

Responsible Gambling Features of Card-Based Technologies

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There is broad support from many sectors of the gambling industry in NSW Australia for account or card-based gambling systems. Some proponents are cautiously optimistic: they suggest that, given the technology has the potential to assist players manage their spending, promoting use of the technology is justified. Others suggest that players are generally reticent to use the system, and advocate incentives and rewards to overcome this. This paper presents a selection of the findings of a wider study into the factors affecting the provision and acceptance of cashless technologies in NSW. A questionnaire was administered to 134 patrons of two large NSW clubs that have implemented card-based technologies. Those items that measured features of the technology that have been suggested by key industry stakeholders as potential responsible gambling tools are identified, and the consumer response to those items is discussed.

Keywords: Problem gambling; Responsible gambling; Card-based technologies; Gaming Machines Regulation; Australia; New South Wales.

Introduction

Gambling is a popular recreation in Australia (Australian Institute for Gambling Research [AIGR], 1999). National gambling expenditure exceeded \$15 billion in 2001-2002, 59% of which was on gaming machines (Tasmanian Gaming Commission, 2003). Almost half (48%) of this \$8.9 billion gaming-machine expenditure occurs in NSW (Tasmanian Gaming Commission, 2003).

While the popularity of gambling in NSW extends back to the arrival of Europeans, it was not until the 1970s that a rapid increase in gaming machine numbers and gambling expenditure was experienced. Social and demographic changes have fuelled this growth: consumers enjoy increased leisure time and higher disposable income than their predecessors, and urbanization has increased accessibility. Technological

innovation has also stimulated growth, making gambling more appealing to consumers, and opening up opportunities for improved monitoring and compliance which has in turn led to liberalization (AIGR, 1999).

This growth has led to the realization that gambling impacts individuals and communities in potentially harmful ways. Today, policy makers look to balance the economic growth and prosperity that gambling brings, with a responsible approach to its provision. Technological innovation is central to this debate. Specifically, card-based gambling technologies are being promoted by the industry and considered by policy makers for their ability to ameliorate harm and promote responsible gambling.

Gambling and Technology

It is widely accepted that technology and gambling are fundamentally linked (AIGR, 1999; Griffiths, 2000; Korn & Schaffer, 1999; Productivity Commission, 1999). The microchip is acknowledged as the prime technological innovation in the history of the development and expansion of the gaming machine industry (Australasian Gaming Machine Manufacturers Association [AGGMA], 2000; AIGR, 1999). Chips enabled

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the replacement of mechanical spinning reels in machines, and facilitated the implementation of a wider variety of games (AIGR, 1999). In the same way, computers and improved telecommunications networks also made it possible for governments to regulate the operation of machines via centralized monitoring services, the introduction of which was witnessed in the late 1990s (AIGR, 1999).

In each case, the technology has been widely adopted for other purposes, and the gambling application has leveraged off this market penetration. This adaptation of entrenched technologies to the gaming environment is common (Jackson, 1998).

Similarly, electronic payment mechanisms are commonly used to pay for goods and services. In Australia, these technologies enjoy high market penetration. There are in excess of 24 million debit card accounts in existence, and in February 2004 these cards were used in more than 134 million ATM or EFTPOS transactions with a combined value of \$14 billion (Reserve Bank of Australia, 2004). However, whilst electronic money (*e-money*) and debit cards can be seen as electronic cash equivalents on the conceptual level, usage rates amongst the two media are quite different (Drehmann, Goodhart, & Krueger, 2002). Therefore, the high levels of acceptance of card payment technologies in the retail sector will not automatically translate to high acceptance within the gambling environment.

Of further interest to a consideration of acceptance of card-based technologies is the knowledge that users perceive the attributes of a technology more favourably than non-users (Rogers, 1983). Thus, the challenge for innovators is initial adoption. Encouraging use on a trial basis is a practical strategy for overcoming this adoption hurdle.

Cashless gambling refers to the replacement of cash in and cash out payment mechanisms on a gaming machine with non-cash substitutes. In some configurations, this is a paper ticket that holds unique information including the payment amount. Machines must be configured with the appropriate hardware to dispense and/or read these tickets.

Cashless card-based payment mechanisms permit registered players to deposit money onto an account, and use a magnetic stripe or smart card to transfer the

balance to and between enabled gaming machines as credits. The number of live, electronic payment gaming machines in NSW is estimated at 695, or 0.7% of the total.¹

The purpose of this paper is to present the results of one objective of a wider study into the factors affecting implementation and acceptance of cashless gambling in NSW. This objective aimed to identify and describe the factors affecting acceptance of cashless machine gambling in NSW from a demand side perspective. These are considered in the context of the features of the technology that affect the perceived and therefore actual experience of the consumer, and together influence the eventual acceptance or rejection of the technology.

It is argued that an understanding of consumer acceptance is critical to any discussion of responsible gambling and harm minimization. The current debate as to the value of card-based gambling systems in these areas is taking place in isolation of this theme. At best this is a deficiency of the debate and at worst it may be damaging, as any change in the provision of card-based gambling as a response to the responsible gambling ethos will necessitate appropriate levels of consumer acceptance to have an impact.

Overview of the Literature

Responsible gambling takes place in an environment where problem gambling is minimized through appropriate consumer protection mechanisms, including awareness and education, harm minimization techniques and treatment (Dickerson, 2003). Harm minimization measures may be further categorized as those that empower consumers to make informed choices and exercise individual control, as well as those that are implemented by venues (Banks, 2002).

Consistent with the responsible gambling measure of informed choice, the Gaming Machines Regulation 2002 NSW (Department of Gaming and Racing [DGR], 2002) mandates the delivery of transaction records and monthly *player-activity statements* (PAS) to all card and account holders upon request.

It has been noted that, for harm minimization measures to be effective, they should reduce the amount of money spent on gambling (Blaszczynski, Sharpe, & Walker, 2001). The probability that card-based technologies will assist gamblers manage their spending, and thus facilitate responsible gambling, was first proposed in Australia in the 1999 Productivity Commission enquiry into gambling. In its chapter on consumer protection, the commission flagged the potential of pre-commitment as an effective tool to aid gamblers manage their spending (Productivity Commission, 1999, Ch. 16.71). It was noted that the general trend in society away from cash based transactions precipitated the

¹ This figure represents the number of enabled machines in the four venues who have rolled out card based play to all patrons. Approximately 20 venues in NSW are approved to operate cashless card based systems (Department of Gaming and Racing, 2003). The number of additional machines for which card based functionality is planned, including those trialling the technology, is estimated at ,3000.

move to alternative payment mechanisms in the gambling environment.

NSW now permits the use of card-based gambling systems. However, of the many pre-commitment characteristics of card-based play discussed in the [Productivity Commission \(1999\)](#) report, only a few have been mandated. These include the incorporation of a PIN, and an ability to set budget limits over a determined period of time. Participation in this scheme is voluntary; although the player must be notified in writing that it is available. Similarly, the [Gaming Machines Regulation 2002 NSW \(DGR, 2002\)](#) requires that the player must advise the venue in writing should a weekly account limit be required. Consistent with the harm minimization ethos of empowering consumers, this measure places responsibility for managing spending back with the individual.

The Regulation also sets the maximum amount held in a player account or on a smart card at \$200, although a venue may apply to the Department of Gaming and Racing (DGR) for an increase in that limit. This amount has been set to limit the liability of a venue toward account holders in the case of financial collapse (L. Brotherton, personal communication, November 29, 2003).

In NSW, the [DGR \(2003\)](#) has a statutory duty to effect harm minimization. To that end, the Department has determined to address the harm minimization potential of account and card-based gambling as a priority for the 2003-2004 period. This investigation coincides with the September 2003 announcement by the NSW Minister for Gaming and Racing of an Independent Pricing and Regulatory Tribunal of NSW (IPART) Review of Gambling Harm Minimization Measures. The review will consider a range of measures including “controls over player reward schemes and card-operated gambling machine systems” and the impact of those measures on recreational and problem gamblers and the community ([IPART, 2003](#), p. 2).

Notwithstanding the forthcoming findings of the DGR report and the IPART enquiry, there is a growing call from gambling industry experts for the widespread introduction of card-based cashless systems. In some instances, wide area schemes are advocated ([Holmes, 2003](#); [Productivity Commission, 1999](#)). Under this model, all machines in the state would be enabled to accept cards exclusively. Professor Mark Dickerson advocates a compulsory card-based system, arguing that such a scheme would mitigate the potential for patrons to move between venues once spending limits have been reached ([Holmes, 2003](#)).

In response to this claim, Duncan Fisher, the CEO of Tattersalls, notes that the control afforded the state under such a program could be deemed to impinge the civil freedom of individuals ([Holmes, 2003](#)). Mr Fisher further notes that a compulsory card-based sys-

tem would have adverse effects on the profitability and viability of the company and the industry, and would negatively impact on the gambling experience for the patron. Whilst these potential impacts are not qualified, other gambling industry commentators have both flagged the prospect of card-based systems negatively impacting gamblers, and cited a lack of evidence as to the potential effectiveness of card-based systems in minimising harm ([Blaszczynski, Sharpe, & Walker, 2003](#)).

The probability that cashless gambling technologies could be useful in the promotion of responsible gambling is crowded with supportive rhetoric. Conversely, the potential of card-based technologies to exacerbate problem gambling are less widely acknowledged, perhaps due to a lack of empirical evidence. However, it is possible to examine the characteristics of problem gamblers and posit how the features of card-based play will interact with those.

Fewer contacts with others is implicated in increased levels of problem gambling ([Griffiths, 2000](#)). Before the introduction of card-based technologies, note acceptors became widely available in machines, thus reducing the need to attend a cashier to obtain change ([Brewer & Cummings, 1995](#)). Gamblers have acknowledged that note acceptors helped them avoid the cashier and thus “the potential embarrassment of being recognized or labelled as a loser or problem gambler” ([Blaszczynski et al., 2001](#), p. 85).

One feature of cashless technologies is reduced interaction with gaming staff. This is particularly evident where venues have or intend to reduce the number of floor staff, as a result of a decline in hand pays, cashier transactions and machine refills ([Casey, 2003](#)). Where a card-based gambling system is adopted, players may initiate and end a gambling session without interpersonal contact, as credits are transferred directly to the account. In the future, the redemption of winnings could take place at cash back terminals, further reducing opportunities for human interaction ([Taylor Parets, 2004](#)).

Highly accessible, continuous forms of gambling are also correlated with the occurrence of problem gambling ([Blaszczynski et al., 2003](#); [Productivity Commission, 1999](#)). A reported effect of cashless technologies is an increase in the rate of play on a machine, with systems in the US increasing this by up to 15% ([Palmeri, 2003](#)). Measures that reduce the speed of play, such as slowing the reel spin and limiting the maximum permissible bet have been considered in Australia for their potential impact on both problem and recreational gamblers ([Blaszczynski et al., 2001](#); [Productivity Commission, 1999](#)). In a widely reported study of the impact of such measures on gamblers, the researchers concluded that slowing the rate of play did not appear to reduce the amount of money lost, but did

however result in a “significant reduction in levels of enjoyment” (Blaszczynski et al., 2001, p. 82).

The percentage of problem gamblers in clubs has been estimated at approximately 14% of reward or loyalty card-using members in NSW and 16% in Nova Scotia, Canada (Blaszczynski et al., 2003). This is consistent with estimates of the incidence of problem gambling amongst regular gamblers of 15% (Banks, 2002). On the basis of this evidence, it is not possible to conclude that use of cards contributes to or ameliorates the incidence of problem gambling.

It is known that account cards have characteristics that make them most suited to frequent players. These include the ability to move between machines easily, the ease of loading and reloading the balance on the card and the ease of payout (Ben-Meir, 1997; Berger & Hauk, 2002; Henderson, 2003). Further, the link between frequency of play and problem gamblers is also established (Abbott & Volberg, 1996; Dickerson, 2003). Therefore, it is possible that at risk, frequent gamblers are attracted to the card.

Method

The wider study from which the results for this paper are drawn utilized a two-stage data collection methodology. The first, exploratory data collection stage sought to expose the issues surrounding the provision and acceptance of cashless gambling technologies. A qualitative methodology was selected, using in-depth interviews with key stakeholders. These informants represented manufacturers, community and social welfare groups, gambling venue managers and regulators.

The second stage of the research sampled the perceptions of gamblers toward account based gambling technologies through the design and administration of a structured questionnaire. Self-completion questionnaires are a proven and reliable data collection method for applications of the *technology acceptance model* (TAM), as used in this study. This model posits that the latent constructs perceived usefulness and ease of use have a positive effect on attitude toward and intention to use new technology. Behavioural intention is in turn a reliable indicator of actual use (Ajzen, 1991).

A modified version of the TAM scale developed by Davis (1989) was administered to a convenience sample of 134 patrons of two Sydney clubs. Where the meaning of the original item could not be retained with modification, features of the technology identified thorough the stage-one interviews with key stakeholders were supplemented. Each of the 23 statements testing consumer perception of the consequences of using card-based gambling were rated on a seven-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The researcher administered approxi-

mately one-third of the questionnaires, with the balance being self-completed.

Both clubs chosen as sites for data collection are located in metropolitan Sydney, the capital city of NSW. Both clubs were ranked in the top 25 clubs in the state in 1999 (Department of Gaming and Racing, 2000).

Wentworthville Leagues Club has 342 gaming machines, all of which accept card-based play. The “eBet” card-based gambling system was rolled out in the club in early 2001 on a trial basis, to a limited number of users. Wentworthville was one of two venues involved in supervised field trials of the system. The system was re-branded “Quick” and made available to all members in November 2003. At the time of writing, the club had 1,006 players registered to use the system. This represents a usage rate of 3.8% of 26,500 members.

North Sydney Leagues Club operates the “eBet” card-based gaming system on 294 (94%) of 314 gaming machines. It is known internally as “Golden Bears Plus” or “cashless.” The club has 705 registered cashless players, being 0.02% of the total membership of 38,000. The system was made available to all members on an unrestricted basis in late 2003.

Results

The results of selected questionnaire items are presented below. These are supplemented with data from the submissions of key industry stakeholders to the current NSW IPART (2003) enquiry, and comments from the stage-one interviews with key informants.

Profile of Respondents

Age. While the distribution of respondents approximated the general population of Sydney (Australian Bureau of Statistics, 2002b), the sample was skewed slightly in favour of older respondents as shown in

Table 1
Age of Respondents Compared to the Population of Sydney

Age Range	Respondents			Sydney %*	Sydney Cum. %*
	<i>n</i>	Valid %	Cumulative %		
18-24	11	8.3	8.3	14	14
25-34	22	16.5	24.8	22	36
35-44	20	15.0	39.8	21	57
45-54	27	20.3	60.2	18	75
55-64	25	18.8	78.9	12	87
65-74	22	16.5	95.5	9	96
75+	6	4.5	100.0	4	100

* Australian Bureau of Statistics (2002b)

Table 2
Frequency of Play of Gaming Machines

	Respondents		
	<i>n</i>	Valid %	Cumulative %
Nearly every day	5	3.8	3.8
A few times a week	35	26.5	30.3
Once a week	24	18.2	48.5
Once a fortnight	13	9.8	58.3
Once a month	17	12.9	71.2
Once every few months	10	7.6	78.8
Hardly at all/never	28	21.2	100.0

Table 1. This is not surprising, given that the times of sampling at each site were predominantly early afternoon through to mid evening. Additionally, both sites were clubs, which are characterized by an older membership (Hing, Breen, & Weeks, 2002). 18.8% of 55-64 year olds were sampled in comparison to 12% representation in the Sydney population. Similarly, 16.5% of 65-74 year-olds were sampled comparative to 9% in the population.

Gender. The gender of the sample of respondents was approximately 56.4% male ($n = 75$) to 43.6% female ($n = 58$). This differs to the approximately 50:50 distribution (49.2% males to 50.1% females) in the general population of Sydney (Australian Bureau of Statistics, 2002b), and possibly reflects higher male membership of the two clubs.

Frequency of machine play. Table 2 shows respondents' self-reported frequency of playing gaming machines. Almost 50% of respondents played gaming machines at least once a week, while 4% of total respondents indicating that they played gaming machines every day and a further quarter (26.5%) played "a few times a week." 10% of respondents played once a month, less than 10% played once every few months and one-fifth played hardly at all or never.

Current use of card. As shown in Table 3, 70% of respondents did not use the venue's card-based system for gambling, 16% always used the card, and a further 14% had used or continued to use the card on an infrequent basis.

Responsible Gambling and Harm Minimization

The potential application of card-based technologies to the machine gambling environment was first suggested in the Productivity Commission (1999) report, and is a central area of consideration under the terms of reference of the current IPART (2003) enquiry. Whilst not the primary focus of the wider study from which these results are drawn, the potential of card-based gambling to minimize harm to gamblers

was explored in the interviews with key stakeholders. Responsible gambling is a factor affecting the acceptance of card-based gambling for venues, government and the community. Features of the technology that may facilitate achievement of this charter include the ability for consumers to set limits on play, the balance limit, and the ability to request a player activity statement.

Pre-commitment. Under the terms of the NSW IPART enquiry, the ability of an individual player to nominate spend limits and set other restrictions on play is referred to as pre-commitment (IPART, 2003). In the issues paper, IPART implies that this "liquidity control" is an essential feature of card-based gambling.

Several submissions to the enquiry strongly supported card-based pre-commitment for its effectiveness as a harm minimization tool. For example, Aristocrat suggested that pre-commitment "may prove to be one of the most effective technical responsible gambling initiatives available" (Aristocrat Technologies Australia Pty Limited, 2003, p. 2). The Liquor Administration Board (LAB, 2003) submitted that player cards are "excellent" for harm minimization, due to the limits on the operation of these systems.

Representatives of community service organizations are additionally supportive of pre-commitment. For example, the Council of Social Service of New South Wales (NCOSS, 2003) was positive about the pre-commitment capacity of cards for the reason that it empowers the player. NCOSS advocates extending the functionality of the card in this area by allowing players to set limits on the number of games that can be played in a given period. The Gambling Impact Society (2003), a body representing problem gamblers, believe that pre-commitment would be of benefit to problem gamblers.

The eminent gambling researcher, Professor Mark Dickerson (2003), qualifies the potential contribution of pre-commitment to the ethos of harm minimization when he notes that gamblers are unable to make rational, informed decisions whilst on the gaming floor. Thus, the value of pre-commitment is that it offers an opportunity to separate the "point of sale" from actual

Table 3
Respondents' Current Use of a Cashless Card

	Respondents		
	<i>n</i>	Valid %	Cumulative %
Never	93	70.5	70.5
Rarely	4	3.0	73.5
Sometimes	9	6.8	80.3
Often	5	3.8	84.1
Always	21	15.9	100.0

gambling activity (Dickerson, 2003, p. 41).

In contrast, ClubsNSW (2003) do not believe that pre-commitment is synonymous with card-based systems. However, they do not suggest other mechanisms by which this might be achieved.

Manage Spending. As noted earlier the survey questionnaire administered to 134 club patrons included items relating to potential responsible gambling features of card-based gambling. Table 4 shows the distribution of responses to these questions. Each of these is discussed below.

One question measured respondent's perception of the utility of card-based technologies in controlling expenditure. This concept was identified through the interviews with key stakeholders. One informant, a manufacturer of card-based technologies, was able to quantify gambler's assessment of these features in noting that they "did surveys and 60% of players said that the system helps them manage or understand their spending."

As depicted in Table 4, approximately two-fifths of questionnaire respondents (38.8%) perceived that card-based gambling would help them manage their spending. Equally, two-fifths of respondents disagreed (37.9%) with the statement. Almost one-fifth of respondents were ambivalent on this issue. The mean score for this questionnaire item was 3.84, being in the range mildly disagree to neutral. Overall, the sample of respondents did not believe that card-based gambling would help them manage their spending.

The comments of some users however, were generally supportive of this functionality. One user summarized his response to the convenience offered by the card thus: "I find the quick system helpful while playing the machine (i.e., invest what you can afford)—you can always check anytime what remains and cease when your investment has disappeared."

Another respondent noted that "I seem to be meaner" when gambling with the card than with cash. In considering how this feature might be utilized, a self-identified problem gambler suggested that he "would put a \$50 limit on it. When the money was gone, it would be gone." Equally, another respondent

noted that whilst the ability to control expenditure might be useful for recreational gamblers, "it wouldn't help real (problem) gamblers."

In an analysis of the relationship between responses to this item and actual use of the technology, a significant correlation was found ($r = 0.175, p < .05$). Thus, for this sample, respondents who have used or continue to use card-based gambling technologies perceive that the card helps them manage their spending. This result confirms the assertion of Rogers (1983) that users perceive a technology more favourably than non-users.

Therefore, the mean response to the card's ability to assist respondents manage their spending may be a reflection of the distribution of the sample. Although further research is necessary, it would be imprudent to reject the usefulness of card-based technologies as a tool to help gamblers manage their spending.

Player activity statement. Another mechanism of card-based gambling that may assist players manage their spending is the player activity statement (PAS). Respondents were strongly supportive of the usefulness of the statement, with more than two-thirds (67%) in agreement with the assertion that the player activity statement would be a useful feature of card-based gambling. 17% of respondents were neutral, and less than 13% disagreed.

The questionnaire comments were more disparate on this issue. When asked whether the PAS would be a useful feature of card-based gambling three respondents freely commented that it would lead to thoughts of suicide, or as one respondent replied, "you would want to kill yourself (if you knew what you spent)." As approximately one-third of respondents ($n = 44$) completed the questionnaire with the assistance of the researcher, this represents an unusually high rate of comment (7%). One respondent dismissed the utility of the PAS outright with "I don't want one." Another noted that "it might be a shock" and "you also need to consider privacy." One respondent commented that the PAS "should be mandatory."

Despite this generally positive assessment of the usefulness of player activity statements, no site was observed to be promoting the feature. One venue did not

Table 4
Frequency Distribution of the Responses to Selected Questionnaire Items (n = 134)

	<i>M</i>	<i>SD</i>	Strongly Disagree (%)	Disagree (%)	Mildly Disagree (%)	Neutral (%)	Mildly Agree (%)	Agree (%)	Strongly Agree (%)
Prefer to be anonymous	5.4	1.7	3.0	6.0	2.2	17.9	6.7	26.1	34.3
Will help me manage my spending	3.8	1.9	17.2	14.9	6.0	22.4	14.2	16.4	8.2
The balance limit is sufficient	5.5	1.7	4.5	4.5	3.0	16.4	9.0	25.4	36.6
The PAS is a useful feature	5.2	1.6	4.5	3.0	5.2	17.2	11.2	33.6	23.1
Intention to use the card	4.6	1.9	9.0	9.7	4.5	22.4	11.9	21.6	17.2

have a self-service facility for generating statements at time of the study, although it is supposed that, given the terms of the Regulations, this venue would have been able to comply had a patron asked. The gaming machine manager at the second venue, where it was possible to request a statement through an authorization terminal on the gaming floor, noted that demand for the service was very low. It is possible however, that this demand is in direct proportion to the promotion of the service: the player information brochure and player consent form provided by this venue does not mention the PAS.

As discussed previously, player awareness and education is a central tenet of responsible gambling (Dickerson, 2003). Given the perceived utility of the player activity statement for the majority of questionnaire respondents, promotion of the availability of the PAS in venues would be consistent with this principle. However, it is probable that, on the evidence of the comments, at risk and problem gamblers are disinclined to receive this information. Alternative strategies to inform and educate this group of gamblers are necessary.

Problem Gamblers

A number of key stakeholders distinguished between card-based gambling as a responsible gambling measure targeting recreational gamblers and card-based gambling as a tool for helping minimize harm to problem or at risk gamblers.

A number of key informants thought that card-based technologies would not be attractive to problem gamblers, and that use amongst this group would be lower than amongst recreational gamblers. In support of this concept, one manager noted that higher stakes machines had greater instances of unrated play. That is, reward or loyalty cards are typically not used on these machines. This is consistent with several propositions around the behaviour of at risk gamblers. The first is that high stakes gamblers and frequent gamblers are more at risk of developing problems. The second is that problem gamblers generally want to be anonymous. As such, “any take up amongst this group would be low.” Therefore, assuming that the alleged benefits of card-based gambling for this group of users are realized, the critical issue becomes encouraging use or acceptance.

Anonymity. Card-based systems in NSW cannot be played anonymously: players must register to use the system. Many key stakeholders noted this lack of anonymity as a potential barrier to player acceptance and usage, although were unsure to what extent and for which groups of players. When asked to assess the degree to which lack of anonymity is a barrier to player

acceptance of card-based gambling, one informant replied: “Is it a big factor? No, but it is a factor.”

Another informant highlighted those gamblers he thought most averse to being identified, noting that “problem gamblers generally want to be anonymous. Any take up amongst this group would be low.”

As evidence, many informants referred to the usage rate of rewards or loyalty cards, with one noting that 50% of play in his venue was with a reward card and 50% was not. Thus, the informant concluded that acceptance of cards was unacceptably low due to the lack of anonymity afforded users of the system. While there is no empirical evidence that gamblers do not use loyalty cards due to concerns with anonymity, it can be assumed that, as highlighted by this manager, these cards carry similar “risks.” It is possible that players who use the cards either do not have concerns over the privacy of their usage information or do not wish to remain anonymous.

Most informants supported the idea that ticket-based systems afforded high levels of anonymity. In two cases, this cashless model was promoted and implemented for this reason. These informants “assumed that people liked to be and remain anonymous. So tickets mean they can...”

For these informants, lack of anonymity was deemed to be a factor affecting player acceptance and usage rates of carded systems. In support of this argument, another informant highlighted the experience of one offshore casino group who have determined that “25% of the market won’t go on card-based” for this reason.

In their submission to IPART, ClubsNSW (2003) appeals for the introduction of anonymous card-based gambling. ClubsNSW (2003) argued that such a scheme would not impact the “ability to use such systems with problem gambling” (p. 30).

In response to the statement, “I prefer to be anonymous when gambling,” more than one-third of questionnaire respondents strongly agreed, a quarter (26.1%) agreed and less than one-tenth (6.7%) mildly agreed. Thus, two-thirds of respondents prefer to be anonymous when gambling. Less than one-fifth of respondents were neutral in response to this statement and in total, one-tenth (11.2%) did not prefer anonymity.

These responses support the proposition of key stakeholders that anonymity is the preferred state for gamblers. While participation in card-based schemes remains voluntary, the promotion of the positive features of use of the card, such as the PAS, could mitigate this concern in some players. However, should regulators move to mandate participation, the lack of anonymity could lead to reduced participation from recreational and at risk gamblers in the short to medium term.

Card balance. Many key stakeholders interviewed in stage one of this study were critical of the \$200 balance limit. These suppliers and managers believed the limit to be an impediment to uptake. One informant advocated transferring the responsibility for setting the balance limit to the player (ClubsNSW, 2003).

The mean response to the questionnaire item “the \$200 card balance will be sufficient for my needs” was 5.5. On this measure of perceived convenience 36.6% of respondents strongly agreed with the statement, 25.4% agreed and 9% mildly agreed. Overall, the majority of respondents (71%) indicated that \$200 was sufficient for their gambling needs. In contrast, 12% of respondents noted that the \$200 card balance was insufficient for their needs, and 16.4% were neutral.

From discussion with those respondents to whom the questionnaire was administered face-to-face, it is possible to conclude that some of those who disagreed with this statement may have done so because they felt that \$200 balance was too high, or that it was the minimum amount needed to participate in the scheme. This is perhaps a reflection of the description of the scheme presented to respondents in the front of the questionnaire.

Inducements. One method to improve acceptance of card-based systems suggested by both Aristocrat (2003) and ClubsNSW (2003) in their respective submissions to IPART is to provide incentives for gamblers to register to use card-based play. One suggested inducement includes increasing the balance limit above \$200 (Aristocrat, 2003; ClubsNSW, 2003). Aristocrat noted that their rationale for this request was that it was “simply inadequate” (Aristocrat, 2003). This view echoed that of one key informant, who noted that at risk players need to be recruited into the program. This informant suggested that “you need to get them using the system and then you can open up possibilities.”

Aristocrat (2003) suggested other inducements, such as doubling the jackpot limit to \$20,000, enabling anonymous play, and doubling the bet limit to \$20 to facilitate uptake amongst players. Whilst these inducements may make participation in the scheme attractive, it is more certain that they will increase turnover on the machines. Blaszczyński et al. (2003) have suggested that a symptom of an effective card-based gambling scheme will be a reduction in expenditure. The inducements proposed by Aristocrat (2003) seek, it seems, to ameliorate this effect.

A potentially more constructive approach to increasing participation is to identify the features of card-based play that facilitate uptake, and enhance or promote those while simultaneously addressing the barriers to acceptance. Such an approach is more consistent with the ethos of responsible gambling.

Intention to use. It has been suggested by key informants that barriers to uptake of the technology amongst at risk gamblers include a perceived lack of anonymity, and the \$200 balance limit. Similarly, facilitators include the ability to manage spending and the provision of player information via a player activity statement. Consumer’s perception of each of these constructs was tested in the questionnaire, making it possible to test the relationship between each construct and frequency of play. No significant correlations were found.

However, when frequency of play was tested against an aggregate measure of intention to use card-based technologies a significant, positive relationship presented ($r = .19, p < .05$). This suggests that at risk gamblers, as defined by frequency of play, may be willing to using card-based technologies on the basis of a general assessment of its usefulness. Clearly, more research in this area, using a specific research design, would be required to prove this relationship conclusively.

Conclusion

This paper has presented selected results from a study of consumer acceptance of card-based technologies in NSW. Consumer perceptions of the usefulness of features of the technology that are convergent with the ideals of responsible gambling have been considered. These views were contrasted with the observations of key gambling industry stakeholders.

Overall, there is no evidence to suggest that a voluntary, card-based gambling scheme offers any significant protection to gambling consumers relative to that offered by other responsible gambling measures. Consumers do not believe that card-based technologies would help them manage their spending. They do however believe that the player activity statement is a useful feature, and more frequent and therefore more at risk gamblers may be attracted to the card on the basis of its perceived usefulness.

Conversely, some features of the system such as the ease of moving between machines and the ease of operation might encourage spending, thus facilitating the development of problem behaviours in at risk gamblers. Therefore, in the absence of direct empirical evidence to the contrary, it is prudent to conclude that the impact of card-based gambling as a harm minimization tool remains unresolved, and confer with the assessment of a key stakeholder, who noted that, “at worst, card-based gambling is neutral; at best, it has positive benefits” for gamblers.

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