is compromised, the system is unable to ensure that the individual receives accurate information about their play, or that the features are working as they should for the player (e.g., spending limits cannot be enforced).

The issue of card sharing was apparent in the Nova Scotia field-testing of the RGD where some players went to great lengths to avoid using the cards. Card-sharing was common and some VLT venues set up fake ID accounts for a “house card” for players who did not want to use a card or did not have a card (Omnifacts Bristol 2005; 2007). A number of ways of preventing card sharing were suggested at the RGC Insight Forum, as well as being mentioned in the literature:

- Adding value to a card or the use of its features by providing incentives for use
- Having significant consequences for the operators who create “house cards”
- Tying the play information and management system to loyalty programs so that gamblers essentially have one card
- Making the card cashless by linking the card to the player’s gambling account for withdrawals, or directly depositing winnings into the cardholder’s gambling account
- Using biometric ID, or combining a card with biometric ID (e.g., fingerprints, retinal scans, facial recognition software)

The most controversial of these suggestions is the use of biometric identification as an additional security feature. In the RGC focus groups and the RGD focus groups (Bernhard et al., 2006), gamblers strongly rejected the idea of using biometric ID, whether through fingerprints, retinal scans or facial recognition software. As one RGC participant commented:

You don't need my thumbprint. I'm not a criminal.

Another way that has been suggested to minimize player card sharing in the context of EGM play is to configure EGMs to play only if the card is in the machine. This would prohibit players from using their cards to “start up” machines for other players. This approach, though, would not prevent cardholders from lending out their cards when they are not using them. Setting EGM games to play only if a card is in the machine may also discourage other players who like to play more than one machine at a time. In Norway, Norsk Tipping has recently adopted the opposite strategy because thousands of people were forgetting their cards in the machines. Its games will now not start until players insert and then remove their cards. Norsk Tipping has also addressed the card-sharing issue by paying all winnings directly into players’ accounts.

RESPONDING TO BARRIERS

Gaming providers can build player acceptance of the cards through many means, including encouraging card trial and experimentation, educating players and building trust in gaming providers.

1. CARD TRIAL AND EXPERIMENTATION

There is a greater chance that gamblers, particularly regular gamblers, will accept cards if they actually try them (Nisbet, 2005b). In the Nova Scotia field trial, once players tried an RG feature, almost two-thirds continued to use the feature during additional play sessions (Schellink & Schrans, 2007). Players who have tried or used the cards are more likely to think that they are useful and be more accepting of them (Bernhard et al., 2006, Nisbet 2005a, 2006). One study of gamblers in New South Wales clubs, for example, found that those who had used the play summary features were generally supportive of their functionality (Nisbet, 2006). Similarly, participants in RGC focus groups who had experience with pre-set limits (such as the \$90/week limit of the Atlantic Lottery Corporation's online lottery service) were among those who immediately accepted the concept of the cards.

As a side note, it is critical that technical issues are resolved before full implementation of a play information and management system. It is important that players can trust that a card works reliably and delivers its features. One of the main reasons players stopped using the card in the Nova Scotia RGD study was because of technical complications with its use (Omnifacts Bristol, 2005).

2. PROMOTION AND EDUCATION

One way to motivate players to use a play information and management system is through a promotional campaign that clearly outlines the benefits of the system and its features, explains how to use the system and responds to player concerns. The researchers in the Nova Scotia RGD evaluation recommended that Nova Scotia develop a communication program that educates gamblers about the RGD features and promotes their usage, especially among high-risk gamblers (Schellinck & Schrans, 2007).

It is important that players perceive that a system is simple to use. A few RGC focus group participants were concerned that the cards would be inconvenient and confusing. In the focus groups for the Nova Scotia RGD evaluation, participants quite often had trouble understanding the nuances of the features, even after trying the device (Bernhard et al., 2006).

However, the panelist evaluation study of the RGD suggests that difficulties with use can be addressed with time and greater card familiarity. The panel of players who were monitored for nine weeks to assess the RGD's usability and functionality rated the system as "easy to use" more often as their familiarity increased. In the initial orientation survey, 64 percent of panel participants rated the ease of use of the system as eight out of 10 or higher; in the final survey this number increased to 90 percent (Omnifacts Bristol, 2005). It is likely that players will go through a "learning curve" and player card orientation sessions will play an important role in achieving player acceptance (Bernhard et al., 2006).

In addition to informing players on how to use the features, it is essential to promote the benefits of the play information and management system (Nisbet, 2006). In the RGC focus groups, several participants who were initially resistant to the concept of a play information and management system became more accepting when they received further information about the card's potential utility, both for themselves and for people who have difficulties controlling their gambling. Moreover, perceptions of usefulness are likely

to increase with greater card familiarity and experience. The proportion of panelists in the RGD evaluation, for example, who rated the “usefulness” of the RGD an eight out of 10 or higher increased from 64 percent to 72 percent during the nine-week field test trial (Omnifacts Bristol, 2005).

For any jurisdiction introducing a play information and management system, educating players about the cards is critical for gaining card acceptance. As gamblers learn more about the system, they appear to be more willing to accept (or, at least, not oppose) the idea of utilizing a play information and management system. With ongoing education and experience, the use of a play information and management system for EGMs may become normalized. This point was raised by one RGC focus group participant who thought there would be initial resistance to the introduction of player cards, but that players will eventually think of them as common:

...think of a seat belt. Children grew up with seat belts. They don't get into a vehicle without putting a seat belt on; it has become a lifestyle thing. If you are a new gambler you would accept it as part of the process.

3. MOTIVATORS

Incentives, marketing schemes, ties to loyalty programs or cashless technologies are potential methods to facilitate the use of play information and management systems (Dickerson, 2003b; McDonnell-Phillips, 2006). Some innovative incentive ideas that are already in place are from Norway and Sweden.

Svenska Spel offers one or two free lotto games per week that are only available to card users, while Norsk Tipping offers several online games that are exclusively for cardholders. In March 2009, Norsk Tipping (Norway) introduced a new incentive, Grassrootshare, which allows players to register their cards directly with their favourite local cause. Norsk Tipping contributes a portion of its revenues that are allocated to sports, culture and voluntary organizations to the specific team or organization selected by the player.

Norway and Sweden also provide an extra convenient aspect to their cards that may serve as a motivator. These jurisdictions link the player cards to their lottery games, whereby lottery ticket purchases are recorded on the cardholder's account. Wins can therefore be automatically deposited into the cardholder's bank account, allowing players to collect their winnings even if they lose their ticket. The Swedish and Norwegian gambling operators market their feature with the slogan “never miss a win.” In Norway, guaranteeing prizes in this way was such a strong incentive that 90 percent of Norsk Tipping customers purchased the card within just over a year of the option being introduced.

Another option for building customer acceptance is to add value to cards, thereby increasing their worth to players, as was done in Sweden, Norway and Australia. One way is to tie cards to existing loyalty programs so that loyalty program members will have access to the features through the existing loyalty cards. As well, card and feature usage can be encouraged by rewarding card use with loyalty points, which then go towards enjoying the benefits offered through the loyalty program. Another way of adding value to cards is to use the cards as part of a cashless gaming system. Here, players may be motivated to use the cards as a general way to manage their gambling money (see Nisbet 2006) or as a convenient alternative to using and carrying cash. Furthermore, players will be less motivated to share their cards with others, since their cards now have cash value.

There is an important caution associated with linking play information and management systems to loyalty cards. Some have noted the importance of not using motivational

methods that encourage further gambling. After reviewing methods for rewarding players for using responsible gambling features without causing harm, Wood and Griffiths (as cited in Parke, Rigbye & Parke, 2008) concluded that players should be rewarded for using such features with incentives that do not encourage further spending (e.g., providing coupons for refreshments, merchandise or entertainment). Participants in RGC focus groups echoed this sentiment when they suggested that incentives “should be for something outside of the casino – gets them out of it.”

RGC ANALYSIS

Emerging gaming technologies are changing the way gambling, particularly electronic forms of gambling, are provided and managed. While still in its early stages, server-based gaming has the potential to be the next major evolution in EGM operations. In the traditional model of EGM operation, each machine is stand-alone with a separate computer. In the server-based gaming model, all machines are part of a network in which the play actually takes place on a central mainframe server.

The use of a player card for server-based gaming provides a technology through which players can identify themselves to the server when at the machine. While players could conceivably identify themselves by entering a pin code only to access their account, the player card offers an extra layer of security, in that others need to know the pin code and have the player card too in order to access the account.

Server-based play can enable a range of optional tools to help players know how much they are spending, keep track of their spending in a specific session, preset limits or create self-imposed timeouts. In the jurisdictions that have established such technological enhancements (e.g. Sweden, Norway and Nova Scotia), all demonstrated some positive benefits. Technological advances can also, as in Sweden, allow players to use play assessment programs that can analyze their play patterns and trigger alerts or interactions.

The research demonstrates player support of using technology to assist gamblers with their play. Gamblers from the RGC focus groups also felt that there would be many benefits for the introduction of some form of player card system that used technological innovations to help reduce the risk of gambling problems. This optimism was echoed in the discussions of the Insight Forum.

However, from the information examined, it is quite clear that there are a number of very important considerations and caveats that are critical to the introduction of any form of play information and management system. This chapter identifies those considerations and discusses the implications they will likely have for future planning. The considerations fall into three categories: the options to be offered, the protection of privacy and implementation issues.

Within each one of these categories, there are always ranges of options for how the system can be configured. It is important to consider context within these discussions. While some countries have widespread use of card-based systems, they are operating in very different cultural, regulatory and gambling settings. Card-based play systems are new and rapidly evolving and are likely to look quite different five years into the future. It is therefore critical that any decisions about these systems ensure future flexibility in the way the systems are configured and offered to customers.

OPTIONS TO BE OFFERED

One of the most important considerations when designing a play information and management system is to explicitly define the objectives for the system. The features discussed in this report are primarily intended as tools for the player. Most often, they are preventative, i.e., intended to help players to maintain awareness of their play and to keep it within safe bounds. Some jurisdictions, notably Nova Scotia, have focused their features entirely on prevention. Sweden, on the other hand, does include a self-assessment feature that will allow players to receive direct feedback about their play or to permit the gaming corporation to monitor their play and provide feedback to them. This latter tracking feature is undoubtedly the most potentially contentious and will be discussed more specifically later. With that exception, the large majority of current and planned features are designed to reinforce individual decision-making.

1. PLAY ACTIVITY REPORT

A play activity report is, in essence, a historical record of the amount of time and/or money the player has spent within a given period of time. The goal of providing an account of an individual's play activity is to provide accurate information so that gamblers can make informed choices about their gambling. Studies from several jurisdictions show that gamblers support the idea of having reports of their play activity.

Play activity reports do not necessarily have to be provided exclusively through a card-based system while the player is actively playing the machine. In fact, it may be preferable for players to be able to access such information online as they would access their bank accounts or other entertainment records such as iPhone libraries.

But, could the provision of historical activity generate a counterproductive reaction by the player? Some researchers have cited concerns that providing ongoing player feedback may unintentionally be counterproductive if players were to become alarmed at losses and then gamble more to recover their money, or if they tried to use information to deduce which machines are about to pay out.

On the other hand, it is difficult to argue against providing information that is useful to many based on the fact that some may misuse it. This finding may point out the importance of the way in which the information is provided and the need to combine this with accurate information about the way the games work.

Although play activity reports are still open to misperception, misinterpretation and misuse, they provide a more transparent, accurate and objective account of a player's gaming activity.

2. CURRENT SESSION FEEDBACK

Current session feedback is a running total of time and/or money spent during an active session. The player receives information in the form of a "play meter" that allows them to see their spending in real time. The obvious goal of such feedback is to keep players aware on an ongoing basis of their spending. Such feedback can be configured in several ways with respect to the depth of information provided but, at a minimum, it usually enables players to see how much money they have won or lost within a current playing session.

Providing current session feedback could be subject to the same potentially negative impact noted in the play activity report section, namely that of encouraging "chasing losses." Could a player, seeing that they are losing money in a session, continue longer or spend more in order to recover those losses? For the same reasons noted above, however, it is preferable to provide play information than to withhold it just because some will misuse it, and to address such misuses through specific measures.

3. LIMIT SETTING (PRE-COMMITMENT)

The purpose of a limit feature is to allow gamblers to decide how much money and time they will spend before they gamble. Many years ago, Mark Dickerson pointed out the difficulty in making rational decisions while caught up in the excitement of gambling. Limit setting or pre-commitment allows players to decide what they intend to spend in advance and thereby reduce the chance that they will overspend the limits. Limit-setting options are usually associated with an action taken at the beginning of a gambling session at a gaming venue, but, in the future, pre-commitment could also be completed online.

Types of Limits

In general, the limit-setting capacity of player cards allows players to preset time and/or money limits for a session, day, week, month or year. The literature suggests a tendency for players to prefer setting money limits over time limits and shorter (session, day, week) rather than longer periods of time (month, year). The preference for shorter limits is to avoid reaching a longer limit quickly and being unable to gamble for the remaining time on the limit.

These preferences raise an important issue related to the design of any limit-setting feature. Planners will find it useful to examine as many scenarios as possible in looking at the potential interplay between time and money limits.

Player Notifications

It is one thing to set a limit, but another to reach it. Typically, when players reach their limit, the system must notify them individually. In the case of EGMs, the machine can do this by locking a player out (i.e., stopping the machine). This would always have to be preceded by some form of information to players that they were reaching the limit they set.

The Insight Forum and focus groups conducted as part of this analysis spent considerable time on the issue of warnings or pop-up messages and shutdowns. Several options were discussed. One option, the least intrusive, would be to provide a pop-up message and the player could determine whether they wanted to take action or ignore the message. Another option would be a warning and a small grace period over the limit that had been set, followed by a shutdown. Some suggested a player reaching their limit might go somewhere in the venue, such as a kiosk, and reset their limits. At the other end of the spectrum, is the straightforward warning followed by a shutdown. There was a clear consensus in both the focus groups and the forum that a limit is a limit – that when players reach their predetermined limit, they should not be allowed to continue gambling for that session.

An early notification, followed by another advisory of some kind, provides the opportunity for a player to discontinue play before a machine shuts down and avoid any unwanted attention or embarrassment. It is very important that players not be embarrassed when they reach their preset play limits. They may be playing with friends or a spouse, or be in another circumstance that demands a discrete approach to ending their play. There is also the potential for a player to become angry or disruptive if embarrassed.

If the limit-setting features become more commonplace, however, any stigma or embarrassment attached to a limit being reached should lessen. In fact, reaching limits may even become a regular occurrence if players begin to use the feature regularly as part of their play experience. Nonetheless, it is still important that when players are made aware that their limit has been reached, or will be reached soon, the notification

must be discreet, tasteful and careful not to bring about any undue attention. How this is done will have to be geared to the venue and corporate policies.

Changing Limits

In terms of changing limits before they have been reached, players should be permitted to reduce their limit at any time. Limit increases, however, should require the person to wait a period of time before they can do so (e.g., 24 hours in Sweden, Norway and Nova Scotia) since there would be little point in a limit that could be changed before it is actually reached. The waiting period for a limit increase request would allow a cooling-off period for players before they made another decision to gamble.

Lastly, there has been concern raised in the literature that spending limits may actually encourage increased gambling, since players may spend more money to exhaust their limit. Research from player cards in Nova Scotia, however, did not find evidence of gamblers spending more because of self-set limits.

4. TIMEOUTS

A play information and management system feature related to limit setting is the timeout, where players can use the technology to ban themselves from play for a certain period of time. There was strong support in RGC's focus groups for the timeout feature. When told that it could be possible with player cards to restrict play for a period of time, many said that they would use the option and thought it would give them an opportunity to "cool off" and take a break. This is another option that could be set up onsite or over the Internet.

Players can choose from a menu of time periods (e.g., week, month or year), or shorter times such as 24 or 48 hours. The shorter timeouts are usually offered as a type of emergency option on the gaming machine to "cool off," which players can access immediately if they feel their self-control or judgment is compromised or impaired (e.g., a "drunk" button) (Schellinck & Schrans 2007). Other timeout options offer an individual the opportunity to choose specific days or periods to be excluded from play. These options would appeal to players who want to restrict their play, for instance, on paydays, weekdays or holidays.

5. RISK ASSESSMENT

Risk assessment offered as a play information and management system feature involves providing gambling-risk information that is specific to the player. Such a risk assessment can be implemented in several ways with varying degrees of complexity.

The assessment can be done as an onscreen self-test (available in Sweden and Norway), where players answer a survey about their gambling and other related questions. The survey assesses the players' risk level for problem gambling based on their self-reported responses.

The other type of risk assessment being done in Sweden and Saskatchewan is a computer-based play analytics program that analyzes a player's actual play activity. Using a computer algorithm, the program is able to calculate a player's problem-gambling risk level. Those who are gambling problematically, or who are at risk of gambling problems, can be alerted.

While the self-test is based on self-reported activity, the computer-based play analytics approach can provide a more objective account of a person's actual play behavior (e.g., increases in frequency or changes in betting patterns, as well as many other indicators). While a self-test can inquire beyond a player's gaming behavior into other relevant areas that could affect a player's assessment (e.g., family life, work), the play analytics risk assessment is confined to the individual's gaming behavior only. It appears that when combined, a

self-test and a monitoring program could complement one another to provide a more accurate determination of whether someone is experiencing gambling problems or is at-risk.

Beyond the two approaches to the risk assessment process itself, there are two general ways that the information generated from computer-based analysis can be used. It can be provided to the player only, or it can be provided to the gaming provider to alert the operator about a patron's risky play. In the Swedish context, the technology-based assessment tool must be enabled by the player who, in fact, allows their play information to be tracked by Svenska Spel.

The provision of self-assessment tools and feedback to players for their own use is much less contentious than the operator-tracking alternative.

In the cases where the operator has access to player-assessment information, there are many ethical and legal issues to address. From a legal perspective, the operators would become more accurately aware of who might be gambling at problematic levels and would need to take action. Player assessment information, however, represents only one type of information. Staff judgments that a customer's gambling is problematic can be a highly sensitive issue for the gaming operator, as well as the player. Operators avoid making them based on single factors (e.g., length of time played, signs of frustration). Play information analytics offer the potential to add another element to the list of factors that staff can take into account when looking for problem gambling among their patrons. A greater amount of player information could be a significant asset to staff in making such decisions.

Making players' risk assessment information available to gaming operators may raise liability concerns that are beyond the scope of this study. However, the system capable of gathering extensive play information for marketing purposes is essentially the same system that would be able to track and assess problematic player behavior. So, the issue of liability may already be on the table as the new analytical technologies are brought on stream.

PROTECTION OF PRIVACY

The success of any player card system will depend to a large extent on the assurance of security and privacy for the player. The issue of privacy is one of the most commonly cited barriers to the acceptance of player cards mentioned in the evaluations of current card-based systems and in the RGC focus groups. Players report concerns that information will be used by the operator to track their data to exploit players, or by governments in a host of different ways, including the investigation of tax returns and claims.

It is critical that great attention and technological resources be paid in order to create a secure and private system. It is also equally important that players perceive the system to be private, secure and reliable.

Nova Scotia has placed great importance on addressing players' privacy concerns in its latest version of a VLT player card (i.e., Informed Players Choice System). The province is employing a rigorous and complex process that registers a player using government-issued ID and creates a personal account. The ID data, however, is scrambled and assigned to the player's account using a unique identifier, which is only accessible to the player. Nova Scotia maintains that this process ensures anonymity and confidentiality, and that player activity cannot be linked to an individual person.

IMPLEMENTATION ISSUES

The features of any player card system are only half of the picture. At least equally important, are the issues associated with the implementation of a play information and management system. These issues can be grouped into the following five general areas:

- Mandatory versus voluntary use
- Ease of use
- Technological implications and requirements
- Incentives, marketing and promotions
- Economic costs

1. MANDATORY VERSUS VOLUNTARY USE

There are two separate aspects of a play information and management system that could be made either voluntary or mandatory. The first is the overall use of the card. If a card is mandatory, players must use the card in order to play. This is the approach that Nova Scotia took in its pilot.

Mandatory use of a card, however, does not necessarily require that a person use the features to play. A player with a card could simply choose not to use the features on the card.

In the Nova Scotia pilot, the use of a card was mandatory, while the use of its features was voluntary. In Sweden and Norway card use is mandatory, as well as the use of one or more of the features.

The debate around voluntary versus mandatory use pertains mostly to card use. While there are some jurisdictions, such as Sweden and Norway, that have a mandatory policy for certain features, it is less commonplace. Where features have been made mandatory, it is usually the limit-setting feature (i.e., Sweden, Norway).

The mandatory use of any card is rare in the Canadian context. The only examples that readily come to mind are universal programs such as drivers' licenses and health cards – both associated with government requirements. These cards come with significant and obvious associated benefits attached. They are not attached to a consumer product. They are legally mandated. Player cards, as discussed in this report, are not universal or legally mandated. They do not, in themselves, come with immediate and obvious benefits to all who use them. They are a safety measure.

A mandatory card gives all players the opportunity to use, or not use, the available features. It integrates the decisions about safer play options directly into the games. If card use is not mandatory, some will choose to use the cards and some will not. This will create a gaming environment where those who have chosen the cards can easily circumvent them simply by opting to play without the card. This undermines the rationale for using a card in the first place. As well, if cards are purely voluntary, there could be a negative perception associated with those who choose to use them. These people could be seen as people with gambling problems or people less able to control their gambling. Beyond the use of the features associated with a card, mandatory cards make the implementation of self-exclusion agreements easier, since access could be cut off electronically to prevent someone from accessing the machines in a particular jurisdiction.

Yet there are dissenting views. Some people in the RGC focus groups did not like the idea of additional cards. A few of those who disagreed with mandatory cards did so vigorously. Gamblers in some studies have expressed concern about the mandatory use of player cards.

Some observers suggest that the debate over mandatory versus voluntary cards is culturally based. Jurisdictions that are more oriented towards social welfare and government intervention, and less focused on personal rights and freedoms, may be more accepting of mandatory card use (e.g., Sweden, Holland). Furthermore, the acceptance of mandatory cards may also be dependent upon the type of game and gaming environment in which the card system is applied. A casino venue can be very different from a community-based VLT venue, not only in terms of logistics and gaming operations, but also in terms of the political culture of the different jurisdictions.

On balance, it looks as if the benefits of having a mandatory requirement to use a card to play outweigh the voluntary approach, although the many concerns from gamblers and gaming operators alike would suggest the need for a long and carefully managed phase-in process.

Most jurisdictions that currently have, or are introducing, mandatory player card systems have introduced them on a voluntary basis and then transitioned them over to a mandatory status. The phase-in approach was also endorsed by several participants at RGC's Insight Forum, who suggested that player cards would need to be phased in over a period of five years in order to facilitate the significant change in players that has to take place. One particular communication objective to players is that of addressing any myths and perceptions around how the use of loyalty cards can influence, or control, the outcome of a game or help a player improve their chances of winning.

The phase-in period allows players to learn about, and try out, the technology over a period of time. This would require time for education and social marketing initiatives that would create the necessary attitudinal shifts and cultural climate to make a mandatory card use policy acceptable. One Insight Forum participant compared the phase-in to the automated banking experience where it took "a long time for people to acquire the behavior to get used to bank cards; it didn't happen overnight."

In the long term, it appears clear that the mandatory use of player cards would be much more effective in encouraging the use of features and in addressing the problem of there being a stigma for card users. Having said this, there are probably two strategies a government or a gaming provider could take. One is to start off with the mandatory approach right in at beginning. The other strategy, somewhat like the original introduction of seatbelts in most places, is based on an incremental plan that incorporates a long period of voluntary usage with a considerable marketing effort to promote the cards. Both approaches have advantages and disadvantages and the one to take will likely depend on the degree of resistance that is encountered, and the will of gaming providers and governments to take on the pushback involved.

If a jurisdiction decides to make its player card system voluntary, it will have to devote effort and resources to motivating players to use the system. In current practice, the use of cards on a voluntary basis ranges from a small fraction up to 92 percent in Norway prior to the cards being made mandatory. The range is largely due to the differences in promotion, education, marketing, incentives and tie-ins in the different jurisdictions. It is difficult to make direct comparisons between jurisdictions, but the evidence suggests that players can be persuaded to use player cards and features on a voluntary basis if offered. Whether by encouraging players through marketing and incentives, or by alleviating anxieties around card use (e.g., privacy), if operators can get gamblers to try the cards, studies show that those who have used the cards are more likely to see that they are useful, and are generally more accepting of them (Bernhard 2006, Nisbet 2005a, 2005b).

2. EASE OF USE

The concept of “ease of use” has many implications.

Simplicity

In responding to player concerns, and in educating players on a system, it is important that information be set up in a manner that is as simple as possible. Excessive or complicated information options could undermine the overall use of any technology. Moreover, ease of card enrollment is essential. On the gaming floor, staff typically has little time to explain cards and convince people to enroll. If a player does decide to enroll, enrollment must take place quickly and conveniently, while allaying any potential concerns and issues (e.g., privacy).

While usefulness is the key to sustaining use of a technology, ease of use is what encourages people to try a technology. Among RGC focus group participants, there was some concern that the cards would be complicated and inconvenient to use. As players become more familiar with play information and management systems, they will find it easier to use and more useful. It is therefore absolutely important that the operation of a card system be very well executed and clearly communicated. Perceived problems among card users, particularly in the early stages, can undermine the successful employment of the system in the long run, regardless of how good the concept may actually be.

Online Access Features

Players can access features when they are playing a game, i.e. by inserting their card into an EGM itself. However, for many features, it would be helpful to players if they could access them remotely. Players who want to ban themselves may not want to be tempted by having to go to the machine or gaming venue to do so, especially if it involves making a special trip. Furthermore, with respect to limit-setting, Dickerson, the originator of the pre-commitment concept, emphasizes that it is important for gamblers to be able to set limits before gambling starts and away from the gambling floor. Many of RGCs focus group participants echoed this sentiment when they said they would prefer to set their limits at home. Lastly, remote access would allow players to discretely and privately obtain potentially sensitive information (e.g., their play activity report) or do sensitive tasks (e.g., timeouts).

Foreign Visitors

Many gaming venues attract visitors from beyond the local community (e.g., destination gaming venues). Some of those players may be regular patrons, particularly from the United States, where player cards are not required and local alternative gambling venues are available. Others may be occasional or one-time visitors. Requiring these players to use a card or feature may be inconvenient and burdensome because they may play only once or just a few times. Moreover, the usual concerns around excessive play and spending that play information and management systems are designed to address, may not apply to vacationing tourists whose priorities and resources lie in spending money and maximizing their fun and leisure. A mandatory policy for card and/or feature use would be seen as restrictive, inconvenient and bothersome to them.

This dilemma is not an issue where use of player cards is voluntary, or where those visitors are already part of a loyalty program that incorporates new card-based play features. Where cards are mandatory, visitors could be provided with

a temporary card. This would mean some form of registration process involving identification and issuing of single use cards.

3. TECHNOLOGICAL IMPLICATIONS AND REQUIREMENTS

Most of the discussion in this report has focused on the “content” of play information and management systems, i.e., the types of information available to the player, the choices the player could make, the structure of the decision process and so forth. It is very important to recognize that, in spite of the considerable work undertaken to date, the widespread rollout of such systems is only in its infancy.

While well beyond the scope of this report, the development and implementation of play information and management systems represent a very significant technological challenge. Their introduction requires a myriad of programmatic and technical decisions regarding the choices to be offered, how to structure those choices, how to communicate complex concepts in straightforward ways and so on.

The demands of these tasks as well as the integration of play management features within gaming machines and, potentially, in kiosks and online, will require countless hours of careful architectural planning and development. The technological demands of such systems cannot be overestimated.

4. INCENTIVES, MARKETING AND PROMOTIONS

The introduction of player cards, whether mandatory or voluntary, as well as the use of features, presents many challenges for gaming operators. One of the biggest challenges is persuading players to use the features. Gaming safety features, like seat belts and many other safety measures, are not rewarding in themselves. Players who do not believe they will ever have a problem will not see immediate benefits.

In the focus groups and the forum there was considerable discussion of factors that would promote greater use of features. There was also a widespread consensus that the introduction of features would need an extensive and well-crafted promotional strategy including, if possible, incentives that do not encourage further spending (e.g., providing coupons for refreshments, merchandise or entertainment). Participants in RGC focus groups suggested that incentives “should be for something outside of the casino – gets them out of it.”

Some gaming providers, including Norsk Tipping and Svenska Spel, have included certain gambling-related incentives such as free games, or access to restricted games, as incentives to promote use of card features. In March 2009, Norsk Tipping introduced a new incentive, Grassrootshare, that will allow players to register their cards directly with their favourite local cause and Norsk Tipping will contribute five percent of the stake to that team or organization.

The creation of incentives that are not related to play promotion is a difficult task for organizations that have a wide array of current incentives that players would like to access. Yet, the promotion of safety features, without promoting increased play at the same time, is a preferable option. This could include options such as reduced price or free meals, shows and other non-gaming perks.

One versus Two Cards

In many jurisdictions and venues, player loyalty cards are now used as a marketing tool to provide players with rewards and to encourage more play. The introduction of a new player card system with play information and management features would potentially introduce an additional card for customers.

Most larger sized gaming venues have some type of a loyalty program whereby players can earn additional goods, services and other items of value based on their play activity. Player activity is typically monitored and tracked through a card-based system that assigns each player their own card that must be used when playing in order to receive credit for their play. Play activity data is collected and stored in a player's personal account. Sweden and Norway are examples of jurisdictions that have player cards that combine both play information and management features and a loyalty program.

Card-based player loyalty programs provide an existing technological infrastructure. They can add on features, particularly play activity reports, because such programs are account-based and already monitor play activity for marketing purposes. In addition, the presence of such programs within a gaming establishment increases the chance of gaining player trust, because players are already used to having their play activity tracked. Privacy was not a major concern among RGC focus group participants who had player loyalty cards, and so were accustomed to having their activity tracked.

The fact that some gaming venues already have some type of loyalty program operated through a player card, or other player identification and tracking technology, provides a base for expanding these technologies to include RGFs. Since adoption of a new card is likely to take considerable initiative and persuasion over several years, it is more desirable to combine the features of the loyalty card and the player card.

The single card approach will also have implications for the mandatory versus voluntary issue, in that a single multi-purpose card can be created with the potential for the player control features, even if the player only chooses to use the promotional features at first.

Account-Based Play

The issues related to account-based play are not unlike the loyalty issues.

In Norway and Sweden, the use of a card with play information and management features has been linked to account-based play. That means that the player's card has three roles. It incorporates play safety features, loyalty features and a player account. In Norway, players can transfer money between their player account and their bank account. The integration of these uses has pros and cons. On the pro side, it gives the players much greater incentives to use cards including the play information and management features. Gaming providers have a much greater chance to provide incentives to players to use these features. It is also much more likely that players will accept a card that has multiple uses and perceived benefits.

On the other hand, the integration of a player account could present an ethical dilemma, in that it could make it easier for a gambler with problems to access funds.

This problem, however, is a two-edged sword. With careful structuring, account-based play could become another tool to help the gambler and the operator create another layer of safety measures. Where players set up a play account, they make a decision about how much they wish to use for gambling. The gaming provider is also a party to the account elements since they are the account-holding institution. The structuring of player accounts is important and can be a further support for the gambling public. Accounts can build in a variety of safeguards, such as deposit limits and transfer limits. They can prohibit increases in player accounts or instant cash transfers during gambling sessions. They can identify acceptable sources of funds and limit transfers from lines of credit or credit cards. They have the potential to facilitate player self-assessment or play monitoring by the gaming provider.

5. ECONOMIC COSTS

Start-up and Developmental Costs

To implement a card system, a number of significant costs are involved:

- Development of new machines
- Replacement or conversion of existing machines
- Cost of the cards (or USB or RFID systems)
- Registration of the cards
- Educating customers (marketing programs etc.)
- Staff training
- Revenue decline due to player resistance

Because of the proprietary nature of the card systems, there is only limited information available about the costs of card-based play.

Nova Scotia estimates that the system will cost approximately \$25 million over five years. Norway has recently released a new generation of VLTs of which the development and implementation cost \$144 million. It also cost an additional \$63 million to develop the new games for the system (Sandvik, personal communication, Feb 12, 2009).

Gaming Revenue Loss

There is no doubt that if the mandatory use of cards is implemented, operators can expect a revenue loss, at least in the short term. Some forum participants compared this to the initial drop in revenue when smoking bans were implemented in casinos, and noted that these reversed themselves as customers got used to the bans. In their trial of the IPCS system.

Estimates of anticipated revenue drops vary drastically depending on the jurisdiction, the accompanying policies and the games involved.

- When Illinois was considering the potential impacts of asking all gamblers to show ID, an analysis of potential lost revenue was completed by Eber (2007). The analysis noted two potential negative consequences that could lead to lost revenue - lineups at the door and gambler privacy concerns. Comparing the potential revenue lost to the smoking ban, Eber estimated a 7.2 percent annual revenue loss (\$148.7 million).
- In Sweden, the anticipation is a 10 percent to 20 percent drop in revenue when they implement registered play on all games, mainly in sports betting because it is available illegally.

Given that the revenue impacts of mandatory introduction are unknown, there should be extensive on-going evaluation throughout the process to allow for data modeling that can quantify player response and revenue impact, including short- and long-term expectations.

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SUMMARIES OF TECHNOLOGIES & FEATURES

The following section profiles five play information and management systems that are either still in development or have been implemented in venues for piloting. This is not an exhaustive list of the available systems and is intended to be examples of how such systems could be configured. It should not be taken as an endorsement of the systems profiled. The features of each system are described in the chart below using the following categories:

Company	The technology company that has designed the play management system
Application	The types of games this system can be applied to (e.g., EGMs, etc.)
Access	How a patron can use the system (e.g., smart cards, etc.)
Registration	How a patron can sign-up for the system
Mandatory	Are patrons required to use the technology?
Anonymity	Can a patron gamble without being identified in the system?
Loyalty Program	Can a patron become a member of a loyalty program and use the player management features?
Security Features	Method used to keep patron information secure (e.g., PIN)
Money Limits	Are there limits that a patron or venue can set on the amount of money spent?
Time Limits	What types of limits can a patron or venue can set on the duration of play?
How to Set Limits	How can a patron set time or money limits?
Timeout/Exclusion	Can patrons set restrictions on their play (e.g., stop play for certain days or certain periods of time)?
Alerts	Can targeted messaging be sent to patrons during play?
Self-Testing	Can patrons take a self-administered test on their risk of developing problems related to gambling?
Data Collection	What type of information is collected about a patron's patterns of play?
Risk Prediction	Can patrons' play behavior be analyzed to predict their risk developing problems related to gambling?
Play History	Can patrons obtain an activity report of their play history?
Cashless Gaming	Can funds be loaded into an account or onto a communication device (e.g., smart card, USB Key) and be used for game play in lieu of cash?
Support Services	Can patrons obtain information about problem gambling support services through the system?
Extra Features	Extra features the technology may possess that were not previously mentioned
Future Plans	What developments are expected in the near future?

The chart also contains terminology and acronyms specific to the jurisdiction.
Please find a description of each below.

EGM	Electronic Gaming Machine
FOBT	Fixed Odds Betting Terminal
IVT	Interactive Video Terminal
PIN	Personal Identification Number
RFID	Radio-frequency Identification
Smart Card	Card with an embedded microchip, which can store and process data
SMS	Short Message Service (a form of text messaging on mobile phones)
USB	Universal Serial Bus
VLT	Video Lottery Terminal

Company	Location	Application	Access	Registration	Mandatory
Maxetag	New South Wales, Australia.	EGMs.	Non-contact electronic tag.	Registration not required unless patron wishes to be identified or self-excluded.	Voluntary in some venues. Clubs require membership by legislation.
Responsible Gambling Networks	Melbourne, Australia.	Internet Gambling, EGMs, Lotteries, FOBTs, Sport betting, Interactive TV, Self-serve gambling kiosks.	Biometric fingerprint USB flash memory key.	Age ID encouraged to prevent underage gambling. Some jurisdictions require state/province/residence ID to obtain the biometric USB player protection key. Fingerprint is scanned and stored in each individual key.	Can be either voluntary or mandatory, although venues and regulators are encouraged to adopt system with mandatory enrolment/USB key usage and voluntary limit setting.
Worldsmart Technology	South Australia, Australia.	EGMs.	Smart card.	Photo ID, name, mailing address, email address, mobile number.	Voluntary.
AMC Convergent IT	Melbourne, Australia.	EGMs (potential casino games, horse/greyhound racing and lotteries).	Card, RFID or proximity devices. Card can be magnetic stripe card or smart card or other form of identification.	ID is required (name, address and date of birth are encrypted in the database for cardholder verification in venue).	Can be voluntary or mandatory. Mandatory is encouraged within a venue. Between-venue implementation can be voluntary or mandatory.
eBet Gaming Systems	Australia, USA, Asia.	EGMs.	Magnetic stripe card.	Photo ID required.	Unknown.

Company The technology company that has designed the play management system

Application The types of games this system be applied to (e.g., EGMs etc.)

Access How a patron can use the system (e.g., smart cards etc.)

Registration How a patron can sign-up for the system

Mandatory Are patrons required to use the technology?

Company	Anonymity	Loyalty Program	Security Features
Maxetag	Yes. Unless it is linked to loyalty program.	Yes.	None (system is anonymous and funds are not stored on the tag).
Responsible Gambling Networks	Anonymity is possible if it is mandated by the regulator or operator.	Yes. Can be linked to a loyalty program.	Biometric fingerprint. Player's fingerprint is scanned and stored in each individual Key (rather than in a central database) to ensure privacy protection of all player biometrics. The finger print scan is used to access past gambling activity. Each Key contains data encryption and digital certificates to ensure data protection. Any personal details are managed separately to the playing behavior and modeling databases. Biometric reconfirmation can be requested at random time intervals during play or after inactivity.
Worldsmart Technology	Unknown.	Yes,	PIN is used to log onto a secure website to change parameters and to obtain player activity statements.
AMC Convergent IT	Optional. System can be fully functional without a person's name or other details, although non-anonymous modes are encouraged.	Yes. Optional. Links to a loyalty program are not a requirement of the system. Provides a standardized XML bidirectional interface enabling virtually any XML-compatible loyalty system or provider to rapidly connect to AMC's responsible player system.	PIN required. Can also use biometric readers. System is capable of implementing new identification methods as they become available.
eBet Gaming Systems	No.	Yes. Players can collect points.	PIN required on machine. If the account goes idle for 15 minutes, the PIN must be re-entered before any transactions occur. Any money being transferred on or off the card must be validated at a cashier by producing ID and the PIN. PIN access is also required at the kiosk, the point of sale terminal (where bonus points are redeemed) and with cashier.

Anonymity Can a patron gamble without being identified in the system?

Loyalty program Can a patron become a member of a loyalty program and use the player management features?

Security features Method used to keep patron information secure (e.g., PIN)

Company	Money Limits	Time Limits	How to Set Limits	Timeout / Exclusion
Maxetag	Yes. Master limit set in a central system by regulator/operator or daily player-set limit at the gaming machine.	None.	At machine or by request at a central location (can be remote).	No. Possible, but not currently implemented.
Responsible Gambling Networks	Yes. Daily, weekly, monthly or yearly. Limits are set by the player or regulator and can be monitored across all types of offline and online gambling.	Daily, weekly, monthly or yearly. Limits are set by the player or regulator and can be monitored across all types of offline and online gambling.	Initial limits set at sign-up. Patrons can change limits online at any time or at self-serve kiosks.	Yes. Personally set by the player or regulator. Can be set for a specific machine, venue or entire state.
Worldsmart Technology	Yes. Daily, weekly, monthly.	Daily, weekly or monthly.	With a cashier. In April 2009, players will be able to set limits online.	Yes. Designated days or times.
AMC Convergent IT	Yes. Session, daily, weekly, monthly or yearly for all forms of gambling.	Session, daily, weekly, or monthly can be set for all forms of gambling.	Online, at a venue staffed service point or self service kiosk.	Yes. Designated days, gambling mode exclusions, total exclusions, player pauses (where the player nominates the timing and duration of pause), exclusions at single venue or all venues.
eBet Gaming Systems	Yes. Regulator/operator account limits or player-set net weekly expenditure limit.	None.	At kiosk or with a cashier.	No.

Money Limits Are there limits that a patron or venue can set on the amount of money spent?

Time Limits What types of limits can a patron or venue can set on the duration of play?

How to Set Limits How can a patron set time or money limits?

Timeout/Exclusion Can a patron set restrictions on their play (e.g., stop play for certain days or certain periods of time)?

Company	Alerts	Self-Testing	Data Collection
Maxetag	Yes. Alerted when limits are approached and when they are exceeded. Alerts can be sent to Responsible Gaming Personnel, by pager, email or SMS.	No.	Data collected: Plays, set limits, time in play, player set limits, total spent, difference, total time in play.
Responsible Gambling Networks	Yes. Alerted when limits are reached. Additional individual alerts can also be established, e.g., velocity of gambling, velocity of gambling loss, etc.	Yes.	Data collected: All player gambling activity (both offline and online) across all forms of gambling at all types of venues.
Worldsmart Technology	Yes. Configurable. Cardholders can determine the message they receive as well as the frequency, such as 50 percent of time or money left. These are both audible and visual on the card terminal. At 100 percent, further audible and visual warning followed by staff intervention.	No.	Data collected: All transactions where a card is used, all gambling activity. All events are time coded.
AMC Convergent IT	Yes. Alerted prior to limit being reached. Information given on how long players have played and how much they have spent. Message is sent directly to the EGM or via SMS or email.	Yes. Factors in responses to their historic actual playing behavior and classifies as "at-risk," "problem" or neither at the time of the self-test.	Data collected: All gambling activity such as frequency, chasing losses and acceleration. Includes plays, lines played, bets, time played, intercessional times, interplay times within sessions, credits won/lost, money in/out, pre-commitment limits reached and which ones, blocks and exclusions, targeted messages sent.
eBet Gaming Systems	Yes. Alerted when the account is over-limit or the player has set and spent the weekly net expenditure.	No.	Data collected: turnover, spend (wins minus turnover), bonus point accrued, time played.

Alerts Can targeted messaging be sent to patrons during play?

Self-Testing Can patrons take a self-administered test on their risk of developing problems related to gambling?

Data Collection What type of information is collected about a patron's play patterns?

Company	Risk Prediction	Play History	Cashless Gaming
Maxetag	No.	Yes. Can obtain printed report of gaming activities at a specialized terminal. Report includes total dollars spent/won, total time played, if any limits were exceeded and difference between limit set and actual amount played. Does not require third party assistance.	Cashless gaming is available and currently waiting for certification by an approved testing facility.
Responsible Gambling Networks	Yes. Neural network algorithms can be used to predict "at risk" behavior in players.	Yes. Can access entire play history from registration onward or for a requested period of play. Full information on date, venue location, day net win/loss, machine win/loss, start of play, finish of play, etc., is available. Can be accessed over the Internet or at self-serve kiosks.	Yes. Funds may be stored on the key if mandated by regulator.
Worldsmart Technology	No. But system is capable of doing so.	Yes. Full history of card usage available at either cashier or online.	No. Not allowed in this jurisdiction.
AMC Convergent IT	Yes. Play data is collected and compared with the individual's as well as the population's statistics. Differences between sex and age groups are monitored. System learns through experience with the player and the gaming population as the basis for comparison for trending and behavioral normality. Identifies both "at-risk" and "problem gamblers" and potential criminal activity, including money laundering.	Yes. Activity statements are provided on request online, at kiosks in the venue or by mail. Players can view data on betting, winning and net movement online for up to seven years. Players can also compare actual time spent playing to the limits set. Information is available for each session and in each venue the player plays in. Players have access to triggered identifications, periods during which they were ID'd as "at risk" and having "problem behavior." Information is archived after seven years and used in modeling.	Yes. Funds stored on account on database not on device.
eBet Gaming Systems	No.	Yes. Player Activity Statements are available on a monthly basis and can be accessed by a player at the kiosk, cashier, or membership desk. Interim reports are available anytime by request at the cashier and membership desks.	Yes.

Risk Prediction Can patrons' play behavior be analyzed to predict their risk of developing problems related to gambling?

Play History Can patrons obtain an activity report of their play history?

Cashless Gaming Can funds be loaded into an account or onto a communication device (e.g., smart card, USB Key) and be used for game play in lieu of cash?

Company	Support Services	Extra Features	Future Plans
Maxetag	Yes. Online by phone or automatic alert to responsible gaming officer by SMS or pager or email.	None.	Scheduled release: August 2009. South Australia, New South Wales and Queensland in 2010.
Responsible Gambling Networks	Yes. Players receive information when they start/finish play, reach limits or request help contact information. Information is also provided over the Internet and at venue self-serve kiosks at any time.	Keys are non-transferable between players. Optional on-board RFID integration can determine the GPS location of gambler.	The Player Protection Key and wider Safety Net System is currently being promoted to national and provincial governments around the world as a total off-line and on-line pre-commitment, self-exclusion and player tracking solution.
Worldsmart Technology	Yes. Links to help services are available on the website.	Ability for dual passwords to be enabled. Allows for counselor to monitor any attempts to change limits and allows the counselor to log onto a secure website to view player activity statements. Default of 24 hours to increase limits, however, if wanting to reduce to \$50 per day can do so immediately at cashier or online.	None.
AMC Convergent IT	Yes. Support services directed to identified players, even players with anonymous card options (by "looking" for where that card is in use, in either the venue or network of venues). On finding the card the system, directs counseling services to the player at the machine in the venue using email or SMS.	Courts, venues or other appropriate parties can impose blocks or other limitations on a player. The system can identify likely criminal activity and money laundering. The system is applicable to horse or dog racing, trotting, lotteries and all other forms of gambling.	Refinement of the behavior modeling and predictive processes with various organizations. Integration with industry terminals.
eBet Gaming Systems	Yes. Gambling helpline phone number can be printed on the membership card or on payout receipts.	System can keep a photo of the individual, so that whenever a card is swiped, a photo of the patron will show on the cashier screen.	Implementation of further "pre-commitment" functionality such as daily, weekly or monthly spending limits.

Support Services Can patrons obtain information about problem gambling support services through the system?

Extra Features Extra features the technology may possess that were not previously mentioned

Future Plans What developments are expected in the near future?

JURISDICTION PROFILES

The following section profiles four jurisdictions where player cards with play information and management features have been used or evaluated. Each jurisdiction is profiled according to:

- The context in which the cards were introduced
- The type of card and how it is configured
- The play information and management features (PIMF) of the card
- Security measures associated with the player card
- Evaluations of the player card
- Future plans for the player card

This section is not intended to be exhaustive and does not cover every jurisdiction that utilizes player cards with play information and management features. A list of products with play information and management features that have yet to be implemented is provided in Appendix B.

NOVA SCOTIA

Player Card:	Responsible Gaming Device
Registration:	Mandatory
PIMFs:	Play History Report Limit Setting Timeouts
Scope of Cards:	VLTs

CONTEXT

Nova Scotia's gambling industry is managed by the Nova Scotia Gaming Corporation (NSGC) that contracts the operation of the ticket and video lottery business lines to the Atlantic Lottery Corporation (ALC). Nova Scotia has approximately 2,900 VLTs operated by 400 retailers (including First Nation sites), 1,230 ticket lottery retailers and two casinos (NSGC, 2009).

In 2005, the Nova Scotia government created its Responsible Gaming Strategy, which focused on balancing gaming revenue with the responsible delivery of products and providing players with services that allow them to make more informed choices about their play. These informed choices are intended to help players play responsibly, thereby preventing future problem gambling and, ultimately, reducing problem gambling (Nova Scotia, 2005).

As part of the Responsible Gaming Strategy, NSGC piloted the use of player cards in two communities in 2005. The responsible gaming device (RGD), designed by Techlink, was added to existing VLTs and offered players the option to use three play information and management features: play summary (by session or longer), money limits and timeouts.

Based on the positive evaluations of the RGD, Nova Scotia moved forward, across the province, with the implementation of an updated version of a card-based system designed for province-wide distribution called the Informed Player Choice System (IPCS). The IPCS, like the RGD that was piloted in 2005, provides options for players to set time and money limits, and to see how much time they have spent playing and how much they have won or lost over time.

TYPE OF CARD

For its trial period, Techlink's RGD was attached to VLTs, which could only be operated with a magnetic strip card. The use of the card was first voluntary and then became mandatory; the use of the features remained voluntary throughout the trial period.

PLAY INFORMATION AND MANAGEMENT FEATURES

The Nova Scotia RGD offered five features – *Account Summary, Live Action, Money Limits, Play Limits and 48-Hour Stop*.

PLAY HISTORY REPORT

The *Account Summary* feature allows players to view the amount of money they have put into a VLT, the amount they have cashed out and the amount they are “up” or “down” over a given period (e.g., day, week, month and year). In the RGD field test, 68 percent of regular players (those who played more than six times during the trial period) accessed the *Account Summary* (Schellinck & Schrans, 2007).

CURRENT SESSION FEEDBACK

The *Live Action* feature allows players to see the amount of money they have put into a VLT, the amount they have cashed out and the amount they are “up” or “down” for the current session. In the RGD field test, 59 percent of regular players (those who played VLTs more than six times during the trial period) used *Live Action*.

LIMIT SETTING

The *Money Limits* feature enables players to set money limits for a specific period of time (i.e., until closing, day, week or month). Day limits were the most popular time period selected by regular players – approximately 90 percent of those who set money limits, did so by day (Schellinck & Schrans 2007).

The *Play Limits* feature enables players to exclude themselves from play for a given period (e.g., until closing, day, month, year or a specific calendar period). The majority of regular players (88 percent) who set play limits set them by day (Schellinck & Schrans 2007).

TIMEOUTS

The *48-Hour Stop* feature enables players to immediately exclude themselves from playing for a 48-hour (two-day) period. It was primarily intended to be a convenient way to impose a “cool down” period should they feel the need to immediately stop gambling. Only two percent of all regular players used this feature during the field test trial (Schellinck & Schrans 2007).

SECURITY

The evaluation of the RGD found that some players were not using their own cards to play. Instead, they shared or traded cards and, in some cases, bartenders set up accounts with false information to keep a house card for players who did not want to register and use their own card. In focus groups, players expressed concerns about privacy with the cards, and were wary about the government monitoring their play for tax purposes (Omnifacts Bristol, 2007).

The launch of the IPCS in 2009 will be accompanied by a comprehensive player education program that will work to inform players that all accounts are anonymous and that the government is not monitoring individual gambling activity. Players can register using government-issued identification (i.e., driver’s license) in order to create their account or enter their information manually. Once the account is created, the identification data is scrambled and converted to a unique identifier, so that no one will be able to track that account to an individual. The purpose of requiring identification to register for an anonymous system) is twofold: 1) In the event that players lose their card, they can re-enter their identification information and receive a new card, linked to their same account, with all of their data preserved, and 2) It ensures that each player may have only one active card at a time.

EVALUATION

The NSGC conducted a four-stage trial of the RGD in two communities in Nova Scotia.⁵ The evaluation was conducted by three research teams. Omnifacts Bristol (2005; 2007) tracked the use and perceptions of the RGD by a panel of 120 Nova Scotian players through two field-test stages (stages one and three) of their RGD. Bernhard et al. (2006) conducted focus groups on gamblers who used the RGD in a simulated casino laboratory setting in Nevada, and also performed a separate analysis of all of the player data from the field test in stage three. Schellinck & Schrans (2007) analyzed all player data from the live field test in Nova Scotia at stage three of the project.

⁵ In stage 1, a smaller group test was conducted on 120 players using 10 sites (52 VLTs) for approximately 9 weeks. Other players who were not a part of the evaluation were able to play VLTs without a player card. The results of this trial were evaluated for further planning and modification purposes in stage 2. In stage 3, a live field test was conducted for all VLT establishments in the two communities of Windsor and Mount Uniacke. Everyone who wanted to play in these areas required a player card. In stage 4, the results of the final live field test were evaluated.

The Nova Scotia RGD evaluation was the first evaluation to give researchers access to real player activity data in a field test setting. Although this quantitative data was confounded to some extent by gamblers playing outside the test area, technical challenges and card sharing among players, the researchers made some analytical adjustments to compensate for these issues.

The panelists in the Omnifacts Bristol (2007) study reported several positive effects stemming from their use of the RGD after the six-month trial.

- 71 percent reported that they were more aware of how much time and/or money they spend on VLTs
- 63 percent felt they were playing more responsibly
- 39 percent said that using the system had reduced their incidences of chasing losses

The Las Vegas gamblers who used the RGD in the laboratory setting generally expressed a positive opinion about the cards in Bernhard et al.'s (2006) focus groups, although some participants had reservations around privacy concerns.

- Roughly three-quarters of the focus group participants believed that the device should be embraced
- All groups seemed to genuinely appreciate the ability to see the amounts of money they had won or lost over a given time period

There were also some concerns about the usage of the play summary feature. Problem gamblers endorsed the usage of this feature; however, they also expressed concern that a potential unintended consequence might be that players could be tempted to use the feature to “determine” whether the machines they played were “hot” or “cold.” Using the play summary feature for this purpose could feed the irrational beliefs that characterize many problem gamblers’ experiences (Bernhard et al, 2006).

The Schellinck and Schrans (2007) analysis of the actual player data in the live six-month field test in Nova Scotia reported mixed results. Their quantitative analysis found that players who used the PIMFs compared with players who did not use PIMFs:

- Had longer play sessions (89 minutes versus 77 minutes)
- Had a higher frequency of play (5.2 days between play sessions versus 9.6 days)
- Put more money in the machine per session (\$250 versus \$174)

These behaviors are indicative of heavier playing patterns. Simultaneously, however, the same players who used the PIMFs:

- Had higher winnings (\$776 versus \$673)
- Had a higher amount of money cashed out during play (\$203 versus \$121)
- Cashed out a greater percentage of the money they put in the machine (76 percent versus 69 percent)

When considered together, these results suggest that PIMF users got greater play value from the machines than those who did not use the features (Schellinck & Schrans, 2007)⁶

⁶ This conclusion was somewhat consistent with Bernhard et al.'s (2006) analyses of the stage 3 player data. Overall, they found that heavier gamblers were more likely to use the RG features.

This view was consistent with the finding that 71 percent of regular players (those who played six or more times during the six-month trial) used a PIMF at least once and about half of them (48 percent) continued to use the features (Schellinck & Schrans, 2007).

Quantitative panelist survey data indicated that the players found the cards easy to use, with more than three-quarters of panelists (78 percent) reporting the cards were easy to use (Omnifacts Bristol, 2007). When asked how the RGD could be improved, many players believed that some PIMFs should be mandatory; 61 percent of panelists supported the mandatory setting of a spending limit, while 65 percent supported a preset maximum (Omnifacts Bristol, 2007). Current plans, however, only call for the use of the cards to be mandatory and the features to be optional.

Despite these generally positive views, the evaluation found some reservations amongst gamblers. The frequency of card-sharing, and the reports that gamblers went outside of the test area to play VLTs (Omnifacts Bristol, 2007), indicate a level of player resistance to using the cards. Some retailers were also resistant to the player card trial because they felt that the trial penalized them, interfering with their food and beverage sales without adequate compensation (Omnifacts Bristol, 2005). Not all card-sharing, however, represented a conscious resistance from players or venue owners. Because the cards functioned like a key that unlocked the machine, some players reported that if they forgot their card, they simply had someone else log them in. Almost 30 percent of panelists lent their card out at some point during the stage three field test, and 37 percent of panelists reported borrowing and/or lending their card (Omnifacts Bristol, 2007). Cards were lent most frequently to someone who did not have a card, was from outside the area, or had forgotten or lost their card.

FUTURE

Nova Scotia is moving ahead with plans to implement the IPCS. Registration for the IPCS-equipped VLTs will be voluntary but may, pending the results of the IPCS evaluation, eventually be made mandatory. There are no plans to make usage of the system's play management features mandatory.

SWEDEN

Player Card:	Spelkortet ⁷
Registration:	<ul style="list-style-type: none"> • Voluntary for bingo, lotteries and sports betting • Mandatory for online gambling and sports betting
PIMFs:	<ul style="list-style-type: none"> • Play History Report • Limit Setting • Timeouts • Risk Assessment
Scope of Cards:	Online gambling, lottery tickets, bingo, sports betting

CONTEXT

Svenska Spel, the Swedish state operator, was created in 1997. It directly operates online gambling (including lotteries, sports betting and poker), traditional lotteries and Bingo and, through its subsidiary, Casino Cosmopol, operates Sweden’s four casinos. The other state gambling operator in Sweden is Aktiebolaget Trav och Galopp, an industry-owned/state-regulated company that controls horse betting. All gambling is controlled by the Swedish government and its agencies, although some private delivery is allowed by sports clubs and non-profits, which use gambling revenue as a substantial source of their income.

In response to Internet poker that was being offered from abroad without Swedish regulations and restrictions and responsible gambling features, Svenska Spel began offering Internet poker in March 2006. The Internet poker is card-based and offers three features: time and money limits, timeouts and risk assessment.

Svenska Spel considers responsible gambling to be a strong part of its brand. Eighty percent of Svenska Spel’s brand marketing is built around the concept of playing moderately (“spela lagom”). The logic of Svenska Spel is that they want to keep players in the “green” (see risk assessment) and keep them playing with Svenska Spel.

TYPE OF CARD

The mission of Svenska Spel is to promote responsible gambling, and to draw gamblers from illegal gambling venues and sites (Strom, 2008a). As part of its strategy, it has launched Spelkortet (literally: player card) for online gambling, lottery tickets, bingo and sports betting. Sweden’s four casinos, which are also government run, have a separate voluntary loyalty card.

In order to play on Svenska Spel’s website, a player must have a gaming card and account. To log into the website, players enter their card number and a numeric personal code. The gaming card is connected to a gambler’s play card, bank or both, and the gambler can authorize transfers of funds to the card. Svenska Spel automatically puts winnings into the gambler’s account that’s associated with the card.

While the use of the gaming card is mandatory for online gaming, players may opt not to use it for traditional lotteries. Despite this, player cards in Sweden are widely accepted and held by 1.3 million customers. One of the primary reasons players register for a card in Sweden is so they don’t miss a lottery win. Player’s lottery tickets are registered on their card, so that even if they lose their ticket, their winnings will still be deposited into their account. Other incentives offered by Svenska Spel to encourage players to register for a card include free weekly lotto games that are only for players with a card.

⁷ There is a separate player card for Sweden’s four casinos. It offers timeouts, is linked to the casinos’ self-exclusion programs for enforcement and allows the option for players to set the number of casino visits they can make in a month.

PLAY INFORMATION AND MANAGEMENT FEATURES

Svenska Spel currently offers four PIMFs with their player cards: play summary, time and money limits, timeouts and risk assessment.

PLAY HISTORY REPORT

In response to a player evaluation that showed interest in play summaries, Svenska Spel implemented Spelkonto, a play summary feature for all their player card users. When players log into their accounts at Svenska Spel they are given access to all of their gaming history for the past 12 months. Due to the short time period in which this feature has been available, there is no usage or evaluation data available at this time.

LIMIT SETTING

On Svenska Spel's Internet poker site, it is mandatory to set limits. Before playing, gamblers must set a money limit for the day, week and month, and a time limit for the session, day and month. Having self-set limits builds on research findings that show that gamblers only respect limits set by themselves and tend to rebel against ones that are imposed on them (Strom, 2008a). Players, since they are able to set their own limits, are also capable of effectively disabling the mandatory limit-setting PIMF (by, for example, setting time limits of 24 hours a day or unreachable money limits)

The online poker evaluation found that most players set realistic time and money limits (limits that corresponded with the amount of time or money that they actually intended to spend) with the limit-setting feature. Forty-two percent of players set money limits that corresponded with what they intended to spend and 25 percent set limits that were "somewhat higher" than what they intended to spend. One third (33 percent) of players, however, set limits that were so high that they effectively disabled the money-limit feature (Internet Poker Committee, 2008).

Slightly fewer players set realistic time limits. Thirty-one percent and 28 percent, respectively, set time limits that coincided with and were somewhat higher than what they intended to spend. Slightly less than half (41 percent) set substantially higher limits that included, for example, time limits of 24 hours a day that effectively disabled the time-limit function (Internet Poker Committee, 2008).

As a whole, Svenska Spel gamblers hit money limits much more often than time limits (118,000 times and 39,000 times, respectively, in 2007) (Internet Poker Committee, 2008). The choice by more players to set realistic money limits, and to more frequently reach these limits, suggests that money limits are the preferred means for the players' management of their gambling.

The limit features were popular among Svenska Spel gamblers with most rating the limit features as "good" or "very good." The highest acceptability ratings were for money limits (79 percent), followed by time limits (63 percent). Only 3.9 percent and 6.6 percent of players, respectively, rated the money and time limits as "bad" or "very bad" (Internet Poker Committee, 2008).

Players have the option to set limits that effectively disable the limit-setting features. The fact that most chose not to do so, by setting realistic limits, indicates that the limits and the limit display have achieved a relatively high degree of acceptance among Svenska Spel customers. The results also suggest that the limits may be helping users to manage their gambling. In the survey, 45 percent of gamblers had been stopped by hitting a limit. Sixty-three percent of these gamblers reported that they did not play with another company after hitting their limit, and 68 percent did not change their limits (Internet Poker Committee, 2008).

Svenska Spel also offers an optional onscreen display of time and money limits. This option, called “navigator” was used by 57 percent of survey respondents with 40 percent of them having it displayed on their screen at all times (Internet Poker Committee, 2008).

As of 2008, all players using Svenska Spel’s remote gambling offerings (both online and mobile gambling) must set a weekly budget indicating how much money they want to spend. Players can revise their budgets at any time. If they wish to lower it, the change is made immediately. If they wish to raise it, however, they must wait until the beginning of a new week (until the following Monday).

TIMEOUTS

Svenska Spel’s Internet site offers timeout options of a day, week, month, three months, six months or a year. Players who select a one-year timeout option must apply to be reinstated for their player cards to become active again. Five percent of all Svenska Spel internet poker players have used the timeout feature, with most of them (59 percent) choosing the shorter timeout option of one week (Internet Poker Committee, 2008). Among survey respondents, 75 percent of those who chose a timeout option did not play online poker at other sites during their timeout. The timeout option was much more popular among gamblers with problems, with 11 percent having used the timeout option versus three percent of gamblers without problems (Internet Poker Committee, 2008). These results indicate that the timeout feature is effective in providing a gambling management option that is used by both gamblers with and without problems.

RISK ASSESSMENT

Svenska Spel offers online gamblers the option of an automatic risk assessment based on their play history (Strom, 2008a). *Playscan* is a program that assesses current play patterns for signs of potential problems and, by projecting play patterns into the future, claims to be able to identify patterns that may indicate future problems. Online gamblers can opt in to have *Playscan* turned on. After the analysis, players receive a green, yellow or red light. Green indicates that gamblers have their gambling habits under control, yellow indicates a negative behavioural change, and red indicates that their gambling is no longer enjoyable. Svenska Spel reports that *Playscan* can not only determine if a player is having problems, but also if a player is running the risk of developing problems in the next three months.

Gamblers can also take an online self-test, which contains 15 questions in three different categories: over-consumption, negative consequences and signs of addiction. The self-test has a similar scoring system to *Playscan* in that it classifies respondents according to three levels of gambling risk, which are represented by the same *Playscan* colours of green (i.e., gambling under control), yellow (i.e., negative behavioural change), and red (i.e., gambling no longer enjoyable).

The self-test and *Playscan* are intended to complement each other to give a more accurate view of whether a player is experiencing gambling problems. All cardholders are able to take the online self-test, which can show a different result from *Playscan* if the customer also gambles at other venues (Strom, 2008a).

For players receiving a yellow or red light, Svenska Spel offers a number of services. They can deliver one of 55 to 60 computerized messages that are tailored to the gamblers’ situation and risk level, provide a helpline number, ask players if they would like someone to call them and direct players to an online chat group. The more *Playscan* deems a player to be at-risk, the more messages that player will receive. Players who receive a red light will automatically stop receiving promotional material from Svenska Spel.

The self-test was used at least once by 16 percent of players. Of those who got a red

or yellow light in the self-test (six percent and 13 percent of test-takers, respectively), 44 percent stated that they had reduced their gambling as a result of the self-test (Internet Poker Committee, 2008).

SECURITY

Svenska Spel has taken a number of measures to ensure that cards are not shared. The most important measure is making the card have real value for the player since it is integral to a cashless system⁸ for gambling transactions.

When players register for a player card, they must show their Swedish birth date number (akin to a Social Insurance Number), which ensures that each player has only one account. To log in to play, players must have the card, and their username and password. In spite of these precautions, there have been a few instances of card sharing where parents have allowed an underage child to use their account, or children have found a document with the parent's password and username. In order to buy lottery tickets, players must also show ID.

In the case of a card that is lost or stolen, the player can call Svenska Spel and it will issue a new card and block the old one.

EVALUATION

Svenska Spel has completed a two-part evaluation of Spelkortet (i.e., its player card) for Sweden's online poker website (Internet Poker Committee, 2008). Although the findings are not directly applicable to live-venue gambling, they do provide insight into the acceptability, effectiveness, and implementation of player cards with PIMFs.

Players' attitudes towards the cards, their usage and the effectiveness of the responsible gambling features were measured in two web surveys. One survey was conducted with a sample group of 1,000 Svenska Spel players and the second was with a separate group of 2,000 Internet poker players, including both Svenska Spel gamblers and gamblers who use other sites. Respondents to the surveys were asked about their gambling behavior in the three months prior to the survey in 2007. The studies provide information about the use of the PIMFs and the impact they had during the period in question. A third evaluation of the risk assessment feature will be completed in the near future.

The survey of 2,000 Internet poker players showed that 15 percent were at risk, and eight percent had gambling problems. The percentages were higher among poker players who only played online poker on non-Svenska Spel sites – 16 percent at risk and 11 percent with gambling problems. The incidence of problem gamblers among players who only played with Svenska Spel was lower, with nine percent at risk and three percent having gambling problems (Internet Poker Committee, 2008). This discrepancy, however, may be attributable to a variety of factors. The gamblers who played exclusively at Svenska Spel had a higher percentage of women and older players, and a lower percentage of regular players (those who played poker for at least two hours per week). It is also possible that the players who played exclusively at Svenska Spel were those that most valued the PIMFs. While causation between card use and lower problem gambling rates cannot be proven, it does seem likely that Svenska Spel players are using the PIMFs and that the features are helping at least some to manage their gambling.

FUTURE

Svenska Spel is developing *Playscan 2.0*, which will be adapted for online poker with an improved user interface and more personalized messages. It will also have new models developed for poker, Bingo and VLTs. An evaluation of Svenska Spel's *Playscan* feature is currently underway.

⁸ Funds are loaded onto an account, and are subsequently used for game play in lieu of cash. Funds are added or removed from the account based on the results of game play, and can be "cashed out" at a later date..

NORWAY

Player Card:	Spillerkort
Registration:	Mandatory
PIMFs:	Play History Report Limit Setting Timeouts Risk Assessment
Scope of Cards:	Lottery tickets, VLTs, Online games

CONTEXT

Norsk Tipping, Norway’s state gambling operator, was created in 1948 to manage a state lottery. It has a 42 percent share of all gambling in the country with lotteries, VLTs and online games (sports betting and lottery draws). Other legal gambling outlets in Norway are bingo halls, which are privately run and contain their own VLTs that offer only bingo games. In 2010, Norsk Tipping will replace these VLTs at bingo venues with new gaming terminals and horseracing gambling operated by the state-owned Rikstotto.

VLTs have had a tumultuous history in Norway. When they were introduced, they were run by private operators. From 2001 to 2005, VLT revenues in Norway rapidly increased from nine billion NOK to 27 billion NOK (\$1.6 billion to \$4.8 billion CDN) (Sjolstad, 2008a). Alongside this rapid increase, however, were a large number of people who cited VLTs as the source of their gambling problems. Because of their association with gambling problems, public sentiment turned against VLTs. In July of 2007, VLTs run by private operators, except for the bingo machines in Bingo halls, were banned in Norway.

In 2009, new state-operated VLTs were introduced with the strictest regulations of any jurisdiction in the world. A number of accessibility and EGM modifications and PIMFs have been implemented with the reintroduction of VLTs. Accessibility is limited, for example, through a restriction of 10,000 VLTs in the country. They are not allowed in grocery stores, gas or transit stations; and they are closed between midnight and seven a.m. Modifications on the new VLTs include a mandatory 10-minute timeout every hour, a ban on spinning wheel games and a maximum win of 1,500 NOK (\$266 CDN) per game. Along with these accessibility restrictions and EGM modifications, VLT players are required to use a player card, which has play summary, limits and risk assessment PIMFs.

TYPE OF CARD

Since 1948, Norsk Tipping had ensured the delivery of lottery prizes to winners by having ticket buyers write their name and address on a copy of their tickets that was left with retailers. Norsk Tipping would then send the prize to the winner by mail. Norsk Tipping promoted the idea that players never missed a prize, even if they lost their ticket, as an important part of their brand. In 1992, player cards were introduced so that Norsk Tipping could continue to ensure the delivery of prizes. Players presented the card when they purchased their lottery tickets at the retailer. The card’s linkage to the player’s bank meant that any prizes won could be instantly, and directly, deposited into the player’s account.

Norsk Tipping felt that the original magnetic strip cards had a relatively low level of security. In 2002, Norsk Tipping started using smart cards (cards with embedded chips that can store and process data), which were capable of providing enhanced security. By 2005, all magnetic strip cards had been replaced. Players can use the cards on their home computers with the

use of a card reader that comes with the card. The cards are also utilized on the new VLTs that Norsk Tipping introduced in 2009. Players must insert their card, verify their player ID, and then remove the card before they can start playing. The card costs 60 NOK (\$10 CDN) and is usable for three years.

The smart cards are connected with the player's bank account and players can transfer money directly from their account to the card. Players can also add money to their card by giving cash to retailers, who then put a credit for that amount onto the card. The use of player cards is mandatory for VLTs and all games in all channels, except scratch tickets, since February 2009.

The usage of the cards should also be effective at preventing underage gambling. The player's age and date of birth is loaded onto the chip. The system, aware of the age of the players, is able to block cardholders under 18 from playing VLTs and sports games (though they are, under Norwegian law, able to play online games and buy lottery tickets).

In March 2009, Norsk Tipping introduced Grassrootshare, a program that allows players to register their cards directly with their favourite local cause and Norsk Tipping will contribute five percent of the players stake (gross revenue) generated by that individual to the selected team or organization.

PLAY INFORMATION AND MANAGEMENT FEATURES

Norsk Tipping offers play history reports, limit setting, timeouts and risk assessment which can be accessed through an onscreen button called "My Limits".

PLAY HISTORY REPORT

Norsk Tipping offers players a play history report for VLT play called "My Game" that allows players to see how many rounds they've played, how much they've lost per week, and how close they are to their limits. Gamblers can view their reports on VLTs.

Norsk Tipping has an expanded play history report feature. Because all transactions are stored on Norsk Tipping's database, if customers are concerned about whether they have received their full share of winnings, customer service personnel can replay the customers' play sessions and they can watch it on the VLT.

There is no play summary feature for online games or the lottery.

LIMIT SETTING

Norsk Tipping imposes mandatory spending limits on their player cards. VLT players have spending limits of 400 NOK (\$70 CDN) per day and 2,200 NOK (\$390 CDN) per month, though they have the option of setting a smaller limit if they wish to do so.

TIMEOUTS

VLT players have the option of taking a timeout for 12 hours, a day, a week, a month or permanently. They can register themselves for this timeout online, but to register for a timeout longer than one month, they must call customer service. There is a 100-day minimum period before the player can apply to reverse a permanent timeout. When a player chooses a timeout, they are guided through a series of onscreen steps. Helpline information is available on the screen during this process. As well, there is a "help" button always available for players. There is no timeout feature for online games or the lottery.

RISK ASSESSMENT

Norsk Tipping offers a self-test online that asks players the 10 questions used in the DSM IV diagnostic criteria for pathological gambling (the Diagnostic and Statistical Manual of Mental Disorders provides diagnostic criteria for mental disorders). Players who are deemed to be “at-risk” as a result of the test are given information about the helpline and the risks of gambling addiction.

SECURITY

Norsk Tipping has opted for a smart card, rather than a magnetic strip card, for the additional security coding that is built into the smart card chip. To use the card, players must have both the card and their four-digit PIN number. If a card is lost or stolen, customers can call Norsk Tipping and put a stop on the card.

Player account information is stored on a central server. When players register, they must show their identity card. In the registration process, the system links the player card with the Norwegian government’s database for personal numbers. As with the Nova Scotia system, the player’s identity is not logged with the customer’s identification. Norsk Tipping cannot identify the player; they can only know that it is the same player card that is being used. If there is a need to identify a player, Norsk Tipping must apply to a third party state company that has a license to handle personal security numbers.

Retailers play a large role in the distribution and management of the cards. Ninety percent of registrations are done by retailers, and they can also assist players with changing PIN codes. In the past, there were a few frauds involving retailers. Norsk Tipping has attempted to address this problem by creating a system in which the retailer has to put their own player card and enter their PIN number in order to make changes at the terminal. This system, introduced in 2008, allows Norsk Tipping to know who is making changes to the player card accounts.

Norsk Tipping has dealt with card sharing by creating a system whereby lottery prizes are deposited directly into the winner’s player account. Since wins are deposited directly into the cardholder’s account, there is little incentive to borrow someone else’s card. Previously, there had been problems with customers leaving cards in VLTs. Now, players log onto the machine with their player card and PIN number, and then must remove the card before the games start. The machine will also alert a player if their card is left in the VLT for too long.

EVALUATION

A pilot was conducted from August to November of 2008, involving 16 VLTs in eight locations in four Norwegian towns (Sjolstad, 2009).

During the pilot, a small percentage of players used the PIMFs:

- 1.3 percent used the voluntary money limits
- 2 percent used the timeout
- 2 percent used the self-test
- 2.3 percent reached the mandatory monthly limit of 2,200 NOK

An evaluation summary (Sjolstad, 2009) reports that players found the card system easy to use and were very satisfied with the PIMFs. Net revenues (320 NOK [\$57 CDN] per machine per day) were very close to what had been anticipated (370 NOK [\$66 CDN] per machine per day).

Norsk Tipping player cards have been widely accepted since they were introduced in 1992. The cards guarantee that winners will receive their prizes even if they lose their tickets. Within one and a half years of their introduction, 90 percent of Norsk Tipping customers had purchased the card. Norsk Tipping has also built acceptance for the card through incentives such as games that can only be played by cardholders.

A number of efficiencies have been realized with the new VLTs and card system, including increased security, less handling for the retailer and marketing opportunities through SMS and email (25 percent of card holders have given permission for personal marketing) (Karlsen, 2008). Another benefit is that, since VLTs do not contain any money, the crime rate on VLT storeowners has dropped significantly.

FUTURE

Norsk Tipping is looking at enhancing its player card PIMFs. As they currently exist, the play summary and timeout features are only available on VLTs. Norsk Tipping plans to introduce a play summary feature on their other gambling offerings in the near future, as well as the ability to set time limits. There are plans to expand the play summary feature so that it will include lottery spending, and so that gamblers can view their statements at home. Norsk Tipping is also looking at the possibility of using a risk-assessment tool such as Sweden's *Playscan*. To this end, they are building up a data warehouse that could be used for analyzing players' gambling patterns.

AUSTRALIA

Player Card:	Various club cards
Registration:	Voluntary
PIMFs:	Play History Report Limit Setting
Scope of Cards:	Casino, Clubs and Hotels with VLTs

CONTEXT

Most gambling in Australia is run by private operators. Australia has clubs and hotels with VLTs (“pokies”), Totalisator Agency Boards (TABs) that offer horse and sports betting, publicly and privately run lotteries and casinos. Because gambling is regulated and, in some cases, operated by state governments, there is a range of gambling services and responsible gambling policies across the country.

Player cards with PIMFs were first flagged as a possible tool to help gamblers manage their betting by the Productivity Commission in 1999 (Nisbet, 2005a). Since then, card-based and cashless gambling has spread to many states, often with government mandates to provide play history reports and limit-setting tools. Gambling venues in Victoria and New South Wales have player cards with PIMFs, while venues in Queensland and South Australia are conducting trials on new player card systems.

In the state of Victoria, the Crown Casino’s loyalty program has integrated a program called *Play Safe*, which has play summary and limit-setting features integrated into it. The system offers gamblers the ability to set daily and annual limits on gaming machine play. The introduction of this system pre-dated the implementation of the *Gambling Regulation Act 2003*, which prohibited loyalty program memberships for EGM players unless the players were given the ability to set limits on the amount of time they could play the machines in a day, or on the amount of money they could lose on the machines in a day or a year (Australasian Gaming Council, 2009).

The capability to set monetary and time limits via card technologies and security PINs has been available in New South Wales since 2002, when new legislation governing EGMs (*Gaming Machines Regulation 2002*) was implemented. The legislation mandates the delivery of transaction records and monthly *player-activity statements* (PAS) to all card and account holders upon request (Nisbet 2005a). The player card system in New South Wales is a voluntary system, operated on a venue-by-venue basis. About 20 of New South Wales’s 700 venues offer the cards with PIMFs as part of their loyalty programs, with about five actively utilizing the cards on a wide scale within their venue (Nisbet, 2009c). The card system is cashless, utilizing a magnetic stripe membership card to access a server-side account.

In Queensland, player card systems with PIMFs are currently being trialed at a club to study what effect they might have on a player’s gambling behavior. In the trial, which utilizes a cashless gaming card, players are able to set limits on how much they can spend in a day, how much they can transfer from their card to the machine in a session and how much money can be stored on the card itself (Australasian Gaming Council, 2009).

South Australia has recently introduced a Responsible Gambling Code of Practice that requires venues that wish to have a loyalty scheme for EGM gamblers to implement an approved player card with a pre-commitment capacity. Trials are being conducted at four

venues on a program called PlaySmart, which has been added to the existing venue card system. PlaySmart allows players to set time and money limits, or a cooling-off period before increases to a money limit come into effect (Australasian Gaming Council, 2009).

None of the aforementioned systems are universal throughout their respective states. The systems that have been implemented in Victoria and New South Wales are voluntary, while the trials in Queensland and South Australia are only taking place at a small number of venues.

In most Australian states, regulations had prevented the use of player cards in gambling venues. After several government inquiries into the possible effectiveness of using player cards with PIMFs, however, several states have changed their regulations and are now encouraging operators to adopt player card systems, and are granting concessions to do so. In Victoria, for example, cashless systems are exempt from bet limits and speed-of-play limitations. Nisbet (2005b) believes the purpose of these concessions is to shore up revenue at least until a critical mass of users is encouraged to adopt the card.

TYPE OF CARD

The pre-commitment features of the player card systems in Australia have mostly been added to pre-existing loyalty club cards. The systems in Queensland and New South Wales are cashless.

PLAY INFORMATION AND MANAGEMENT FEATURES

A combination of play history reports and time and money limits is available for player cards in venues in several Australian states. Regulations call for these PIMFs to be available in New South Wales, but they are not currently being promoted by venues, nor is access to these features facilitated without staff assistance.

PLAY HISTORY REPORT

Victoria: The state government requires Crown Casino to provide annual play summaries to its EGM players. Those who sign up for the program as part of Crown Casino's loyalty program are required to view their statements at least once per year or their membership will be canceled or suspended.

New South Wales: Play summaries are available at clubs with VLTs, but only a small percentage of patrons actually access them. Nisbet (2005a) found that 67 percent of gamblers interviewed thought summaries would be beneficial, but that few actually used them, likely because they could only be accessed at particular locations within the venue and with staff assistance.

LIMIT SETTING

Victoria: Players at Crown Casino can set daily or annual limits. When the set limit is reached, the screen notifies players and they are then unable to accrue loyalty points until the selected time period has lapsed. The experience at Crown Casino demonstrated that Crown Club members were pleased to have the ability to place limits on their play, although only a small proportion of Crown Casino patrons actually did so (Independent Gambling Authority, 2005).

New South Wales: Players can advise the venue in writing if they wish to set a money limit on their account (Nisbet, 2005a). There is also a universal limit on the card balance of \$200, with an opportunity for venues to apply to increase that limit, which several have successfully done.

Though there is no hard data available about actual usage of time and money limits, 47 percent of EGM gamblers in a nationwide survey indicated that they would try setting limits when playing EGMs and use them in the long term (McDonnell-Phillips, 2006).

Although not directly studying actual limit-setting behaviors for player cards, there is some research that looks into how Australian players generally use spending limits for gambling. The McDonnell-Phillips (2006) study found that EGM players have a greater tendency to set their limits either the day prior to, or the same day, they go gambling than either on the way to the venue, at the venue or while playing. The study also compared gamblers with problems to regular gamblers and found that both are equally likely to set limits but gamblers with problems have more difficulty keeping to limits. In addition, the study found that participants under 34 years old were most likely to use the limit-setting features while those over 50 were more likely to report they would not want to use the limit setting feature at all (McDonnell-Phillips, 2006).

EVALUATION

There are currently no publicly available evaluations of player cards with PIMFs in Australia. There are, however, two government inquiries into responsible gambling that include a focus on player card technologies (IPART, 2004; Independent Gambling Authority, 2005). As well, there is a nationwide survey on gambling that included questions about the acceptability and perceived potential effectiveness of player cards (McDonnell-Phillips, 2006). Finally, Nisbet (2005a, 2005b, 2006, 2009a, 2009b) has done a number of studies using surveys, focus groups and interviews that provide insights into acceptability and perceived effectiveness. Her studies provide valuable insight into strategies and costs for implementing player cards with PIMFs.

A number of government inquiries have proposed player cards with PIMFs as a way to minimize harm by assisting players to develop awareness and manage their gambling (IPART, 2004; Independent Gambling Authority, 2005).

The only data on the actual usage of player cards comes from Nisbet's evaluations (2005a; 2006) of two New South Wales Clubs where player cards were being used. At these venues, only 0.02 percent and 3.8 percent of players used the cards (Nisbet, 2005a). Neither club, however, was observed to be promoting the cards.

Player perceptions are mixed, with 39 percent reporting that they believed player cards with PIMFs would help them manage their gambling, and 38 percent reporting that they thought they would not help them. Other respondents were ambivalent (Nisbet, 2005b). Experience with the cards may change the players' perceptions. Nisbet (2006) found that players who had used, or continued to use, the card in New South Wales clubs were generally supportive of its functionality.

Research literature from Australia cites a number of barriers to players' acceptance of the cards. One of the most important barriers was player concern about privacy. In Nisbet's study (2005a) two-thirds of respondents stated that they would prefer to be anonymous when gambling. Site owners felt that higher risk groups were more likely to hold concerns about privacy because they generally prefer to be anonymous (Nisbet, 2005a). This is supported by the McDonnell-Phillips (2006) nationwide survey where only 29 percent of problem-gambling EGM players and TAB punters did not have any privacy concerns about the card, compared to 50 percent of non-problem gamblers. In the same study, 27 percent of EGM players and 32 percent of TAB punters reported that they would be extremely concerned about privacy implications. Nisbet (2005b) also found, however, that most gamblers were confident about the security and reliability of the technology-based responsible gambling systems.

Current research indicates that players' concerns with the privacy of their data are alleviated by actual use of player cards, and by players having an established positive relationship with a venue (Nisbet, 2006). In contrast to the concerns about privacy expressed by many research participants, the research suggest that players who have been using cards for four years or more believe that player cards promote player privacy (Nisbet, 2009d).

In addition to concerns about privacy, in the nationwide survey, 31 percent of regular EGM players, and 35 percent of regular gamblers, expressed concern that mandatory limit setting would decrease their enjoyment of gambling, while 52 percent of both groups felt that it would have no real effect (McDonnell-Phillips, 2006).

There is some evidence from New South Wales pointing to possible unintended consequences of cashless player cards. Staff at one gambling venue reported that the major benefit they observed for players using the cashless player cards was the ability to move from machine to machine more quickly and easily (Nisbet, 2009a). Staff believed that players “put more money through...and put it through quicker on cashless than they do on hard cash” primarily due to the ease of collecting and then spending winnings (Nisbet, 2009a).

A cashless card-based system also reduces player interaction with gaming staff, who are trained to identify and interact with problem gamblers (Nisbet, 2005a). This may add to the incidence of problem gambling, since staff will have fewer opportunities to engage with patrons who may be showing signs of problem gambling. As a result, there will be fewer opportunities for interventions.

Weighing the unintended consequences against the possible benefits, and using what is admittedly limited information, Nisbet (2005a) concludes that “at worst, card-based gambling is neutral; at best, it has positive benefits.”

A number of insights on the implementation of player cards come from the Australian literature. The nationwide survey, for example, found that most gamblers were open to the concept of player cards, but a majority thought that the idea would elicit a strong negative reaction from other players (McDonnell-Phillips, 2006). The authors point out that this finding indicates the need for public education when introducing player cards, and warn that any negative media could have a very significant effect on public opinion (McDonnell-Phillips, 2006).

FUTURE

Player cards with PIMFs are in the development stages in several Australian states. Two systems are currently being tested in Queensland, one of which has a terminal away from the machine where a player can set a limit. The state of Victoria is mandating that, by 2010, every new gaming machine be required to have pre-commitment capabilities. South Australia has also recently legislated that venues must introduce player card and pre-commitment systems.

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