Evaluation of the Cashless Gaming Trial at the West Suburbs Newcastle Leagues Club (Wests New Lambton)

Professor Paul Delfabbro

University of Adelaide

December 2023

Report prepared for Liquor & Gaming NSW

Acknowledgements

The evaluation was overseen by the Liquor & Gaming NSW; funded and supported by Aristocrat Leisure Ltd; the fieldwork was undertaken by 3ARC (Nicole Hodge, Kate Sadler, Kerry Sproston); and hosted by West Suburbs Newcastle Leagues Club (Wests New Lambton).

The evaluation team are grateful to the generous support provided by staff at Wests New Lambton as well as the patrons who agreed to be part of the trial methodology.

Table of contents

Executive Summary

Trial background and technology

- The trial was part of the NSW Government's Regulatory Sandbox (RS) that allows for the trialling of new gambling technology of policy and industry interest.
- Under the RS, a trial is supported by industry, overseen by Liquor & Gaming NSW but evaluated by an independent research team.
- The RS is a scheme designed to conduct time-limited focused trials of particular technologies that are of industry and regulatory interest to examine their feasibility and potential impact on gambling-related harm.
- This trial evaluated the PRIME Player Smartphone App developed by Aristocrat Leisure Ltd and implemented at Wests New Lambton in Newcastle between October 2022 to June 2023. The App allows for cashless gaming to be undertaken using a phone-based digital wallet solution.
- The technology solution involves the establishment of an App-based account which can accept banking funds which can then be transferred into a gaming wallet which interfaces with EGMs using a Bluetooth connection (PRIME locator).
- The technology also includes voluntary responsible gambling features (limit-setting, player activity statements and self-exclusion functionality).
- The new technology was operational at the same time as a legacy system that enabled people to gamble on EGMs using cash or preloaded tickets and earn points by inserting a physical Wests card.
- The trial was overseen by Liquor & Gaming NSW and evaluated by Professor Paul Delfabbro working in conjunction with 3ARC who conducted the fieldwork.

Trial aims

- The trial aims were informed by the principles of the Regulatory Sandbox. It examined:
    - The influence of the new cashless gaming solution on customer behaviour and their ability to manage and control expenditure;

    - Player experiences with the technology which included issues of harm reduction and usability;
    - The ability of the technology to deliver on functionality that could reduce gambling harm and provide consumer protection (or meet broader legal and regulatory objectives;
- The evaluation also highlighted areas for technological improvement; offer guidance into the future conduct of trials; and, provided insights into strategies for the implementation of cashless technology in venues in the future.

Background/ literature

- The report included a detailed review of national and international literature that provided a context for the current trial.
- Digital payments are becoming increasingly common and are now predominant over cash-based payments in many commercial contexts.
- This has accelerated since the COVID-19 pandemic.
- Cashless methods are considered more convenient, faster, more secure and may reduce the costs of handling cash in business contexts.
- Some psychological literature points to concerns around cashless payments as having the potential to increase expenditure due to expenditure being harder to track; a 'decoupling' of the costs of transactions from the immediate benefits; and the possibility of impulsive expenditure.
- Digital payment methods are becoming more common in gambling venues around the world for both gaming machines and table games.
- Research suggests that easier access to money in venues (e.g., through ATMs and EFTPOS) could increase the risk of over-expenditure and this raises concerns about cashless gaming.
- Self-report research appears to support the hypothesis that people would prefer to spend using cashless gaming methods than using cash, but this is usually based on hypothetical situations rather than actual real-life studies of behaviour.

- The possibility of safer gambling tools, including player activity statements and the ability to monitor expenditure facilitated by cashless technology, may potentially mitigate some of these concerns.
- Studies of technological adoption show that new technology will only tend to replace older methods when the perceived benefits outweigh existing systems and when the new system is relatively easy to use. Younger people and those with greater technological confidence are more likely to be early adopters.

Methodological approach

- The principal focus of the trial was not primarily focused on naturalistic uptake, but on whether the new technology worked and how users responded to it.
- A multi-faceted mixed methods approach was taken to the methodology to achieve triangulation and convergence of findings across different data collection methods.
- A major recruitment drive for trial participants was undertaken with the intention of achieving a sample of around 300 patrons (this was almost reached).
- The methodology involved a pre-trial survey with patrons; a post-trial survey of patrons; qualitative interview with technology users and non-users; interviews with venue staff, management and the technology provider; and analysis of objective usage / behavioural data collected during the trial.

Baseline quantitative with Wests patrons

- 260 patrons registered for the trial and completed the pre-trial survey. Almost two-thirds were men, and the majority were aged under 45. Comparisons with the Wests membership base showed that the sample over-represented men and younger patrons.
- Important barriers to participation included a: lack of interest; concerns about publicised hacks that compromised people's personal information; privacy and concerns about the government or banks tracking their expenditure.
- There was, however, a good level of diversity in the level of EGM playing experience and broad representation of the different PGSI risk groups: 14% had gambling problems; 22% were moderate risk gamblers; 22% were low risk and 42% were non-problem gamblers.

- 80% were members of the Wests loyalty program and the majority reported using their card to track loyalty points when they gambled at the venue.
- Gambling at other venues apart from the trial venue was common: almost 75% reported doing this and people usually played more than one machine when they visited the venue. These findings immediately established the fact that trials operate in an environment where venue or machine specific technology experiences are likely to occur alongside other 'non-trial' gambling activity.
- Trial participants were generally receptive to responsible gambling features.
- Most (over 80%) were familiar with using their phones to make payments in other contexts.
- The majority (over 80%) reported setting their own personal budgets when they came to the venue to gamble.

Interviews with trial participants

- Two rounds of interviews were conducted. An earlier set of interviews gained insights into why patrons were not engaging with the technology early in the trial.
- The slow sign-up process was a concern for some respondents in the early non-user interviews; not having the required information for KYC (Know-Your-Customer ID checks) for the App-based account set-up; and issues with WiFi connectivity were cited by these respondents.
- Some early issues with Bluetooth connectivity with the EGMs and problems with the location beacons being too sensitive when loading gaming wallets were also mentioned early in the trial, but were addressed as the trial progressed.
- Concerns about privacy, hacks and surveillance were also mentioned as barriers.
- Similar issues were raised as barriers in the later interviews with patrons.
- The wallet names and interplay between them was considered complex at first, but this part of the technology (funds transfers) appeared to work well.
- There was little perceived impact on gambling behaviour. Some believed that it made expenditure easier to monitor because gaming wallet balances were more transparent during the process of gambling.

- There was generally support for the responsible gambling features, but generally low usage because people did not view themselves has having a problem and needing the features.
- The new technology was seen as easy-to-use and convenient once fully operational and saved on ATM fees.

Interviews with venue staff

- Interviews were conducted with venue staff: both general staff and those assigned as “trial ambassadors”.
- These interviews generally confirmed the observations of patrons.
- They noted that it had been hard to recruit older participants, particularly during the day.
- They confirmed that the initial set-up process had often been more time-consuming than expected and that the wallet names and interplay between them was not easy to understand at first.
- The workload was generally not considered onerous, but the process of recruitment had sometimes been stressful because of the problem of duplication in approaches to patrons and rejections.
- Staff were supportive of the trial and the responsible gambling features, but were not sure that higher risk /value customers were participating. They also pointed out that people would only use the technology if it were seen to have benefits above the existing system.
- Staff emphasised the importance of training and having clear information. They believe that this had been quite good, but could be supplemented by more opportunities to trial the technology in “demo” mode. They also emphasised the importance of having technical staff close at hand to deal with any issues that arose with the operation of the technology.
- They did not witness any obvious impact on player behaviour with cashless gaming, although they conceded that they based this on limited observation.

Analysis of objective data

- Analysis of data collected by Aristocrat during trial made it possible to monitor the level of activity during the trial.
- Usage of the new technology was generally low, but this data collection confirmed the successful operation of the technology as well as the ability to capture data on expenditure and feature use.
- It was noted that not all activity involving the interface between the gaming wallet and EGMs using the new technology necessarily involved money which had originated in the venue wallet. People were also able to gamble using money previously loaded in via cash or tickets and then transferred to the gaming wallet by Bluetooth connection.
- A total of 259 people were detected by the system (one self-excluded person was not included). Of these, 20 made at least one venue to gaming wallet transfer (236 events in total); 88 made gaming wallet to EGM transfers (with 8206 transfers detected in total).
- The median amount transferred from the venue to gaming wallet was $300 and $566 from the gaming wallet to EGM. A total of $1.3m was tracked from gaming wallet to EGMs across all trial participants using multiple machines (note: this does not represent total expenditure, but value transferred).
- No differences in system usage were identified based on PGSI risk level.
- Only 10 people tested the limit setting features and only 5 had limit breaches detected. The system successfully demonstrated its ability to detect nearly all the limit types, breaches and also limit modifications and venue notification selections. Too little data was, however, available to consider venue reactions, with much of the limit activity likely to be a test by participants rather than a genuine attempt to control gambling.
- System tracking confirmed post-trial survey results (see below) by showing that participants conducted most of their gambling using the old or legacy system using their physical Wests card.
- Expenditure rates seemed quite similar between the old and new gambling systems to the extent that this could be compared in the trial.

Post-trial survey

- A total of 77 people who had registered for the trial completed the post-trial survey.
- The age, gender and PGSI profile of this sample was generally similar to the pre-survey sample.
- A variety of reasons for not using the new system were given. The most common were: having a preference for the older system; privacy concerns; a lack of incentive; and, not being able to play one's preferred machine.
- The majority of people (almost 70%) had only used the new system some or half of the time when they gambled and only 7.5% reported using it all the time.
- The idea of a quarantine wallet was generally supported.
- When asked about the effect on the new technology on gambling, about half reported liking the convenience; not having to speak other people; and 61% reported being able to monitor their play.
- Most believed that the quality of support and information provided during the trial had been good (54-62%) and another 20-25% thought it was average.
- Over half believed that the main functionality including registering for the trial was very easy or easy with only 18% reporting that registration was difficult.
- Most supported the location beacon that prevented loading money from the venue to gaming wallet on the gaming floor, although some saw it as inconvenient.
- The most common ongoing technological issue experienced by trial participants were occasional drop outs in the Bluetooth technology connecting the gaming wallet and EGM. This issue appeared to be the one that was not always addressed rapidly through technical support.
- The principal response to questions relating to the impact of the new cashless gaming App on gambling was that it made little difference to the amount of time and money spent. However, further analysis of other response categories showed that the percentage of people who reported a reduction in the amount of gambling spent per day was lower than the percentage who reported an increase which is consistent with the qualitative interview feedback.
- Analysis of a question relating to the technology's impact on people's ability to manage their expenditure showed that just over half of respondents indicated no

impact. However, the percentage who agreed (35%) was greater than the percentage who disagreed (10%).

- People reported very little use of the limit setting features, but believed they were useful to reduce gambling harm. Other features considered potentially useful were those that helped people monitor their expenditure within sessions.
- The player-activity-statement was seen as useful, well-designed and a potentially useful safer gambling measure by the majority of respondents: over 70% would recommend it to others.

Senior industry interviews

- Interviews were held with Wests management as well as Aristocrat (the technology provider) about their higher-level appraisals of the trial.
- Both believed that the technology worked well when it was operational, but raised concerns about the registration process. This was seen as “clunky”, too slow or requiring too many “clicks” on the App. Both believed that a more streamlined process was required to develop a more “seamless” and easy-to-use App that would be operationally effective in venue environments.
- Wests expressed concerns about the potential impact of the technology on older patrons (the majority of the customers) who did not often use mobile phones. It was believed that it was too early to introduce this new technology and that any solution would have to suitable to meet the needs of casual and leisure-oriented gamblers who would not have the time or inclination to go through a slow sign-up process.
- Both saw cashless gaming as an inevitable feature of future venue operations and that there many advantages for the delivery of safer gambling experiences.
- Wests believed that the workload for staff was considerable in the early recruitment phase of the trial and this needed to be considered in future trials.
- Both respondents argued for strategies that avoided duplication in KYC ID processes such as venue membership information being also used to validate peoples ID for cashless gaming enrolment. Other methods for recruitment using more sophisticated marketing method were discussed.

Conclusions/ Take-away messages

- The results of the trial were discussed in terms of the principal aims.
- It was concluded that findings from different data sources showed considerable convergence.
- The principal challenge with the technology was the enrolment process which was considered too slow by users, venue staff and other industry respondents.
- The technology generally had limited impact on player behaviour and, if anything, may have made it easier for people to control and monitor their expenditure.
- People generally had a tendency to revert to the old legacy system rather than use the new technology.
- Participants generally had a positive experience with the technology once it was operational
- Other aspects of the technology that may need some improvement include clarity around the naming of wallets (there were many names) and the issue of Bluetooth connectivity that seemed to affect some participants.
- The technology appeared to be successful in delivering the functionality that was promised and this extended to the ability to collect behavioural data on player behaviour, including interaction with responsible gambling features.
- There was general support for the responsible gambling features, but low usage of these features during the trial.
- The trial highlighted some venue specific issues that may need to be considered in future trials. These include: the quality of wifi connections at the venue; appropriate spaces to sign people up; the demographic profile of the venue; and its staffing profile. Given the resources required to onboard patrons on to new technology, it may be that larger venues are better positioned to adopt cashless gaming than smaller ones.
- The trial also highlighted the challenge of running trials in contexts where people have access to another legacy system and where they have opportunities to gamble on trial machines, but also others located at the same, or different, venues.
- The evaluation notes the strengths of the data collection strategy; namely, the use of multiple convergent data sources, but notes limitations. These include the self-

selected sample, low utilisation of some features and only modest response rate for the post-trial survey.

Chapter 1: Project Background and Aims

1.1 Introduction

This report describes the background, methodology and findings arising from the first major trial of cashless gaming technology in NSW gaming venues: the Prime Digital trial based on technology developed by Aristocrat Ltd. The trial of this technology represents the successive NSW Governments' interest in supporting the gaming industry move towards a cashless environment through development of a future regulatory framework that allows cashless gaming in NSW. Cashless gaming is now considered an inevitable feature of the evolution of gambling technology within the industry, with potential commercial and customer benefits. These include: reduced costs; reduced handling of physical cash in gaming machines; and greater customer flexibility and convenience. For the government, cashless gaming provides an opportunity to strengthen its commitment to harm minimisation through the potential inclusion of responsible gaming features; to gain greater insights into player behaviour through better data collection protocols; and the potential to strengthen anti-money laundering protections.

The trial was conducted within the context of the Regulatory Sandbox (RS) developed by the NSW Government, which involves the provision of flexible and time-limited regulatory and compliance processes that enable the trial of new gambling technologies. Through the RS, industry groups are able to apply to the NSW government (Liquor & Gaming NSW) to trial new technologies. This will usually involve the appointment of an independent researcher to provide advice on an appropriate evaluation methodology to evaluate the trial and to conduct a formal evaluation. Such work would be funded by the industry applicant, but overseen by Liquor & Gaming NSW. Implicit within the NSW government's involvement in this process is a commitment to ensure that the new technology does not contribute to any increase in harm in people who play gaming machines in NSW. To this end, all trials which are supported will each address three key areas:

- changes, if any, in player attitudes and behaviours due to the use of technology, including changes in gambling behaviour, the ability to manage and control gambling spend, the frequency and duration of sessions and the level of harm experienced
- player experiences using the technology, particularly the harm minimisation tools made available, and any barriers identified
- areas for improvement to reduce gambling harm or consumer protection.

1.2 Project governance and management

The trial was conducted under a governance framework that included: Liquor & Gaming NSW, the Office of Responsible Gambling, Aristocrat Ltd., and the independent research team (IR). The independent research team featured: (a) Paul Delfabbro from the University of Adelaide who advised on the design of the methodology, conducted analyses, and prepared the final report and (b) 3ARC (formerly DBM Consultants), who led the fieldwork and day-to-day management of the data collection processes. The methodological design of the trial was developed in the first 6 months of 2021 and approved by Liquor & Gaming NSW in May 2022. The trial data-collection commenced in October 2022 and concluded in late June 2023. Regular meetings were held between the principal parties on at least a monthly basis with site visits in Newcastle undertaken by the research team at appropriate points in the project.

1.3 The PRIME Digital technology

The PRIME technology enables people to transfer money/ value from any non-credit bank account into a bank account established by the technology solution which is represented in the smartphone Prime Player App (downloadable on IOS or Android) as the "venue" wallet located on the smartphone. The technology also allows for Point-of-Sale (POS) payments to made into the venue wallet if Google Pay and Apply Pay is available. To set up the technology, people have to download the PRIME App, but also undergo a KYC (Know Your Customer) identity check to enable them to set up the new account which forms of the basis for the Venue Wallet. Once money is in the Venue account or PRIME wallet (see Figure 1.1 and 1.2), they can then transfer money to the Gaming Wallet (called cardPay at the venue) so that it is available to spend on EGMs. Patrons can then login / tap

to commence a gambling session by connecting with the gaming machine via a low energy Bluetooth connection (PRIME locator beacon which is called *Connect-and-Pay* at the venue). This establishes a connection that will cause the funds from the player's gambling wallet to be transferred to the gaming machine once the player confirms the transaction with a pin. Once gambling is complete and they end the session (either by ending the session on the machine or the app or by leaving the EGM vicinity), then the funds on the gaming machine are transferred back to the gaming wallet.

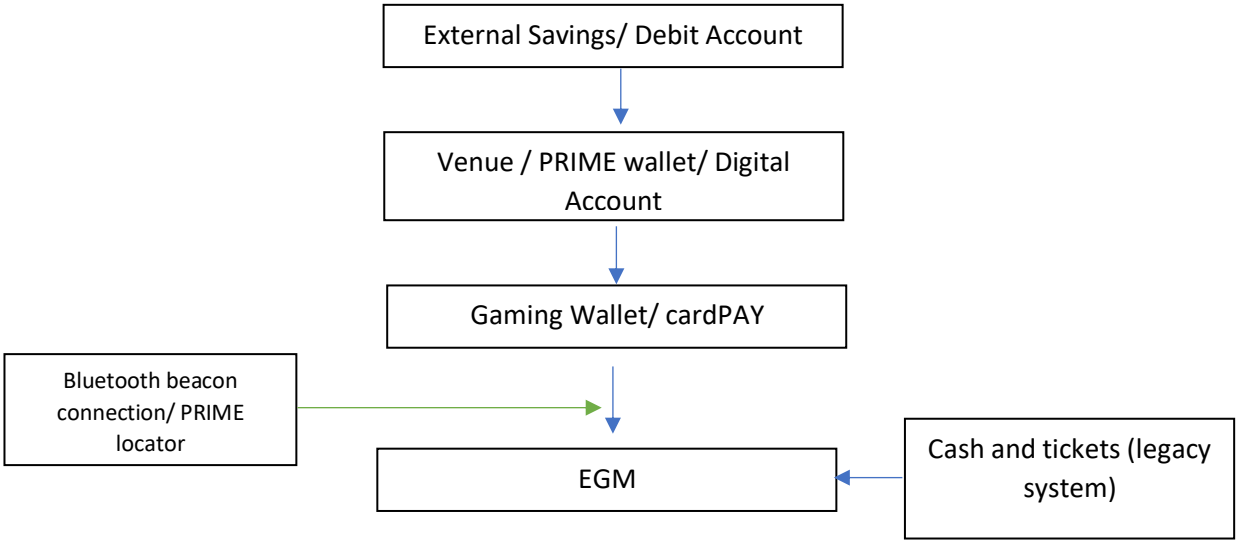


Figure 1.2. How to gamble using the new PRIME technology

Two important points to note with the system is that money can flow back up the system. First, any money in the gaming wallet can be sent back up to the venue wallet account and then returned to the person's original bank account. Second, money can also be loaded on to the EGM using the legacy (cash and ticket) system and then also added to the gaming wallet if the person were to establish a Bluetooth connection with the machine. Thus, not all money available in the gaming wallet necessarily has to originate from the venue wallet. In other words, the new technology can be used fully or partially to gamble.

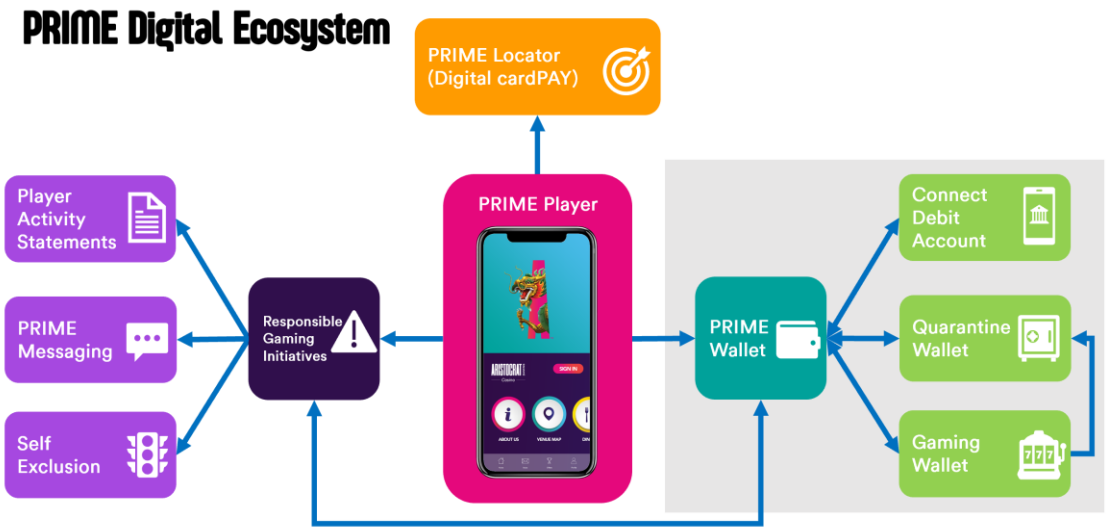


Figure 1.2. **The PRIME Digital system (Aristocrat, 2023)**

Figure 1.2 shows that the App also features a quarantine wallet. Where credit balances exceed $5000 (or lower if configured by the patron), the funds exceeding the balance limit are sent to this wallet automatically. Funds are held there for 24 hours after which they are automatically transferred to the Venue Wallet, at which time the funds may be transferred to any bank account or to the Gaming Wallet to a maximum balance of $5000. Players can access the quarantine wallet immediately at points of sale within the venue to pay for meals, drinks or other non-gambling club services. PRIME Digital provides a locational capability (via a location beacon) which enables the software to know if the person is in the designated gaming area or out of it (non-gaming area). This makes it possible to enable certain functionality based on their proximity to the beacon. The PRIME player app on the user's smartphone also attempts to communicate with the gaming machine's console at regular intervals. If this communication fails (because the player has moved too far from the gaming machine), then the PRIME Player will terminate the gaming session (after a warning).

As Figure 1.2 shows, PRIME Player also has a lot of other functionality (both from a venue and player perspective). It can enable harm minimisation features to be activated

when the person signs up (e.g., limit setting); can enable requests for periodic activity statements; enable player messaging such as push notifications if set limits are reached; and be used to make players aware of non-gambling related venue service and amenities (e.g., restaurants). Once registered for the digital wallet, they are automatically directed to the responsible gaming trigger configuration screen (Figure 1.3). This provides access to a number of harm minimisation features. Various limits can be set based on rules: (a) Session length: maximum duration for continuous gaming session; (b) Frequency of play: Maximum number of visits to venue in a specified period; (c) Amount spent: Total net expenditure in a given period: (d) Total bets: Maximum total bets within a given period; and [1](e) Maximum bet: Maximum bet below a specified average in a 5-minute period (e.g., the total bet amount/ number of bets cannot exceed a set value). Users can choose whether or not to activate these limits and can choose multiple limits (a configuration of limits). In addition, patrons also have access to digital self-exclusion functionality as displayed in Figure 1.4.

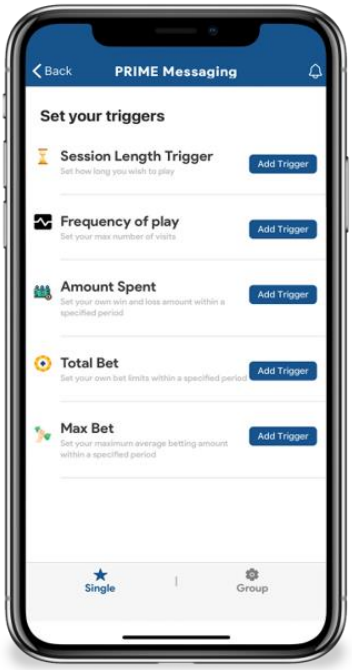


Figure 1.3. Responsible gambling limit setting features

[1] The feature can be set to 1-minute intervals, unsure if it's been rounded out to 5 minutes for documentation purposes.

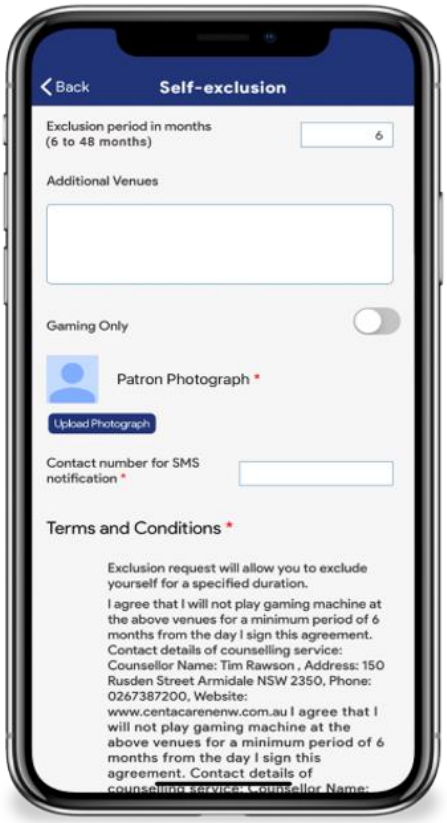


Figure 1.4. Self-exclusion functionality

Limits that are set at sign-up can be subsequently modified to a higher limit at any time or set a lower limit which becomes active within 24 hours. The default consequence for triggering an event by exceeding a limit is to lose all[2] loyalty point accrual for the remaining hours on the trading day or for the remaining duration of the configured period, whichever is greater. However, it is possible for players to enable 'venue notification' when setting the limits. If this is configured, then further consequences arise from breaching a limit.[3] Staff are notified and the[4] machine is locked so that remaining funds cannot be played. If the person wants to[5] continue gambling, then they would have to move to another machine and play

[2] This includes all loyalty program activities such as exclusion from entries into loyalty promotions, in addition to points accrual.
[3] Staff = Venue designated or nominated trained staff. This is to ensure suitably trained employees are having the conversation with the patron.
[4] Machine Locked = Is a venue configurable setting which was not enabled by Wests.
[5] When the machine is unlocked the remaining funds are returned to the patron. If the machine lock setting is used, each EGM a trigger is exceeded on will lock as the patron continues to move from

using cash OR transfer additional money to their gaming wallet from their venue wallet if they wanted to gamble on another machine using the PRIME app.

1.4 Venue context and deployment

The trial was supported by Wests New Lambton who initially deployed the technology in October 2022 on 36 machines in a designated area of the venue. At the start of February 2023, functionality was extended to 144 machines so that people would have a greater opportunity to play their favourite machines. Wests also utilises an existing loyalty card system which enables people to earn points, prizes and rewards based on their gaming expenditure. For example, a person can spend money at the venue and then earn points which can be converted into an equivalent in 'Wests dollars" to be used on services such as food and beverages. This actively usually occurs through people playing EGMs using a legacy system that involves putting cash or prepaid tickets into machines. If their physical membership card is inserted, then their tracked activity leads to loyalty points being accrued. People sign up to gain a card and are assigned a Wests membership number.

1.5 Trial Objectives

The principal trial objectives were set out in the principles for the Regulatory Sandbox described above but were also further confirmed by a 'trial framework' developed by Aristocrat in their response to Liquor & Gaming NSW. In essence, the trial should examine the impacts of the technology on two parties: Industry and players. Aristocrat referred to these as 'Industry sustainability considerations' and 'Player considerations'. In other words, what impact would the technology have on: (a) industry operations, venues and staff and b) what impact would it have on people who gamble on EGMs? The RS guidelines indicate that there are two broad areas that had to be considered. The first of these was: Integrity and functionality. In essence, did the technology provide the functionality which is promoted (i.e., address the 'technological problem') and could it do so in a way that meets broader legal and regulatory objectives? Important issues here included: patron privacy; data security; legal compliance (e.g., KYC to meet requirements under Federal and State laws); and the ability to provide 'intelligence' in the form of

machine to machine. The options for the patron to continue gambling are not to exceed their limits, delete their limits and wait 24hr, or continue playing without their member's card which means ending a digital session and continue playing with the absence of inserting their physical member's card, i.e. as a non-member.

standardised data collection. The second was to facilitate harm minimisation or RG initiatives and to indicate whether a shift to cashless gaming influences the likely degree of harm associated with EGM gambling (no change, decrease or increase).

1.6 Structure of this report

This report is divided into several sections. Chapter 2 provides a literature review that places the current trial within a national and international context. It discusses the psychological and sociological literature relating to how people interact with cashless technology; the ways in which this technology can be used to facilitate harm minimisation measures; and, an overview of factors influencing the uptake of new technologies. Chapter 3 summarises the principal methodology of the trial, including the methodological principles that were applied; the different components of the methodology, including the sources of data; and, areas or variables that were captured. Chapter 4 summarises the findings of the baseline or pre-trial survey involving those customers of Wests who signed up for the trial. Chapter 5 presents the main findings from the two rounds of qualitative interviews with trial participants/ customers. Chapter 6 summarises the findings from the qualitative interviews conducted with venue staff who were actively involved with recruiting and advising patrons. Chapter 7 summarises the results of the objective data collection that shows how many behavioural events were captured. This indicates the level of utilisation and provided tangible evidence of the functional operation of different parts of the technology. Chapter 8 summarises the results of the post-trial survey involving patrons. Chapter 9 includes the higher-level appraisals of the trial provided by senior industry respondents at Wests and from the technology provider. The final chapter (Chapter 10) then summarises the main findings and the extent to which the technology appears capable of achieving the objectives for which it was designed.

Chapter 2: Cashless gambling: Literature review

2.1 Overview

This chapter provides an overview of the developments in digital or cashless payments that forms a contextual background to the Aristocrat-Wests New Lambton trial. It discusses the broad trends in the use of cashless payments; some of the theoretical principles that provide insights into how cashless payment influence consumer behaviour; and, what is currently known about the potential impact of cashless payments on gambling (with a particular focus on gaming machines). A specific focus will be to consider the potential risks associated with the introduction of cashless payments to gaming, but also the potential for this technology to be used to facilitate the implementation of harm minimisation technology. Included within this discussion will be a summary of existing evidence relating to people's receptivity and use of harm minimisation features to reduce the potential harms associated with gambling.

2.2 Trends in digital payments

Over the last decade, there has been a continuous trend towards the use of cashless payments rather than physical cash to facilitate payments. Such trends have been strongly observed in Europe, particularly in Scandinavian countries (e.g., Sweden, Iceland or Norway) which are very close to becoming completely cashless societies (Capgemini, 2019). For example, national banks in Norway estimate that only 3-4% of transactions now involve cash (Black Swan Capital, 2021), and estimates from the Riksbank in Sweden indicating that only 13% of consumers were still using cash in 2018 (Riksbank, 2018). In nearly all these countries, rates of debit card ownership (that would facilitate the use of tap and pay transaction settlement) are close to 100% (Black Swan Capital, 2021). Cashless payments are also now commonplace in China, with few shops now accepting payment in physical yuan; instead, people are preferring to pay using social-media-based payment apps (Pymts.com, 2022), with the central authorities also moving towards the imposition of the digital yuan or central bank digital currency (CBDC).

A trend towards cashless transactions is also emerging in Australia, although at a slower rate. According to the Reserve Bank of Australia (RBA), Australians made an average of 625 electronic transactions per person in 2020/21 as compared with 275 a decade earlier and that payment cards are not the most common method for payment in retail environments. Around 75% of these transactions involve debit cards as compared with 60% a decade earlier, with the use of credit cards (e.g., swiping a credit card) decreasing in the same period. A survey of 1000 individuals and 11000 transactions by Caddy et al.'s (2020) RBA survey showed that in-person cash payments still comprised 32% of the total number of transactions (down from 43% in 2016) and 19% by total value (down from 30% in 2016). Cash still makes up 27% of the total transactions conducted and around 10% of the total value. On the whole, digital payment methods were preferred for larger transactions (e.g., $50 or more (only 16% were in physical cash), but there has been a trend towards smaller amounts under $10 no longer involving physical cash (50% down from 66% in 2016). The vast majority (83%) of the cashless transactions were found to be contactless or "tap and pay" rather than other methods (e.g., insert or card swipes). Of this 83, around 5% involves mobile-based payment apps.

The RBA research shows that the use of cash may still be quite high at pubs or bars, at least based on the 2016 Consumer Payments Survey with 25% of payments at bars and hotels and 18% via credit card (RBA, 2017) (total of 43% for cards and 57% for cash). However, the percentage of card-based payments increased 19% points to 62% in the 2019 survey (Caddy et al., 2020). This may have increased a lot more over the ensuing period since the COVID pandemic and suggests a clear shift towards cashless transactions at these venues as well.

The use of cashless technology is not, however, being observed uniformly across the entirely population. Caddy et al. (2020) found that older people (aged 65+ years) are still much more likely to use cash than younger people. They observed that 40% of 65+ year-olds reported being high users of cash (defined as 80% of transactions or more) as compared with 4% of people aged 18-29 years. Further analysis showed that this difference was not merely due to differences in the incomes or size of the transactions in the two groups. Even

after controlling for transaction size, it was found that people over 65 years were five times more likely to engage in person cash transactions as compared with younger age group.

2.3 Advantages of cashless payment methods

Caddy et al. (2020) and the RBA (2018) observed that convenience is the most commonly reported consumer reason for using cashless payment methods; this mirrors similar findings around the world (e.g., Delaney al., 2019; Ramya et al., 2017). Amongst those who were high users of cash in Australia, over 50% reported that they would experience some inconvenience if cash was not made available as compared with around 26% of the sample as a whole. The principal reasons people gave for wanting to continue to use cash was to maintain their privacy (24%); shop preferred cash (20%); to help with budgeting (14%); or because they were paid in cash or did not have any other way to pay. Other important reasons, which were not specifically mentioned in the survey, might include the need to have cash when network outages or power outages occur, or when EFTPOS machines are not working.

Caddy et al. further observed that the value or reliance which people place upon cash payments may be related to the accessibility of the facilities or technology required to facilitate cashless payments, or gain access to cash in general. Those who are less familiar with new technology, who live in remote or regional areas with less reliable mobile or Internet technology may have a greater reliance on cash payments (even if this method does not have to be used all the time). For example, some regional towns may have less reliable internet coverage, fewer banking services to provide face-to-face information on new payment methods, or there may be few functional ATMs. People may, therefore, prefer to make less frequent visits to larger regional centres (e.g., a hotel in a larger regional town) to draw out money which they keep in their wallets for some time to meet daily expenses over a longer period of time. Consistent with this view, Caddy et al. (2022) found that those without mobile internet access were 13% more likely to use cash for in-person transactions.

As Schottler Consulting (2020) point out, cashless payment methods also became the preferred method of payment for retailers during the COVID pandemic because of concern about hygiene. Not having to handle coins and bank notes reduces the likely physical

transmission of the virus between customers and staff; it also reduces the need for disinfectant use between transactions. Other advantages to retailers include a reduction in: the need to handle and count physical cash; the security risk of having larger cash amounts in the till; and, the risk of money being stolen by anyone who works on the premises. These various advantages are also considered favourably by the government, not only during the pandemic, but also more generally. Having electronic methods of payment reduces the size of the "cash economy", reduces tax evasion, provides a stronger audit trail in investigations of payments; and, can also reduce the likelihood of money laundering (Australian Treasury, 2019). Other important advantage of a more cashless society is that it reduces the amount of physical cash that needs to be physically produced by central banks (e.g., the Australian Reserve).

2.4 Effects on expenditure and psychological factors

A number of studies have shown that people tend to spend more money when using card-based payments than when paying in cash (Huebner, Fleisch, & Ilic, 2020; Runnemark et al., 2015). Numerous laboratory studies as well as field studies involving shoppers and other consumers have confirmed this effect (Soman & Cheema, 2002; Soman, 2003). Prelac and Simester (2001), for example, compared the responses of people involved in an auction for sports tickets and found that people using a credit card placed bids that there 64% higher than those who had to pay in cash. Another study by Soman (2003) inspected the shopping receipts of 275 shoppers and asked them how they had made the payment. Those who paid using credit cards spent 32% more than those using cash and tended to have a higher expenditure on treats and luxury items. Similar findings are evident in studies which compare expenditure using cash and vouchers (Raghubir & Srivastava, 2008). These findings were similarly observed in a study by Greenacre and Akbar (2019) who found that lower income earners tended to display less price sensitivity (or a reduced elasticity of demand) to variations in the prices of groceries. Another study by Manoj et al. (2001) tracked the debit card purchases of 1000 households over six months and found that these were more likely to involve purchases of junk food than those made using cash. This may be because it is easier to make impulse purchases when using cards or because digital payments allow more flexible limits on how much can be spent as compared to balance of physical cash.

The reasons why this occur have been summarised in reviews (e.g., Schottler Consulting, 2020) and in papers that continue to pursue this line of research. One view is that card-based expenditure is easier because people are more distant from the effort associated with earning the money. For example, it may be easier to spend an abstract balance placed into a banking account by an employer than to spend physical cash that is seen as arisen from a particular volume of work (e.g., being paid $X for Y hours of work) (Wong, & Lynne, 2017). In Wong and Lynne's research in the laboratory they were able to show that the presentation of credit card cues and no reminders about the hard work associated with the origins of the money was associated with greater expenditure; this effect was found to be particularly pronounced for those who identified as being more conversative in their expenditure on a standardised scale.

Another view is that there is a 'decoupling effect' when people use cards or electronic methods to make payments. When payments are electronic, the true cost of the consumption is more distant or 'decoupled' from the immediate benefits or reinforcement arising from the consumption (Prelac & Lowenstien, 1998). In effect, people are shielded from the "pain of purchase" until some later point in time, whereas the physical handing of money contributes to the sensory experience of transferring something of value to another party (Khan, Belk, & Craig-Lees, 2015; Limbrick-Oldfield et al., 2022; Parke, Parke, & Blaszczynski, 2016). In a similar vein, Soman (2001) refers to how more electronic payments lead to delays in the immediacy of the "wealth depletion" effect as compared to cash. Making cash payments also often involves a stronger "rehearsal effect" in that people may need to plan out how they are going to spend the physical cash. In effect, the purchase process is more active in that people need to consider the amount spent, the change received, and the amount remaining. By contrast, spending using a card is a more passive process which does not usually involve the same planning or consideration. One can visit a retail outlet and spend whatever amount is required, as long as there is a valid credit or debit balance available on the card. As Schottler Consulting (2020) point out, these effects have been observed across a variety of payment modalities, including credit cards, stored value cards, debit cards and multi-function cards. A study by Boden et al. (2020), for example, compared contactless or mobile payments with credit cards and found that the

perceived pain of paying did not differ between the two methods. Both appeared to be distinguishable from cash payments in their effect on consumers.

Other research has focused on the difficulties which card-based payments create for mental accounting as well as the salience of total expenditure. Some studies have shown that people find it harder to recall the amount they spend on cards as compared to when they use cash. Gafeeza et al. (2017), for example, conducted a study involving 496 German students who reported having purchased campus items using cash, a single use card, or a multi-function card. The expenditure amounts recalled were compared with a cross-validation of how much the purchased items actually cost. As hypothesised, respondents were generally more accurate in their recall of expenditure for cash vs. card-based purchases, but no difference was observed between the two types of card. These findings suggested that the salience of the amounts was reduced when the purchases were made by card. These effects may occur because it is easier to remember how much cash was taken out or used for the purchase. Huebner et al. (2021) and Health and Soll (1996) argue that cashless payments make mental accounting more difficult. Many people may have mental accounts of how much they intended or believe is reasonable to spend on different categories of activity. When this is done in cash and compared against a budget plan, it is relatively easier to assign a certain amount of money to bill, food, car expenses and then to luxuries or incidentals (Zhang & Sussman, 2018). However, if all payments are made using a card or electronic payment system, these partitions or categories no longer exist. It is easier, therefore, for a person to spend beyond his or her budget for a particular category of activity. Moreover, cards or electronic apps further provide opportunities to make purchases impulsively or 'in the moment' without reference to any expenditure category. This situation becomes worse when the person has multiple bank accounts, cards, payment methods and individuals using the same account (Kaye et al., 2014).

By contrast, cash provides a more salient record of expenditure. When physical cash is withdrawn, the person can print out a tangible record of the amount. This money is then placed in a wallet and a person knows how much is spent once it is depleted or by inspecting how much remains (Jonker, 2015). The person does not have to log-on to a bank account or inspect the statements from an App to determine their financial position. This

advantage makes it easier to budget and to assign expenditure (e.g., the rent money) to a particular category and to avoid it being spent on anything else. For this reason, it has been argued that using a strict cash budget (e.g., a biscuit jar strategy for essential payments) can be an effective way to adhere to a budget (Eschelbach, 2017), although there are now electronic apps and spreadsheet tools now available (e.g. MyBudget software) which specialise in providing this type of assistance.

2.5 Digital payments in gambling

Digital payments are emerging as a strong trend in the gambling industry (Blaschke, 2021; Brewer, 2021). For example, according to industry reports in the US, 59% of people who visited a casino in the previous year said that they were less likely to use cash in their everyday lives because of the COVID pandemic. A total of 57% indicated that having access to digital or contactless payment options on the casino floor was important to them (Stutz, 2021). In the US, cashless technology is already available for slot-machines in many places and this mirrors similar developments in Australia (Nisbet, 2005, 2006) where ticket-based system have been available (e.g., in NSW) for EGM gambling for some time. Digital technology is seen as having many advantages, including: faster and seamless gambling experiences; a faster transition between games; reduced costs of operation; and, the potential for marketing and enhancing customer loyalty using the technology. Major manufacturers (including Aristocrat) are engaged with the development of cashless gaming solutions both for slot machines, but also other forms of gaming (e.g., table games) (Blaschke, 2021).

Many parts of Asia are similarly exploring digital solutions for gambling (White & Guerreiro, 2020). White and Guerreiro observe that cashless payments comprised 84% of all payments in China and 72% in the US. They argued that people are embracing cashless payments and that it difficult to see how this will not also occur in gambling venues such as casinos, especially for younger people whose payment choices may be ‘digital first’. The article indicates that cashless wallets provide opportunities to implement responsible gambling features and also provide operators with better real-time oversight of cashflows to help identify suspicious transactions and comply with regulatory reporting requirements much more quickly. Discussions are now underway in Macau where there is the expectation

that the central Chinese government will allow digital payments to be accepted as China transitions to the Central Digital Currency /Yuan. These views are also reflected in a report by Trust Networks (2021) in Canada that reviewed the literature on the impact of ATMs and the potential impacts of cashless gaming, but also summarised the developments in different parts of the world. They indicate that relatively few jurisdictions if any in Europe have implemented this technology. They note, however, the fastest progress appears to be occurring in North America (as indicated above) and also in Australia with reference to the Regulatory Sandbox in NSW and developments at the major casinos. They also drew attention to developments in the UK. Although it does appear the cashless gaming on casino tables has not been officially sanctioned by the regulator, attempts have been made to introduce this technology at some casinos. As Trust Networks writes:

> One particular emerging concern has been the increasing use of cashless technologies to facilitate debit payments at table games between players and dealers without limitations. Although the regulator has instructed operators to stop this practice, if this trend persists, then the regulator plans to intervene with stronger measures.

It is clear that, however, that digital payment methods are likely to be a topic of ongoing review by the UK Commission.

2.6 Digital payments: perceived consumer benefits and gambling harm

The idea that digital payments might have an impact on gambling expenditure has been analysed for several decades. According to Parke et al. (2016), there have long been concerns that cashless payment methods (e.g. credits on gaming machines) (Griffiths, 1993; Parke & Griffiths, 2006) or tokenised forms of gambling involving tickets or chips (Cole, Barrett, & Griffiths, 2011) might lead to a suspension of judgement or reduce people's perception of the true financial value of the transactions. Many of the issues are similar to those raised in relation to cashless payments in general, although the analysis often extends beyond the process of making payments. For example, earlier work focused predominantly on the view that gambling with credits on a gaming-machines or placing poker chips on a table encourages people to spend greater amounts of money because they are no longer

gambling with real money. Here the focus will be upon the potential impact of the greater accessibility of cash in venues as might be facilitated by the use of cards or other digital technology. Parke et al. (2016) discuss this topic in the context of 'remote loading' which refers to the ability for gambling customers to use technology in the venue to load money from their bank accounts onto a card or ticket which is then used for gambling.

A useful summary of the potential issues associated with digital payment methods is provided in a study in 2021 by 2CV, a marketing research company. A survey was conducted of 615 gamblers which included 317 land-based gamblers and 115 people who had experience financial harm from gambling. The survey focused on people's attitude towards and use of cash vs. digital payment methods. Several important insights arose from this work and one of these was views about the potential impact of cashless gaming on their gambling behaviour. The questions asked respondents to compare the two different forms of payment (cash vs cashless) how this might affect their behaviour. The comparisons revealed the following results:

- Feel like I'm in control of my spending: 79% for cash and 46% for cashless
- Easy to keep track of my spending: 73% for cash vs. 43% for cashless
- Easy to set limits on spending: 70% for cash and 48% for cashless
- Difficulty to keep track of total gambling spending: 39% for cash vs. 69% for cashless
- Feels like spending less than really is the case: 33% for cash vs 66% for cashless
- Easy to spend more time than intended: 32% for cash and 77% for cashless
- Easy to spend more money than intended: 30% for cash and 85% for cashless

The differences observed between the payment methods persisted even when the analyses were confined to those who preferred to use cashless payment methods. Other questions asked people whether they would be able to adhere to a planned budget using the different payment methods. Only 9% said that they would spend a little bit more and 1% a lot more if gambling with cash, but this increased to 34% (a bit more) and 12% (a lot more) if the payment method involved a smart App on a mobile phone. When people were asked a general question about their preferred payment method, 48% reported preferring to pay with cash, 37% said digital or cashless and 13% believed that the method should vary

according to the product. Cash was the preferred method for casino purchases, whereas cashless was preferred for lottery products and certain types of gaming machine. Consistent with what has been observed more broadly in this chapter, cashless gaming was much more likely to be preferred by younger people (68% of 18-34-year olds) as compared with 32% of those aged 55 and older. Moderate risk and problem gamblers were more likely to report preferring cashless gambling (68%) than no-risk and low risk gamblers (41%).

Overall, this study suggested that people had some concerns about their ability to control and manage their gambling behaviour as well when they were using cashless payment methods. However, the study was largely based on hypothetical scenarios and it may have been the most logical response to argue that cashless gaming provided less control over expenditure. It did not provide any insights into respondents' potential views about the value of activity statements, mandatory limits, budget setting tools or other responsible gambling/ harm minimisation tools that could potentially be implemented as part of a shift to cashless gaming.

These findings appear to follow from the general research into cashless payments. In addition to the issues relating to the suspension of judgement, the reduced "purchase pain", the saliency of expenditure and the ability to keep a mental budget, cashless gaming methods also could change how people behave in venues. First, as Parke et al. (2016) point out, cashless gaming could make the act of getting additional money less visible. In existing casinos, people have to physically remove themselves from the gaming floor to visit an ATM or a booth/ cage to purchase additional chips. Such behaviour can be used as an indicator of potential risk of gambling harm. For example, Delfabbro et al. (2007) found that 45% of problem gamblers reported frequently or always using ATMs or EFTPOS two or more times when they went out to gamble as compared with 15% of moderate risk gamblers, and 3% of low and no-risk gamblers. Such behaviour would no longer be so easily visible if people could stay at a machine and gamble using a digital App.

A second issue which is commonly raised is that it may allow longer and more continuous gambling sessions and also facilitate impulsive betting (Cantinotti & Ladouceur, 2008; Clarke, Tse, & Manaia, 2006; Parke & Griffiths, 2007; Wood, Griffiths, & Shorter,

2004). In effect, there could be less effort or 'friction' in the process of sitting down and commencing to gamble if one can use an App rather than go through the process of buying chips first. Cashless gambling, as it has been rolling out in North America, could also potentially allow people to gamble on a wider range of activities and transition more easily between activities. Having the convenience of being able to gamble without the need to take out money from an ATM, might lead to fewer breaks in play being taken (e.g., Gainsbury & Blaszczynski, 2021; Oakes et al., 2021; Rintoul, Deblaquiere, & Thomas, 2017). Both raise the point that problem gamblers are more likely to engage in impulsive gambling and that breaks in play can serve to provide a 'reality check' away from the gaming area.

A final concern is that the industry may also use the data collected from the App to tailor their gambling offering to increase revenue. Apps could also be used for marketing and to create customer loyalty through promotional deals.

2.7 Insights from ATM and EFTPOS studies

There are a few studies which have specifically examined whether easier access to cash might contribute to gambling harm. Most of these related to the availability of ATMs in venues or how close these are to gambling areas, but the impact of EFTPOS services are likely to be similar. Much of this literature is reviewed by Trust Networks (2021). McMillen, Marshall and Murphy (2004) found that self-identified problem gamblers were more likely to use ATMs at gambling venues (60%) than regular (25%) and reactional gamblers (12.7%). Prevalence studies which have specifically included questions about ATMs have made similar observations. For example, the Productivity Commission (1999) found that 60% of problem gamblers scoring 10+ on the SOGS 'often' or 'always' used ATMs at gambling venues, compared with only 4% of non-problem players. Of those problem gamblers in a large survey of people recruited from counselling agencies, 75% of clients responded that the removal of ATMs from venues would be a highly effective strategy. These findings have been replicated on multiple times over the last 20 years:

- A higher prevalence of ATM use was observed in higher risk gamblers in the Northern Territory (Stevens, 2017).

- In Queensland in 2008–09, 87% of problem gamblers were found to sometimes, often or very often access money from ATMs at venues compared with 68% of moderate risk gamblers, 46% of low- risk gamblers and 20% of no-risk gamblers (Queensland Government, 2010)). EFTPOS use also differed by gambling risk (51% problem gambler vs. 33% of moderate risk gamblers, 19% of low-risk gamblers, 10% of no-risk gamblers).
- Analysis of the timing of ATM use showed that 90% (2006–07) (Queensland Government, 2007) and 75% (2008–09) of problem gamblers Queensland Government, 2010) reported using ATMs before they started gambling vs. 60% of moderate risk gamblers and 42% of low-risk gamblers. Around 36% of problem gamblers reported getting extra money out from ATMs during gambling sessions.
- In the 2011-2012 Queensland Household Gambling Survey (Queensland Government, 2012), 84% of problem gamblers reported using ATMs at least on some occasions as compared with 67% of moderate risk and 43% of low risk gamblers.
- In the 2012 South Australian survey (Department for Communities and Social Inclusion, 2012), 65% of problem and moderate risk gamblers reported having used ATMs before or during sessions to take out money to gamble. In comparison, 35% of lower risk gamblers reported having done this before sessions and only 17% reported doing so during sessions.

In some studies, the purpose for which the money was withdrawn was also considered. In the 2008–09 Queensland study, 100% of problem gamblers reported using ATMs for 'gambling at the pub or club' as compared with a figure of only 15% for no-risk gamblers, 44% of low-risk gamblers and 63% of moderate risk gamblers. Further evidence for the greater use of cash facilities was reported in a Victorian evaluation of the effects of removing ATMs in venues. Thomas et al. (2013) observed that EFTPOS use increased between time 1 and 2: 46% of problem gamblers reported using EFTPOS to obtain money to gamble prior to the policy and 67% used it after implementation. An increase was also observed for moderate risk gamblers: 33 to 50%. Once again (and most importantly for the present review), it is clear that higher risk gamblers are more likely to use EFTPOS at venues

than other gamblers. In general, the findings obtained for EFTPOS usage across the levels of gambling risk appears to follow a similar pattern to ATM usage.

Some of the studies have examined the importance of the distance between the gambling activity and ATMs. For example, in a study by Schottler (2017), some merit was ascribed to a plan to have a 30-metre limit between ATMs and gambling activities such that the machines were out of the gambler's sight. This conclusion was based on the views of gamblers: 26.9% of problem gamblers (26.9%) and 67% of at-risk gamblers reported "they would not access ATMs to spend more than they intended to" and also "they would be unlikely to use ATMs to spend beyond gambling limit." A study by Harrington et al. (2010), for example, examined the effect of removing ATMs from a gaming room in Canada as compared with a control venue without this change. Over 700 regular (biweekly or more often) gamblers were included. The study examined gambling expenditure, adherence to limits and frequency of play. On the day of the intervention, 23% of the intervention group reported unplanned cash withdrawals as compared with the control group, but no such difference was observed 30 days later. These results suggested only what might be reasonably obvious; namely, that people take out less money quickly when it is harder to do so, but this does not fundamentally change their behavioural propensity to engage in this behaviour. Other studies have observed similar results. Jackson et al. (2016) examined how 828 EGM players had responded to the removal of ATMs from venues in Tasmania. Although 98% of respondents reported no change in their gambling expenditure, 10% of moderate risk and problem gamblers reported a decline in expenditure. Another study by Thomas et al. (2013) investigated the removal of ATMs in Victoria using a sample of 928 gamblers who were surveyed before and after the ATMs have been removed. People with gambling problems reported reducing their expenditure from AUS$277 per month to AUS$187 in hotels and AUD$203 to AUD$161 in clubs. These findings were generally in line with the broader observations of a 7% downturn in revenue across the State in the 6 months following the introduction of the measure.

2.8 Harm minimisation and safe-design features in cashless gaming

Despite the potential risks associated with cashless gaming, it is possible that a cashless system could be designed in a way that attempts to mitigate the potential risks that have been summarised in this chapter (Gainsbury & Blaszczynski, 2021; Jackson et al., 2016; Rodda et al., 2019). For example, to this end, the UK Gambling Commission (2021) has published some guidelines on the issues that should be considered in the implementation of cashless gaming. They argue that operators should be able to explain:

- How you will make sure that consumers are required to have a break from gambling before they are able to access and use new funds.
- How you have satisfied yourself that you will be compliant with the Gaming Machine (Circumstances of Use) Regulations in respect of the use of debit or credit cards, payment limits and committed payment limits.
- What anti-money laundering controls you have considered in designing your solution. For example, would a player be able to fund a gambling product via cash and then withdraw funds via an app or digital wallet?

They also ask:

- What information can your product provide to the consumer about their own gambling? For example, will consumers be able to access information on their transactional gambling history over certain periods of time?
- Are you able to provide tools that enable the user to manage their gambling? For example, can the consumer use the product to set limits on the amount of money they are able to deposit or spend over a certain period of time?
- What alerts would be triggered when a limit is reached? How will the limit-setting be made effective in terms of reducing the risk of gambling-related harm?
- Does the product allow for users to voluntarily stop themselves from using the product for gambling purposes for a period of time? Or provide a cooling off period whereby the product cannot be used for gambling for a certain period of time?
- If the product or system is to be made available for use with different gambling products (including different categories of gaming machine), how will you ensure that your solution is adaptable and able to respond to the different nature of each gambling product and the associated risks or legal requirements?
- Does your solution enable you or a gambling operator to monitor customer behaviour. For example, the gambling spend or intensity of an individual customer over a period of time?

Based on these principles and other recommendations, it appears that there are harm minimisation features that could be built into a potential cashless system. Many of these are reviewed by Schottler Consulting (2020) and by an established literature relating to the

potential value of pre-commitment and budgeting systems for offline and online gaming (Delfabbro & King, 2021).

2.9 Harm minimisation features in cashless gaming

A number of systems have been developed and trialled around the world to provide people with tools to manage and monitor their gambling. Such systems have been introduced in online environments (e.g., Auer, Hopfgartner, & Griffiths, 2018, 2019, 2020; Auer, Reiestad, & Griffiths, 2020; Griffiths, Wood, & Parke, 2009), but have also been trialled in a number of land-based pre-commitment trials (e.g., in Australia: Delfabbro, 2011; Delfabbro & Stevenson, 2013; Schottler Consulting, 2009a, b, 2010; South Australian Centre for Economic Studies, 2019). These systems usually include several features: (a) monetary and/or time limits; (b) periodic activity statements; (c) time-out or exclusion functions; (d) real-time feedback on expenditure (e.g., how close people are to their limits); or (e). messages or information about help services or safer gambling. Some details on how these might be configured are as follows.

Monetary or time limits can usually be set for specified periods (e.g., per day, week or month), but it would be possible to have limits based on many other criteria including: maximum bet sizes, the amount which can be deposited into accounts, or how often a person plays. Those who exceed their limits might receive a warning, be unable to continue to play, no longer accrue loyalty points, or receive a visit from a responsible gambling staff member. The second feature, activity statements, could take several forms; they could involve second screens on a gaming machine; printed out statements from a kiosk; online account information; or, a document that is emailed or posted to the customer (Focal Research, 2010). Such statements usually contain information on how often the person has played; the total amount deposited and played (gross turnover); and, the amount won and lost (net expenditure). The third, time-out or exclusion features, allow people to stop gambling for specified or extended periods of time. The final feature, messaging, involves a system whereby people might be provided with static or dynamic information about their gambling. Such information could be factual (e.g., the change of winning the maximum prize is 1 in 5m spins); advice based (e.g., Playing more than 3 hours can lead to harm) or self-referent (e.g., Think about the things you could buy if you don't spend too much) (see

Gainsbury et al., 2018, 2020). Messaging can be static (it is just fixed on the screen) or dynamic (it scrolls) or pops-up on the screen. It can also be 'smart' or play-related (e.g., it tells you how much a person has spent in real-time or the proximity of limits) (Auer et al., 2018). Studies generally show that more personalised, self-referent and dynamic messages are more likely to be noticed and to have a short-term effects on behaviour (Gainsbury et al., 2018; Schottler Consulting, 2010)

As Delfabbro and King (2021) point out, the majority of systems have been voluntary. In other words, people have been able to elect whether they apply any limits; the nature of the limits; and, whether they adhere to them. A review of the evidence from both Australian and international studies is very consistent: such systems generally have a very low uptake rate. Only a small percentage of people choose to set monetary limits and few people stick with them for an extended period of time. For example, in the evaluation of the *Yourplay* system in Victoria, SACES (2019) found that respondents reported only using the system 2 times/ venue over 14 months; *Yourplay* based play accounted for .01% of total EGM turnover in Victoria in the 2017/18 period; and, of 161 mystery shopper visits, only 24 (15%) resulted in a limit being set. Low uptake and retention rates (for the use of features) are similarly reported in other Australian trials (e.g., Delfabbro, 2011; Schottler Consulting, 2010). However, both Schottler Consulting (2010) and Focal Research (2010) reported that people find information and message features to be useful, particularly if they are personalised or tailored to the individual (e.g., in South Australia, in the Schottler Consulting trial, people were able to set their own reminder messages). Similar low usage levels are observed in online studies (e.g., Forsstrom et al., 2016) which showed that self-tests and advice use dropped to less than 1% after five visits to the responsible gambling platform (Playscan in Sweden).

It is important to recognise that several of these features have the potential to mitigate some of the potential risks thought to be associated with cashless gaming. These include the provision of: (a) budget and deposit management; and (b) activity statements. If cashless gaming allows people to deposit money into a designated digital wallet, it creates a clear balance which can be monitored over time. In effect, the person will know how much has been transferred and can monitor the degree to which this amount is depleted. It also

allows people the capacity for mental accounting in the sense that they can determine how much of their total household budget is being allocated to gaming expenditure. By contrast, any legacy system involving cards, EFTPOS or ticket-in, ticket-out (TITO) allows people to spend money incrementally. Having digital wallets does not, of course, prevent people from transferring large or frequent amounts from their bank into a digital wallet, but it provides some cognitive processing and several steps which can be configured so that they do not occur within gaming areas. Moreover, the ability to create activity statements is also likely to be significantly enhanced by digital wallet systems. Deposit and withdrawal systems provide a clear audit trail of the amount set aside for gaming, but also the amount spent. This makes it easier for the technology to provide people with the ability to monitor their expenditure over time; the proximity of limits, total balances and other functionality that might be useful to the player.

2.10 Technological adoption

A final area of literature which is important to consider in the trial is work that has examined the adoption of technology (Rogers, 2003). Although technology can be well-designed and have a lot of potential, it does not always follow that people will: (a) see the benefit of adopting it; (b) know how to adopt it; or (c) be willing to adopt it. People exist in a complex world with competing demands for time, money and cognitive resources. They usually already have established ways of undertaking everyday tasks and many of these may already involve some sort of technology. If this technology is seen to work reasonably well, then people may not see the benefit of adopting another technology or be willing to make the effort. Such issues have applied to many previous technologies, e.g., the transition from in-person to online banking; the use of mobile phones vs. landline phones; and, the transition from analogue telecommunications to digital systems. For these reasons, it is important to consider the potential barrier and facilities to technological adoption as well as the likely individual differences (e.g., demographics) that might be associated with variations in technological adoption.

Many of these issues have previously discussed in the technology and finance literature with specific papers on cashless gaming in NSW having been previously published by Nisbet (2005, 2006). Several sets of principles have guided work. The first has been what

are called technology adoption models (e.g., Davis, 1989), which set out the factors that influence the uptake of new technologies. According to David (1989), adoption is likely to be most strongly influenced by: (a) *Perceived usefulness:* the convenience and value to the consumer; and (b) *Ease-of-use*: the amount of effort required to adopt and then continue to use the new technology. In essence, people are more likely to use technology when the potential benefits outweigh the costs or effort involved. When this situation arises, there will be a stronger intention to use the technology. Nisbet (2006), in her study of NSW cashless gaming, further integrated the Theory of Reasoned Action (TRA) into this model so that adoption was hypothesised to be greater when people had more positive attitudes; greater self-efficacy (i.e., confidence in the ability to use technology); and, there were stronger social norms (i.e., people saw that others endorsed the technology). Another important factor was the perceived credibility of the technology, in particular, the extent to which it was reliable, safe and could be trusted to provide security and privacy.

A similar range of factors are identified by Rogers (1995, 2003) in books that examine the factors which affect consumer technology adoption. These include: (a) *Relative advantage*: the extent to which the new technology is seen to afford benefits greater than the current method used to undertake a task or behaviour; (b) *Complexity*: how easy the technology is to understand and use; (c) *Compatibility*: how well the technology accords with the person's habits, needs or values; (d) *Trialability*: how easily people can try out the technology initially without having to commit fully to it and practice the new skills; and (e) *Observability*: how easily others can witness the benefits or activity associated with other users (e.g., Apple's *ipod* with its distinctive white ear-buds are a commonly cited example in the technology market).

Another important set of principles is provided by Venkatesh et al. (2003) who conducted a comprehensive systematic review of existing models to develop the UTAUT or Unified Theory of Acceptance and Use of Technology. In summary, this distils the different terms and areas of consideration down to several core areas: (a) *Performance expectancy*: the extent to which the new technology will be useful and achieve benefits or facilitate the task to be undertaken; (b) *Effort expectancy:* how much effort appears to be required to engage with the technology; (c) *Social influence:* which refers to the extent to which

individuals believe that important or significant other people are encouraging the new technology; and (d) *Facilitating factors:* the extent to which people perceive or believe that there are supports and technological architecture available to assist with adoption and use of the technology (e.g., a person might be more confident of buying a new advice if they can get advice or help when needed).

Some studies also (e.g., Wohl et al., 2014) refer to Human-Computer Interaction (or HCI) and Persuasive System Design (PSD) principles. HCI refers to the use of consumer feedback and experiences to inform the design of technology to make it easy to use: good aesthetics, clear displays and display, and control over functions. PSD refers to design features that might encourages changes in attitudes in behaviour such as the ability to monitor behaviour, which provides information at the right time (e.g., if the person were displaying riskier behaviour) and which helps them make gradual progress towards goals. Wohl et al. showed, using a laboratory experiment, that pop-up messaging employing HCI and PSD principles were more likely to stop gambling than continue on after they had lost $10 in the experiment.

Numerous studies have been conducted to investigate people's intention to use and adoption of technologies (e.g., mobile payment Apps, online banking) using these frameworks as the foundation. Venkatesh et al. (2003), for example, reported that performance expectancy appears to be a strong predictor of intention to use in most situations, with the effect found to be strongest for men and younger people. Effort expectancy was also found to be important with effects stronger for women, older people and those with less experience in working with the relevant technology. Social influence was found to be most important for older people and women and where people had less technological or work experience. Kim et al. (2010), in a study that examined the adoption of mobile banking technology, found differences between early and late adopters. Early adopters tended to be highly proactive and would engage in a rapid process of information-seeking to determine the benefits; this leads to beliefs developing about the technology (e.g., is it good or bad) and then make a decision to adopt it. Such people do not necessarily become exposed to the technology any earlier than late adopters, but the time between awareness and a decision is much shorter because of their self-directed information

seeking. Such people often become the opinion leaders who might then influence the decisions of those which follow (e.g., reports of the benefits, recommendations to try it out). Another study by Liébana-Cabanillas et al. (2015) examined the predictors of the intentions to use QR code mobile payment systems: adoption was related to more positive attitudes; subjective norms; and, personal innovativeness (which referred to how willing people were to try out new technologies and conduct their own investigations). A study by Pham and Ho (2015), using principles arising from Roger's (1995) showed that perceived usefulness and computability (i.e., how well it fitted in with a person's habits and values) were the two strongest predictors of the uptake of a mobile payment system.

Research in this area also draws a distinction between the factors associated with the initial adoption of a new technology and its continued use (Humbani, & Wiese, 2019; Susanto et al., 2015). In many cases, these factors can be the same (perceived usefulness, ease of use). However, there can be other factors which influence continued use. Such factors are often discussed within the context of theoretical frameworks such as *Expectation Disconfirmation Theory* (Churchill & Surprenant. 1982). These frameworks examine user satisfaction as based on how well the experience of using a technology coincides with the pre-adoption expectations. When the performance of the technology meets or exceeds expectations, 'negative disconfirmation' is said to have occurred. This leads to satisfied consumers who are more likely to continue to engage with the technology in the future. Important additional elements that influence continued usage include trust, security and privacy (Humbani, & Wiese, 2019). Whether or not a person trusts a technology is seen to arise from many factors: how trusting people are to begin with (their dispositional trust); their trust in the institution providing the technology; beliefs about the beneficial motives of the other party (e.g., the bank) or their intentions (e.g., they are doing it to provide a useful service vs. some more malign intent).

Studies involving financial technology generally show that continued satisfaction arises from greater trust in the technology and the provider and whether privacy and security are being maintained (Casalo et al., 2007; Pikkarainen et al., 2004). These factors are also important in adoption. For example, Tan and Teo (2000) surveyed 301 people about

their use of internet banking and found that perceived security and trust and perceived usefulness were all significant predictors of continued use. Similar findings were reported by Zhou (2011) in a study of mobile services: perceived usefulness and perceived ease of use were related to ongoing usage.

Taken together, this literature suggests that the update and ongoing use of cashless gaming technology is likely to be facilitated by a system that is: (a) perceived to be useful; (b) does not require too much effort to adopt and use; (c) adds benefits that are not otherwise available using existing payment or gaming methods; (d) which is trusted and seen as being provided with the right intentions; (e) is perceived to be secure and protective of people's privacy; and (f) can be easily incorporated into people's routines or habits when they visit a venue. Nisbet's (2006) work involving surveys with 134 venue patrons in NSW, which provides insights into some of these variables, found that perceived usefulness and ease-of-use were both positively associated with the intention to use cashless gaming technology.

Chapter 3: Trial methodology

3.1 Overview

A detailed methodology was developed to inform the trial and this was informed by the national and international literature pertaining to similar studies (e.g., trials of pre—commitment technology or cashless gaming) as well as the specific operational context of the NSW venue. This chapter summarises the principal design considerations and research principles that were taken into account; the different components of the overall methodology; and, the areas which were covered so as to address the requirements of the Regulatory Sandbox guidelines.

3.2 Stakeholders involved and broad aims of methodology

Although there several main parties involved in the trial (Aristocrat, Wests New Lambton), it is important to recognise that the methodology needed to be able to capture the experiences and views of a range of different people within these stakeholder groups. It also needed to be able to capture the specific impacts or issues relevant to each of these different respondents. These respondents and the issues of principal concern are summarised in Figure 3.1. At the broad industry level, the trial needed to be able to capture the reviews of those who designed the technology, who operated the venue, but also those frontline staff who had to deal with the interactions with patrons as they adopted or interacted with the technology. Important issues include: views on the functionality and usability of the technology; the impact on staff workloads and venue operations; and, the wider implications if the technology would need to scaled for other venues in the future. The other principal stakeholders are the patrons or users. As stated in the RS guidelines, it important to know if the technology is well-received (is functional); how it affects gambling behaviour (e.g., does it increase or decrease the risk of harm); the factors which increase or decrease the uptake and usage of the technology; and, whether people are able to access and use the responsible gambling tools included in the PRIME APP.

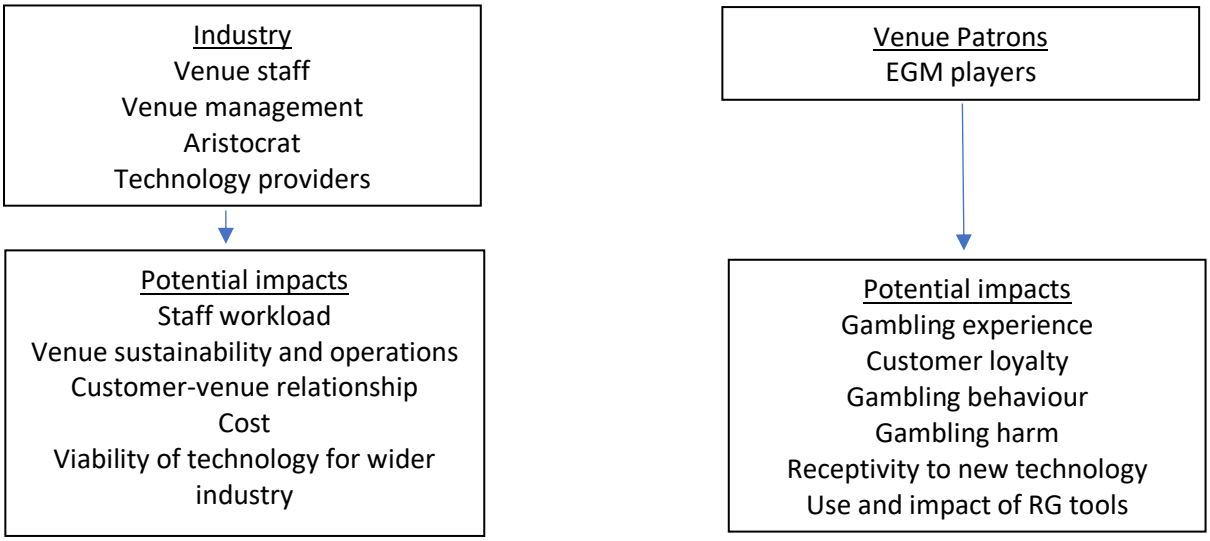


Figure 3.1. Impacts that can be considered in trial

3.3 Research principles

A first important design consideration in the trial was to distinguish between **outcomes and processes**. Although the aim of the trial was to examine whether the new technology works effectively and achieves outcomes / various impacts, it was also important to examine what makes it work. For example, what aspects of the technology worked well, or not so well? Did it have any apparent impacts on gambling behaviour and was it used consistently or in combination with existing or legacy gambling systems? This was not an uptake or randomised control trial in that the primary focus was not on whether people naturally take up this technology in contrast with a comparison venue. **Instead, the focus was on how well a group of actively recruited patrons could use the technology and if it was capable of delivering the functionality which had been intended. Future trials planned in NSW, that follow these initial trials of specific technologies, may consider uptake studies, but the initial priority is to establish the preferred technology solutions that might be used in those trials.**

A second design consideration was that the trial be conducted in a manner that complies with, and respects, the contractual and legally required privacy provisions and requirements of the different parties involved in the project. This includes the participants in the research, as required under the NHMRC National Statement on the Ethical Conduct of Human Research. The principal privacy provisions relate to the anonymity of the patrons in

the final reporting, the commercial or proprietary property of Aristocrat and the responsibility of the researcher to Liquor & Gaming NSW to maintain confidentiality concerning the findings until the public release of the findings.

A third consideration was that a variety of data collection strategies or mixed methodology should inform the trial evaluation. A use of data-triangulation methods is important to examine whether findings are reliable and valid. Reliability refers to the consistency of the findings across different data sources, whereas validity refers to whether the trial is measuring the intended outcomes. By capturing insights in different ways, using different types of data and respondents, this strengthens both qualities. When such methods are used, one can be more confident that the findings are capturing the reality of how the trial operated by observing convergent findings (reliability), but also by showing that the results are not just the artefact of one specific data collection method (validity). To this end, the methodology design incorporated both objective industry data-sources as well as self-report or respondent data which could be both qualitative and quantitative. Qualitative data would capture how people describe or experience the new gambling technologies and provide detail and context, whereas quantitative data (e.g., via survey methods) would provide insights into the frequency or relative weight of different views, attitudes or experiences and how different variables might be related to one another.

3.4 Methodological components and data sources used in the trial

The trial methodology specified that several sources of data would be sourced to inform the trial. These are summarised in Table 3.1.

3.4.1 Objective/ Industry-sourced data

The trial had access to data generated from the Gaming Management System/ PRIME App relating to the utilisation of the new technology and features; usage of loyalty cards during trial period for patrons who obtain a PRIME App registration; EGM data on frequency and expenditure for trial patrons. It was possible to determine what settings (if any) were chosen for RG features at sign up, during trial, and behaviour following RG events (e.g., did anyone self-exclude or breach their limits as an indicator of whether people adhered to the limits during the trial). Data was also available concerning the use of the

legacy loyalty card system during the trial so that it was possible to examine how many patrons switched between the new app and the existing loyalty card system. This provided insights into whether people appeared to spend more quickly or slowly using the new as opposed to old technology.

3.4.2 Qualitative methods

Structured interviews / focus groups were conducted to collect information and insights from different respondents including patrons/ EGM players, venue staff and management, and other senior industry representatives involved in the trial. Copies of the full interview protocols used by 3ARC are provided in the attached *Technical Report.* Interviews were conducted either in person or online (e.g., using Zoom), were transcribed and common themes were compiled using the method recommended by Braun and Clark (2006) which involved developing a hierarchy of themes and subthemes. Most of the patron surveys were conducted at the end of the trial, but some interim interviews were also conducted earlier in the trial (November 2022) to gain insights into the factors which might have been acting as potential barriers to signing up and/or installing and using the new App.

3.4.3 Quantitative survey

Surveys were conducted with patrons who participated in the trial by agreeing to complete a baseline survey. These were conducted at baseline around the time that they signed up to use the app. The first survey collected principally demographic information, gambling habits and gambling risk and people's general usage of the venue and their experience with similar technology. A second survey was then conducted at the end of the trial that focused in more detail on their experiences with the technology and if it had affected their gambling experiences or behaviour. Details of this survey and the recruitment methods are summarised below in this chapter.

Table 3.1. Summary of the components of active data collection

Respondent group	Methodology	Timing
Trial EGM players	Quantitative survey	Pre- and post-trial period
Trial EGM players	Qualitative interview	Post-trial
EGM players/ patrons who used the technology EGM players who did not proceed to use the PRIME app	Qualitative interview/ task analysis	During and Post-trial
Venue floor / gaming staff	Focus group	Post-trial
Senior industry staff (Venue managers/ Aristocrat)	Key informant interviews	Post-trial

3.5 Details of EGM player survey methodology

Wests New Lambton indicated that the venue has around 120,000 patrons with around 12,000 or 10% utilising the gaming facilities. The principal stage in the data collection was to promote the App and the trial to patrons who could potentially take part in the trial by completing the baseline survey and then agreeing for their objective data to be shared with the trial research.

The criteria for participants to enter the survey was that they needed to be a West member, and have gambled using an EGM in the last 12 months or was intending to gamble on an EGM in the next 12 months. The reason for this broad inclusion criteria was to capture both regular and some casual gamblers and to increase the sampling base, given that recruitment is: (a) quite difficult in these trials and (b) we anticipated attrition by the time of the post-test survey. A validation process was used to ensure that all participants contacted had an active Wests membership, had not opted out of receiving communications, and did not have an active self-exclusion. The data-set was reviewed for duplicates and confirmation that all participants who had been assigned a de-identified trial identification

(ID) number had provided informed consent. 3ARC collated the survey data and triangulated this with the member data held by Wests and their corresponding trial IDs. 3ARC further confirmed access to the trial machines against a trial ID in a database held by Aristocrat. A target of 300 participants was sought for the pre-trial survey. This was based on: (a) previous Australian trial experiences (e.g., Delfabbro, 2012; Schottler, 2010) that observed very low utilisation rates (usually 10% for responsible gambling features); (b) the practical upper limit based on the project timeline and available venue support in recruitment. Two main methodologies were used to recruit trial participants: patrons who were existing members of Wests, were contactable and had a recent history of visitation were approached to join the trial via online recruitment, including email (electronic direct mail or 'eDM') and Wests' app push notifications; and (b) patrons who were in the venue were approached by a member of Wests staff.

Recruitment timeline: Recruitment commenced in October 2022 and concluded February 2023. The cashless gaming trial was intended to last a period of 3 months (October to December 2022). However, recruiting participants was slower than anticipated with several issues arising as barriers to participation early in the trial. These considerations led to the Trial Governance Committee agreeing to an expansion of the recruitment period to end of February, to accommodate changes to the trial incentivisation and gaming floor. The trial was then further extended by Liquor & Gaming NSW until late June 2023 to allow participants adequate time to use the digital wallet.

Recruitment and communication strategies: A number of strategies were used to recruit participants (key communication methods and timings are summarised in Appendix X). On the 10th of October 2022, Gold Tier members at Wests were sent an email with links that allowed them to register for the trial and also complete the pre-survey. Details were also provided of information sessions to be held at the venue, but these had minimal attendance and were not pursued further as a recruitment strategy. There were also trial posters at the venue with QR code links which also provided access to registration and the survey and brochures / guides available. Patrons who had provided contact details could be contacted by SMS for reminders to complete the survey and other parts of the trial enrolment process,

including completing the KYC process to establish an account to facilitate the use of the Prime App.

Direct messaging was also used as a strategy and this was directed to Wests members with carded play between July and September 2022; who did not have an active self-exclusion; who had opted in for direct communication; and, who had a valid email on file.

Trial ambassadors at venue: As part of the naturalistic data collection, a select group of Wests venue staff were educated about the trial to become 'trial ambassadors' and then commenced in-person recruitment in mid-October. Trial ambassadors underwent a number of training sessions with Aristocrat staff to outline the functionality of the app and the benefits of using the digital wallet. Sessions occurred prior to the recruitment period and refresher sessions were run at the end of January 2023. Best efforts were made to have one trial ambassador per shift to approach patrons and be available for any queries or trial troubleshooting. Trial ambassadors were equipped with a tablet device and a QR code for approaching patrons. Patrons were approached by staff on the gaming floor and informed briefly about the trial, what was involved, and the benefits of taking part.

After a verbal briefing, the first step to joining the trial was for patrons to read the informed consent sheet placed at the start of the survey. Following this, they provided their name and email address so the Trial Governance Committee could contact them about subsequent research steps, including completing the pre-trial survey if they elected not to complete the survey in situ with staff. Venue staff had the ability to turn on access to the wallet for the patron in situ, though patrons could not use the full wallet technology until they passed KYC.

In-person recruitment for the trial concluded in December 2022, in line with the increased workload hospitality staff are subject to over holiday periods. This coincided with anecdotal evidence that in-person recruitment was hitting saturation point, as ambassadors noted that some customers reported having already been asked to join the trial by another ambassador on a previous visit. Wests trial ambassadors appeared to be the most effective recruitment method for the trial.

Addressing barriers to recruitment: Trial participation was monitored closely throughout the recruitment period. It was observed in November 2022 that a significant proportion of trial participants were halting at the Know Your Customers (KYC) stage. Researchers designed a small investigation of non-users at the end of November, to explore the factors preventing trial participants from progressing to using the wallet. Based on the findings of the interviews with the non-users, an additional $20 Wests gift card was offered to participants who passed KYC. This was included in all communications, including in-venue materials, from December 2023. A video was also developed to assist with this process.

An incentive protocol was developed to encourage participation in the trial and compensate patrons for their time spent on research-related activities. Incentives were attached to milestones related to the research. Incentives took the form of food and beverage vouchers to be redeemed at Wests. Vouchers were not redeemable for cash or gambling credit. A total of $20 was provided for passing consent and the pre-trial survey; there was an additional $20 for passing KYC and gaining access to the digital wallet; and $60 for completing the post-trial survey.

Ethical principles: All participants needed to provide informed consent before joining the trial in line with the University of Adelaide Human Research Ethics requirements. Important ethical requirements included: (a) An understanding that participation in the trial was voluntary and could be terminated at any time; (b) An understanding that there was no requirement to spend more or play longer due to participating in the trial; (c) An understanding of how data will be deidentified, aggregated and used by multiple stakeholders; (d) Consent to be recontacted for future research related to the trial; and (e) A list of contact people to contact with any queries or concerns. To streamline the process of signing up to the trial, consent was collected as part of the pre-trial survey. Participants were required to select ‘yes’ to the questions of consent presented to them before submitting their name and contact details to be recontacted for research activities and receive their incentive.

3.6 Survey details

Copies of the final surveys are provided in the Technical Report (attached). Areas that were addressed in the trial are summarised in Table 3.2. As indicated, the pre-trial survey captured information on demographics; gambling habits; the level of gambling risk; loyalty card use; and, the person's attitudes towards harm minimisation features and the use of new cashless gaming technology. The focus of the post-trial survey was on the participant's experiences of the value and functionality of the technology; what features they had used; and, if using the digital wallet had any impact on their gambling.

Table 3.2

Areas addressed in the pre and post-trial surveys

PRE-SURVEY	
Construct	**Measures**
Demographics	Gender, age, Aboriginal status, English language status, employment status, highest level of education obtained. Postcode to calculate SEIFI index/ SES.
Gambling habits	Participation by activity and frequency; estimated net expenditure per visit; session length; EGM gambling habits (preferences, machine changes)
Gambling risk and harm measurement	PGSI; Indicators of financial harm derived from the Gambling Harm Measure.
Attitudes towards responsible gambling	Perceived value of limit-setting; breaks; self-exclusion; activity statements
Loyalty club holder	Yes/ No and type of membership tier (if available)
Attitudes towards new technology (to capture receptivity)	Perceived value of cashless gaming (from Nisbet, 2006); Self-efficacy (self-rated confidence in using new technologies)

Sharen L. Nisbet (2006) Modelling consumer intention to use gambling technologies: an innovative approach, Behaviour & Information Technology, 25:03, 221-231.

POST-SURVEY	
Construct	**Measures**
Self-reported use	% use (100-0%) vs. use of regular loyalty card on gambling visits to venue
Quality and value of promotions and information on usage	Quality of information provided Ratings of interaction with staff Quality of training / info to use technology
Clarity, visibility and ease of use	Sign-up process/ App download Money transfer process (bank to venue wallet for depositing money, venue wallet to bank for withdrawals) Venue wallet to gaming wallet Gaming wallet to gaming machine General – access to harm minimisation features: Limit setting Self-exclusion Quarantine of funds Activity statement: best format, clarity, accessibility and how often it should be received.
Quarantine wallet	Experience (Y/N); attitudes towards it
Motivations for using technology	Convenience; harm minimisation motives; enhance gambling experiences
Behavioural impact	Influence how often, how long spent gambling or duration of session; amount spent. Impact on ease of onset of sessions Impact on ease of cessation of sessions;

Harm minimisation	Impact on perceived ability to budget and manage expenditure Impact on perceived ability to control gambling (how long and how much)
Impact on gambling experience	Makes gambling more / less enjoyable/ no impact; Acts as barrier to gamble or makes it easier; Makes it easier or harder to track how much is being spent
Perception and use of harm minimisation features	Use of limit setting features: Y/N Selection of venue notification feature Types used (time vs/ money and amount)/ Limits reached and how often/ changes? Use and value of activity statements (differences based on % use of PRIME-Player vs. loyalty card only) Perceived value of messaging Process to self-exclude
Impact of harm minimisation features	Impact of harm minimisation features on ability to control and manage gambling frequency, expenditure and session duration Reports of any harm minimisation actions (e.g., did anyone self-exclude?)
Areas which could be improved	Open ended question
Invitation to take part in focus group	[Details to be recorded]

Chapter 4: Analysis of baseline patron survey

4.1 Overview

This chapter provides a summary of the characteristics of the baseline patron sample that was recruited for the trial. The final analytical sample involved (n = 260 patrons). This sample was created after removing a small number of non-Wests members who completed the survey (16 cases) and also a small number (8 cases) where people had completed the survey more than one occasion. In this situation, the first survey completed was selected based on a consistent decision rule. Patrons were recruited using a variety of methods through: email invitations; direct approaches by staff; and, also through people reading information about the study in the venue. The data collection also included some analysis of why people did not want to participate for the venue-based recruitment and whether this varied according to a person's gender and staff estimates.

4.2 Analysis of trial refusals

Wests were able to provide refusal or decline data based on 119 people who were approached at the venue (44 women and 57 men, 18 missing gender details) with an estimated mean age of 42.5 years (SD = 15.1). Details of the recorded refusal records are summarized in Table 4.1. As shown in Table 4.1, just under a third of the respondents did not give any clear reason for refusal. There were 16 who were not members or from the local areas (e.g., visitors to Newcastle) and 9 who believed that the technology might increase their risk of spending more money. The most commonly reported reason related principally to concerns about privacy; some of the this appeared to be motivated by concerns about published data hacks or the vulnerability of the technologies, but there was also a strong theme of suspicion that this was a form of monitoring and control (a 'dangerous technology') that people did not like. Other potential barriers were that people did not possess a mobile phone or did not use digital payment solutions (e.g., using Internet banking or phone Apps for financial transactions).

Table 4.1. Reasons for non-involvement by patrons approached in venue

	N	%
Not a local or member	16	13.6
Favourite machine not in trial	6	5.1
Not interested (no reason)	36	30.5
May increase gambling risk	9	7.6
Privacy concerns/ technology dystopian or 'dangerous'	31	26.3
No phone	10	8.5
No benefit or relevance	5	4.2
Doesn't like digital payments technology	5	4.2

Caution has to be applied when interpretating relatively small numbers, but it was evident that certain groups were more likely to report certain reasons for refusal. Those who were worried about privacy or who described the technology as "dangerous" tended to be younger (mean age was 34 years), whereas those who had technological barriers (e.g., did not have a phone or did not like digital payment systems) were older (mean age of 51 years). The older group who had difficulties with technology (i.e., liked to stick with legacy methods of doing things) were predominantly male (9 out of 11), whereas there did not appear to be any obvious gender bias in the larger group who had concerns about privacy or being monitored and tracked.

4.3 Demographic characteristics of sample

A summary of the demographic characteristics of the sample is provided in Table 4.2. As indicated, the majority of the sample were men (almost two-thirds). Over half were aged under 35 years and relatively few respondents were aged over 65 years. These figures differ significantly from data supplied by Wests concerning the gender and age composition of their membership base. According to Wests, around 56% of their members are men (compared with 64% in the trial sample) which suggests that the trial found it easier to recruit men than women. There were even larger differences relating to age. In the Wests membership database, the breakdown of age is: 18-24 (6%); 25-34 years (10%); 35-44 years

(11%); 45-54 years (13%); 55-64 years (18%) and 43% are aged 65 years and older. It is clear that the trial has a significant over-representation of patrons in the younger age ranges and under-representation of older people.

In relation to other demographic characteristics, it can be seen that the percentage of Aboriginal and Torres Strait Islander people was over 10% which is considerably higher than in the population in general (around 3.5% in Newcastle based on ABS figures). The sample was generally English-speaking at home, so few people with non-English speaking backgrounds were recruited. Around three-quarters of the sample were in some form of paid employment, around half had some form of post-school qualification (half did not) and the sample was evenly divided between those who were in a relationship and those who were not. Overall, the sample indicated a reasonable level of diversity in the sample in terms of its demographic characteristics, notwithstanding he relatively low percentage of older trial participants.

Table 4.2. Demographic characteristics of sample (n = 260)

	N	%
Gender		
Male	165	63.5
Female	86	33.1
Other ID	9	3.4
Age-group		
18-24	79	30.4
25-34	67	25.8
35-44	32	12.3
45-54	42	16.2
55-64	25	9.6
65+	14	5.4
Aboriginal/ TS Islander		
Yes	29	11.1
No	216	83.1
Not stated	15	5.8
Language spoken at home		
English	248	95.4
Non-English speaking	12	4.5
Employment status		
Full-time	145	55.8
Pat-time /Casual	53	20.4
Self-employed	27	10.4

Retired	14	5.4
Unemployed	13	5.0
Studying	8	3.1
Marital status		
Married/ Relationship	114	43.8
Separated/ Divorced	20	4.7
Widowed	5	1.9
Single	100	38.5
Other/ Non-stated	21	8.0
Educational level		
Primary school only	8	3.1
Up to year 10	32	12.3
Year 11 or 12	87	33.5
Diploma	67	25.8
Bachelor's degree	64	24.6
Other	2	0.8

Note: Not all figures add to 100% due to rounding and occasional missing data items

4.3 Gambling habits of the sample

4.3.1 EGM participation

A number of questions were included in the survey to capture patron's gambling involvement. The first questions related to the frequency of their engagement in EGM gambling (the principal focus of the trial). When asked how often per month patrons had played EGMs in the previous 12 months, it was clear that the sample were very regular gamblers. The mean number of times per month was 10.19 (SD = 16.7) with a median of 4.5 (more than weekly). Similarly, when asked how often they intended to gamble on EGMs in the next 12 months, the figures were slightly higher (M = 13.59, SD = 21.5) with a median of 5.0 times per month. The percentage breakdown of these two sets of statistics are provided in Figures 4.1a and 4.1b and show that over half of the sample played EGMs more than once per week.

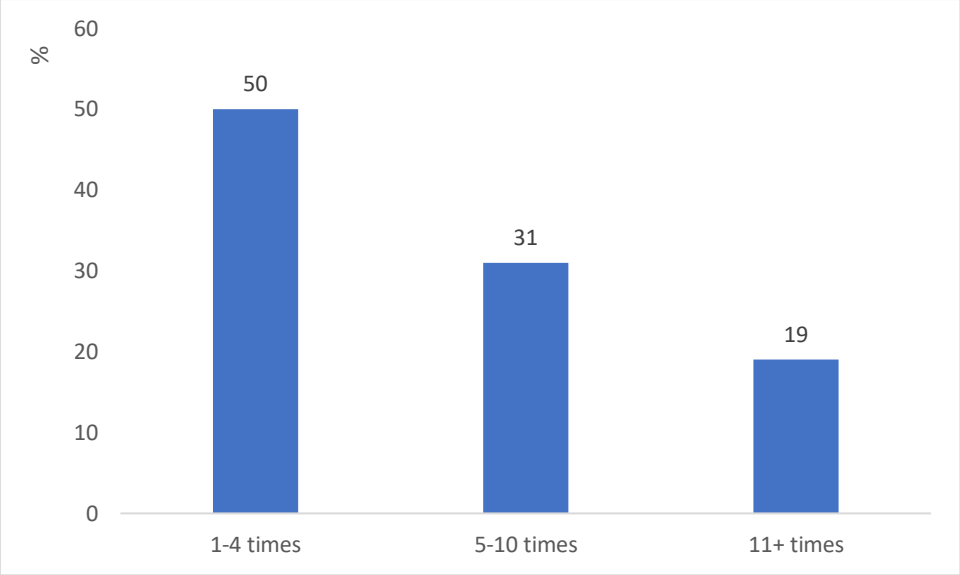


Figure 4.1a. EGM participation per month in previous 12 months: distribution (*n* = 260)

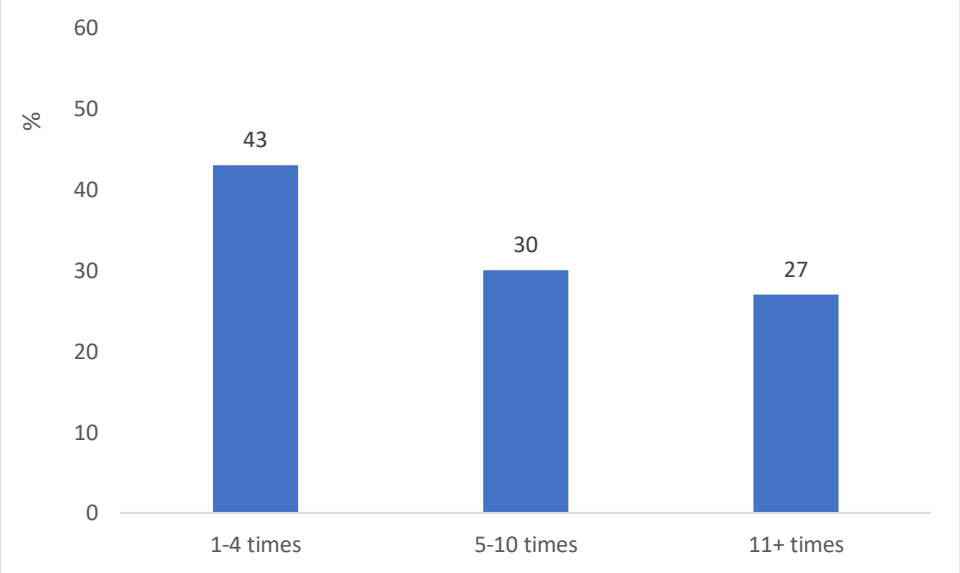


Figure 4.1b. EGM participation per month in next 12 months: distribution (*n* = 260)

The majority of the sample (two thirds) also gambled on other activities, but there were one third of patrons who only played EGMs.

4.3.2 General gambling participation by activity

As shown in Table 4.3, the most commonly reported activities other than EGMs that patrons had participated in during the previous 12 months were race betting, hotel or club Keno, scratchies, draw lotteries and lottery style games. Around 1 in 5 reported gambling on

online or land-based casino games. These figures very likely reflect the high percentage of men in the sample who, from the 2018 NSW prevalence study, are statistically more likely to gamble on racing and sports as well as casino-style games. The sample is also derived from a large NSW club so that this may have also influenced the participation rate reported for activities such as Keno. Overall, the results show that the patron's in the sample had gambling interests that extended beyond EGMs.

Table 4.3. Gambling participation rates for different activities in the previous 12 months

	N	%
Race betting	102	39.2
Keno (Club/hotel)	96	36.9
Draw lotteries	87	33.5
Sports-betting	84	32.3
Scratchies	60	23.1
Casino games (land-based)	50	19.2
Lottoland	48	18.5
Online casino games	47	18.1
Events betting	16	6.2
Clubs/ Mahjong	16	6.2
Other	12	4.6
Bingo	10	3.8

Base N = 260

4.3.3 Site of EGM gambling: Wests New Lambton and other venues

A series of questions examined how often Wests was chosen as the site for EGM gambling as opposed to other locations. The results showed that most patrons generally gambled on EGMs at a variety of locations. As indicated in Table 4.4, only a quarter of patrons reported only gambling on EGMs at the trial venue; over half went to other Wests venues to play; 40% to non-Wests clubs; half to hotels; and around a quarter reported playing EGMs at casinos.

Table 4.4. Playing EGMs at different locations (*n* = 260)

	N	%
Only at Wests New Lambton	69	26.5
At other Wests	136	52.3
Non-Wests clubs	103	39.6
Hotels/ pubs	127	48.8
Casino	56	25.4

Details were also obtained concerning the frequency with which patrons visited other venues to play EGMs (Table 4.5). Table 4.5 shows that patrons generally made few visits to other Wests clubs, but more frequent visits to non-Wests clubs or hotels. Multiple visits to casinos were generally rare. These findings suggest that people who were members of Wests New Lambton tended to favour their own club over other Wests clubs possibly to take advantage of loyalty benefits, but were still happy to visit other non-Wests venues. This observation has implications for future trials that might attempt to compare EGM technology at specific venues: it may be hard to control for external EGM activity occurring at other venues at the same time.

Table 4.5. Annual frequency of EGM gambling at other venues

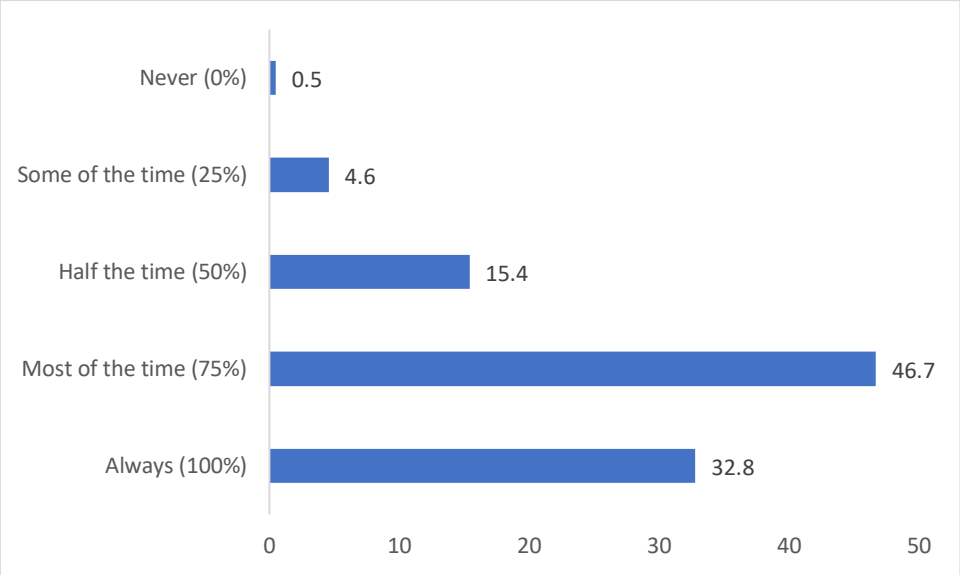
	n	1 %	2 %	3 %	4+ %
At other Wests clubs	136	31	40	13	17
Non-Wests clubs	103	26	17	11	45
Hotels/ pubs	127	7	17	12	72
Casino	66	59	27	6	8

Note: Not all figures add to 100% due to rounding and occasional missing data items

Finally, there were also questions about whether people gambled on other activities (apart from EGMs at Wests New Lambton). A total of 103 or 39.6% said yes: 48 patrons reported race betting; 55 sports betting, 56 reported Keno and 9 reported playing bingo.

4.3.4 EGM gambling at Wests New Lambton

Respondents were also asked a series of questions relating to their EGM gambling habits when they visited the venue. The first question was whether patrons reported having a clear budget when they played EGMs: 195 or 75% endorsed this statement. When asked, how often they adhered to this budget, the following results were obtained (Figure 4.2). The results show that around 80% of people (the 195 who had a budget) mostly or always stick to their budgets, but that over 20% of people do not adhere to their budgets consistently (50% of occasions or lower).

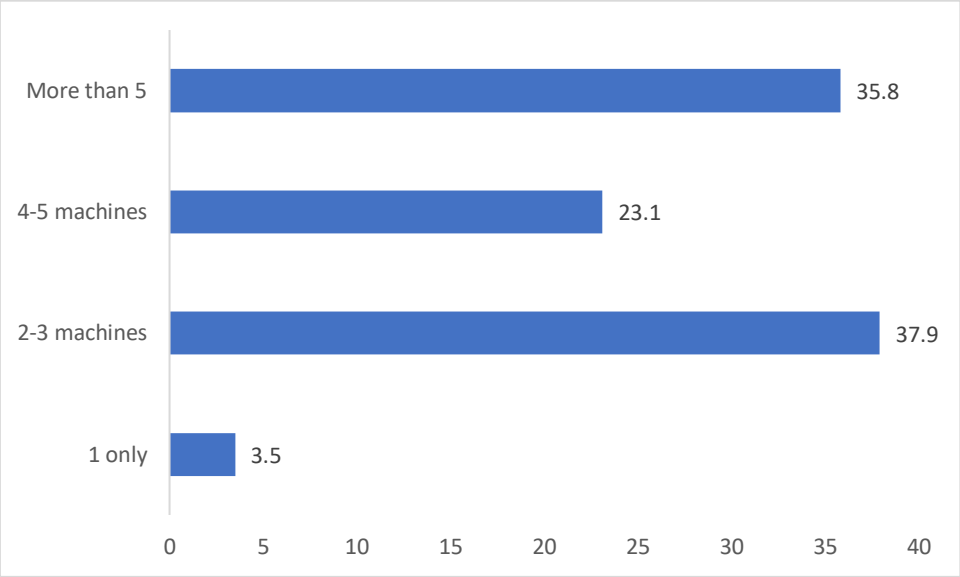


Note: Not all figures add to 100% due to rounding and occasional missing data items

Figure 4.2. Percentage of patrons with budget who adhere to their budgets (n = 195)

Patrons were also asked how many different EGMs they played when they visited Wests New Lambton. These results are summarized in Figure 4.3 and show that relatively few (under 5% of patrons) gamble on only one machine; over a third play 2 machines; 23% play 3-4 machines and over one third play 5 or more machines. These findings indicate that any trial that requires people to gamble on only one machine or a limited range of machines

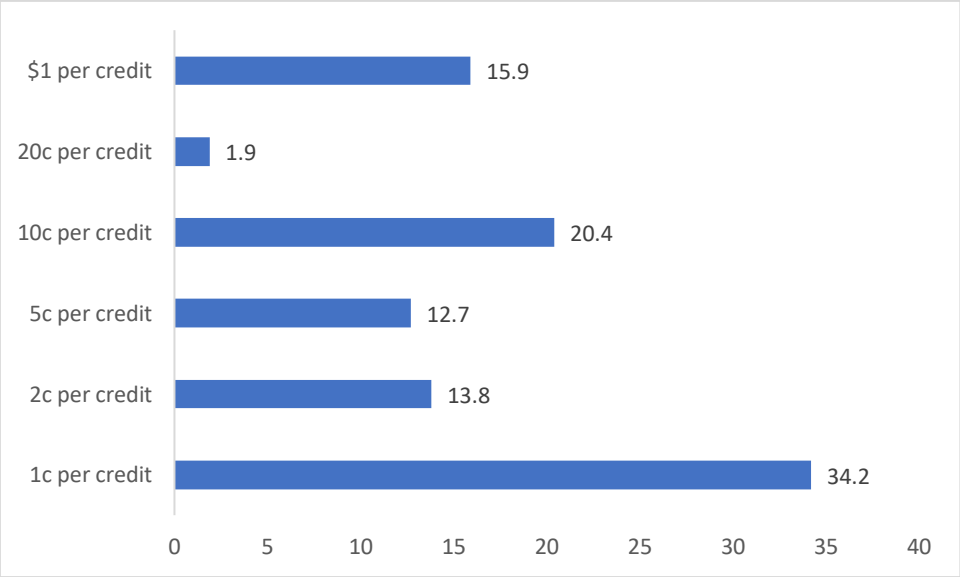
may be problematic because people usually like some variety, even within a single day of gambling.



Note: Not all figures add to 100% due to rounding and occasional missing data items

Figure 4.3. Number of machines played when people visit Wests New Lambton (*n*= 260)

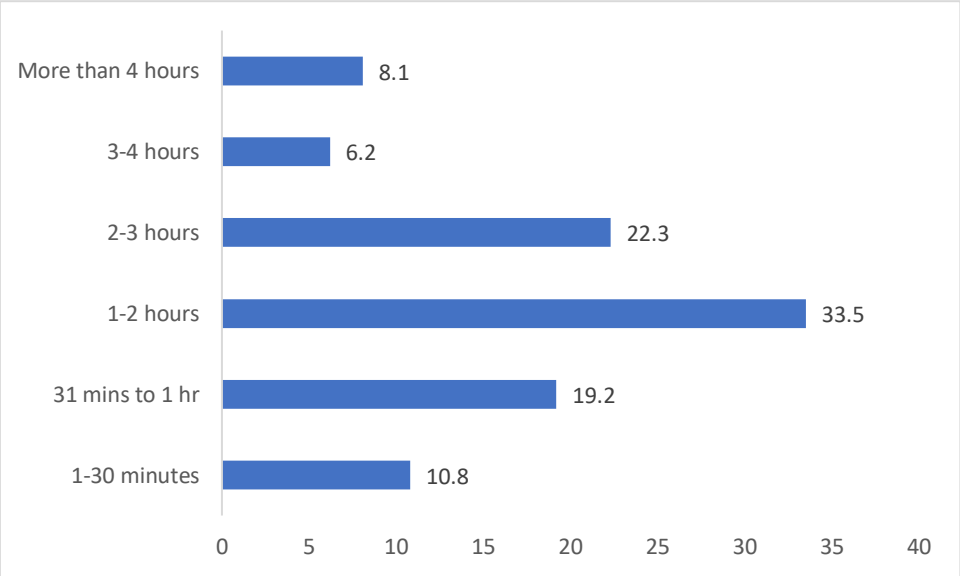
Patrons also indicated what type of machines they preferred to play (Figure 4.4). Just over one third preferred 1c machines; the next most popular was 10c per credit machines; and, the third were $1 machines (16% liked these machines).



Note: Not all figures add to 100% due to rounding and occasional missing data items

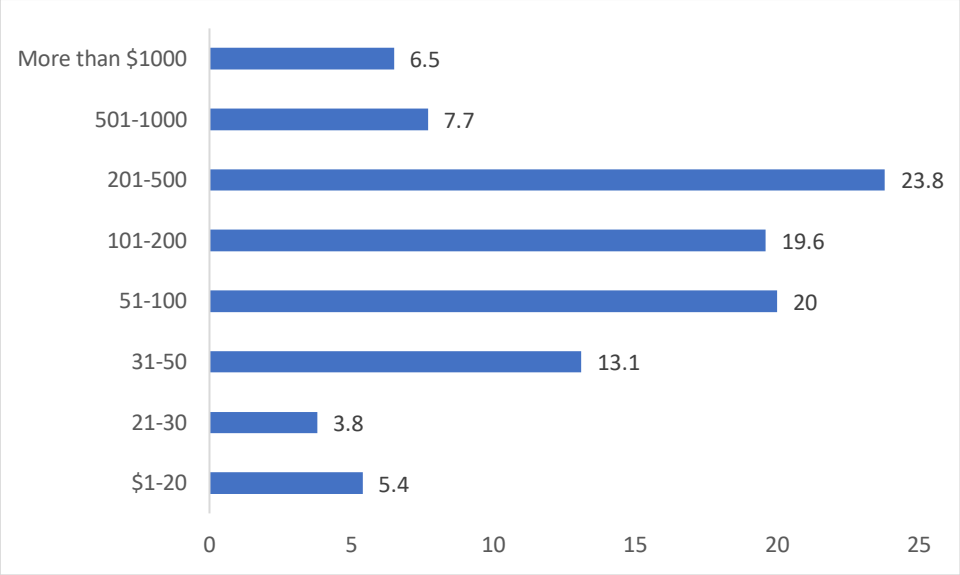
Figure 4.4. Types of machine preferred by patrons (*n* = 260)

There were also questions that captured how long people spent when they played EGMs at the Club (Figure 4.5) and how much they spent per day (Figure 4.6). Figure 4.5 shows that the most amount of time spent playing was under 2 hours, but that there was a significant proportion of the sample who gambled for very long periods on EGMs, with just under 15% playing for 3 or more hours. Figure 4.6 similarly shows considerable variations in expenditure. Around 40% of patrons spent under $100 each day they visit, but 20% were spending between $100 and 200 and almost a quarter between $201-500. Just under 15% were spending over $500 per day. Some caution needs to be applied when interpreting these figures because people can possibly interpret the word 'spend' in terms of turnover as opposed to the net amount lost on the machines; however, the figures suggest high levels of expenditure in a significant proportion of this sample.



Note: Not all figures add to 100% due to rounding and occasional missing data items

Figure 4.5. % of patrons spending different amounts of time spent playing EGMs per day (*n* = 260)

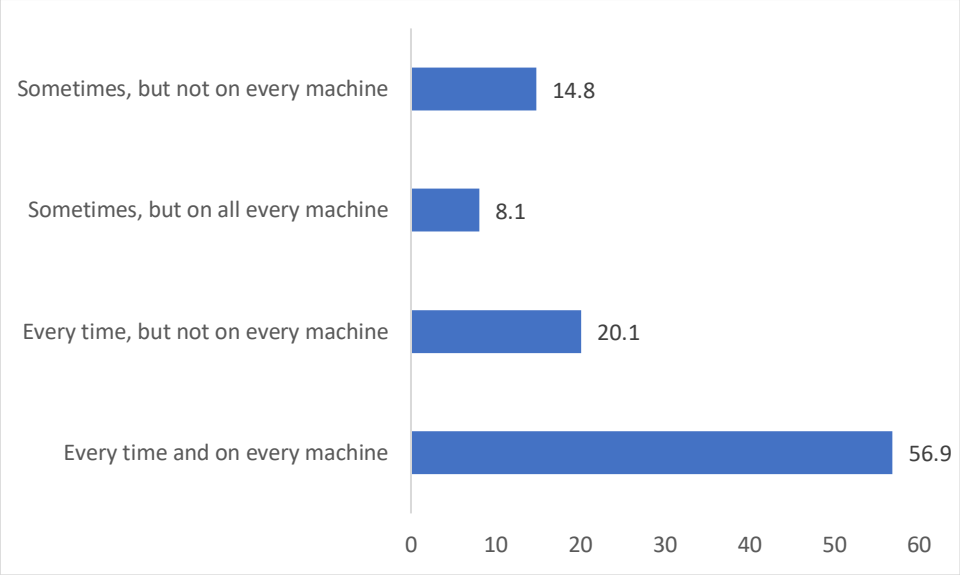


Note: Not all figures add to 100% due to rounding and occasional missing data items

Figure 4.6. Amount spent per day on EGMs (% distribution) (*n* = 260)

4.4 Loyalty program membership and use

A total of 209 or 80.4% of patrons in the sample were part of the Wests New Lambton loyalty program. When asked how often they gamble on EGMs with the loyalty card, the following responses were obtained (Figure 4.7). Over three quarters of the sample used the loyalty card every time they visited, although only half the sample used in on every visit and every machine. Only around 15% reported using it sporadically and only on some machines. In other words, the majority of people appeared to be taking advantage of the venue loyalty program when they played EGMs. This observation has implications for trials for new EGM technology in that it may increase the likelihood that people can default to the old system and under-utilise any new system.

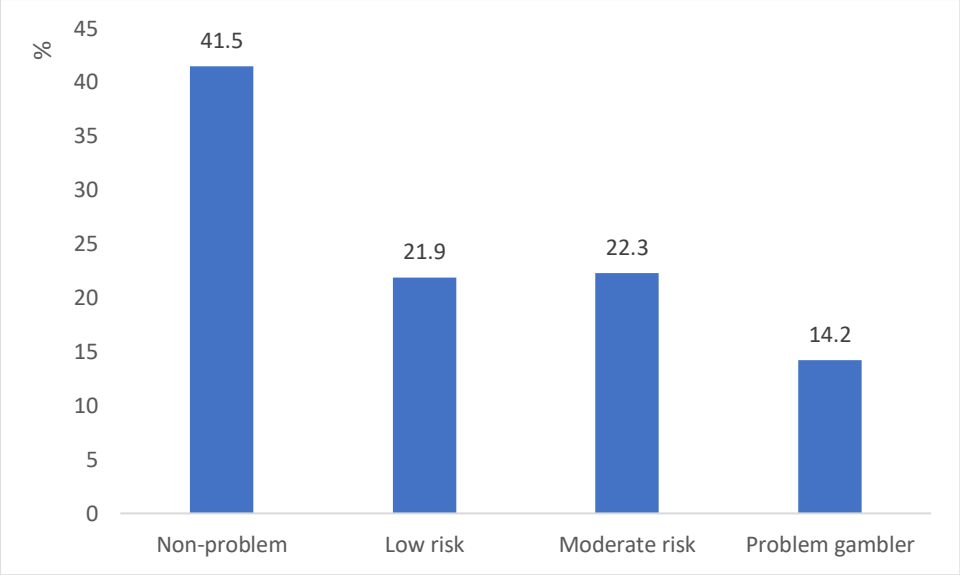


Note: Not all figures add to 100% due to rounding and occasional missing data items

Figure 4.7. Use of Wests loyalty card/ App (*n*= 209)

4.5 Problem gambling and harm

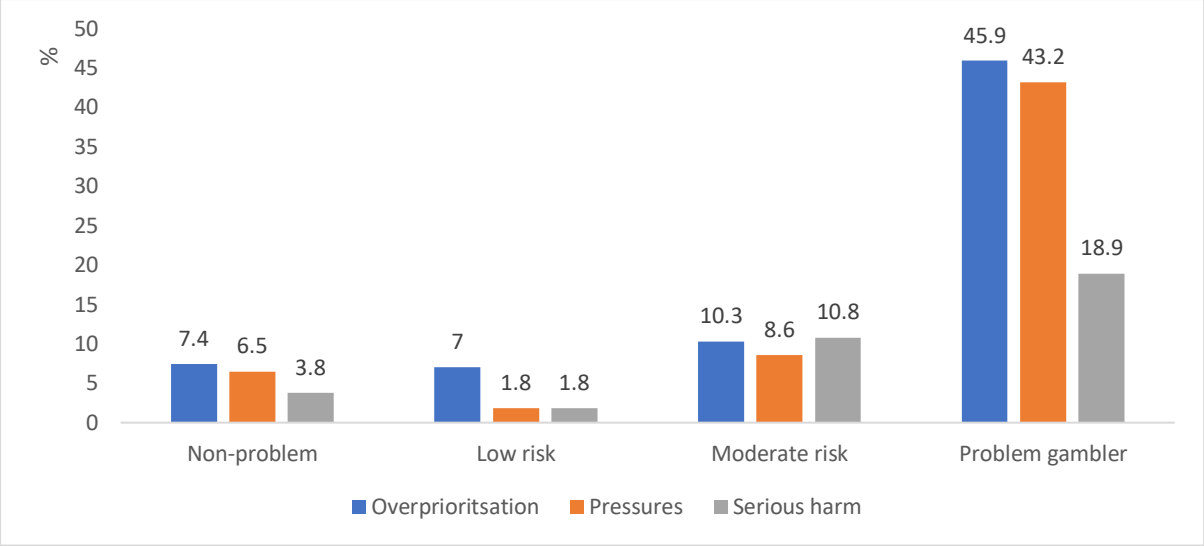
All respondents completed the Problem Gambling Severity Index (PGSI) as well as sub-items from the Gambling Measure (Delfabbro et al., 2020). Figure 4.8 provides a breakdown of the PSGI categories and shows that 14% were classified as problem gamblers; 22% were moderate risk gamblers, 22% were low risk gamblers and that 42% were non-problem gamblers. No significant gender or age differences were detected.



Note: Not all figures add to 100% due to rounding and occasional missing data items

Figure 4.8. PGSI categorization of the sample (*n* = 260)

Analysis of the financial harm subscale showed that 35 (13.5%) reported over-priortising gambling expenditure over other things; 29 (11.2%) experienced financial pressures or strains (e.g., issues with bills) and that 15 (5.8%) had experienced serious financial harm associated with their gambling. As would be expected, financial harm was generally much more common in the higher risk groups (Figure 4.9). Non-problem and low risk gamblers rarely reported any low risk harm, whereas people classified as having gambling problems reported over-priortising gambling expenditures (46%); financial pressures and strains (43%) and serious financial problems (19%). Moderate risk gamblers generally fell in between these two extremes, but had much lower levels of reported harm than problem gamblers. The fact that some lower risk groups reported serious harm may seem unusual, but this may be because the PGSI was only asked in a last 12-months time-frame. Some lower risk gamblers have had problems in previous years, had moderated their behaviour, but were still experiencing some legacy harms.



Note: Not all figures add to 100% due to rounding and occasional missing data items

Figure 4.9. Financial harm severity by PGSI level (Base: NPG = 109, LR = 57, MR = 58, PG = 37)

Analysis was also conducted to examine the frequency of EGM gambling per month, time spent per day and daily expenditure by PSGI level. People with gambling problems and moderate risk gamblers visited significantly more often (at twice the rate) than the low risk groups (Table 4.6), $F(3, 256) = 5.67$, $p < .001$.

Table 4.6. EGM play frequency by PGSI group

	N	M (SD)
Non-problem	109	3.51 (3.50)
Low risk	57	3.49 (3.22)
Moderate risk	58	6.03 (6.73)
Problem gambler	37	7.43 (11.1)

On the other hand, how long people spent each time they played EGMs did not differ significantly between the groups: 33% of non-problem gamblers played 2 or more hours per day as compared with 36% for low-risk gamblers, 41% of moderate risk gamblers and 38% of problem gamblers. There was also little differentiation based on reported expenditure per day with a similar percentage of low, moderate risk and problem gamblers (17-18% reporting spending $500 or more per day, but this was higher than for non-problem

gamblers (9%)). In other words, the biggest difference between the highest risk gamblers and the lower risk ones were how often they played as opposed to the level of engagement on particular days. However, it may be that higher risk gamblers were significantly more likely to under-report their expenditure than the other groups, especially given that they reported much higher rates of financial harm. It is also important to note that over 60% of the sample and 72% of the problem gamblers were men who engaged in many other forms of gambling. It is therefore possible that these patrons spent higher amounts on other activities such as sports and racing rather than EGMs.

4.6 Perceptions of the value of responsible gambling measures

Patrons were asked about the potential usefulness of several responsible gambling features. Table 4.7 summarises the mean scores out of 5 (where lower scores indicate greater endorsement) as well as the percentage who agreed or strongly agreed with that the feature would be useful. Ratings generally fell between the neutral and agree rating which suggested general endorsement of the features: spend limits were more strongly supported than time limits and information on expenditure was generally considered useful by two-thirds of respondents. Self-exclusion was rated lower, but this may be because this was seen as less personally relevant for many of the respondents. The usefulness of these features was not found to differ between the PGSI groups.

Table 4.7. Perceived usefulness of responsible gambling features (*n* = 260)

	M (SD)	% Agree useful
Setting a money limit before playing	2.23 (1.22)	66.7
Setting a time limit before playing	2.58 (1.36)	52.2
Information on expenditure	2.22 (1.23)	66.5
Breaks in play	2.38 (1.32)	60.8
Self-exclusion	2.48 (1.40)	58.0

Note: 1= Strongly agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly disagree. Agree in the final column refers to the % who Strongly agreed or agreed.

4.7 Familiarity and attitudes towards digital technologies

Patrons were asked a series of questions about their comfort and familiarity with digital technologies such as phones and payment systems. A total of 212 (81.5%) of the sample reported having used their mobile phones to make payments. They were then asked

how comfortable they were with: mobile phone technology in general and digital payment methods such as online banking. The mean rating out of 5 (where 1 = Strongly agree) was 1.18 (SD = 0.4) for mobile phone technology and 1.63 (SD = 0.9) for electronic payments. Both ratings therefore indicated considerable comfort with using both technologies. No significant age and gender differences were observed in the sample.

4.8 How people liked to gamble

The survey also included some questions on how people liked to gamble in the venue. In general, people liked to play privately, although only 40% agreed that this was how they gambled. Around 40% agreed that they generally did not speak to other people when they gambled, but around ?? reported that they spoke with venue staff when they visited. Most agreed that it would be good to be able to play without having to go an ATM, but most did not have difficulties waiting for an attendant for payout. Responses to these questions did not differ significantly across the PGSI groups.

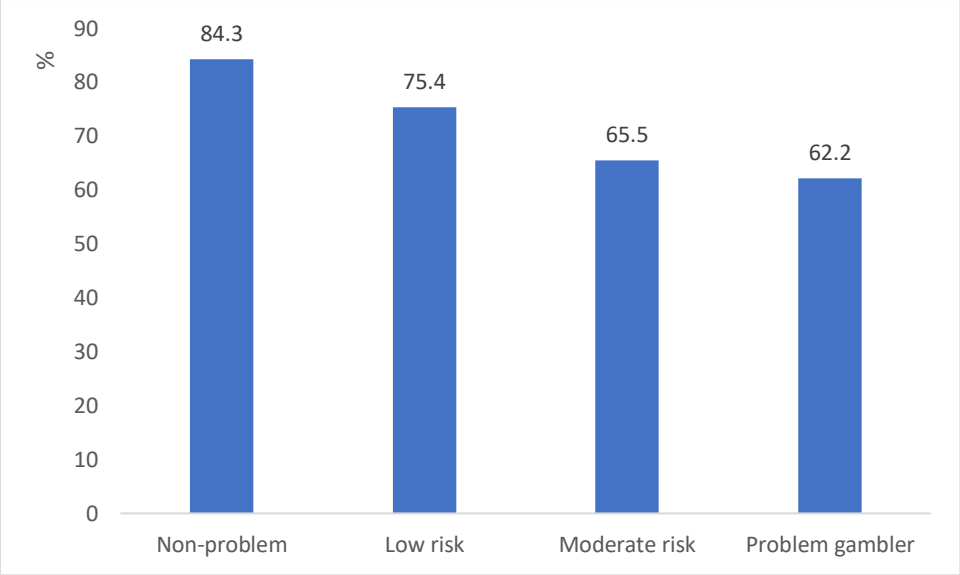
Table 4.8. Endorsement of statements relating to EGM gambling (*n* = 260)

	M (SD)	% Agree
Like to gamble privately	2.42 (1.64)	41.1
Don't tend to speak to other people	2.74 (1.18)	40.7
Like speaking with venue staff	2.42 (1.00)	52.3
Dislike having to wait for an attendant to receive payout	2.62 (1.14)	41.9
Would like the convenience of being able to play without ATM	2.02 (1.07)	72.1

Note: 1= Strongly agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly disagree

4.9 Budget setting and problem gambling

Analysis of the budget setting question in relation to the PGSI groups showed that budget setting was less likely in the higher risk gambling groups (Figure 4.10), $\chi^2(3, N = 260) = 11.0$, $p < .01$. This supports the idea that limit-setting features might be of greater benefit to higher risk groups and that lower risk groups are more likely to be engaging in this behaviour already.



Note: Not all figures add to 100% due to rounding and occasional missing data items

Figure 4.10. Budget-setting by PGSI group Base: NPG = 109, LR = 57, MR = 58, PG = 37)

4.10 Discussion

The baseline survey provided several useful insights into the progress of the trial which is likely to be useful for informing the design of future trials.

4.10.1 Characteristics of the sample

Analysis of the baseline sample shows that the trial was successful in recruiting a diverse sample of patrons with varying levels of gambling experience. Patrons in this sample generally had very regular gambling habits and many reported spending significant amounts of time and money playing gaming machines. There was good representation of numbers across all four PGSI categories which meant that the sample appeared appropriate to allow analysis of how gambling risk was related to behaviours observed in the trial. Many of the people recruited in the sample (around 16%) were experiencing pressures and strains or significant financial harm associated with their gambling which would suggest that having a cashless gaming system with built in responsible features would be potentially beneficial. Demographically, the sample showed some bias towards younger people and also men which is unusual given that prevalence surveys tend to have an over-representation of women or people in late middle age (who are often weighted down in the studies). Many of

the patrons recruited reported gambling on a variety of activities at Wests New Lambton and also that they gambled at other venues (most notably other Wests venues and at hotels). However, the majority (80%) were loyalty card holders and reported using their loyalty card to play EGMs on most occasions that they visited the venue. Other activities that were commonly reported included sports and race betting and also Keno and this very likely reflects the male-bias inherent in the sample.

4.10.2 Insights into trial recruitment

The baseline data-collection indicated that there are some challenges associated with recruiting people into trials of this nature. The fact that younger people and men appeared were more common in the sample may indicate that trials involving new digital technologies are more appealing and accessible to these groups. Older people may not be as comfortable using these technologies. Although no gender or age effects were observed for questions relating to comfort and familiarity with phones and digital payments, this does not rule out the possibility of selection effects; namely, that the people who agreed to take part in the trial were those who had greater confidence in their ability or preference for these technologies. Some tentative evidence in support of this proportion arose from the records kept by Wests into why people refused to take part in the trial when approached in the venue. Some refused without a reason (which could have indicated a lack of interest, time or willingness to take the trouble), but older people were more likely to indicate a lack of comfort with the technology or that they did not have a phone. The most dominant reason reported by a quarter of people was around privacy and being monitored. People described the technology as “dangerous” which may have been synonymous with “dystopian” (the government wants to track the things I am doing). Another very small group of people were worried that having easy access to their bank accounts for gambling could increase their gambling risk.

4.10.3 Views of the technology features

Respondents endorsed the potential value of having a payment system which did not require them to use an ATM and also saw some benefit in not having to call for an attendant when they got a larger payout, but this second advantage was not so strongly

endorsed presumably because it was not something which affected them as often. Most saw value in being able to set personal spend limits, but there was only modest support for time-based limits and breaks in play. It is important to note here that RG features may not have been seen as relevant to some respondents, but the overall trend was towards support for these features to be included in a cashless gaming system.

Chapter 5: Qualitative views of patrons

5.1 Overview

This chapter summarises the findings from a series of qualitative investigations involving Wests' patrons about the PRIME digital wallet technology. The first series of interviews (n = 5 people) was conducted during December 2022 during the earlier phases of the implementation of the technology to gain insights into the early barriers to uptake and impressions of the functionality. A second group of key information interviews (n = 10 individual interviews) conducted in March 2023 once the trial was well progressed were designed to capture the views of patrons who had used the technology. The focus of these interviews was on the usability; awareness and views about the different features; and, patron attitudes towards the value and future value of the technology.

5.2 Barriers to early uptake: key informant interview findings

The five participants (3 women, 2 men, age range 40-50 years) who took part in these interviews had to meet several eligibility criteria: (a) had completed the pre-trial survey; (b) Indicated that they were open to participating in further research; and (c) had not passed the KYC process for trial. Participants were randomly drawn from the sample of trial participants and contacted via email after indicating potential interest in an interview form the pre-trial survey. These interviews examined: (i) overall impressions of the trial and the technology; (ii) what stopped them progressing; (iii) thoughts and awareness about the responsible gambling features; and (iv) overall 'likes' and 'dislikes' about the App. A full copy of the interview schedule is provided in the Technical Report.

5.2.1 Overall impressions of the trial and technology

Of the 5 participants, two had generally positive experiences, two were more negative and the final person had not engaged sufficiently with the technology to reach a firm conclusion. The two patrons with positive reviews reported they had initially had some misgivings: for one it was about the security and privacy of data given previous publicized data breaches (e.g., Optus), whereas the other encountered connection issues (e.g., not being able to get a strong enough WIFI connection at the venue to facilitate the set-up process):

“Obviously, with everything in the news at the moment was a little apprehensive. But a lot of my information is out there anyway, so I didn't have any too many issues.”

I think it's going well. Initially, there were some technology problems where it wouldn't log out if you walked away and a few things like that that they were still trying to iron out. And I think some of them might have been just problems with the club's Wi Fi, I think or something but it's now working pretty well.

The two negative views arose from the whole process seeming to be too slow and drawn out and demanding and not consistent with the person’s desire to use the visit as a way to ‘switch off’ or relax.

“It's just, when I go to Wests, I go there with intentions of trying the digital wallet. And it just seems too tedious. Other times, I'll go there and I've already taken money out because I think ‘I'm got going there with this much to spend’ and then I forget to use the digital wallet. … It's my way of just relaxing”

“The whole process of jumping on was certainly not as seamless as one would hope for as, as a member coming in… It took me half an hour plus to join.”

In the early stages, it was also not clear whether all Wests’ staff were familiar enough with all the features to provide full guidance and there were problems with getting certain information into the App (e.g., getting the right email address entered in). Those who had previously obtained a Wests membership had the dual advantage of being familiar with how phone wallet worked and did not have to go though both the Wests and trial sign-up process. Those who had to do both become annoyed when they discovered that they had to do two KYC processes:

“The two pieces of technology should be talking to each other so that I don’t have to put my details in twice.”

Two of the respondents also provided responses that had not been anticipated when the trial began; namely, that they confused the Wests loyalty card (which can take the form of a digital membership card as well as a physical card) with the PRIME wallet (which they had not actually downloaded). In other words, they believed that they were utilizing the new technology when this was not the case.

The final respondent, who was still in the early stage of exploration of the App, was not sure how well the technology would be received by older patrons.

> *"But where I live the demographic at Wests tends to be more mature and I worry that some of the oldies might not bond with the new technology."*

5.2.2 What stopped them progressing

A principal barrier to people progressing with the sign-up process was the KYC process required for setting up a new digital bank account from which money could be ultimately extracted into the gaming wallet. KYC requires: (a) that people have access to a number of different pieces of personal information and (b) that they are able to remember all the correct details at the time. For example, one patron was not able to remember an email address.

> *"I couldn't go to the next step of registering my wallet because the email was incorrect, and there was an issue with it or something, but then I went to helpdesk, and they updated that which allowed me to continue."*

Another did not have all the required person documents or ID on-hand when they visited the venue:

> *"I don't carry my wallet with me, so I didn't have my Medicare card, my passport, my license – my licence is in my phone, right, somewhere in here. But I didn't have it that I could use it to go through the KYC so I skipped it."*

A third patron believed that the KYC process took too long and that it was an unnecessary burden when the person had come to the venue to relax. In that circumstance, the person was content to continue to use the existing cash-based system.

"I've gone in there with the best intentions (to complete the KYC) and then I realized that I had cash on me that I wanted to spend so I didn't want to do the wallet registration at that time."

This respondent also drew attention to some redundancy that arises when a person wants to sign up for both the club and the new App. Each of these sign-ups requires their own separate KYC process which the patron found time-consuming and frustrating. In response, the patron made some recommendations about the process.

"There's a process and KYC is obviously a very big part of this. And because there's two systems talking to each other, the membership system, and the financial services system talking to facilitate the transaction. The two systems should be someone should be the master for the KYC. And so therefore, the player or member should be able to complete the process once not twice."

Two other patrons highlighted another problem which had not been anticipated in the trial; namely, that people would confuse existing membership-cards with the new App. These patrons were using the digital version of the Wests membership card and believed that this was the PRIME App. The observations suggest that having more than one digital wallet / membership system operational at venues need to be taken into account in communication strategies.

5.2.3 Views about the responsible gaming (RG) features

The overall view was that features were useful and the respondents appeared to be aware that they existed on the App. As they observed:

"anything that makes that (spending) a little bit harder, I suppose, is better, for better for reducing your gambling."

"I think the measures in play for the system, to put funds in a holding account to allow you to set your limits and all those things were very good. I think they're all necessary and gaming systems had them anyway, but this just makes it easier from a player perspective in terms of, you know, deciding and making your own conscious decision to spend $500 for 24 hours. … I if I

win, or if I lose, I can set the rules to say don't let me take any more money out of my [bank] account to transfer onto the machine."

However, there was also some ambivalence particularly in relation to the player activity statements. Although these were seen as useful, these also appeared to evoke mixed emotions: (a) they were scary or evoked feelings of shame; (b) were quite detailed; and (c) might encourage people to go into denial.

"I think the player activity statements will be useful and scary – I opened it up and there was quite a bit of activity, so I just closed it down again. … I literally just opened it, saw that there was a large volume of lines there and so honestly, I didn't look at it."

"The player activity statements are good –sometimes you don't realize how much you've spent or what you've been playing and then you can have a look, but I haven't had a look at mine. I'm too scared, but I know it's there and I've seen it. But I'm pretty good at keeping a track as I said, I normally go to the ATM beforehand, get what I need to spend, spend that and then sometimes I might do another trip to the ATM like the walk of shame but I tend to go with what I want to spend."

One respondent was eager to look at the activity statement, but wanted to do so when she felt confident that she did not have a problem and away from the watching eyes of staff. In other words, the patron almost did not want to look because of what might be seen, but was still curious to see the amount.

"Definitely the activity statement because I've always wanted to look at mine. Mainly because you've convinced yourself that -and I don't have a gambling problem - but you convinced yourself you don't have one even though you haven't read the statement. So, I've always wanted to read it, but I've never wanted to ask staff."

Patron respondents also expressed some doubt as to whether some of the higher risk or problem gamblers would necessarily avail themselves of the RG features:

"I'd love to say that the responsible gameplay features will be useful but I think what we're forgetting is that problem gamblers don't go in there with the intention of spending what they do. So it would require them to think ahead and set these limits. But most of the people that I know will look at it and go 'I don't need that - I'm just going to go in and play and not worry about it'. … I don't think anyone's going to use it willingly.

A respondent also pointed at that, over the longer term, the whole venue would probably have to transition to a cashless system otherwise people would easily circumvent any controls using the existing methods for gambling.

"It's a good thing, as long as we go completely cashless, because it's pointless if you're excluding yourself on the app, but then you've got a wallet full of $100 notes."

5.2.4 Overall likes and dislikes

Respondents showed clear signs that they were able to adapt to the technology and that it generally worked well. Despite early teething problems, it appeared to become more routine and instinctive as time went by.

"I haven't really had a chance to delve into [the digital wallet] too deeply but so far, I don't think it's too hard to use. I mean, everything's there. It's highlighted what and where the options are, and where to select and what you need to find - it's quite clear."

"It's almost like I'm used to it now. The best way to describe it is, like when you first used to use a poker machine it used to spit your winnings out in money. And then that became a ticket. So it's kind of just a natural adjustment that you're no longer putting money in or taking money out. We haven't been taking money out for a long time. Now we're not putting money in."

Several of the respondents did, however, raise some concerns about the location detectors. For example, several noticed that when some ended a session on a machine - which would lead to the displayed balance on the machine returning to the person's App gaming -wallet- there was often a delay. As a result, a person would step away from the machine and walk a few metres only see that the balance was still displayed on the

machine. Even though, in reality, this would not be available for use by another player, it was disconcerting:

> *It only disconnects you from one machine with enough distance and mine wasn't disconnecting. So I didn't feel the security was there properly.*

> *"If the session is not terminated within - for the sake of our conversation - two or three meters and the money transferred back to the players account I think there's gonna be some real challenges for loss of funds. I mean the loss of funds not gambling related just you're leaving money in the machine - I guess it's no different to leaving your ticket in the machine but it's not a good experience from that regard."*

Patrons also generally did not like being locationally tracked. Apart from the potential privacy concerns, there was also a concern that this could lead to battery drainage on phones which would render the App unusable if the battery needed recharging.

> *"The only sort of issue I had was, it keeps asking me to use my location continuously, even when I'm not in or near Wests, which is obviously going to drain my battery and other things. So, I have that turned off. So, now every time I open the app, it asks me to turn on continuous location search, which I don't allow."*

Finally, there was some concern that the App did not have an intuitive way for players to reserve a machine as was the case with the legacy systems. Such functionality was recommended for future iterations of the technology.

5.2.4 Summary of findings

This initial set of insights needs to be treated with some caution because it came very early in the trial recruitment. A number of the issues (e.g., location and machine balances) and clarifications around the distinction between the Wests membership App and the new PRIME app were addressed in subsequent communications involving Aristocrat, Wests and 3ARC). These are summarized in Table 5.1. Overall, the feedback showed a pattern of initially teething problems followed by adaptation and acceptance.

At an operational or implementation level, there is clearly a need to make the KYC process more streamlined; for staff to be given sufficient time to familiarize themselves with the technology so that they can provide advice to patrons; and, it is important to take interactions or experiences with existing legacy systems (e.g. membership wallets) into account. Some of the unanticipated findings related to the issue of connectivity: for people to be able to sign-up and also to continue to use the phone-based App, they need good quality WIFI / Internet connections as well as the ability to recharge their phones. Few major concerns were raised about the operation of the technology once people were familiar with it, but some raised concerns about the locational devices because of concerns about privacy and tracking and felt disconcerted when wallet balances still remained on machine displays for a short time. Respondents also made the observation that the people who are more familiar with Apps are more likely to adopt them than those (e.g. older people) who have a longer history of using legacy systems.

Patrons generally supported the implementation of RG features and were aware of them. As previous studies have shown, people tend to believe that the features are not necessary relevant for them and raise questions about whether higher risk gamblers will use them (Delfabbro & King, 2021). However, an interesting insight was that player activity statements were observed ambivalently. Although seeing how much one was spending was seen as important, there was a sense that some people 'did not want to know'. Such information was seen as anxiety-provoking and could lead to feelings of shame or denial. These comments coincide quite strongly with a paper by Oakes (2019) that shows that relapse in problem gambling can often be triggered by feelings or hopelessness and despair when people become aware of just how much money they are spending and the consequences of their actions. Such findings might suggest the need for adding help-service or advice to player activity statements to mitigate some of these emotional reactions.

Table 5.1

Summary of insights from early uptake interviews with patrons in late 2022

Area	Specific issues raised
Sign-up process	• Slow and cumbersome and takes too long; not consistent with casual gaming • Need to bring along the right ID / documents/ remember emails • Duplication if other memberships also have to be set up at the same time
General technology issues	• Issues with the availability and quality of WIFI • Phone batteries can charge down if location detectors are used and if phone Apps are used for longer sessions of gambling
PRIME technology	• Concerns about the machine balance remaining visible after leaving the machine • Need to be able to reserve machines as with the legacy systems
Legacy/ competing technology	• Being mindful of potential confusion with any existing wallets or App technology in venue
Staff awareness and training	• It can take some time for staff to be fully aware and trained in how to give advice about the technology
Responsible gambling features	• Generally accepted and seen as useful • Useful for problem gambling, but some people with gambling problems may avoid them • Player Activity Statements (PAS) seen as very relevant, but could trigger feelings of shame, denial and avoidance

	• Need for all the venue to be cashless for RG measures to work • PAS are quite complex, but seen as useful
Demographics	• Users with previous wallet experience more confident • Speculation that older or less tech-saavy people might struggle with the technology

5.3 Key informant interviews during the trial

A group of 10 patrons (10 men, aged 25-64 years and 4 women aged 30-70 years) who were actively using the App by March 2023 completed detailed 45-minute interviews about their experiences. These interviews included questions about: their initial impressions; the set-up process; their views and experiences with using the wallets; their views and use of responsible gambling features including the player activity statement (PAS); the best and least liked features; and, whether using the App had any impact on the way that they gambled.

5.3.1 First impressions and the set-up process

The general view of patrons was that the initial set-up process required a lot of time and clicking on the phone, but that the technology generally works well once one gets used to it. As respondents noted:

> "…it all made sense, once you sort of got into it. And the app was fairly logical and well laid out, it was really good to see your history, because as a gambler, you forget your losses. And I did lose on the first day, but won on the second and the third day. So that was good to have in that app that reminded me about the ugliness of gambling. "

> "The first time I used it, it was very difficult because it took so long to set up. So I had to call the manager and everything and get it properly set up and everything. But once it was up and running, it was really good."

As in the earlier interviews conducted back in 2022 and described earlier in the chapter, there were concerns about how long the set-up and KYC process took, but fewer of these respondents appeared to have problems with having the right ID or information which may suggest improvements in communication from Wests during the course of the trial. Despite this, some patrons still had minor problems as such not being able to remember emails, pins or passwords. One patron also indicated that it was important to explain that the new account that is set up through the App is also called a wallet.

The principal concerns that arose for this group of participants was issues to do with connections. Once again, not all patrons had good experiences trying to find a good Internet/ Wifi connection.

> "I thought it was horrible, to be honest. Because you had to have Wi Fi to download. It was just I don't know how old people would do it. Put it that way. Yeah. Yeah. So I found that cumbersome…"

There were also connection errors when people tried to interact with gaming machines. This problem was reported by multiple patrons with some referring to messages about "too many servers being open". Some examples of their statements are summarized below.

> "when I was trying to load it through the app, it sort of I was getting errors. But it seemed to take a long time to try and even connect. And then it seemed to be having difficulties to connect. "

> "so I don't have like a lot of feedback, because I didn't use it much because it was so poor when we did try and use it. It wouldn't connect, like as in the loading it took forever. And then when it was trying it was this error about there was too many servers open or something like that, at the same time trying to connect to too many servers"

> "Used it most times I've entered. I've had it for a month and a bit now. I think it's been a month and a bit. So I've used it about seven, eight times. Not as often as I've given up sometimes and just put cash in because it's not connected. And I got frustrated."

> “yeah, that's multiple open beacons detected. So you'd press the retry. And then you'd sit there and wait, and wait, and wait for that to come up again.”

> “Well, I was with, with my mate, and we're playing around with it first when it first came out, and it didn't work too well. It I think it connection has improved a little bit, but I don't know how many people are using it. But it just seems like there's interference, but I don't think there's many people using it. So I was trying to work out why.”

Another problem reported by some patrons was that it was difficult to transfer funds between wallets anywhere inside the venue. This led to some patrons having to leave the venue and go across the road to load up their wallets.

> “And then I went to deposit like, try and transfer more, so my main issue was that it wouldn't let you transfer more, while you're at the location. You had to walk outside. I took a walk across the road with one of the managers here who's very nice, [staff member name]. And yeah, we did it that way. But I think that would be one of my deterrents in maybe using it all the time, But when I was using it just had good functionality, like I learned how to connect to the machine, and disconnect when I'm finished. And it all worked well for the purpose”

At the same time, there were a number of patrons who reported that it all worked well and was clear and straight-forward, particularly for those who were comfortable with using digital technology. Those who used it liked the instant deposits and withdrawals.

> “I've had a little bit of experience with it. I found it pretty easy to use for someone my age. Pretty easy to understand. But then again, I'm pretty tech savvy. I found it pretty straightforward. Like it's no different to other apps I use.”

> “So yeah, I liked the setup of it. It seems like clean and informative. And there's lots of different pockets that you can go and get more information and stuff like that. So yeah, I liked the app. It was purely the connection issue with the game. Multiple open beacons detected.”

Feedback from three of the respondents indicated that some of the navigation and instructions might need to be improved. Instructions could be more transparent and act as a

guide to help create a sequence of tasks to be completed. These views are evident in the following responses.

> “But yeah, so that once it got sorted, that was fine. I think the apps have been, I think clunky. It's not really easy to navigate and know what everything is, unless you go in and read all those instructions and things.”

> “Yeah, that was fine, that was easy. Getting the BSB and all that that came down? Fairly easy. I think. I think just that initial navigation, just doesn't really explain itself. Like there wasn't even like a thing to be able to press, you know, an eye button to say that's what that's for. Yeah, I think that's what it needs. To make it a bit easier. And I'm pretty tech savvy. And I thought if older people were using this, they'd have no idea.”

> “Yeah, I think it could have had it they could have made the app easier to sign up to. And easier to create the wallets and everything. Like made it- yeah, more accessible and easier.”

> “Yeah, probably just the way it was put out, like when you put your date of birth in and stuff, it was just really, really bad layout. Like, I really hate that layout, because you've got to keep tapping constantly. And then you've if you find a way to do it the other way, it's so it's not clear. There's all these buttons that we didn't know about. And you couldn't see them. So that was really annoying too like, it didn't have any specific, you know, telling you where to keep going or, "Press this button". It was all hidden, so you couldn't see it?”

5.3.2 Wallets: Understanding and ease of use

Feedback on the wallets was generally positive. As several patrons pointed out:

> “Yep, everything I clicked on it explained it. And it has that whole section where you know, if you just don't understand it, that explains everything step by step. Just yeah, it's pretty straightforward. Yeah. I might have to go back every now and again and go through the process and just read it again, but it's all straightforward.”

> “But yeah, it's pretty instantaneously, it's pretty quick. Being used to just your card and taking a ticket out- it's faster, it is faster. And I like cash because it's old. Having money when you put it in a machine get your money out, then you could set that money aside, which is the same thing with the wallet in the West, app- like the holding wallet. You can say, I want to put that

much in there, and then keep this much on the cards, so it's the same process as those. I'm just so used to money. “

At the same time, some patrons expressed some concerns. For example, it was pointed out that there are several different wallets and that it takes some time to learn the purpose of each of them.

“I thought it was maybe too many wallets for, you know, when you transferring to the card for the machine use, and then back to the venue, and I wasn't really sure what the other one was for, to be honest. But yeah, I'm sure it's just a learning curve thing. And once you know what it's for, then it'd be fine.”

“The different wallets? I had no idea there was multiple wallets. Yeah. Because probably because I didn't really get to, oh, here we go. Venue wallet, holding wallet. Yep. I this is I do remember wondering why what am I meant to use and things but it wouldn't work for anything for me at the time. …There's gonna be so many people that don't want to use this, don't understand this, can't use it have got way more questions than I would have and would be too scared to just give it a go and see what happened. So that was my sort of biggest concern for the for the app and for the patrons.”

“When I first look at that, I think where do I put my money? Right. What is a holding wallet? What is a venue wallet.”

This complexity was further compounded by the fact that the term wallet could refer to a digital version of the Wests membership card stored on people’s phone wallet, the WestsPay App used for food and beverage as well as the wallets used in the trial.

“I think maybe if we reworded the wallet names to something like machine play or something like more descriptive meaning I'm transferring this to be able to play on the machines.”

“Here we go the wallets in West pay isn't it? Yes. Oh yeah here we go, wallet. That would probably be it says West pay so it doesn't actually say wallet at the front maybe that would be a bit clearer if where you actually pressed the wallet it said wallet because it says West pay. And I just sort of went Oh, yeah, Westpay I think that's the wallet. And then you go in and it says wallet. Okay. Yep. So venue wallet holding wallet card pay.”

An issue of function that disconcerted some patrons was that, if the connection dropped out, they felt that their funds were still trapped on the machine and this gave rise to concerns about security.

> “The bluetooth fell out a couple of times on some of the older machines. And I had to get the, the duty supervisor who knew the cashless gaming machines, and she was off somewhere. So that took quite a while for her to arrive. And we basically had to reboot my phone, which I thought was a bit a bit clunky and problematic. I did think about the security of a Bluetooth connection between my phone and a machine.”

> “the first time I wanted to get money out of the app, and I asked the guy at the change box. He actually said I had to go across the road because of you had to leave, like the network or whatever it is. Yes. And so we had to go across the road to be able to get the money out, which was really weird.”

> “Sometimes it was difficult to connect to it. And it took a few times to do it. Sometimes it sort of dropped out, and we had to reconnect. If you wanted to go and buy a drink, you couldn't leave someone else there to take your phone to pay for your drink? Of course, yeah. Because it automatically took the money out.”

Some patrons commented on the potential risks of having a system that connects to one’s bank account and the differences between spending money and credit on the App. Speaking about money, one respondent commented:

> “Because when I first heard of this, I was like, Whoa, what a dangerous slope. But then I then obviously learnt more about it and was like, oh, it's not just automatically connected to your bank account, you still, it's just like having to go to an ATM without actually physically having the cash or paying that fee. You still have to, like you've said, walk away, make a transaction or process but on your phone. So that straightaway, I was like, Oh, that makes me feel better about not myself. I don't think I have an issue. “

> “it's more in your face. Instead of just like numbers on a screen. They don't really represent dollars they just represent digits. Yeah. And especially like when you're drunk you're not really thinking of money then when you don't have to open your wallet up”

However, the respondents also came to realise that there were differences in that there were already ways in which the current systems in venues allow people to make multiple withdrawals (e.g., from ATMs) and that the system had other protective features such as controls on where money could be loaded into the gaming wallet.

5.3.3. Effects on gambling behaviour

When patrons were asked how the App affected their behaviour, the two main themes that emerged related to the change in the process of gambling (cash/ tickets to digital cash) and whether it changed (deceased/ increased) their likelihood of overspending. Some patrons indicated that it took some time to adapt to the different method of gambling. As one patron put it:

> “I suppose it takes a while, it's because it's all new. It's not instinctive. And then it's more convenient just get a ticket and put it in another machine. And then instead of getting your phone out all the time, open up the app. And then like I'm worried about the battery running low .”

However, the more common view was that the App did not make a lot of difference because they already had their own budget and limits.

> “So I have my limits. You know. So I have I have a budget. I'm a pensioner and I have a budget.“

> “Well, I don't take any extra with me, like, I just, I might put 100 on there. And that's my limit. And I won't put any more on.”

When patrons did comment on any behavioural effects, it was usually to say that the more complex process of gambling appeared to slow down how much they were spending. The new system appeared to make them more aware of how much they were loading in

whereas cash could be loaded in almost immediately without a lot of attention to the amount.

> "Yeah business as usual but I think it does, like I said, make you more aware of what you're spending. So that's, I think, a good thing."

> "I probably use more if I'm just using cash. …Because it's just like - cash is easier to use than to go through and do the transfers and stuff like that."

Another patron pointed out that the monthly statements (the PAS) would also serve to reduce expenditure because it made the amount being spent a lot more transparent. This is well described in the following extract from one of the interviews:

> "I think I would take into consideration and really look at those monthly statements, if they're available and say, Look, I need to pull my head in or, you know, it's going well, or that type of thing and mould your behaviors around that type of thing. So I think that will be my most useful tool. Yeah. Yeah. I know you can see warnings on every machine saying if there's a problem call the number but I think you've got to have something really more that hits you personally like a statement saying you've lost $3,000 last month what are you doing type of thing. So I think that'd be my most useful tool in defining my habits if I got to see the bigger picture of what I went out and did last Saturday night."

5.3.4 Responsible gambling features: views and usage

The respondents generally had very favourable views about the responsible gambling features and most were aware that they existed in the App. A number of patrons specifically emphasised their endorsement of this functionality:

> "I will use it? Yeah, I definitely I will using it. I will download it and use it. There's any other Sydney club venue?"

> "Yeah they were, great. Yeah. No it was really good. And on the machine, too. It's I guess it's good as well, you can put, you can take a break and had it on the app as well. And yeah, no, that was really good. That was all clear and straightforward."

> “Yeah, I think it's a very good thing. No, I think it's a good thing to set a limit. Because, yeah, I know, I can waste money there. And I have done in the past, you know, and, like, I think that's a good thing to set yourself a limit. So you don't go over that? And sort of not, you know, wasting your money or anything like that.”

In addition to general comments, patrons made a number of specific comments about particular RG features and how they might be used by people who gamble. The first important theme that emerged in relation to this question related to the importance of privacy. Patrons liked the idea of being able to set limits unobtrusively without other people knowing and that more drastic action (e.g., getting a break-in-play or self-exclusion) did not require an awkward face-to-face interaction with staff. This is evident in these following statements:

> “Oh, very convenient. Very not so confronting … you can do it all anonymously and you don't have to face somebody. So you can do all on your own with no one judging you I suppose and no one- I don't know just that's more personal.”

> “I think it's awesome. Because so many people would be more likely to press a button, than go up and talk to someone about it. 100% and people who do have a, you know, an issue and you know, they've got that foresight to go, I need to do something about it, they're going to feel a hell of a lot more comfortable and confident, I think, to be in the privacy of their own, you know, space and just go rather than have to go up and face someone and sort of say, I need help. Or make a phone call or whatever it is like I mean we're just more and more so in a way of as this is not sort of face to face interacting with people.”

> “Yeah, I guess if you're going with it with family or friends, and you don't want to really be in the gambling room, or duck off, maybe having a dinner? That's probably a good feature. To know that you can't actually access it. Yeah, that's pretty cool.”

A second theme was that respondents differentiated between their own personal needs to use limits as opposed to people who might have problems with gambling. Such people (e.g., people they knew) that they? believed could benefit from the RG features, most notably the convenient access to self-exclusion. These views are evident in the following extracts:

> “Undecided… I think is my honest answer there. I'm not sure. I only have a certain amount to gamble every week. Once it's gone, it's gone. I don't ask for any more, sort of walk out with my tail between my legs and don't come back until the next allowance day. So would I be brave enough to set a limit per day that I could gamble, probably, but I'm not. Not sure how I would do that right now.”

> “I think they will if they adapt them? If they adapt them. I don't think it would have applied to me. Because I don't see myself as a problem gambler and my husband agrees with me.”

> “I've got friends that play their electricity bill money. And, you know, I think Yes, that'd be good. If it were, well, you've got to be aware that you've got a problem, you've got to want to put a limit on yourself as well. But it's good to have the option there to be able to do it. I wasn't sure too whether the club actually had a limit of how much you could put through in a day.”

A third theme related to the fact that not all people with gambling problems would necessarily be willing to avail themselves of the features. This is because not all would be willing to admit or confront their problems.

> “But you know, it takes somebody to admit they've got a problem, or somebody that knows, they really want to do that. So you know, when it comes down to sort of empowering again, somebody who's got a problem. And they know they got problem. And they can't do it normally, I suppose it would make them not so ashamed to do it personally. But still, if they can't stop now, they're not gonna really exclude themselves to begin with.”

> “But this is more putting the onus onto the person to do it themselves. So they have to want to do it. It's like an alcoholic giving up alcohol. They have to want to do it. But if they want to do it, I think it would be a big help. Would be- you can turn it off and on. You know, as you want it. And I think it would be a big help.”

Another important view or theme that emerged strongly in several patron interviews was the value ascribed to the ability to hold money in another wallet. It is not entirely clear whether these people were referring to the dedicated quarantine wallet for larger wins or the venue wallet. However, in either case, the ability to transfer money out of the gaming

wallet (or the 'holding concept' in general) was seen as a great strength of the App. This is evident in the following extracts:

> "I don't see myself going in and looking at this, but I liked the holding account. Because I can tell you now, last night, I wish I had known about the holding account."

> "Yeah, that makes sense. I think that it's like, you can transfer over the amount that you want to play to start with. So if I know I've got $200, for instance, you know, I know that's, that's what I've transferred over and it's harder. I mean, you can do it, but you've got to actually go in and do it again, you know. And that really makes you know that's your starting balance and you can play it and watch it and transfer it back in and from the accounts. I like the fact that I've had the holding being in the end, when you knew what it was, I knew what it was. Because I could just pop money into it know that I'm not going to spend that, you know?"

> "But then there will be something they're holding, because every gambler is the same. When they start losing, they want to, you know, inject more money and try to get the money back. Right. And then 95% of them is losing on that day. And then after they go home, they everybody's and they shouldn't do that. So holding is probably a good idea. "

5.3.5 Location-based controls

Views about the geo-controls on the ability to transfer money from the venue wallet into the gaming wallet on the gaming floor were generally positive. A number of patrons saw this as a useful way to achieve a form of reality-check or to reconsider and monitor their gambling. It forces a conscious decision to leave the machine and add on more cash if people want to continue gambling. This view is evident in the following transcripts:

> "Um, yeah, I think that's kind of good sort of thing to like to make you think how much money you're spending and kind of thing like that? Yeah. I guess. And you can sort of keep track, yeah, what money you're spending. That's what I liked about it, 'cause that would make you think and stop you- not let you waste your money…"

> "I think it's quite good because it's a decision. It's a decision making move. And you've got to think well, okay, do I want to go and get some more money? I've got to leave this machine, will someone take it off me while I'm away."

> “And I think that is a good thing because it takes away the incentive to carry on gambling. Because it's so close to you.”

> “Yes you can now that never used to be there before. Yes, that's good. I'll take a break when I want to go to the toilet. So if the machines is doing the right thing for me, I'll take a break.
>
> I don't know what difference walking six steps would make to me to transfer more money, but not being able to transfer at the machine. Yeah, it could interrupt and cause me to rethink who knows. So probably a good idea, but I would have not expected but thought it would be more effective if it was a lot further geographical area away from the gaming floor.”

The only difficulty with this locational control is that it could lead to consternation from patrons who might believe that they cannot access their money. This led to the suggestion that clear information, including reassurances, would need to be provided to avoid negative reactions from patrons who were new to the technology.

> “I think it's probably a good thing. But it needs to really be explained, I think before you before you do it, because it just felt like, it just felt like there was a block not able to access my money. And so, yeah, I think that just needs to be really explained before.”

The other problem, previously raised in the 2022 interviews described earlier in this chapter, was that the geo-location was often too sensitive. Not only could patrons not transfer money in the gaming area, some found it hard to do anywhere in the venue. This led to them having to cross the road. Such observations suggest that careful calibration of the geo-location beacons is needed to ensure that this problem is not experienced by too many patrons.

> “I don't think I saw anything telling me that. So I was like, why is it not letting you transfer? I thought it was reception because it didn't. Wests struggle with reception a bit sometimes. So yeah, it wasn't clear. I ran across the road. Still wasn't working. I went outside first, then I went across the road. And then it finally finally worked. I was still thinking it was a reception problem.”

“Definitely, yeah, if even if I had to walk to the front foyer to do it, rather than exiting the venue. It would be, I think a game changer in that I would do that. But yeah, crossing roads and it's raining. I'm just not gonna do it.”

5.3.6 Player activity statements

Patrons generally expressed very positive views about having access to a player activity statement.

“I think that was good. And I really liked the fact that I could have a look and see what I, what I'd been spending. And so I think you could really sort of identify "well Geez", you know, work out, you can have ways of stopping spending so much if you had a problem.”

“Oh, definitely. ..it shows me how much I've spent at this place. I don't feel too good about myself. So this could make you realise on either A, how well you're going or B, maybe you should slow down if you're doing a lot in one certain month. Because sometimes you realise, hey, geez, I didn't realise I went there seven times in one day or in the week, like you were there every day?”

“A like a statement type of thing. This is kind of like that it's showing you. So that definitely would be cool. If it was at the front somewhere. Like don't have to click through too many menus to see your activity. “

Most of them saw the potential benefits in reducing the risk of gambling, for example, as indicated in the following extract:

“it would be if you were looking for clarity on how much you're spending on how much you're actually putting through because you know, you lose yourself sometimes in a winning or losing situation, or you're just by yourself or drunk?”

Patrons believed that the PAS should be easy to obtain and that the delivery method should be in the form that people would be more likely to read it.

“I like it. The only thing would be that when you say in app or delivery method. So what there's in app, email, or mail, I mean, I think most people who were using the app are just

gonna say in app is maybe like habit in a way where you it's either keeps going down the I don't know, or it delivers like it has maybe a PDF thing that you then click and it opens”

“Yeah even if it was just an email saying, here's what you did monthly at Wests, you can click here to see a statement, that would be ideal, I think.”

5.3.7 Views on general acceptance of the App

This questions generally evoked views which arose from discussion around other questions. In general, the views towards the App were positive with most patrons seeing the value of it. For example, one theme that emerged related to the general acceptance and adaptation to the new technology. Over time people would get used to using an App rather than a card or cash in much the same way they have done so in other areas of life.

“I think it's a starting point where it will gradually in time,. Everybody's going to adapt to it just like any technology but I do see in the future? Yeah, maybe 5-10 years from now. Yeah, for sure.”

“using it, maybe 30% or 40% of the time. Because I just tried it out as an interest, because it's just so quick to pull out a ticket and get money. I'm more about money, because I've been doing 20 something years. So changing that habit, not just, it's not changing myself, but it's just becoming more becoming normal…”

“If you if they can get it, right? Yes. Yeah. Absolutely. Like I've just said, like, I don't think many of us carry cash around now. “

At the same time, some questions were raised about whether older people or those who were accustomed to using cash would so readily adapt to the new technology. Some could get frustrated and this could, some respondents argued, lead to a loss of patronage.

“… most of the people in that club, were using dollar coins. But so does that give you an insight into how they might download an app on their, you know, their mobile phone? That they probably don't, then have transfer money. I think it'll be problematic. I think that a lot. If

that's the only way to play. I think that clubs will lose a high proportion of their regular blue rinse set."

"But I think if it's hard to access money. And not knowing where to get the thing, maybe not know transfer the money to people would be frustrated, because then as I was saying."

"Because it is pretty straightforward. But even though like I can imagine my dad's trying to use it like he'll get frustrated with it but like I know the start like as long as they know the staff is there willing to help then them through it than Yeah, like you should be able to show them once or twice and they should be able to get themselves going like is pretty much straightforward. And it's just with the changing from the wallets and the wallet bit is what I reckon they might have a bit of difficulty with understanding that bit."

5.3.8 Main problems encountered/ Least liked features

Many of the issues raised in relation to this question also overlapped considerably with feedback obtained for earlier questions. In general, the main concerns about the App fell into several categories. A number of patrons drew attention to the time it took to set up the App and getting registered. Patrons described the process as 'fiddly' or time-consuming and that problems arose if one did not have the right information on hand. However, they also pointed out that these issues could be addressed through appropriate advice from staff or clear instructions.

"Well, I had problems setting up a PIN one time, it was like a while ago... And it took like, 20 minutes…"

"I found it a little bit fiddly to use, is that the right word? And I probably just need somebody to sit down with me at at a pokie machine and go through things again, to refresh it, in my mind…"

Some raised concerns about privacy and the potential for personal information to be hacked following the highly publicised hacks in the media during 2022 (e.g., of Optus customers).

> “But personally, I don't like having all my information out there. They say it's secure and I suppose it's secure. But after what happened with the cyber crimes, what's secure? So I think there'll be a mixture. Some will say no, I don't want that. Others will say yeah, that's fine we'll try it.”

Once again, there were concerns about the geo-location block that led to problems in being able to transfer money between wallets. People either did not know this block existed or had to exit the venue to bring about the transfer.

> “We use it when we first came to the club and played the machines with it. And then, like, if we wanted to go and play it in another area. And that was where I had the problem originally, was that to get the cash out of that to play the other machine. I couldn't get it until I'd walked across the road.”

Others reiterated their concerns about connection problems at the machines:

> “Look when you press the thing, sometimes it took a while for it to work. So I don't know whether that was behind the scenes, or whether that's the app or what it is? Or the network?”

> “So that was a bit sort of frustrating. And then there were times where the money didn't show up on the thing or on the machine. And there was a delay. And we panicked because I think it was a few hundred bucks, didn't show up on the app, press the button straightaway to get the attendant who came and didn't know. I don't know if so, yes, and reconnected back to the machine. And then it came up on both, came back on there and then transferred it back. So it was there.”

> “I did get frustrated a lot with this connection problem. I'm sitting there hitting refresh, like pressing, pressing again, I can't remember off the top of my head, but I think it was just too many devices or something trying to connect.”

Or that it was sometimes disconcerting when the balance would stay on the machine when people walked away.

> “I did actually have a problem with that. Not the connection but pulling out the money. I thought it pulled out and I walked away. And it I think it did tell me an error or something. But then I ran back over the machine and it was still sitting on there…”

5.3.9 Best features of the App

The majority of the patrons’ responses were very similar. The principal advantage of the App was its convenience, speed and ease of use. One could just tap to gamble and then it was easy to get money back out of the machine into the wallet.

> “To use it's very quick you just click it open and you just click on the card you want to use and tap? Yeah, straight up.”

> “But I see it as a normal. I see it in the that's just normal. You can use it anywhere. I'd assumed it to be just the same as what I usually do my with my Mastercard”

> “It's just like, I think it's more becoming like a bank card, isn't it like you can other than getting your wages paid into it or things like that you can still like I do with credit cards and stuff when I transfer money to that to pay off things. And but then I'll use it again. So it's the same thing where I go oh I need that little bit of cash for that right now, just tap and pay it. Or my winnings that I won one time- pay for. “

Patrons also liked the fact that one could transfer money from the wallets back to a bank account or vice versa.

> “And I can easily transfer that back to my bank account. If I needed to, no worries about that. Like I said before it's like pretty simple…”

> “Like how I can transfer from my bank straight to the card. Like straight into the app.”

There was also the view that this meant that one did not have to go off to visit ATMs or pay the withdrawal fees associated with their use.

> “If I can get the app to use? I would - I never have cash. And so in the ATMs that are in West's are not like a bank. So you've got to pay a fee. And it pisses me off every time. So I would

want, if I can get it to work, I will 100% exclusively use the app. So I will, I'm going to book in another little date with my friend, and I'm gonna go and give it a crack."

"Um, no I've been using the app a little bit, but I find it easy to use because it saves a lot of the $2.50 fees"

Others anticipated the time when they would be able to walk in and play any machine and then withdraw quickly and move on and be able to do this at different Wests clubs.

5.3.10 Overall comments

Patrons were also asked for any overall comments about the technology and the trial. The general view was that the technology was inevitable, generally worked well, and that people would gradually get used to it over time.

"it's just getting used to it, I suppose becoming more of a normal, you know, which it will. I reckon it will, because we're all going that way in the digital world. …that's the only thing that's going on with technology that I suppose that they need to make phones more powerful I suppose."

"I would definitely favour playing cashless. And I think that's definitely the way forward especially with a lot of the media attention around it now."

They were also appreciative of the efforts that Wests had taken to educate and support them in the process of adoption.

"I thought Wests did a good job populating all the other sections. So once I got home, I went through the entire app, and they were using it very effectively to get my attention to what was happening and, you know, meal deals and that sort of stuff. So yeah, it was a good app overall."

A challenge for some people was that the initial set-up of the trial involved only a subset of the machines in the venue (what people considered to be the 'old machines') and so participation on the trial machines was likely to have been initially limited by the availability of the technology throughout the venue. This issue was addressed during the

course of the trial through the expansion of the technology across other machines in the venue, including the newer machines.

> “Well, because the machines were so old. I didn't play them on the second and third day, to be honest, but I still had paid my member card so I could still get all the benefits of the app and that sort of stuff. But I'm not. I'm not nervous about cashless, I don't think it will change my habits enormously, but they will give me more insight into my gaming sort of history, which is a good thing.”

Patrons also anticipated the time when similar technology would be available at other locations across NSW or parts of Australia.

> “Yes, if you have a universal app, like being able to when it goes I don't know statewide, or Australia wide, having an app that is standalone.”

> “For me I think now that I know, if I have to walk outside …But yeah, if it's taken up across more venues, because I usually play it with city. That would, I would definitely do it that way.”

The principal negative comments or concerns related to ongoing issues to do with the security of private information and Bluetooth connections and what would happen if a person lost their login or account details.

> “What happens if I lock myself out of this account? How do I access this money? Is there a concierge? Obviously, you can't see my limits and stuff like that but is there a concierge that can see my account at all? Do I call up and have to ID myself somehow? Because I change my mobile number quite often.”

These views highlight a broader issue that is not necessarily a criticism of the App, but the technology that supports it. The functionality of an App would only be as good as the phones which support it, so that some patrons drew attention to concerns about the need to ensure adequate access to WIFI and charging ports at venues which relied upon this type of technology.

5.4 Summary of themes from key informant interviews

A summary of the key findings from the interviews is provided in Table 5.2. The principal findings were similar to those observed earlier in the trial, although some of the issues that presented themselves earlier (e.g., people not having the right ID during sign up or not knowing what to do to join the trial) seemed less evident in the statements of these respondents. The general view was the App was somewhat time-consuming to set-up and required a lot of different "clicks" and screen viewings. The set-up process was not intuitive and was time-consuming, most notably the KYC process to set up the new wallet or account that enabled patrons to fund the App. At the same time, most respondents indicated that they soon got used to using the App once they had overcome the initial uncertainty about how it operated. It was clear that having staff on site to help them was an important part of the adoption process for a number of these people. The view was that the process might need to be simplified or shortened and accompanied by more instructions that guided person through the process rather than have them try to infer each step. Apart from some initial issues with location beacons being too sensitive, patrons generally found that the wallet system worked well and that it was a fast, convenient and cheaper way to gamble than using cash. The word of caution related to whether the technology would be as accessible for people with less experience or preference for digital technology (e.g., people in older age groups who had used cash for a lot longer).

None of the patrons believed that it led to any increase in their gambling behaviour and may, in fact, have led them to spend less because they were more aware of how much money they were putting into the machine. They also expressed positive views about the use of holding/ quarantine wallets and having access to player activity statements and believed that these should be made readily available in a form that would be read by patrons. Most reported that they did not have too much use for RG features because they already set their own personal limits, but the RG features were seen as useful. RG features were instead seen as most relevant for people with gambling problems.

Table 5.2

Key themes from patron interviews

Topic	Themes/ Patron feedback
Set-up and first impressions	• Slow, time-consuming, a lot of clicks required on mobile device, but works in the end. • KYC process time-consuming • Issues with effective WIFI connections and issues to do with different phone types • Need more instructions to help guide and navigate through the process
Wallet use	• A lot of wallets and names not always consistent • Wallets transfers generally worked • Some issues with not being able to transfer in the venue • Recognition that the bank transfer is only App based version of ATM use
Effect on behaviour	• Little impact perceived • Gambling slowed down due to more complex process • Greater awareness of how much going into the machines • More transparency in spending
Responsible gambling features	• Views very positive about availability • Value of being able to set limits in private • Some evidence of "3rd person effect": relevant for others, not the respondent • Most respondents setting their own limits • Holding wallet seen as important
Location-based controls	• Useful as a reality check on expenditure

	• Can be too sensitive and lead to the need to exit the venue to transfer between wallets
Player activity statements	• Positive views • Helped people to track expenditure • In a form patron would want to see (e.g., via email / PDF)
Perceptions of usage	• May be an issue for people with less digital technology experience (e.g., older people)
Problems encountered	• A bit time-consuming to set-up
Best features	• Speed and convenience • Can avoid ATM fees
Overall comments	• The move towards cashless generally seen as inevitable • People might find it initially a bit challenging, but would adapt like they have done for other technology

5.5 Technological changes

An important post-script to this chapter is to note that the trial allowed some elements of "action research" in that it was possible to provide the earlier patron feedback to the technology providers to address some of the technical issues which had arisen early in the trial. These included the geo-location issues; Bluetooth drop outs on machines; and, the unsettling retention of credit balances on machines when people walked away. In relation to geo-location issues, it was noted that there were three 3 designated areas inside the venue (ATM areas) where transfers were allowed instantly and that these may not have been promoted widely enough to patrons. Some adjustments were also made to allow transfers on some additional sides of the building where EGMs were not located to avoid people having to leave the venue. In response to the drop-outs when connecting to machines, Bluetooth beacon idle timeout settings were adjusted to allow for a for longer idle time to avoid errors. The issue of lingering credit balances was addressed by adjusting Bluetooth beacon settings to decrease the distance from an EGM to when a disconnect is

triggered, so as to lead to a reduction in disconnection time. An important insight from the trial was to increase communication around potential challenges associated with WIFI and phone connections that could sometimes vary depending upon the nature and age of the phones that people were using.

Chapter 6: Qualitative interviews with industry stakeholders

6.1 Overview

This chapter summarises the findings of two focus groups (n = 3 people) and (n = 2 people) with venue staff as well as an interview conducted with one of the principal trial 'ambassadors' who took a leading role in patron interactions and recruitment at Wests Newcastle. The questions focused on: (a) overall impressions of the sign-up and recruitment process with a particular focus on facilitators and barriers; (b) insights into the best way to run trials; (c) perceived impact on patron behaviour; (d) impact on workloads; (e) appraisal of the technology; (f) perceived benefits for responsible gambling or harm minimization. These questions were generally asked in the same order using a semi-structured interview format, but the interviewer also allowed some flexibility to explore other relevant topics if these emerged. The summary which follows provides an overview and content analysis of the principal responses to the questions as well as emergent themes relating to each question. The full interview schedule is contained in the Technical Report.

6.2 General venue staff focus group interviews

6.2.1 Impression of sign-up process

The sign-up process was considered reasonably complex, but the process seemed to work well once people were enrolled in the trial. Similar views were expressed by different staff members:

> "…it was like the process of like setting them up and getting them started is pretty tedious but after that they just kind of went away and they could do it all themselves. So they had it down pat."

> "I thought it was easy, like it was a little bit hard at the start. But once we could overcome the little barriers that stopped it. I think it was easy to sign up. The wallet part was the easiest for me. "

> "In the beginning, it wasn't that great. But once we fixed up those little things, and we knew what it was, it worked perfect, like the idea of having a Google Pay, and Apple Pay wallet

> everyone liked that, once you got your head, understanding how it works, and all that though, like, oh, yeah, this is pretty cool."

The principal aspects that were considered more complex were getting the bank account/ wallet set -up and then finding an appropriate place in the venue where there was good connectivity and where the person could take the time to complete the process:

> "I think the actual, like, sign up process of like getting started on the app, like linking your bank and all that. I feel like that process could be a lot easier. Like, it's very, like tricky to do especially in the club, because there's only so many areas that you can and can't like, access that because of the you know, the what do you call this little beacons? Yeah, like the little the, you know, how if you can access it on the floor and stuff. So we were I was taking people like, right to the foyer, like basically down the stairs to set the app up on their phone. Okay, and it was taking probably, like 15 minutes plus per person. And I feel like that if there was a way to make that, like, easier, more accessible."

Several consistent concerns were raised by patrons who were more reluctant to join or who required greater persuasion. These includes concerns about privacy, particularly if the extent of the person's gambling might become known to banks or other people. As one respondent observed:

> "worried it was gonna affect them getting like a home loan or something"; "that was people's, like, biggest concern was that they're like, oh, you know, I run a business. I don't want them knowing how much I spend on the pokies."

Some patrons were also reportedly concerned about whether it would become too easy to access money for gambling but, as noted in the sections below, this did not appear to translate into any perceived changes in gambling behaviour when using the trial machines.

Staff members argued that it was generally easier to get younger people to take part in the trial because they were more familiar with digital technology than older patrons.

> "I feel like the younger generation are pretty good with their phones so pretty comfortable with it. It was pretty easy to sign them up. "

> “I felt like 50 age group they were fine. But above that was just difficult, mostly because they didn't have the technology or didn't understand the technology. They didn't want to understand the technology - that was the thing too. Which was just surprising because of the cashless and the way that cashless is coming in.”

These age-related difficulties meant that recruitment was often easier at the times of the day in which younger people were more likely to be presented in the venue and harder when the patrons were predominantly older.

> “And that's how we found it hard to promote it during the day. It was the hardest, because it's your older group during the day and your Friday, Saturday nights were your best night to promote it. Because there was like a mix of all ages in.”

6.2.2 Issues with recruiting for the trial

Venue staff provided some insights into their experiences of being involved in the recruitment of patrons for the trial. The overall view was that there were some “teething issues” at the start, but that the process become more efficient and worked well once the trial was underway. Getting people to sign up for the trial was strongly influenced by the participation incentives provided to patrons, so that there was the impression that not many people may have adopted the technology if they did not receive some form of benefit from being involved. Although the trial was not specifically about naturalistic recruitment and was more focused on technological functionality and its perceived value and impact, these observations are useful for understanding what might happen in the future when similar technology are implemented outside the context of a trial. As one staff member commented:

> “I honestly didn't think it would be that successful as the only reason I could get people to sign up was by bribing them with their vouchers. So I was really good at selling them like free money and gift cards. But as soon as that was out of the equation, nobody was interested.”

Finding a good location in the venue to sign people up emerged as an issue in recruitment and this is an important consideration for future trials if there needs to be

connectivity and privacy as well as some time to complete the sign up and implementation process for each patron.

> "All right. Make more accessible areas for people is set up the app because as I was saying before it doesn't work in many places of the Club."

Staff also believed that there was not always consistency in the amount of information available or in how familiar staff were with the technology and this point overlapped with issues relating to the level of training received.

> "So that would help a lot, I think, and making sure that everyone knew, like staff how to actually sign people up and get them started with the app. Because I feel like if someone comes up, they'd always just kind of be directed to someone and then redirected to someone else. Because, like, it was never explained to us or taught to us properly. Okay. So like, if, for me, I was had to go and ask about it and say, oh, I want to do that. Can you tell me about that?"

> "Yeah. Well, like we didn't really get any training for it. They [managers] just kind of gave us clipboards one day and it was like, here you go you gotta sign people up for this. It's like, what is it? And they were like Ah, ah, you can read that. It kind of says some stuff about it….We did have some sessions on it but that was like six months or more before the trial even started. It just kept getting pushed back."

Staff said that it was often stressful becoming *de facto* field recruitment staff because they were not accustomed to having to interact with patrons and receive multiple rejections.

> "It was very off putting sometimes like you go try sign people up and use keep getting rejected there. And they'll just be saying the same thing. Like no, and I think that's terrible. I'm not interested in that and it was just like ahhh. That makes me feel weird and just getting rejected over and over again. Yeah. I guess some people are good at sign up."

They also pointed out that members nights did not turn out to be effective methods for recruitment. Almost no-one turned up. The reason, they observed, was that this may

have led to embarrassment or a stigma associated due to the perception of being identified as a gambler suitable for a trial that, at least in part, related to responsible gambling.

> “Because like, if someone wants to get involved they don't want to go to the night where everyone else knows that they're a gambler. I feel like they didn't want to do that because they didn't want to go and out themselves. “

6.2.3 Perceived behavioural impact/ responsible gambling features

According to staff members, there was little evidence that patrons had changed their behaviour as a result of using the App. As one staff member pointed out: “I didn't see anyone like spending more than I normally would or something like that” and this view was expressed by several respondents. In fact, some indicated that it might be “safer” because people were better able to monitor what they were doing. However, staff also observed that it was not always easy to discern what people were doing because it was: (a) difficult to know if people were using the App if they did not have a visible card in the machine and (b) because people generally did not like to be observed.

> “I never really, like observed many people using it to be honest. Like, I don't even know how you'd tell if someone was using it. Because they don't have their card in the machine or anything. So it just looks like - they all kind of that look the same.”

> “I didn't see many people actually using it Yeah, it's hard to see people actually using it. And it's very hard because they get annoyed because they want to watch their feature. And you're standing over them. I mean, I love watching the features too.”

Staff reported few discussions relating to responsible gambling limits because patrons were either not interested in them or did not raise the issue. However, one staff reported having to interact with patrons and these approaches did not appear to have raised any difficulties for the staff member.

> “We just approach and just have that conversation with them. Because if it's like a time limit, you just sort of ask them if they like how they're going and just like have a soft conversation. It's not like going extreme because like he said, most of the time, they don't realise they've

done it, but yeah, it's still giving them an opportunity to let us know if there is anything we can do and then get on that track."

6.2.4 Perceptions of the technology

These staff generally did not report very many technical issues when they were on the gaming floor. As one staff member pointed out:

"I only really saw like two people having like trouble connecting their phones to the machines that yeah that was only two out of however many."; "I was expecting yeah issues with our transfer timeouts or whatever else things that will be issues like that but it was pretty smooth."

However, they reported that the technology was quite complex and took some time to understand. Some reported that having a step-by-step pamphlet was useful, but that it was easier to learn how it worked by physical interaction and demonstration or for there to be clear demo version and test account for staff to access. Once they had done it 2-3 times, they reported much greater confidence in their knowledge.

"Yeah, probably the second or third time where I got it explained to me and then I kind of got it down pat and then the computer side of it just have to get shown that you know, again 2-3 times and then got a hold of that so just more of like a you gotta keep doing it a couple times like repeat the process to get stuck into it."

"one thing that we never got a chance to use it was probably having the staff using it, not even having a test account made it so hard for us to stay in touch with what the patrons are doing. Like, if you're like me, I prefer to learn something."

The most difficult part to understand was the three wallet system. Some found the bank wallet and the creation of a bank account difficult to understand, whereas others were not entirely confident about the operation of the holding or quarantine wallet.

6.2.5 Impact on staff workloads

These staff members did not report any significant change to workloads and argued that more of the load appeared to have been taken up by the managers who were organizing the trial. There was also the view that the main workload was principally at the start of the trial and that relatively little had to be done thereafter once people had been signed up.

> "I was gonna say because we had a big shift every day and night for the ambassador signing people up so in terms of that like yes, it did. But I feel like over time there's probably gonna be less work for us. It's a bit more at the start just to get everyone on board but then once you have them signed up it will be easier."

These respondents noted that having an effective ambassador (usually just one person on the floor) to whom patrons could be referred appeared to work well.

> "I latched on to the ambassador thing. Walking around, talking to people, getting them all signed up but as soon as the incentives were gone like people's interest was gone. Yeah, you know, and like you really just gotta like know how to pick them and like the others said like after you've been rejected so many times, it kind of just puts you off it but yeah, I didn't mind it itself. So it sucks that they have taken the shift away."

> "I feel like one person, one person was plenty to go around and don't really needed to be done with all the people."

A challenge that staff did face, however, was knowing if certain patrons had already been approached by staff. This was due to changes in staff shifts and difficulties in keeping records of who had been approached in a large venue.

> "People would be on the shift that asked the same customer that the customers would be like oh my gosh leave me alone. Yeah, and it was hard because I like I'm like I didn't know you have already been approached and that you're not interested."

> "Because if they had like a different person on the shift every day, then yeah, the same people will keep getting approached every day from different people. And you know, they could start

> feeling harassed, but we've got no idea that they've already been asked 10 times. And it's a big club, so it's hard to even keep track yourself. Have I asked that person before?"

Another important issue raised by staff was the importance of having technical support staff on hand to deal with problems as they arose. One staff member noted that this was a considerably strength of the trial in its early stages.

> "Probably, I think the best part about it was that Aristocrat were like so all over it at the start. It was really handy for me, because I could just ask them and get answers within a certain amount of time and take it straight back to the patrons. It was, it was something that we haven't seen before"

However, staff mentioned that it was important for this technical support to be ongoing as new issues arose.

> "Aristocrat was going to be on site with the staff and then Aristocrat weren't on site with the staff. I think having them on site with the staff walking around looking around with them even for an hour or two at the start of their shift would have impacted them. Like So that's how you want to do it. That's the questions that are going to be asked that's the question to answer. I think that would be a better way to go about it."

> "If somebody's there and talking about the problem it could be fixed right there instead of waiting or being like I don't know what you're talking about I'll pass it on and then we'll get to that if somebody leaves it might be there in the visit. We'll put that up and then say they leave and its them going back in we've signed someone up given them their $10 and that's good but they're not coming back."

6.2.6 Overall perceptions

These respondents generally supported the technology and believed that the responsible gambling features were important and should be mandatory and include notifications from staff to patrons when people had reached a certain percentage of their limits. They also liked the idea of having statements or information that might be provided in the form of an activity statement to players, even at the end of each day of gambling.

Some other useful observations were that the trial technology (despite its ability to allow people to gamble privately) appeared to have the opposite effect in that it provided a reason for staff to have more frequent interactions with patrons:

> "Because we made them talk to us. I always thought that promotionally we should do things like this to get the staff talking to people, the people that did actually go and talk to them. We were getting responses from people whether it was just had a conversation with somebody and gone out there and made an effort. So just from my point of view, it's really good."

Another general observation was the potential benefit of the technology to higher value customers. For one staff member mentioned that there are some people for whom amounts of $5000 (either cash in or out) can sometimes apply. In other words, the technology might be very convenient for these patrons, but such large amounts also have implications about how the same App might be used to mitigate the financial harms that might arise from such high levels of expenditure.

> "And then the funds within 24 hours would have been something huge, especially for bigger players. Because they're always looking for ways to get the money quicker. I mean, to explain it you there's a cap of $5,000 cash that you can bring that we get all that plays, we get big players that come in and they don't win a jackpot but they are playing large and winning big, they will try to keep it under 5000."

6.7 Trial ambassador interview

This interview followed a similar line of questioning, but the main points or themes often blended due to the flowing nature of the conversation. For this reason, some themes are combined so as to provide meaningful examples of quotes that coincide with the views expressed.

6.7.1 Sign-up process and recruitment

The general impression was that the initial recruitment was time-consuming in relation to the amount of time that had to be spent with each individual patron. However, initial concerns about negative reactions from patrons gradually abated over time.

> "In all honesty, probably better than what I thought to begin with. I was doing a lot of the talking to the customers. And once you got the customers engaged, and you got through that, there was always gonna be plenty of negativity. But once you've actually explained what the first part of it was about…"

The principal process issue that caused some difficulty for staff was how to deal with the vouchers/ payments for participation. Patrons were not always sure about what parts of the trial they had to complete to be eligible for the voucher and so staff sometimes had to deal with queries about payments or re-explain the structure of the vouchers (e.g., what was provided for completing the first survey as opposed to adopting the technology). This was because the total participation incentive was broken up across different tasks. For example, there were separate small payments for completing the consent and pre-trial survey, passing KYC and downloading the digital wallet and then completing the post-trial survey. As the respondent pointed out:

> "Because, you know, and this is where, you know, the other side of it was a lack of understanding, like, what triggers the $20. $20 are triggered by the survey being completed 20 dollars is not triggered by them answering the first three questions in the survey, and you [the staff] walking away, the $20 is triggered by them completing the survey, the survey has to be done…….I don't know how many times I had that discussion with [a specific member of staff]…And that's where you had a little bit of backlash? Because you're not getting the right info straight up."

Patrons generally suspected why the government might have an interest in the trial and correctly identified concerns relating to the use of gambling to foster money laundering.

> "There was a very clear acceptance / knowledge of the whys, including the anti-money laundering type scenario. Like people aren't stupid - they listen to the news. They know that that's what, at the end of the day, black and white, that's what this is all about. …..They're not after you. No one's after the moms and dads or anything like that."

However, other issues emerging in the news relating to well-publicised data breaches were also mentioned and these may have been possible barriers for some patrons:

> “Well one of the worst things that could have happened was I think it was Coles, copped a hit two weeks after we'd started. And that and that became Optus, that became a standard thing. What are you's doing with the data? That isn't going anywhere? All they're using the data for its statistical purposes in relation to going back to the government bodies to say X, Y & Z.”

The staff member also noted occasional problems to do with connectivity and that they had to exit the venue and walk some distance to allow the transfer of money to occur between the venue and gaming wallet.

> “While it's on my mind. Probably another bit of feedback from a customer just the other night. And he had $50 in his account that he wanted to move over to cardpay so that he'd be able to play and so the machine I said, mate, no, that's not gonna work. Part of this is, he said oh that's right. You've got to go off site. Not even thinking I left with him to do it. We ended up over the back of the bowling club. That's how far we had to go. Let me try something, take West WiFi off for me. Which we did. And all of a sudden we literally just across the road and did it.”

Issues were also raised about the extent to which this new technology affected some of the elderly and regular long-standing patrons. It was observed that any technological barriers to being able to play the machines could discourage them from being able to visit the Club to engage in their regular activities.

> “a lot of regular clients, and I ended up just leaving them behind. One of the concerns that I have for our club here and for our demographic… there's got to be some leeway for our pensions for the elders who are just not tech savvy. No clue what you're talking about that he tried on a couple of other ones that I thought were a little bit more. Within a couple of minutes, no idea, they can't even print out their $10 meal vouchers by themselves at the kiosk, that's got to be done for them. And that's fine. But as I said, in relation to this stuff. You'd hate to see them basically cut off from the club. “

6.7.2 Staff training and impact on workload

This staff member also emphasized the importance of staff training and the differences between knowing about the technology and the ability to interact effectively

with patrons. Younger staff members generally did not appear to have significant difficulties with understanding what they had to do or how the App worked as compared with other staff members, but more experienced staff members often knew how to deal with patrons: how to approach and talk with them and how to deal with any rejections. Speaking about junior staff, the respondent observed that:

> "they just wouldn't have known in relation to the nitty gritty of how to deal with customers. And how did you actually gauge their interest"

Often the best strategy was to introduce the technology and the trial gradually and not force the information upon patrons. People could even be given some time to consider before being approached again so that the situation did not feel pressured.

> "it wasn't rammed down people's throats it was subtle…That was another big part of how I did it was making clients aware …can I take 5 minutes of your time? And then I'd offer to walk away but and come back, but nines times out of ten they would go yeah. Or take the brochure. And that was fine, too. Well, as I understand it, there was actually a reasonable amount of take up online."

The staff member found that there was an increase in workload associated with the new role, but it was not clear to what extent this had replaced other duties in the venue. When asked whether more staff could have been deployed to work on the trial, the principal issue was more to do with staff preparation; namely, that staff could have been trained a bit more and given more scenario-based training around how to interact with patrons, e.g., how to approach them, communicate and how to deal with negative reactions. As the staff member observed, the best training would be:

> "Where we actually get into a room with a couple and actually do some of like this is a scenario that might hit you, play it out, and then go, okay, well, how about..."

Such situation or scenario-based training would, it was argued, be particularly useful for more junior staff members:

> “I'd be happy to be involved in that, to be honest too, just to get it running effectively. Yep. It's much more about that. Especially with the younger ones. You've just seen before and yeah, deers in headlights when the customer snaps back at you, it's the end of the section it's not gonna happen. See you later, they will run away. Maybe, just and I realize everything's an expense, but if we just spent that bit of a couple of hours, scenario training then things could have been a bit different.”

A further issue related to training around how to identify and target the sort of people who would be suitable for the trial and for this knowledge to be incorporated into the preparation training.

> “Help with running trial: But I just think it could have been better prepared for from our point of view, from the club's point of view, perhaps a little bit more time spent on thinking about who we are trying to target - let's not make this open slather where we have got 20 people competent of having these discussions. Let's make it a group of five or six. That are going to be around. And are going to give the right information. That's probably the critical part of it. “

6.7.3 Views of the technology

Some features of the technology were strong selling points for the trial. One of these points was the convenience of being able to keep value on the App without having to take money out of machines and reload on another day. Another was being able to avoid the ATM fees:

> “I mean how much better would it be for you if you happen to win a couple of 100 on the night and you can just leave it there for next time if you like. Don't have to worry about it - its' there. No more $2.50 fees.

Patrons also seemed receptive to the idea of being able to gain private access to details about their gambling or RG features without having to personally request an activity statement:

> “Yeah plenty of conversations about people didn't realize that one of the big ones for me was playing the state player statement? Wow. Well, you have actually been able to do that by just asking. But absolutely. Now it's a facility that's there for you…. I did have one conversation

around exclusion. And they were like oh I love the fact that I can just do it here. I said stop you can get about halfway there, then you're gonna have to come and see us."

Other RG features such as limit-setting appeared to more sensitive in that staff appeared more cautious about approaching these topics out of fear of negative reactions from patrons:

"No one else wanted to have conversations with clients that are a fair chance of ending negatively. Who does? But you know, you have just got have enough..."

6.7.4 Early recruitment issues

The staff member also provides some commentary relating to early attempt to recruit patrons. It was pointed out that, although emails are often used as a form of communication, these may not be personalized enough and often get ignored. Membership events also proved to be unsuccessful and that a potentially more useful method was to apply a stepped approach. There would be posters with the QR codes, but also perhaps information packs that people could take and read at their leisure so that they could decide whether they wanted to take part.

"Something that really needs to, I believe, probably needs to be looked at? Maybe for future ones, if you had like a welcome pack. Obviously, be able to get an email sent daily or whatever with these are the ones that are created today. This was a staff member involved, so the actual welcome pack would come from [the specific staff member] and the team at West. Versus you're number 176, there's your voucher."

It was felt important to allow opportunities for follow-ups and more personalized discussions with staff members.

" Because a couple, part of what I've hear back, dealing with back end the customers were a little bit frustrated. They felt like here's this thing but what what do I do now? Who do I talk to about what I do next? And if it would have been me they'd know my name and etc. But a lot of cases and a lot of those were the online people to be perfectly honest. I'm not accusing any of the staff of anything there. People that allegedly got into online and got stuck. "

6.8 Discussion

6.8.1 Overall appraisal by staff

Staff members raised a number of issues that were similar to the customers whose responses are summarised in Chapter 5. Some of the barriers associated with the trial were: concerns about privacy and the potential influence of media-documented data-hacks that had occurred at the same time as the trial; some difficulties in understanding the differences between the wallets and the process involved in setting up the bank account/ wallet. A few staff members also reported issues relating to connectivity and finding appropriate locations in the venue where they would have the time, space and connectivity to allow the person to download the App and for details of the trial to be provided. Staff also perceived some of the same benefits of the new technology, including: its convenience; the ability to avoid ATM fees; and, the ability to engage with responsible gambling features or information (e.g., self-exclusion or player activity statements) more privately. Another common theme was that younger people were probably more amenable to the new technology than some of the older regular patrons who already experienced some difficulties with existing technology available in the venue. Concerns were raised about whether a wider implementation of cashless gaming might prove a barrier for this demographic group.

6.8.2 Insights into the effective operation of trials

Staff provided a number of useful insights into the operation of the trial which have implications for the design and implementation of other trials. The first issue was that it appears very difficult to recruit people naturalistically into these trials unless there is some sort of incentive. People often would not voluntarily give up their time unless there was some monetary compensation and they would often become annoyed if there was any delay in the receipt of this amount or confusion about how it was provided. This confirms what is generally known from the literature on the topic of voluntary pre-commitment (see Chapter 2) which shows that people are generally reluctant to adopt new technologies unless there is some clear and tangible benefit. A second issue was the importance of staff training. Although staff appeared to overcome the initial challenges associated with

understanding the technology, some aspects of it still remained confusing. Particular examples included the difference between the three wallets (which had names that varied between the original Aristocrat paperwork and the terminology used by the venue) and the nature and process involved in setting up the bank account/ wallet. Staff reported that having pamphlets or written guides was useful, but that more practical training and opportunities to work with demo-versions of the App would have been helpful.

A third issue related to the social challenges associated with recruiting people into the trial. This task appeared more challenged to younger, less experience staff members and could often be stressful when approaches to patrons repeatedly involved rejections. Some senior staff believed that trials should also include training relating to how to deal with people on the gaming floor, including scenario-based training in which people practiced different approaches and scripts and how to deal with rejection. For example, experience in the trial showed some staff members that the best approach was often to engage with patrons in a more subtle methods such as mentioning the trial in passing and then coming back later after people had time to think about it. In this way, people would not feel pressured into signing up and might be more amenable to asking questions that might further evoke their interest. In this trial, there may been a need for some “top-up” training due to the way in which the trial unfolded. Staff may have received training some time before the main period of recruitment (i.e., when it became busier) so that there was less immediate opportunity to utilize the training when it was originally received.

A fourth issue was the importance of having technical staff available at the start of the trial and in the earlier uptake phases to deal with technological problems as they arose. For example, it was difficult to get people to engage with the App if they had to leave the venue to transfer money between wallets or if there were drops outs or difficulties with connectivity in the venue. Having someone available to make the adjustments (e.g., to beacons, when the balance on the machines disappeared when people stepped away) would have quickly allayed concerns and made the technology more adaptive to the experiences of the patrons.

6.8.3 Implications for workload and training

Staff generally did not raise significant concerns about an increase in workload associated with the trial, but argued that having one well-trained and experienced ambassador consistently available in the venue appeared to work well. Other staff appeared to feel confident in the management of the trial when there was a clear “go to” or person available to whom they could refer patrons for more specific enquiries. The experience of the trial clearly showed that the person with the primary social engagement role should be more experienced and confident in being able to deal with patrons (even the more complex ones) and that caution should be applied in assigning these studies to very junior or less experienced staff.

Another insight relating to recruitment was that people appeared more likely to sign up when this was done more discreetly or privately than through publicized events. Attempts to recruit people via larger membership events generally did not work and this appeared to be because people did not want to be singled out as ‘gamblers’ or potentially ‘gamblers who needed some special attention’ if they were seen to volunteer when the event was held. Instead, it would be better to consider options such as take-away information packs that people might read at home or elsewhere before deciding whether they wanted to sign up for the trial.

6.8.4 Technical observations

Overall, the staff did not report too many technical difficulties with the technology itself, apart from the occasions issue previously identified by customers in Chapter 5. These included the need to leave the venue to get the venue wallet to gaming wallet funds transfer to work and some issues with obtaining a clear wifi connection. Staff generally believed that the technology worked well and was a good idea and that the responsible gambling features probably should be mandatory on cashless gaming systems because they provided people with private and easy access to self-exclusion, limit-setting and activity statements. The staff were of the view that this capacity would overcome some of the problems (presumably stigma) associated with accessing responsible gambling features via direct face-to-face interactions with staff.

6.8.5 Impacts on patron behaviour

Staff generally did not witness very much interaction with RG features, but also did not discern any clear changes in people's behaviour when they were using the trial machines. Although this was, as they conceded, partially due to the fact that it was hard to know when people were using the App on a given machine, their observations generally accord with what was reported by the trial participants themselves in the previous chapter. The new technology appeared somewhat paradoxically to encourage greater reflection on what people were doing and also (at least in the trial) appeared to encourage greater engagement between patrons and venue staff.

Chapter 7: Analysis of objective trial data

7.1 Overview

This chapter provides a summary of the objective records of trial data recorded by the system when trial participants interacted with the new PRIME App and also EGMs (where this could be tracked). These data were obtained with permission from patrons as part of the consent process and could be linked to survey data using a study identifier. It is important to note that these figures will vary from the survey chapters because not all people who registered to take part in the research and completed pre-trial surveys necessarily went on to be detected by the system. Some may have decided not to use the technology or only examined it rather than formally going through the digital sign-up process. Another important consideration is that the new technology was operating in parallel with the legacy system available at the Wests club so that some activity also reflects a combination of the old and new technology. Here, a summary is provided of the level of engagement with different parts of the system, the breakdown of expenditure between the new and old system and the extent to which the system was successful in recording limit-setting and associated breaches.

7.2 Review of technology and terminology

To assist readers in understanding how the system worked and how it interacted with the existing or legacy system for gambling on EGMs, it is useful to again review of the different components of the system outlined in Chapter 1.

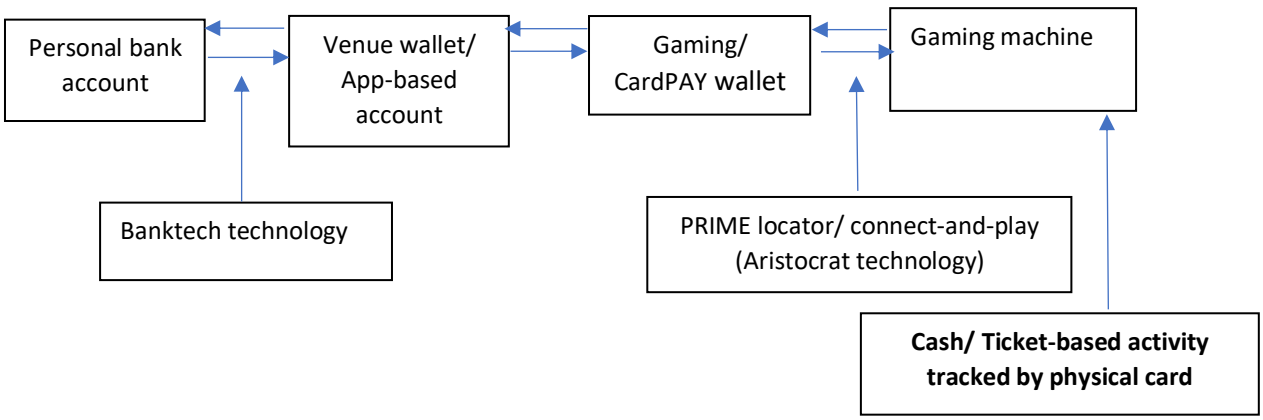


Figure 7.1. The elements of the cashless gaming technology (legacy system in bold)

As noted in Chapter 1, the new system essentially involves the establishment of a new App-based banking account (the venue wallet) that enables people to transfer money in from their regular banking accounts (debit account). This money can then be sent to their gaming or cardPAY wallet (Aristocrat's card-based cashless solution) in preparation for spending on gambling. Gambling occurs when the person visits a gaming machine, connects via the Prime Locator/ Connect-and-Play (Bluetooth beacon) and the person then confirms that a connection can occur (the player ID is validated by the system). Money can then be transferred to the gaming machine and the person can start gambling. Once the session has completed by the person ending the session or moving away from the machine, the remaining cash balance on the machine is then transferred back to the person's gaming/cardPAY wallet. This balance can then stay in that wallet or be transferred back to the venue wallet and to the person's bank account. The only exception to this is that for very large balances (exceeding $5000) on the EGM, $5000 will transfer to the cardPAY account and the additional funds that exceed $5000 will go into a holding or quarantine wallet where they are locked from further gambling for 24 hours.

Players also have the option of being able to put cash or pre-paid tickets into the EGM along with their physical Wests loyalty card to earn loyalty points (the legacy system). This can lead to interactions with the new system to the extent that a person who has a balance on the machine loaded in by tickets or cash can transfer that money into the Gaming/ Cardplay wallet if the new App is active (i.e. via PRIME locator). That person could then come back to that machine at another time and play using the new technology (gaming wallet- EGM), but the money being spent originally came in via the legacy system, not using the venue wallet and their bank account. For this reason, the total number of gaming-wallet to EGM transfers may be greater than the number of transfers from the venue wallet to the gaming/ cardPAY wallet. The objective system records capture the total number transfers between different wallets so that these should be seen as usage for each part of the system rather than usage of the system as whole.

7.3 Wallet activity detected

A total of 259 people were detected by the objective monitoring system and 59 of these registered a venue wallet which meant that they had completed all the requirements to utilize the full system for the trial. Of those, 20 made at least one transfer from their venue wallets to the gaming/ cardPAY wallet. A total of 88 gaming wallet/ cardPAY to EGM transfers undertaken using PRIME locator / Connect-and-Play were detected. More detailed statistics are provided in Table 7.1. As Table 7.1 indicates, there was a lot more use of the gaming-wallet to EGM connection (8206 instances recorded), with some trial participants clearly using it quite frequently. Some also used the venue-wallet to gaming wallet transfers quite often (given the maximum of 101). However, given that the number of gaming-wallet to EGM transfers were considerably greater than the venue wallet-gaming wallet transfers, it appears that a considerable proportion of the activity was being funded by money that was loaded on to the machine using the legacy cash or ticket system.

Table 7.1

Aggregate statistics relating to wallet activity

	Venue wallet to Gaming wallet	Gaming wallet to EGM
Mean (SD) including 0s	.91 (7.07)	93.3 (235.2)
Mean (SD) for users	11.8 (23.3)	31.7 (143.6)
Total number	236	8206
Range	0-101	0 - 1857

The system was also able to detect and record how much money was being transferred between the different wallets. Table 7.2 summarises the amounts for venue-gaming wallet transfers and gaming wallet to EGM. Table 7.2 shows that a lot of value in transfers were detected during the trial. The most meaningful figure is the venue-wallet to gaming-wallet transfer amounts because this indicates how much people were allocating to gambling. These values are highly skewed, so that the most indicative figure will be the median value of $300, but the data show that some people transferred up to $15000. The

figures for gaming wallet to EGM transfers appears to be very high and this needs to be treated with caution. This represents the value going between the gaming wallet and EGM every time a person makes a connection; it does not represent how much a person has spent. For example, a person might have $500 in the gaming wallet, use an EGM and play a small amount, disconnect and then do the same on 10 different machines. All of the value transfers into the machine on each occasion would count as expenditure. Moreover, it is again important to point out that much of the money that came into the gaming wallet could have come from the EGM (loaded via cash or a ticket) rather than via the venue wallet.

Once again, the median value of $566 provides the most indicative figure for users: this means that, during the trial, the typical user transferred a total of $566 between the gaming wallet and EGMs. The main point of interest here is that the system has a demonstrated ability to keep track of the different monetary transfers.

Table 7.2

Total value ($) transferred between wallets

	Venue wallet to Gaming wallet	Gaming wallet to EGM
Mean (SD) including 0s	155.3 (1208.2)	5139.9 (29,194.7)
Mean (SD) for users	2011.1 (3987.5)	15,124.6 (48,730.6)
Md (users)	300	566
SUM	$40,222	$1, 330, 963.5
Range	0 to $15,239	0 to $352,927

It was also possible to determine how many days people were active in the trial and used PRIME locator to transfer value to an EGM. People were active a mean of 4.07 days (SD = 12.6) with a range of 0 to 119. A more detailed breakdown is provided in Figure 7.2 which shows that around 10% of people in the trial used the technology 11 or more times.

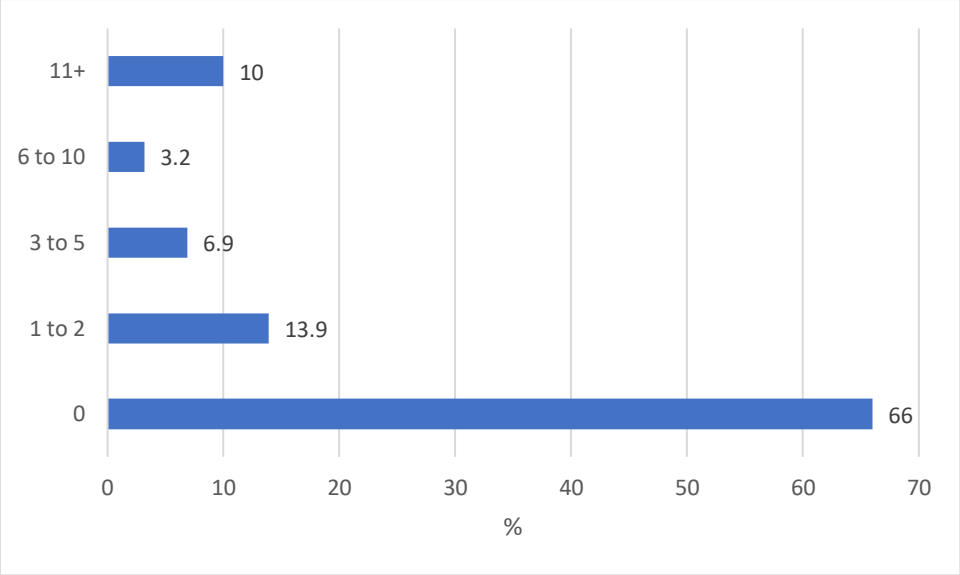


Figure 7.2 Number of days involving a gaming wallet-EGM transfer

7.4 Use of old and new system

It was also possible to examine how much people used the old legacy system as tracked by the Wests physical card activations as opposed to the new system. In other words, how much money was spent using PRIME locator/ Connect-and-play as compared with what was tracked by the physical Wests card. The mean number of hours using mobile gambling was 0.11 hours (SD = 0.36) vs. 52.2 hours (SD = 234.8) for the physical card system. In other words, people in the trial generally continued to use their physical card for gambling and mobile gambling using the new system was only a small fraction of their total play. Similarly large differences were observed for the net expenditure for sessions started using PRIME locator vs. using the physical membership card. For PRIME sessions, the mean was $23.0 (SD = 149.61, range net win of $450 to net loss of $1879) vs. $3151.86 (SD = $10, 476, range net win of $3408 to a net loss of $102,743[6]) for sessions commenced with the physical card (the two cannot be active on the same machine at the same time).

These differences are not unexpected given that the full range of machines in the venue were not available for all of the trial. People may have played on other favourite machines during the trial using their physical card to accumulate loyalty points. Others may have still preferred to play on the legacy system in general because they either preferred it or wanted to accumulate points using the familiar method.

[6] This amount was spent over 319 hours of carded-play. The person's linked PGSI score was 2 (low risk).

A final analysis examined the net expenditure/ hours ratio for play that commenced with PRIME locater/ connect-and-play vs. the physical membership card: the ratio was 120 for mobile/ connect-and-play initiated play as compared with 118 for sessions with the physical card. This suggested little difference in the speed at which money was lost per hour between the two methods of gambling.

7.5 PGSI risk level and activity

Matching PGSI data from the pre-survey was available for 123 people tracked by the objective data and this included: 51 non-problem gamblers; 31 classified as low risk; 23 moderate risk and 14 classified as having a gambling problem. Several different statistical analyses were conducted. Spearman correlations revealed no significant association between PGSI scores and how many wallet transfers were made. Nor was there a difference in PGSI scores based on whether people had signed up for venue wallet. Further comparisons of moderate risk and problem gamblers combined vs. the other groups also revealed no significant differences in the number of wallet transfers or in the total amount spent on the physical card or by mobile app during the trial period. The effect sizes were very small so that the lack of significance was not due to the modest sample size.

7.6 Testing responsible gambling features

The trial also sought to test whether people could set limits and if it were possible to record breaches. Not all of these were necessarily people who wanted to limit their gambling, but may have also been tests by people who wanted to see whether the technology would work. Very low levels of activity were observed for these features. A total of 16 individuals tried out the limit setting features. This included:

- 8 instances of setting session length limits
- 7 frequency of play limits
- 13 expenditure limits
- 6 total bets limits
- 4 maximum bet limits

The software was successful in detecting different limit setting parameters. For example, there were records of limits ranging from 1 to 80 minutes; frequency limits of between 2 to

21 times per month; spend limits of between $2 and $1m; total bet amounts of between $100 and $1m; and maximum bet limits that could be specified across time intervals (e.g., $2.50 across 60 minutes or $500 in 45 minutes). The software also detected whether patrons had indicated that they wanted the venue notified if a breach occurred (n = 13 cases).

The system was able to detect breaches for spend limits (n = 1); frequency of play (n = 2); expenditure (n = 3); total bets (n = 2), but there were no detected breaches for maximum bets. A total of 5 people had at least one recorded breach. The system was able to detect if people continued to play beyond the breach period. Another feature to be tested was the ability to modify limits. The software detected modifications to all of the limits set, except for the maximum bet category. It also successfully detected whether the modification to limits involved an increase or decrease in the limit set.

No self-exclusions were detected by the objective data, but the venue reports that there were 2 participants in the trial who sought self-exclusion (from data at the venue).

7.7 Discussion

The results from the objective data revealed generally low levels of utilization of the new technology relative to the legacy system, although this was likely influenced the availability of machines at certain stages of the trial and people's preference to use the familiarity physical loyalty card system. Most time and money spent during the trial was on the physical card rather than via the mobile App. Importantly, there was little evidence to suggest that gambling using the new technology had contributed to a higher levels of expenditure in total or when examined on a per hourly basis of activity. Consistent with other trials, the analysis showed very low levels of use of voluntary limit-setting features, but confirmed that the system was successfully able to record activity in this area from the types of limit set, whether there were breaches or modifications to limits and if people had continued to gamble. It is less clear, however, whether the current data recording would capture the action taken by venues in the event of breaches. Finally, it is clear that the system has the ability to generate quite detailed data on gambling expenditure using the two systems (card based and mobile) which is an area of interest in NSW.

Chapter 8: Post-trial survey results

8.1 Overview

This chapter summarizes the findings of the quantitative post-trial survey results obtained from trial participants who successfully completed the registration for the trial. The principal aims of the post-survey were to understand: (a) why people used, or did not use, the trial technology; (b) the perceived value of the technology and whether it worked as intended; and (c) if the use of cashless gaming had any perceived impact on people's gambling (e.g., how much they gambled or how much in control they felt over their behaviour). The survey was designed to collect information from both those who had, and had, not been active and consistent users of the new technology. A full copy of this survey is provided in the Technical Report.

8.2 Post-test sample

The full 260 patrons (minus one self-excluded patron) were invited to take part in the survey as based their completion of the pre-survey and enrolment in the trial. A total of 99 people attempted the survey, with 77 people completing it in full. This represented a response rate of 30%, although it is important to note that the majority of those who were invited were not necessarily active users of the technology. The sample was slightly more likely to be male than in the pre-survey (73% vs. 64%), but had a similar age profile (e.g., 56% were aged 18-34 years compared with 49% for the pre-survey; 38% vs. 37% for 35-64 years) and both samples included 5% of people aged 65+ years. The PGSI risk profile was also similar (14% vs 10% for problem gambling in pre-survey; 22% vs. 20% for moderate risk; 22% vs. 27% for low risk and 42% vs. 43% for non-problem gambling). These comparisons suggested that there was no evidence of any sampling bias relating to gender, age or problem gambling status associated with the 30% response rate.

8.3 User status of post-test sample

All of the 77 respondents had completed the verification process to download the digital wallet technology, but only 32 had completed the KYC (know-your-customer) process required to utilize their bank-linked (or venue wallet) as a vehicle for funding the gaming (or cardPAY wallet). A total of 48 people had transferred money into their venue wallets (which

could be either from their bank or back from their gaming (cardPAY) wallets); 42 had transferred money from their venue wallet to their gaming wallet; and, 40 had gambled on a poker machine using their gaming wallet (cardPAY wallet) and the new Connect and Play (PRIME locator) technology.

8.4 Use of responsible gambling features

A total of 10 had set some sort of limit during the trial (9 out of 10 of these people reported using Play and Connect / PRIME locator) to play a poker machine). This represents 10/77 or 13% of total respondents) or around a quarter of those who had used the new Play and Connect technology to play poker machines. A total of 14 or 18% had sought a player activity statement or 14/40 = 35% of those who had used the new trial technology to gamble. Only 2 people had used the new technology to self-exclude.

8.5 Barriers to use

Respondents were asked why they had not used the new technology to play poker machines. Of the 37 people who appeared to encounter barriers, 24 only reported 1 barrier; 7 reported 2 and 6 reported 3 barriers. A summary of the main barriers is provided in Table 8.1. Inspection of Table 8.1 shows that no single reason was dominant. However, being content to use the old system or not feeling that there was any advantage to using the new system were mentioned by a number of respondents. The issue of not having a preferred machine may have affected earlier trial participants before the technology was expanded to all machines in the venue and privacy was an issue for around a quarter of respondents. Overall, there was little evidence that a failure of the technology itself was a barrier to people not using it. Only 5 people indicated difficulties in this area.

Table 8.1 Barriers to using the new wallet technology (n = 37)

	N (%)
Easier to use the old legacy system	10 (27.0)
Forgot to do it	9 (24.3)
Privacy concerns	9 (24.3)
No incentive to do it	9 (24.3)

Preferred machine not available to play	8 (21.6)
Other	6 (16.2)
Difficulty loading $ into wallets	5 (13.5)

8.6 How people interacted with different technology options

Some questions were included to examine whether people used the new technology exclusively or combined it with existing systems. A first question asked people how often people used the new technology when they played EGMs (Table 8.2). Table 8.2 indicates that usage was inconsistent with the majority having combined the new technology with the existing system (based on cash, tickets and the Wests loyalty card).

Table 8.2 Frequency of use of the new wallet technology amongst active users (*n* = 40)

	N (%)
Every time (100%)	3 (7.5)
Most of the time (75%)	9 (22.5)
Half of the time (50%)	9 (22.5)
Some of the time (25%)	18 (45.0)
Not at all (0%)	1 (2.5)

Patrons who used Connect and Play (Prime locator) to interact between their gaming wallet and a poker machine were asked to indicate where the money had come from. Of the 40 respondents who had used Connect and Play, 8 (20%) had exclusively used the new technology (i.e., the money had arrived via the venue wallet); 9 (23%) said that the money had arrived in the cardPAY wallet via cash being backloaded from the machine, whereas 23 (58%) said both. Thus, it was again clear that respondents were combining the new technology with the existing technology when playing poker machines. Another question asked respondents what they had done if they had not played using the new technology: 57% said that they used their physical West's card and 60% indicated that they used cash or tickets to load money into the machine.

The reasons given for not always using the new technology consistently were generally similar to those cited for not using it in general (Table 8.3). Once again, it is likely that some of these issues were resolved during the course of the trial (e.g., machine availability). Connectivity issues were mentioned by a significant proportion of the respondents, but according to qualitative interviews this was often an issue raised earlier in the trial, so it is unclear whether this remained a consistent problem as the trial progressed.

Table 8.3 Barriers to using the new wallet technology (n = 37)

	N (%)
Preferred machine not in trial	21 (56.8)
Trouble connecting	16 (43.2)
Forgot	10 (27.6)
Preferred other method	8 (21.6)
Phone not accessible	6 (16.2)
Privacy issues	5 (13.5)
Other	2 (5.4)

A final question asked all post-trial respondents (*n* = 77) what machines they played during the trial: 11 (14.3%) exclusively played trial machines; 6 played only those not in the trial; and 50 (54.9%) played both types of machine. When this analysis was confined only to those who had used connect-and-play (gaming wallet to machine) to play EGMs, 83% reported playing both trial and non-trial machines and the remainder only trial machines.

8.7 Play at different venues

It is also important to acknowledge that people who were in the trial may not have exclusively played at the trial venue during the course of the trial. Respondents (*n* = 77) were therefore asked what other venues had been visited for gaming: 45 (58.4%) had played at other Wests clubs; 25 (32.5%) had played at other non-Wests clubs; 32 (41.6%) had played at hotels; 13 (16.3%) had played gaming machines at a casino.

8.8 The quarantine wallet

A total of 51 (66.2%) of total post-trial respondents (*n* = 77) were aware that there was a holding or quarantine wallet into which large win amounts of $5000 would be kept for 24 hours. Only 3 or 3.9% of respondents had encountered this wallet (presumably this is because large wins are rare), but 16 (20.8%) had elected to transfer money into this holding wallet manually. This may suggest that the holding wallet is potentially a useful responsible gambling feature for a small number of players. Respondents were also asked about their views of the holding wallet (Table 8.4) on 5-point Likert scales. Over half of respondents believed that it was a useful way to reduce the temptation to gamble winnings and around half believed that it was a way to reduce gambling harm. Slightly over half believed that the feature should be retained. At the same time, almost 40% said that they did not like the feature. However, the percentage who disagreed with the potential harm reducing features was generally low which suggests that respondents were (on balance) positively disposed towards the benefits of the feature. All of the mean scores on these ratings were less than the mid-point of 3 (neither) which indicated general agreement with the statements ($p <$ .01).

Inspection of PGSI scores for those who did, or did not, like the feature showed that responses were not significantly related to problem gambling status (a third of 'agree' responses for the Don't like the feature question) were moderate risk or problem gamblers as compared with 28% for the other respondents.

Table 8.4

Views about the holding/ quarantine wallet (*n* = 77)

	Agree	Neutral	Disagree
Reduces temptation to gamble winnings	45 (58.4)	27 (35.1)	5 (6.5)
Good to reduce gambling harm	38 (49.4)	30 (39.0)	9 (11.7)
Feature should be retained	41 (53.2)	33 (42.9)	3 (3.9)
Don't like the holding wallet	30 (39.0)	31 (40.3)	16 (20.8)

8.9 Perceived value of the technology

An important aim of the trial was to examine people's perceptions of the technology as well as their motivations for getting involved in the trial. A series of statements (Table 8.5) were rated on 5-point Likert scales. Around half liked the convenience of being able to gamble using smart phones and over 60% liked being able to monitor their play. About half liked being able to gamble without having to interact with staff and 36% believed that it would make gambling more enjoyable. It was also clear that curiosity and a general interest in new technology as well the hope of receiving a voucher for trial participation were influential. Relatively few people disagreed with the key statements relating to the utility of the technology: its convenience and capacity to help players monitor their expenditure. In other words, the overall pattern of results suggests that the technology appeared to be seen as useful for around half the sample, whereas the other half were either indifferent or negatively disposed. Overall, the mean scores for these scales were significantly lower than the mid-point of the scale (Neutral) for all statements except for the handling cash and coins items (i.e., scores were significantly in the agree range) ($p < .05$) as based on single-sample Z-tests.

Comparisons of the mean scores on these items across the PGSI groups (non-problem, low risk and moderate risk and problem gambling) revealed significant differences for two items. Lower risk gamblers were more likely to agree that they were using the technology to help monitor their gambling, whereas non-problem gamblers were most likely to say that they were participating to receive a voucher. All other comparisons were not significant.

Table 8.5

Views about the value of the technology (n = 77)

	Agree	Neutral	Disagree
Like convenience of phone gambling	38 (49.4)	25 (32.5)	14 (18.2)
Don't have to speak with people to gamble	37 (48.1)	23 (29.9)	16 (20.8)
Like being able to monitor one's play	37 (48.1)	30 (39.0)	8 (10.4)
Like to try out new technology	64 (83.1)	12 (15.6)	1 (1.3)

Thought gambling would be more enjoyable	28 (36.4)	39 (50.6)	10 (13.0)
Don't like handling cash / coins	31 (40.3)	27 (35.1)	19 (24.7)
Curious about the technology	64 (83.1)	12 (15.6)	1 (1.3)
Wanted to receive a voucher/ reward	52 (67.5)	21 (27.3)	6 (7.8)

Based on a 1-5 Likert scale: Strongly agree to Strongly disagree. Agee = Combined Strongly agree and disagree; Disagree = Strongly disagree and disagree. Note that a few cases are missing due to not applicable being chosen as the response option.

8.9 Perceived quality of support provided during trial

Participants were asked to rate how well they had been supported during the trial in relation to the quality of information provided, venue staff knowledge and the amount of support provided (Figure 1). A 5 point scale was used, where 1 = Very good, 2 = Good, 3 =Average, 4 = Poor, and 5 = Very poor. to As Figure 1 indicates, the majority of participants rated the information, knowledge and support as being good to very good; around a quarter rated it as average; and, less than 20% rated it as poor or very poor. The level of support from the venue was the highest rated with only 6.5% rating it lower than average. Overall, the results suggest some room for improvement in the quality of support and information, but that this was not an area of significant concern for participants in the trial.

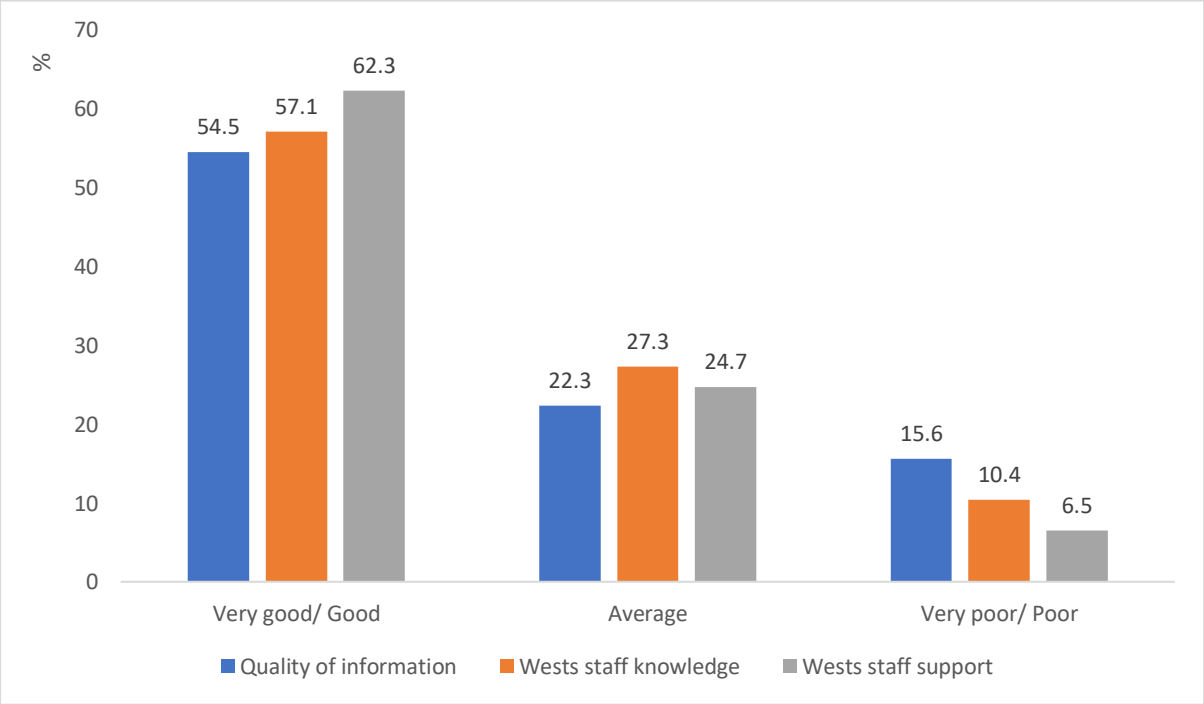


Figure 8.1. Views on the quality of support provided by the venue/ trial (*n* = 77)

8.10 Participant perceptions of usability

Another important element of the trial was to examine what players thought of the usability and functionality of the different elements of the cashless system. To this end, respondents were asked to rate different elements on a 5-point scale from 1 = Very easy to 5 = Very difficult. Table 8.6 summarises the consolidated results for these questions. Not all participants had engaged with all of the functions so that different numbers are used when analysing the breakdown of responses. It is also important to note that there will be more responses to these questions than earlier questions relating to usage because some people may have tried or been familiar with the features without having used them.

Table 8.6 shows that the vast majority of respondents did not have difficulties with the trial technology. The area which appeared to create the greatest challenges appeared to be registering for the venue wallet which often involved having to get a good Internet connection, having the correct ID and undergoing a KYC process. However, the mean score on the rating scale was generally in the positive (easy range) and significantly lower than the mid-point score (neither). The second most common issue was the connection between the gaming (cardPAY wallet) and the poker machine (a connectivity issue that appeared to be encountered earlier in the trial). All other aspects of functionality appeared to be either OK (mid-point score of 3 or 'neither' or easily navigated by 85% of players). These findings suggest that the trial technology was generally well received by the patrons, but that the registration process was slower for around 1 in 5 respondents.

Table 8.6

How easy were the following aspects of the trial and technology (*n* = 77)

	n	Very easy/ Easy	Neither	Very difficult/ difficult	Rating different from midpoint
Signing up for the trial	77	53 (68.8)	15 (19.5)	9 (11.7)	Yes
Registering for the venue wallet	77	44 (57.1)	16 (20.8)	14 (18.2)	Yes

Funding venue wallet from bank account	66	33 (50.0)	23 (34.8)	10 (15.2)	No
Venue wallet to gaming wallet / CardPAY transfers	67	34 (50.7)	24 (35.8)	9 (13.4)	No
Gaming wallet to poker machine connection to gamble	63	34 (54.0)	18 (28.6)	11 (16.4)	No
cardPAY to holding wallet transfers	16	10 (62.5)	3 (18.8)	2 (12.5)	No
Gaming machine back to gaming wallet/cardPAY transfers	63	33 (52.4)	21 (33.3)	9 (14.3)	No
Gaming wallet / cardPAY back to venue wallet transfers	64	33 (51.6)	22 (34.4)	9 (14.1)	No
Venue wallet to bank account transfers	56	37 (66.1)	22 (39.3)	7 (12.5)	No
Disconnecting from a machine once session of playing has ended	68	35 (51.5)	23 (33.8)	7 (10.3)	No

Note that number will not exactly sum to 77 due to some not applicable responses. The final column indicates whether the rating scores out of 5 were significantly lower than the midpoint of 3.

8.11 Views about protective beacon-based technology features

One of the important features of the technology is that locational beacons prevent players from being unable to load money into their gaming wallets on the gaming floor. This is to encourage people to take breaks in play and for decisions about the allocation of funding to gambling to be made away from environments where people might still be emotionally and cognitively engaged with gambling. Two questions were therefore asked of respondents: how convenient did they believe this feature to be; and, their preferences for how this separation of playing and money transfers was achieved. Table 8.7 shows the findings for these questions. People generally regarded the beacon feature as inconvenient,

but the majority of these respondents recognized that the feature might benefit higher risk gamblers. Just under a quarter indicated that the technology might help people to take more breaks. In relation to the second question, it was observed that slightly more people believed that loading cash away from the gaming floor was the preferred design option, but having delays was also seen as useful. Around a third were not decided on what technology solution was preferable.

Table 8.7

Separating wallet transfer funding and gambling in venue (*n* = 77)

Views of having to leave gaming floor to transfer money into gaming wallet	N (%)
Inconvenient	16 (20.8)
Inconvenient, but potentially useful for problem gamblers	38 (49.4)
Good because it encourages breaks	17 (22.1)
Not sure	6 (7.8)
Preference for how funds transfers are limited	
Away from gaming floor	29 (37.7)
Transfers into gaming wallet can occur on gaming floor, but delay before it can be used on a gaming machine	23 (29.9)
Not sure	25 (32.5)

8.12 Problems with the technology

Respondents were asked if they had encountered any technical problems during the course of the trial and what aspects of the technology were problematic. Of the 77 respondents, 36 (46.8%) had experienced at least one technical glitch during the course of the trial. However, problems associated with individual elements of the technology were generally low (Table 8.8). The figures presented are based on the sample of those who reported at least once glitch, but these figures would be 50% lower when based on the whole sample of 77 respondents. Several observations can be made. In general, the most

common problem was connecting to the machine, a problem that emerged early in the trial. Transfers in a forwards direction (venue wallet to gaming wallet and machine) tended to have more glitches than the reverse (machine- gaming wallet- venue wallet).

When asked how people had attempted to resolve the problem, the most common response was by speaking to venue staff (n = 12), restarting the app (n = 6) and trying to fix the problem oneself (n = 5).

Table 8.8

Technology elements where problems arose (n = 36)

	N (%)
Gaming wallet to EGM interface	12 (33.3)
Bank account to venue wallet transfers	9 (25.0)
Venue wallet to gaming / CardPAY wallet	9 (25.0)
Trial sign up	8 (22.2)
Disconnecting from machines	7 (19.4)
Registering for trial	7 (19.4)
EGM back to gaming wallet	6 (16.7)
Gaming wallet to venue wallet	2 (5.8)
Venue wallet to bank account	1 (2.8)

Note: 2/10 had problems with manual transfers from the gaming wallet to the holding wallet.

When asked if the problems had been resolved, 25% of 36 said that all problems had been resolved; 11 (30.6%) said that most of them had been resolved, but there were 9 (25%) who said that only some of the problems were resolved and 7 (19.4%) said that none of the problems had been resolved. Insights into what problems had been more difficult to solve were examined by cross-tabulating the problem resolution question by the responses to individual technology features. It appeared that the problem that was most likely to be ongoing was connectivity between the gaming / cardPAY wallet and the EGM: 8 out of 12 people who highlighted this as an issue were more likely to report that problems had been not been resolved at all or that only some problems had been addressed. Although this

interpretation needs to be treated with caution because no question was asked about the solution of specific issues, it is generally consistent with what was reported in the qualitative interviews reported in other chapters. This connectivity problem was not common, but it appeared to be an issue of greater concern than functionality relating to the transfers of funds between different wallets.

8.13 Cashless gambling: impacts on behaviour and the experience of gambling

These questions were posed to those who had used the PRIME locator or connect-and-pay method to gamble on poker machines (n = 40). The first question asked of respondents was whether cashless gaming affected their enjoyment of gambling (Figure 8.2). Overall, the results show that cashless gaming had little impact on people's enjoyment of gambling. The percentage of people who reported improvements was three times that of those who reported less enjoyment. The mean score for this rating did not differ significantly from the mid-point score of 3 (No change).

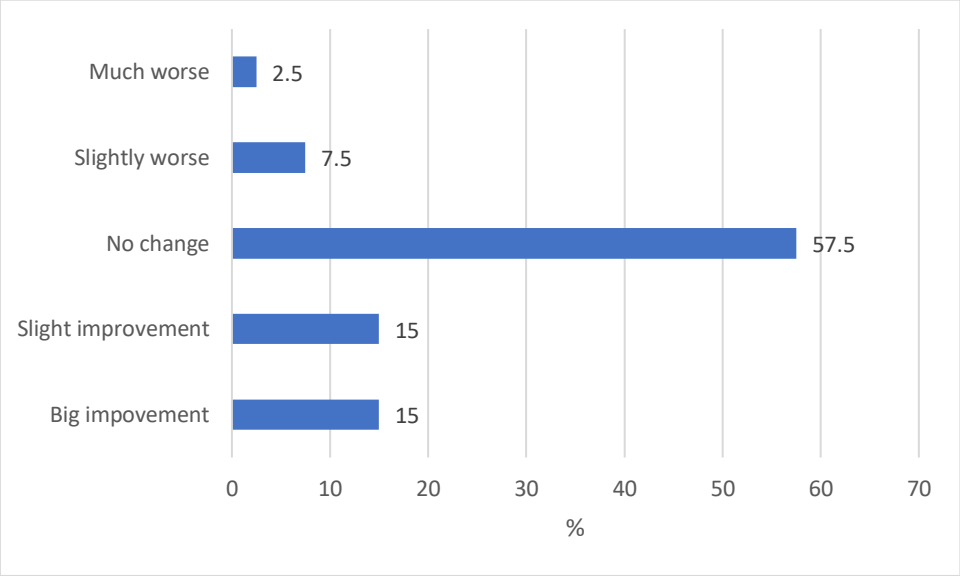


Figure 8.2. Impact on the enjoyment of gambling (*n* = 40)

A second question asked whether cashless gaming made it easier to start gambling (Figure 8.3). The results for this question were more mixed. Around a third said that it made it harder to start playing, another third said it was faster and then the remainder said it made no difference. Overall, the mean score for this rating did not differ significantly from the mid-point of 3. Those who said that starting was harder (worse) may have been those

who experienced problems with connectivity. Cross-tabulations showed that 7 out of 13 people who found the process of gambling to be slower reported this technical problem.

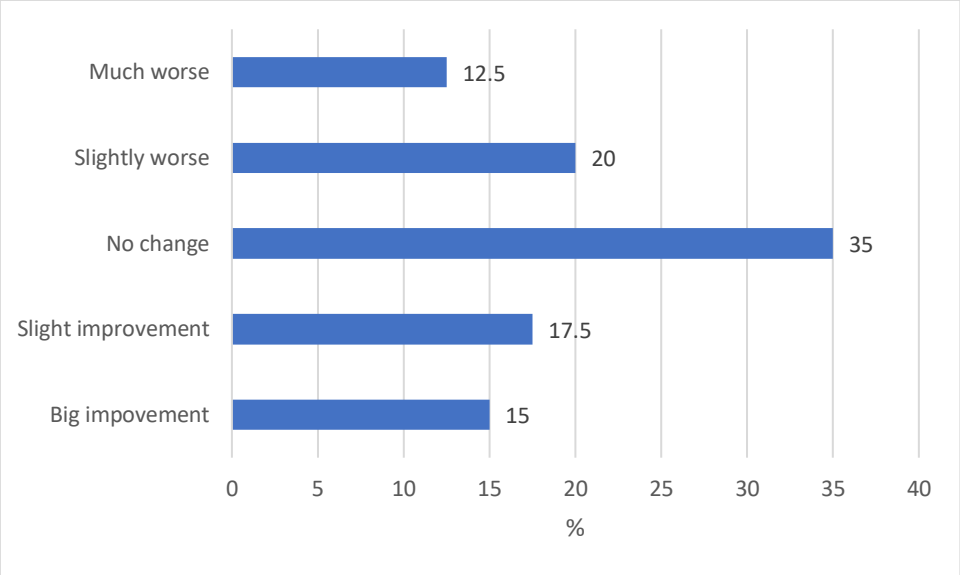


Figure 8.3. Impact on the ability to start gambling (*n* = 40)

A third question asked if cashless gaming made it easier to move between machines (Figure 8.4). About half said that it made no difference which is perhaps not surprising given that existing ticket systems also allow this. There was a small trend towards a greater proportion of respondents reporting that cashless gaming led to the ability to move more quickly between machines- even through 20% reported that it was slower. Overall, the mean score for this rating scale did not differ significantly from the mid-point score (no change).

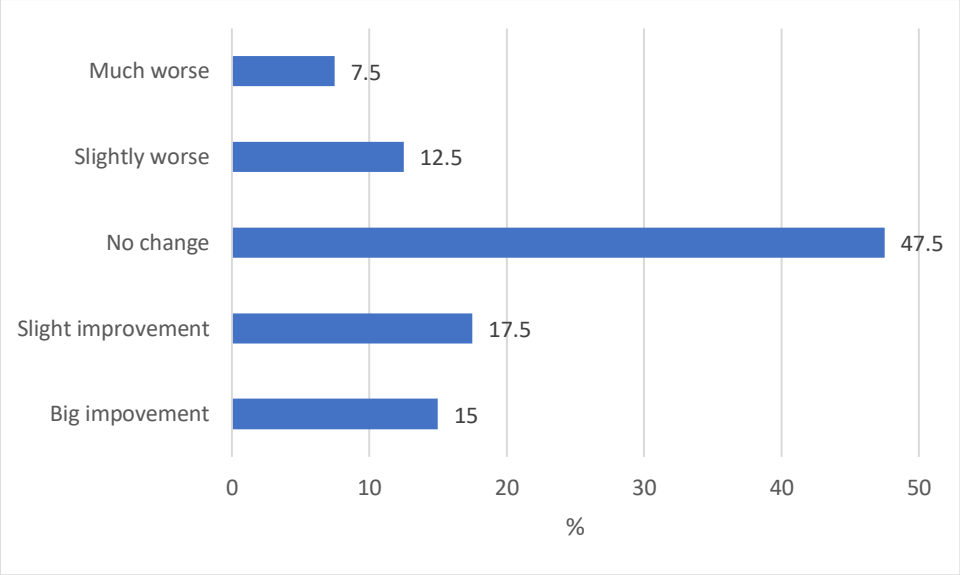


Figure 8.4. Impact on ability to move between gaming machines (*n* = 40)

When asked if cashless gaming had led to an increase in the number of days gambled on poker machines, the dominant response was that it made no difference (Figure 8.5). The percentage reporting increasing the number of days was higher than the percentage reporting decreases, but it is possible that some people may have come to gamble slightly more often because of the trial. The mean score for this rating scale did not differ significantly from the mid-point score of 3 (no change). PGSI data was available for 5 out of the 6 people who reported increased days and 2 were problem gamblers and the other 3 were non-problem gamblers.

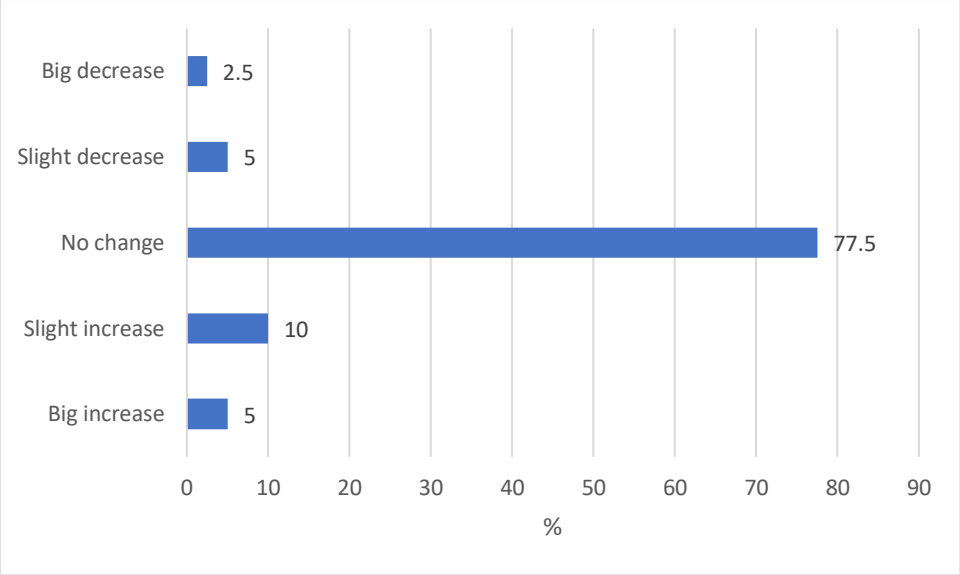


Figure 8.5. Impact on number of days spent playing gaming machines (*n* = 40)

Participants were also asked if cashless gaming increased how much they spent per day on gaming machines (Figure 8.6). Once again, the dominant response was that it made no difference. A larger percentage of people reported decreasing their expenditure than increasing it. Only one person out of 40 reported a big increase and this person was a non-problem gambler. In other words, there was little evidence that cashless play had increased expenditure. As with the other ratings above, the mean score for this rating scale did not differ significantly from the mid-point score of 3 (no change).

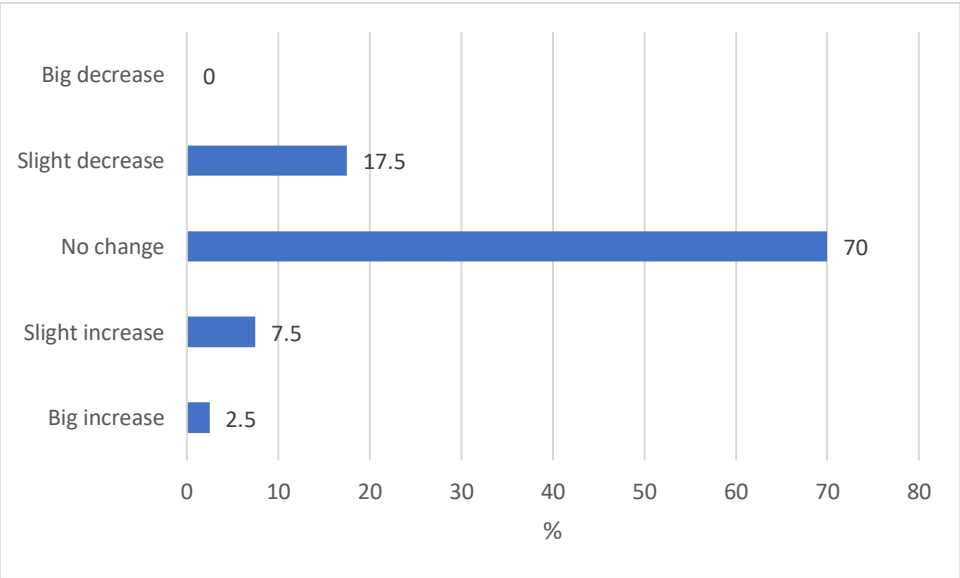


Figure 8.6. Impact on the amount of $ spent per day on gaming machines (*n* = 40): Note: SA, Agree and Disagree and SD categories are combined

When the same question was asked about the amount of time spent gambling, the results showed that the majority reported no change (Figure 8.7). Here, there was a small, but non-significant trend towards people spending slightly longer, but the mean score on the rating scale did not differ significantly from the mid-point of 3 (no change).

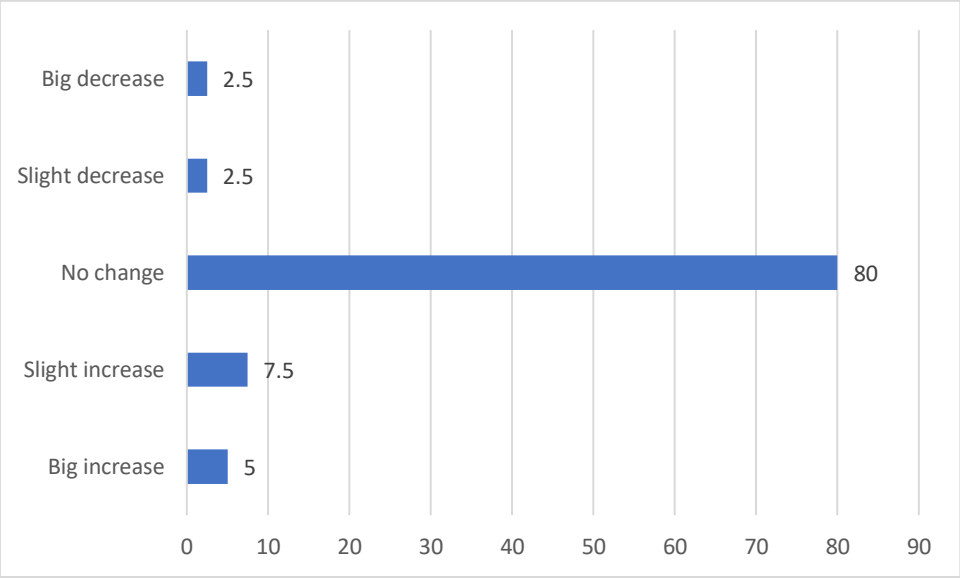


Figure 8.7. Impact on the amount of time spent per day on gaming machines (*n* = 40): Note: SA, Agree and Disagree and SD categories are combined

Respondents were then asked whether the cashless gaming technology increased their ability to control their gambling on a 5-point Likert scale. As shown in Figure 8.8, 35% agreed that it improved their control, 55% did not agree or disagree (neutral) and only 10% said that it did not help. In other words, the technology was more likely to be seen as beneficial than not beneficial. The mean score for this rating was significantly less than the mid-point score of 3 ($p < .01$).

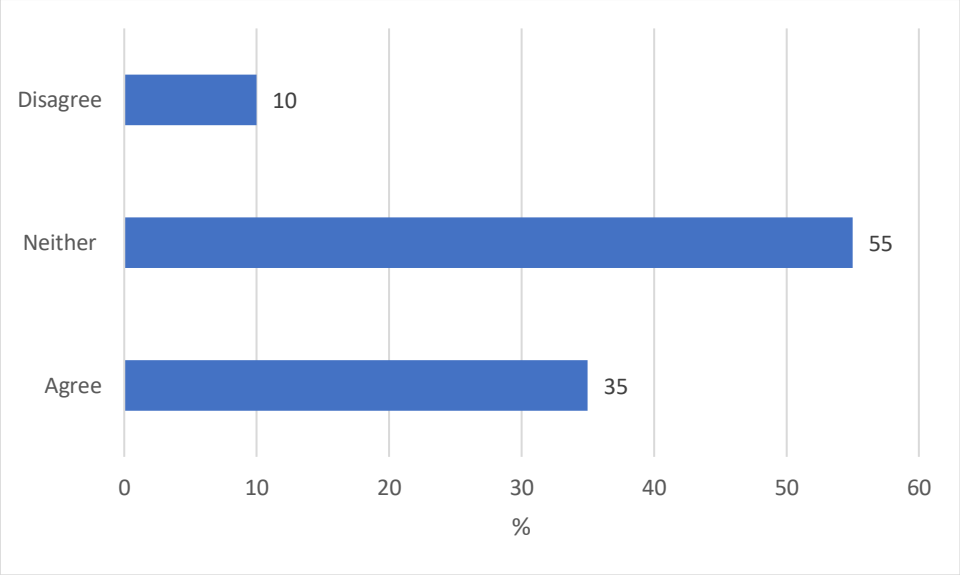


Figure 8.8. Cashless gaming technology improves ability to control gambling (*n* = 40): Note: SA, Agree and Disagree and SD categories are combined

Very similar results were obtained when respondents were asked if the new technology helped them to manage how much they spent on gambling. This mean for this rating scale was also significantly less than the mid-point of 3 ($p < .01$).

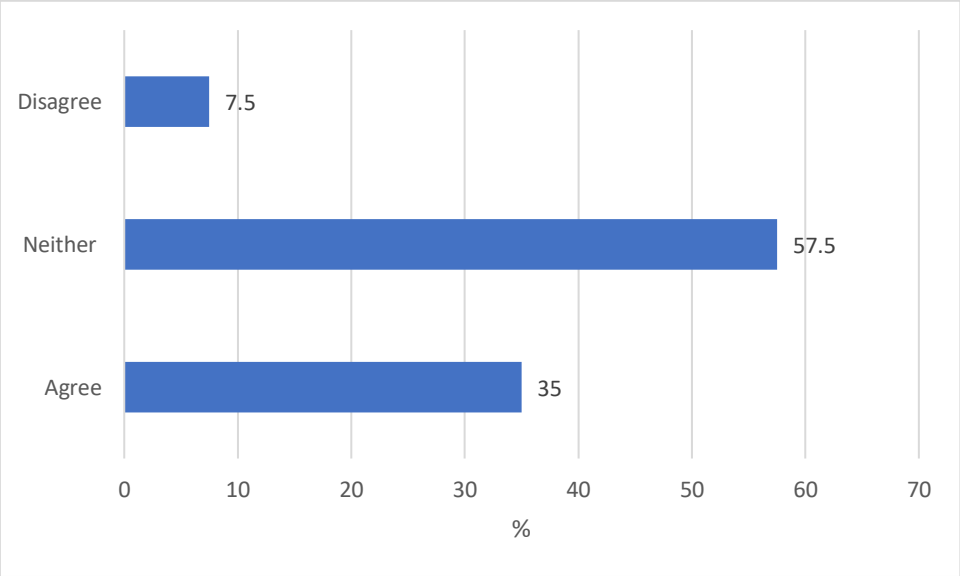


Figure 8.9. Cashless gaming technology improves ability to manage expenditure on gambling (*n* = 40): Note: SA, Agree and Disagree and SD categories are combined

These results were further replicated when people were asked whether the new technology had helped people control how long they gambled (Figure 8.10). The mean was again significantly less than the mid-point of 3 ($p < .05$).

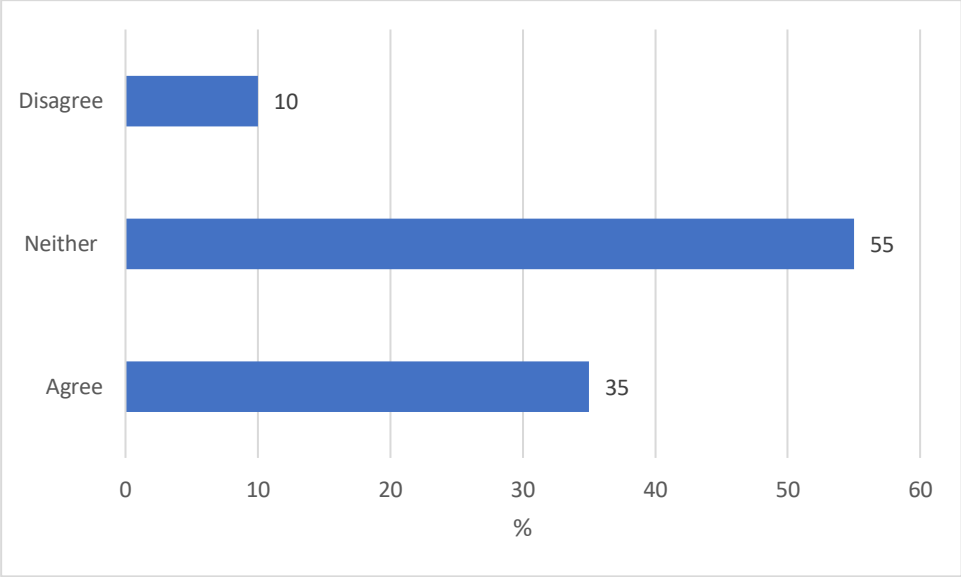


Figure 8.10. Cashless gaming technology improves ability to manage the duration of gambling (n = 40): Note: SA, Agree and Disagree and SD categories are combined

A final question in this section asked people whether the new technology helped them resist the temptation to start another session. Once again, there was more agreement than disagreement that the technology improved people's ability to resist the temptation to start another session of gambling. The mean score for the rating scale was significantly less than the mid-point of 3 ($p < .01$).

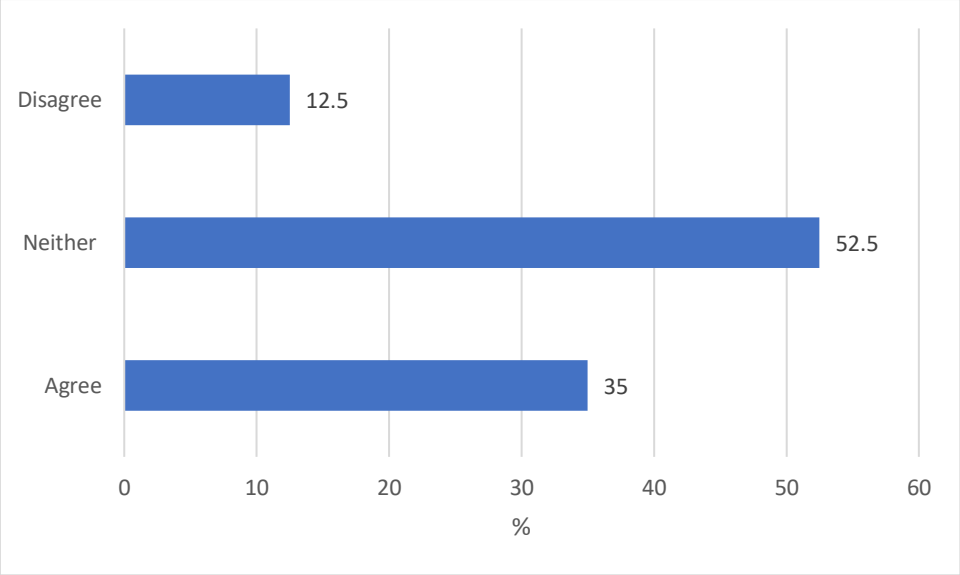


Figure 8.11. Cashless gaming technology improves ability to resist temptation to gamble (*n* = 40): Note: SA, Agree and Disagree and SD categories are combined

Analysis of the mean scores on these rating scales across the PGSI groups did not show any significant differences, but it is important to acknowledge that the level of statistical power for the comparisons was reduced due to the sample size.

8.14 Financial harm

Three questions about financial harm were included in the survey: over-priortisation, strains and pressures due to gambling; and, serious financial harm. Only 2 people who had used the connect-and-play technology (n= 40) reported any over-priortisation. There was zero endorsement of the other questions. These results suggest that there was no evidence of significant levels of financial harm in the principal user group who responded to the survey.

8.15 Use of the limit setting features

Another aspect of the trial was to test the functionality of the responsible gambling or limit-setting features in the PRIME App. Only 10 people in the post-survey responded to a question asking them about their use of the limit-setting features. The question had 5 response categories: 1= Very easy, 2 = Easy, 3 = Neither/ neutral, 4 = Difficult, 5 = Very difficult. Of these people, 8/10 said that it was very easy or easy to use and the remaining two were neutral. In other words, no one reported that it was difficult to use. Questions

than asked (Yes/ No) if people had made any changes to their limits or how they had responded to limits. One person increased their limit and 3 people reported decreasing their limit. Two people reported removing a limit. A total of 5 people reported reaching a limit: 1 continued playing, 2 stopped after speaking with staff and 2 stopped on their own. These very small number of cases are not sufficient to provide any insights into whether limits influence gambling behaviour but confirm that the technology appeared to be functional.

When the 40 users of connect-any-play were asked why they did not use the limit setting features, 71% said that they already had their own limits in place; only 3 said that it was only useful for problem gamblers.

8.16 Potential future use of limit setting features

The entire sample was asked what features might be useful (Yes or No) in the future. These are summarized in Table 8.9. One the whole, respondents did not respond favourably to features that might limit how often one played or how much was bet, but they were more favourably disposed towards features that limited deposits, provided notifications for losses or which provided access to information about the person's gambling activity.

Table 8.9

Future App features that might be useful (n = 77)

	N (%)
A feature which notifies you on how much you have spent in a session of gambling	26 (33.7)
A feature which notifies you based on how often you have gambled	15 (19.5)
A feature which notifies you based on how much you have lost	31 (40.3)
A feature which notifies you based on the amount you have bet	12 (15.6)
A feature which excludes you from venues	10 (13.0)

A feature which gives you access to player activity statements	28 (36.4)
A feature which sets a daily maximum transfer limit	27 (35.1)

When the sample (*n* = 77) was asked what might make them more likely to utilize the limit setting features, 15 said that more information on how to use the features would be useful; 8 said that more information on the benefits would be useful; 11 said that reducing the number of options would help; and, 34 said that offering some reward for using the features would be beneficial. In other words, by far the strongest support was given to offering incentives for encouraging people to engage in responsible gambling or safer gambling behaviours. Most people when asked (49 or 62.3%) were aware that they could have asked Wests staff for support with these features, but surprisingly there were 38% who were not aware of this.

8.17 Player activity statements

A total of 14 people in the post-trial survey had accessed a player activity statement. The activity statement was rated on a 5-point Likert scale. Most expressed positive views about it (Table 8.10). Caution has to be implied when interpreting such small numbers, but the general pattern suggests that those who accessed the player activity statement believed it to be clear and of some value. Most would recommend it to others. Very few respondents reported that it was hard to access or poorly designed.

Table 8.10

Views about the player activity statement (*n* = 14)

	Agree	Neutral	Disagree
Easy to access	8 (57.1)	5 (35.7)	1 (7.1)
Easy to understand	8 (57.1)	5 (35.7)	1 (7.1)
Useful to manage funds	6 (42.9)	7 (50.0)	1 (7.1)
The results were surprising	3 (21.4)	10 (71.2)	1 (7.1)
Would recommend it to others	10 (71.2)	4 (28.6)	0 (0.0)
Contents might be upsetting	1 (7.1)	6 (42.9)	7 (50.0)

The strongly agree and agree and Strongly disagree and disagree responses are combined.

8.18 Self-exclusion

A total of 7 respondents indicated that they had considered the self-exclusion feature, even though only 1 person in the trial appears to have used it.

8.19 Overall views of safer gambling features

A final group of questions asked respondents to comment on the perceived effectiveness of the three main safer gaming features: limit-setting, player activity statements and self-exclusion. A 5-point scale was used: 1 = Very effective, 2 = Quite effective, 3 = Moderately effective, 4 = Slightly effective and 5 = Not at all effective. Figure 8.12 summarises the percentage of respondents who believed these to be effective or ineffective with some categories combined. Figure 8.12 shows that very few regarded these measures as ineffective. Single sample Z-tests showed that the mean score for each of these rating scales was significantly lower (more positive) than the mid-point of the scale ($p <$ .001). The vast majority rated all three as at least moderately effective. It is important to note that these findings are hypothetical and based on perceived effectiveness and do not necessarily reflect whether the respondent believes them to be personally useful.

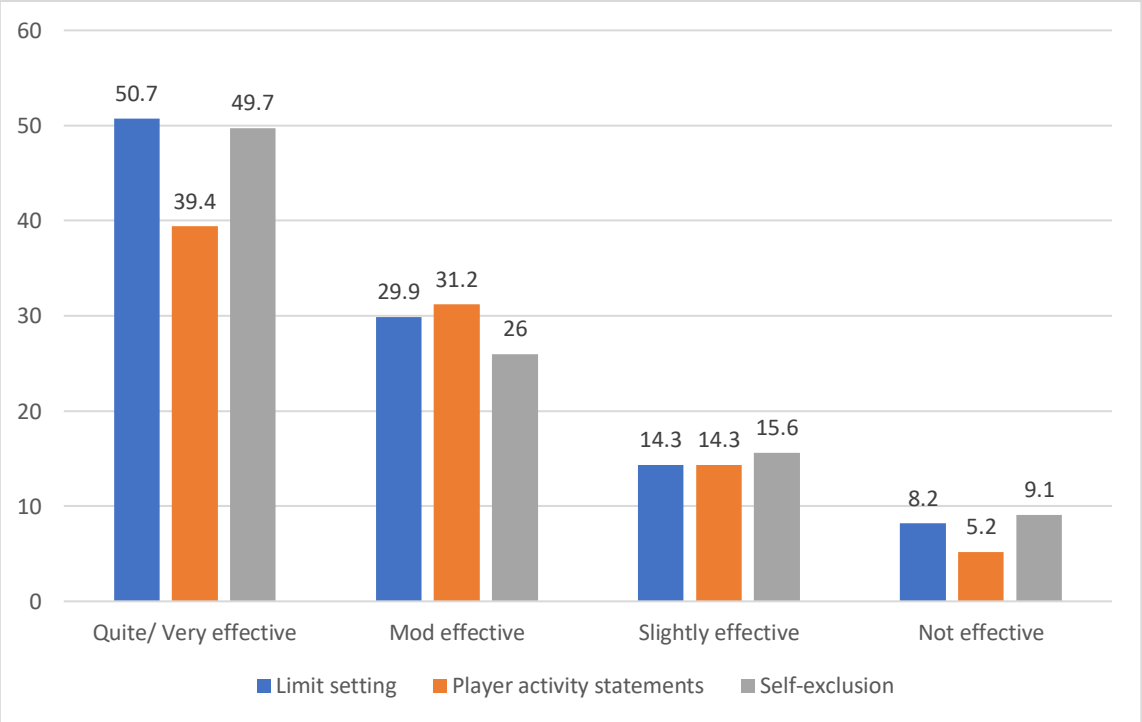


Figure 8.12. Perceived effectiveness of safer gaming measures (n = 77)

8.20 Who used the technology

A final set of analyses examined the profile of the 40 people who reported using the new technology with an EGM and compared them to the rest of the baseline/ pre-survey sample. This was achieved by matching the study IDs across the post-test and pre-survey samples. The result showed no differences on any of the key variables: gender, age-group or PGSI scores. There were also no differences related to the frequency of playing EGMs or whether people had a Wests App installed or had a loyalty card at the venue. There were also no differences relating to differences in attitudes towards technology. The lack of significance is unlikely to be due to the small number of uses (statistical power). Instead, it is more likely that users and non-users shared many similarities by virtue of having all volunteered for the pre-survey. Such volunteers are likely to already be more disposed towards the use of new technologies than those who did not volunteer. Thus, one potential option for future trials is to conduct additional survey work with those who do not volunteer to use the technology in a trial, but who might still be willing to complete a survey.

8.21 Discussion

The post-survey provided a number of insights into how trial participants viewed the new technology and how it had influenced their behaviour.

8.21.1 Barriers to use

The main barriers to people adopting the technology did not appear to be strongly related to any failures of the technology itself. Instead, the most common reason for not using it appeared to be general satisfaction with the default system. Wests New Lambton, as with numerous venues in NSW, already have a legacy form of cashless gaming in the form of ticket-in/ ticket out and physical and digital memberships. For this reason, it may be harder to show how the new system (which requires some effort to install and use) offers enough incremental value to consumers. Other concerns related to the privacy of the new gambling method.

8.21.2 Mixed use

Trial participants admitted that they frequently combined play on the new system with the legacy system. For example, 80% reported having got money into the gaming or

cardPAY wallet by transferring it from the machine rather than via the venue wallet. Trial participants reported using both trial and non-trial machines and this was often influenced by occasional connectivity issues with the trial machines or the inability to get one's preferred machine in the early stages of the trial (before the technology was extended across the venue). These observations are important because there are likely to be ongoing debate about the need to provide solutions for casual players who might not want to undertake a registration process to undertake cashless gaming. What this trial shows is that the availability of a legacy system is likely to lead to people switching between the systems and using both.

8.21.3 Consumer value of the trial technology

Trial participants generally reported that the new technology offered a convenient way to gamble and that it would help them to monitor their expenditure. However, it was also clear that curiosity about new technology developments and the opportunity to obtain a Wests voucher were also motivations for trial participants for more than half of the participants.

8.21.4 Usability

One of the important findings was that the majority of participants had a positive experience with the technology. Only a minority reported that it was difficult to use and the majority either found it easy to use or neither easy nor difficult. If any single feature of the trial could be singled out as being less satisfactory, it was how long it took to get registered. This was reported by 18% of users which represents only a small minority of the total 77 respondents who would have reached this stage, but who did not all necessarily go on to be active users. On the whole, it did not appear that users had many difficulties making transfers between wallets. The only issue that sometimes arise was establishing a reliable Bluetooth connection between the App and the gaming machine: 12 of the 42 active users of connect-and-play or 12 out of the 77 total post-trial respondents mentioned this as an issue. This problem appeared to be the one that was most difficult to resolve in that those who reported having experienced problems that were not reliably revolved were more likely to report this connection issue. Apart from this problem, the technology generally appeared to operate as planned.

8.21.5 Impacts on behaviour

Another important consideration in this trial was whether people believed that gambling on a cashless system made had any impact on their behaviour. As noted earlier in Chapter 2, research proposes two competing views about cashless gaming. One hypothesis is that distancing people from the tangible reality of physical money might encourage greater gambling and increase the risk of harm. The other is that this technology makes people's decisions over expenditure more transparent and makes it easier to control and monitor their expenditure. The dominant finding across multiple questions is that it appears unlikely that this type of cashless gaming system is likely to contribute to increase expenditure or greater gambling harm. Most respondents indicated that it made little difference as compared with the legacy system (which, as noted above, is already partly cashless). If anything, there was a trend towards cashless gaming increasing people's enjoyment of gambling; making it easier to control and monitor expenditure; manage their money; and, avoid the temptation to start another session (e.g., no loose coins to play out). There was also little evidence that cashless gaming appeared to increase the amount of time or money spent on a given day.

8.21.6 Responsible/ Safer gambling

Although the trial was principally focused on the usability of the technology, its potential impact on behaviour and value of the RG tools and features, it was also possible to gain some insights into responsible gambling features. Unfortunately, relatively little can be inferred from the use of most of the features because these were so seldom used (consistent with other studies of voluntary pre-commitment, Delfabbro & King, 2021). However, the trial was successful in showing that the safe gambling features worked: people were able to set limits; breaches were captured; and people reported being able to make changes in limit settings or whether they accessed player activity statements or self-exclusion.

Respondents generally had positive views about most features of the technology. The holding or quarantine wallet was generally seen as useful for reducing problem gambling, even though many regarded it as inconvenient. Similar views were expressed

about the beacon system that restricted people's ability to transfer money into their gaming wallet on the gaming floor. This was seen as inconvenient, but potentially beneficial to reduce problem gambling. Indeed, two thirds believed that having this separation or some sort of delay between the transfer of money and gambling to be a useful harm reduction measure. Overall, most saw limit setting, player activity statements and self-exclusion as important measures, even though these were rarely used by the participants themselves (the well-documented 'third person' effect) described in Chapter 2. When asked what future features might be beneficial to encourage safer gambling, there was some support for features that informed players about their expenditure in sessions; which allowed them to track losses; or, those which set limits on deposits into wallets.

8.22 Limitations

It is important to acknowledge several limitations in the data obtained. First, the observations are based on a selected and not random sample of people who agreed to take part in the trial. It is unclear, therefore, how well these findings would generalize to all patrons, and especially those who may not be so technologically confident. Participants in this respondent group were, for example, generally younger than the general population of Wests New Lambton patrons, so the results may not have been as favourable if a broader range of patrons had participated in the trial. Second, these findings are based on self-report and are potentially subject to socially desirable responding, selective recall or errors. A third issue was that people were able to gamble with a mixture of the new and old technology, so that findings related more to the people's perceptions of particular elements of the trialled system rather than a pure test of only the new technology. For example, a trial user may have used the gaming wallet to connect to machines to play, but not always used the venue wallet first to do so. Despite this, it was still possible to gain insights into each element of the new PRIME App cashless gaming solution. Finally, it needs to be noted that this post-test sample involved only those who had registered for the technology. Some people may not have persisted with the registration for the trial if they encountered challenges in the initial onboarding processes. For this reason, it is likely that dissatisfaction rates with the initial registration process may be slightly higher, as indicated in the pre-trial survey chapter which provides details on the reasons for non-participation in the trial.

8.23 Conclusion

Overall, the post-trial shows that the technology generally worked as intended, notwithstanding some patrons sometimes experiencing slower registration processes or issues with the Bluetooth interface with gaming machines. On the whole, there was little evidence that this cashless gaming is likely to cause increases in harmful gambling; in fact, there was a trend towards it offering players a greater sense of control. Most players supported the majority of safer gambling measures, although, consistent with other voluntary trials, usage of any opt-in features was very low.

Chapter 9: Senior Industry Perspectives

9.1 Overview

This chapter summarizes the views of senior industry respondents, including the management of the trial site venue as well as the technology provider (Aristocrat). The principal issues covered in these interviews related to: (a) the facilitators and barriers to the adoption of the trial technology; (b) views on the functionality and usability of the technology; (c) insights gained from the trial operation and management; (d) the benefits of cashless gaming to patrons and the industry; and: (e) suggestions for the future design of cashless gaming and similar trials.

9.2 Wests' management

9.2.1 Barriers to uptake

According to Wests management, the principal barrier to uptake if patrons showed interest was the complexity of the sign-up and onboarding process. To take part, one had to be a Wests member; download the app; provide informed consent for the research survey component; provide 100 points ID for the venue wallet; and, then have to learn about the different aspects of the functionality. This included the names of the different wallets, how they worked and how to navigate through the App. Even when one removed the research component that was only instigated for the trial, the process was still a complex one that could take over 45 minutes. All of this created hurdles for participation and required staff to be physically present to provide one-to-one support to patrons.

The technology itself was also not straightforward as compared with the existing ticket-in-ticket out (TITO) cashless gaming system. As was pointed out:

> "I think that was very difficult. The explanation that you've got a venue wallet a quarantine wallet and also a gaming wallet where I transfer my money to where it lives. it wasn't it wasn't simple."

> "I think some of the reasons why patrons didn't you know take up the technology is because it probably wasn't quite as simple or as easy as the current technology.
> You know the current technology put you put your $20 note in and it prints you out a ticket. It's pretty simple to understand …."

It was argued that the onboarding process needed to be much more seamless. It should not require so many steps to sign on and the technology itself was considered quite complex because of the different wallet names. For cashless gaming to work, it needed to be more 'tap-and-go' and not require too much reading to understand how the technology worked. It would have to be suitable to meet the needs of casual players who would have visited the venue for enjoyment rather than having to deal with a complex process.

> "So and it took a bit even for our staff to quite you know to understand and I think whatever this cashless solution ends up looking like it has to be simple that your everyday person that that comes in you know for a meal, they can jump on it and use it. You know it's almost as seamless as tap and go. It's something that we've accepted it in society and we use regularly. It doesn't need an explanation book to use it."

A second significant barrier was the age demographics of the patrons. Many patrons were people in their 60s and 70s who were already comfortable with existing methods of gambling (e.g., using physical cash or TITO). These patrons did not always own smartphones or want to transition to another method of gambling. A third issue was concerns about privacy; this was not only in relation to awareness of the breaches which had occurred with Medibank and Optus, but also the significance of providing a tangible banking record of gambling transactions and how that might affect credit scores.

9.2.2 General operation of the technology

A positive feature of the trial was that, despite its complexity, the technology worked very well once it was in operation. The experience was compared favourable with other technological roll-outs which had been affected by many more 'teething problems' and this

seemed to reflect the preparedness and experience of both the venue and the technology provider.

> "We didn't to be honest I was really surprised we didn't have any glitches or you know customers I guess querying where their money went or which when we've done it in the past with card play we've had, we've had a bit of education around that machines and because this is very similar. I think the guys that were on it were already had that bit of education behind them and understood it."

The venue reported little negative feedback about the ongoing operation of the system and described it as 'seamless' once one had progressed past the initial challenges associated with getting people registered. The only technical issue that came to the attention of the venue was the operation of alerts for breaches and this took some weeks to sort out. The system would send information from the breach log to a paging company which would then, in turn, be sent through to Wests through OASIS software to trigger a staff intervention. Staff had to go into the system to know that a breach had occurred, but any break in the chain of transmission of information meant that a breach would not be noticed and no action would be taken. This problem was reportedly resolved during the trial.

> "we did have a couple of hiccups and it wasn't a customer or staff picking, it was more integrating our paging with the technology because it was all new that when someone breached their limit sending a notification and then having to go back to the Oasis system and find it. Aristocrat had to send some sort of alert through their system and then the paging company had to pick that alert up and then send it through a pager. And so once they got that resolved, that was right that that was fine."

9.2.3 Behavioural impacts

Wests reported no indication that the trial technology led to any meaningful change in player behaviour in terms of how much time or money was being spent. Revenue essentially remained unchanged for the principal machines that were involved in the trial. This may have also been because the level of usage of the new technology was quite low.

> "From a revenue point of view, we saw no difference. We put the technology in there, the area didn't suddenly increase and it suddenly didn't decrease, but again, not a high percentage of our membership database using it."

9.2.4 Impacts on venue staff

The general view of Wests management was that the trial required a lot of set-up work and that recruitment of patrons was the principal challenge for the venue. Specialist trial ambassadors had to be employed and these staff members had to acquire a lot of new information: how the technology worked; the operation of the trial; and, what action to take if certain situations arise.

> "there was a lot for the staff to get their head around because not only do they have to understand all this stuff that we just talked about with the customer, they then also need to understand the background and what happens when this, you know, this happens. How do I fix it or what does it mean and where does their money go and how do I?"

The ambassadors had to engage with patrons face-to-face often for an extended period and answer questions about the wallets, how they worked, about the responsible gambling features. The training from Aristocrat was considered to be good, but the volume of information in the initial sign-up phase was considered to be quite high and there were challenges in making sure that staff rostered at different times or days all had the same information.

At the same time, it was pointed out this burden declined once the patrons had been recruited into the trial and that many of the tasks which were being performed by the staff were similar to what they were already doing, e.g., observing patrons for signs of problem gambling, dealing with queries about machines and other general interactions with patrons.

9.2.5 Views about the future of cashless gaming

Wests management was very much in support of the concept of cashless gaming and believed that it was inevitable because of how technology is being used by younger generations.

> "the next generation of people that are fully digitized and doing everything digital on their phones. They have their digital license, they have, you know, their debit cards all linked to their phone. It's pretty seamless."

However, the full transition to cashless gaming in the short-term seemed unrealistic because of the significant challenges it would impose on older patrons and the fact that any new technology requires a gradual transition period. Concerns were also expressed about the impact of any new system on casual gambling, particularly if the process for using cashless gaming was more complex than for existing systems.

> "And again, if the solution isn't as simple as something along the lines of tap and go, you know that discretionary spend which makes up a huge chunk of our revenue would disappear overnight because it's just too hard."

There was also discussion about the potential for some patrons to migrate to online gambling where there would not necessarily be the same level of personal contact with staff trained to provide safer gambling interventions.

9.2.6 Views about the future design of trials

The venue management believed that the trial revealed a lot of redundancy in that people had to go through extensive ID / KYC checks and other data collection processes that could have been partially completed at another time. It was point out, for example, that Wests was introducing a new system for collecting data for its new digital club cards and that this could potentially capture some of the information that had to be collected as part of the trial registration. It was possible to envision a future when clubs might collect more

information from patrons as part of other membership processes which could then remove the need to duplicate this information if cashless gaming systems or trials had to be undertaken.

9.2.7 Data concentration and breaches

Wests management also pointed out that cashless systems will lead to the concentration of personal data about individual as well as their expenditure and this raises issues about privacy and security. Although it might be beneficial for some hospitality groups in that it might encourage loyalty (people may stick to the venues with which they hold wallets holding spending money), it also provides a potential target for hackers. The breach that occurred during the course of the trial did not involve any loss of funds or compromise personal data, but it further highlighted the security concerns raised by the venue as well as patrons who did, and did not, take part in the trial. The data breach highlighted the need for serious consideration of cyber security in future trials of similar technology.

9.2.8 Responsible gambling features

Wests management generally saw the value of the responsible gambling features that were available in the PRIME App. Features such as being able to set limits on time or money, self-exclusion or for the venue to be able to gain insights into how long people have been on certain machines (a potential capacity) were seen as potential ways to reduce gambling-related harm.

> “I certainly think the features that were used or yeah, because I think obviously spend limiting spend and time, I think being able to set those to limits is a good thing and giving them those options because yeah, I think that'll certainly help.”

> “So I do think that using this technology in a way to notify venue staff that for instance, someone's been sitting on the same machine for over 3 hours, you know if they can, if we can use this technology to notify us, that's not a bad thing either because then we can go over and have a conversation.”

However, such features were considered to be principally of value to people with gambling problems rather than recreational gamblers who, it was argued, probably would not be receptive to these features or be included to use them.

> "I don't need to set a limit or I don't feel like I need to set a limit because it's a recreational activity and I don't feel like I have a problem because I've done that for so long that it's just part of my everyday life…Now, if I was a problem gambler, I certainly think having those tools to empower the customer is a good thing."

The value of the new technology for self-exclusion was seen as particularly useful because people may often be reluctant to reveal their problems to other people or often need to make decisions when they are primed to take action. If people go home, then the resolution to take action may be lost.

> "the other part of it was the self exclusion, right. I do really like that piece because I guess the current process is if you want to self exclude and you ring up and say [name], I want to self exclude…once you leave the club and you're in your home environment, you might sit and reflect differently. So giving them the tools to, I guess, initiate that process is a good thing."

The final point raised about responsible gambling was that any technology-based system would still always need to be supported by a human element. For example, having limits and alerts would really only be of value if it led to some interaction with trained staff to offer support or advice.

9.3 Insights from Aristocrat (the principal technology provider)

An interview was conducted with a senior member of the Aristocrat team to provide insights into their views on how the technology had performed, the future of cashless gaming and insights gains about the conduct of the trial.

9.3.1 Barriers to use

As the principal technology providers, Aristocrat were able to provide many first-hand observations about the implementation of the technology at the venue. It was immediately evident that the process for registering people into the trial was a lot more complex (or "clunky") than had been anticipated. Not only did people have to download the App, but they had to create an App-based bank account and also have 100 points of ID on hand. Completing all of these processes took time and also created several fail-points: some people would not have their phones available or did not even own phones; many did not have 100 points of ID on the day; and, there would need to be a good connection to download the App. This was then combined with the need to consent to the trial itself and complete a survey. As a result, it was concluded that the front-end process "needs to be better than the current solution".

It was also observed the successful uptake of a new technology also requires that people perceive the benefits of doing so, particularly when there are existing ways to gamble. Unless one can show failures in the existing system (e.g., taxi-ranks vs. Uber), it may be hard for people to make the transition.

> "going in and engaging a player to do something that they did yesterday this way and asking them to do it this way, that's incredibly hard and so but if it's better to use than anything we've done previously people will just adopt it like you don't. I can't remember when I used to, when I learned to use Uber. But I know that I adopted it because it's better than standing at the taxi rank."

Another way one can gain insights into the usability or efficiency of digital technology is to examine how many "clicks" are taken to achieve a certain objective. In this case, Aristocrat found that the set up of the new technology was more time-consuming than expected. Trying to reduce the number of steps or "clicks" was seen as an important part of the refinement of the technology: to reduce the "friction" and "choke" points that the trial identified.

> "You know that when you do anything digital people you can count the clicks, you can count the number of fields like you can count. I could, I could tell you how many clicks. I can't tell you off the top of here, but I know that there how many clicks went into filling out the survey that a player had to fill out before beforehand, I could tell you how many clicks went into having to download and register for the mobile app. It's a lot of clicks."

Aristocrat also acknowledged that the implementation required a lot of interactions with the venue and that onboarding patrons was heavily influenced by the support provided by venue staff. The staff at the venue appeared to have been very supportive and worked hard during the trial period, but it would have almost inevitably been the case that some staff members would have been more knowledgeable than others and that the player experience would have potentially differed because of this variability.

Finally, like Wests, Aristocrat believes that concerns about privacy and security arising from the Medicare and Optus hacks were probably inimical to recruitment for the trial. The hack of the Banktech technology near the end of the trial period, on the other hand, was felt unlikely to have had much impact on the trial itself. The event had also led to a number of useful investigations which should lead to improvements and greater security in this technology across NSW.

9.3.2 Future design considerations

The trial showed that cashless technology needs to be designed with a strong customer focus, with clear communications and which places an emphasis on ease-of-use. Removing the number of steps and clicks required to register and use the system is clearly a priority. EGM players in the future are likely to be increasingly tech-savvy and less likely to be tolerant of what might be considered time-consuming or "clunky" technology designs. There also has to be a focus on benefits; namely, how the new technology is an improvement on the previous one. At present, the solution that was trialled in Newcastle appears to work well once players are signed up and using the wallets, but there is clearly room for improvement at the front-end of the implementation and design.

9.3.4 Cashless gaming: benefits and responsible gambling

Aristocrat believes very strongly that cashless gaming is a considerable opportunity for the industry to evolve and is in keeping with the technological shift towards greater player autonomy and having one-to-one relationships with their personal devices. It was observed that people seemed to enjoy the experience of being able to play using their phones once they were set up. Being able to move from machine to machine also seemed much easier. Moreover, in additional to these consumer and commercial advantages, cashless gaming was also seen to have the potential to enhance player safety by making protective measures more private and accessible to players. This includes features such as "the prime messaging, the ability to set limits", but also self-exclusion.

> "And I think the pathway to do that is the mobile device because you don't like anywhere where I have to go and queue up at a kiosk or queue up at the cashier or go out and stand at the reception desk in amongst the courtesy bus crowd to be asked to self exclude like people aren't doing that."

One of the things that was a surprising development was that people appeared to readily take advantage of player activity statements through their mobile devices. Previously they would have to have gone to a kiosk or lined up at a reception desk. Enabling people who potentially had concerns about the sustainability of their gambling to access information about their gambling more readily was considered a considerable advantage. It was also believed that safer gambling measures should be refined to have a greater focus on assisting people who might want to put smaller checks in place (e.g., breaks, cooling off periods) rather than hard limits or self-exclusion (a measure which might only be considered once a person has experienced significant harm).

9.3.5 Advice for future trials or onboarding patrons

Aristocrat's observation was that trials could be facilitated by: (a) greater use of technology in recruitment and (b) reducing duplication in data collection. For example, the use of posters was seen as an old-fashioned way of recruitment and could have been complemented by other method such as "activation marketing" (e.g., event promotions where the technology might be co-marketed in communications). As with Wests, it was also felt redundant to have to collect so much identifying KYC information again when this could be more routinely collected as part of digital club memberships.

> "You know maybe we go down that path of everyone that plays becomes a verified player like that can't lead the club that's got 100,000 plus members like Wests to have to get 100,000 plus members to line up a reception and fill out you know all these forms."

9.4 Discussion

The views of Wests senior management and Aristocrat are generally very similar. The observations suggest that the trial succeeded in its purpose under the Regulatory Sandbox in that it examined whether it was likely whether the new technology had the potential to exacerbate gambling harm and deliver functionality that enabled cashless gaming and potential features that might mitigate gambling harm. The strengths of the technology is that the system appears to work well once it is operational and appears to offer a satisfactory player experience. However, there are clearly challenges associated with the number of steps (or clicks) required to set the App up and for players to be registered. This observation clearly suggests the need for improvements in the efficiency of the front-end design of the PRIME system and also innovations in venue data-management that might help to reduce duplication in ID/ KYC processes. Having to use a type of App based bank account (the venue wallet) rather than a simple debit card-based system used in other gambling contexts (e.g., sports-betting) appeared to be one element that added to the complexity of the registration process.

Both respondents believed that cashless gaming is likely to play a very important role in the industry in the future and has the potential to enhance the quality of safer gambling

measures. Cashless gaming offers more personalized and private access to features and information (e.g., player activity statements) and could be tailored to offer a suite of refined measures that could benefit gamblers at different points on the risk spectrum. However, the implementation of cashless gaming may need to be staged to take account of the fact that a lot of older patrons in venues may not easily make the transition to App-based gambling, e.g., if they do not own smart phones or are conformable with modern digital technologies. For this technology to be adopted, it will have to be shown to have benefits, confer advantages not conferred by legacy systems, and be easy to use, particularly for casual gamblers.

Chapter 10: Conclusions

10.1 Overview

As outlined in Chapter 1, the trial was informed by the principles of the Regulatory Sandbox which were further articulated into 'industry sustainability considerations' and "player considerations" by the technology provider in the design of the trial technology. In essence, the technology had to be examined in several areas: (a) what impact did it have on customer behavior and their ability to manage and control expenditure; (b) player experience with the technology which included issues of harm reduction and usability; (c) the ability to deliver on functionality that could reduce gambling harm and provide consumer protection (or meet broader legal and regulatory objectives. It was also anticipated that the trial evaluation could highlight areas of technological improvement; offer guidance into the conduct of trials; and, provide insights into strategies for the future implementation of cashless gaming technology in venues.

10.2 Impact on customer behaviour

Insights into this area was gained from the post-trial survey, qualitative interviews with patrons, objective data monitoring of player behaviour and venue observations (including assessment of revenue changes). Post-trial interviews with Wests customers indicated that the new technology had minimal impact on player behaviour. The most common response was that there was little impact how much time or money being spent, or how fast people gambled. However, analysis of other response categories showed that the percentage of people who reported reducing the amount spent on gambling per day was generally higher than the percentage reporting increases. This was also borne out by the qualitative interviews with customers and the incidental observations of venue staff. The venue management also reported no evidence of any revenue changes on the trial machines compared with before the trial. Importantly, the analysis of objective data showed that the expenditure rate per hour did not appear to differ between use of the old card-based technology and the new mobile gambling method.

In general, people tended to revert to the old legacy system quite often so that the level of use of the new mobile connect-and-play method of gambling was considerably

lower than for the existing physical card-tracked cash and ticket-based gambling. This was observed strongly in the objective data analysis and also reported by respondents in the post-trial survey. The majority reported combining the new technology alongside the existing system; they moved between trial and non-trial machines and also reported gambling at other venues. These observations have several important implications for future trials and venue operations. It appears that people are reluctant to relinquish the gambling methods to which they are accustomed; have their favourite machines in venues; often move between machines and also between venues. Thus, attempts to compare any new EGM technology in the future will need to take a whole-of-venue approach (e.g., have changes on all machines) and may experience difficulties in trying to control other EGM activity outside of any trial venue.

There was some evidence from patron surveys as well as qualitative interviews that using a cashless gaming method made it easier for people to keep track of their expenditure. One reason for this that the gambling process was more cognitively engaging. People had to take actions to transfer money between wallets and to the machines and each time they moved machines. Another reason was that the remaining gaming wallet balance would also be more transparent each time the person started gambling or moved between machines. These findings do not confirm the hypotheses proposed in previous self-report research about the potential risks of cashless gaming (e.g., 2CV, 2021). In this previous work, people were asked if cashless gaming might increase gambling risk across several areas (e.g., potential for harm or ability to set limits), but such work was largely hypothetical and did not consider people's actual experience with cashless gaming. As mentioned in Chapter 2, one also has to consider the potential for this technology to enable greater transparency of expenditure through the use of wallet transfers and player activity statements.

10.3 Impact on player experiences

Those who used the technology generally reported positive experiences. Once it was operational, it was found to be easy-to-use and convenient and enabled people to move smoothly between machines, start and end sessions, and also avoid the cost of ATM fees. People also liked the idea of being able to access the responsible gambling features in

private. However, there were two aspects of the technology which were reported as problematic by some customers. The lesser of these problems was to do with getting a reliable Bluetooth connection with the EGM. Sometimes there were connectivity problems with machines (i.e., PRIME locator/ Connect-and-Play) did not always work when players wanted and this was a problem which may have re-occurred occasionally throughout the trial. There was no evidence that this was a common problem or one that affected the majority of patrons, but it is clearly an issue that would need to be monitored in any future deployment of this technology.

However, by far the biggest challenge (reported by customers, venue staff and management and acknowledged by the technology provider) was the slow registration process. Some people found the initial process of having to download the App, provide KYC information, and learn how to use the system to be time-consuming. Even with venue staff support, this reportedly could take a lot of time (45 minutes to 1 hour) in cases where the person had difficulties establishing a reliable Internet connection. This was a concern for customers and for the venue who argued that this length of time was not commensurate with the needs for customers who usually come to the venue to relax and enjoy themselves. It also raised questions about the viability of the technology for casual players who might not be regular customers and who would prefer a faster “tap-and-play” style of gambling without the need for a complex registration process. Both the technology provider and Wests management believed that a simpler more “seamless” process was needed at the registration phase and one that required fewer “clicks” or steps.

On the other hand, the design and layout of the App did not appear to be problematic for customers once they had familiarized themselves with it, although there was some confusion around the different types of wallet. Not all people understood the quarantine or holding wallet (even some venue staff) and this was not helped by having dual naming of some wallets and functions (e.g., the gaming / cardPAY wallet, PRIME and venue wallet), PRIME locator/ connect-and-play, so on. In addition, patrons and venue staff had to juggle this terminology alongside other use of the term ‘Wallet’ such the existence of a digital membership card that sat in a person’s phone wallet App. Although this did not appear to be a major issue for patrons (who usually got only one name), it would have made

the task of advising patrons more difficult if training or technical documentation used terms that were not the same as the operational name in the venue.

10.4 Functionality

On the whole the trial showed that the cashless gaming solution was able to deliver on what it had been designed to do. People were able to register for the technology and transfer money backwards and forwards between the wallets (as confirmed by the objective data analysis). People were able to move between machines taking the gaming wallet balance with them. They were able to set and modify limits, access player-activity-statements (PAS). In addition, it was clear that the system enabled breaches to be recorded, although the way in which this information was fed through to the venue required some attention during the trial. Another positive feature was the ability to provide detailed data on gambling activity both using the old and new systems, which can be useful for future discussions around safer gambling initiatives as well as anti-money laundering investigations.

Although just under half of the active participants reported at least one technology glitch during the trial, individual glitches were generally uncommon. Apart from occasional issues with obtaining a Bluetooth connection with machines, there were early trial issues with achieving the right sensitivity of the location beacons on the gaming floor (people occasionally had to leave the venue to make a transfer into wallets) and having a short delay in how long it took for the balance on EGMs to disappear when people walked away from the machine.

10.5 Ability to deliver on responsible gambling (RG) features

The limit setting features were trialled by only a very small number of people in the trial, but these appeared to work. The system data showed evidence that nearly all the limits could be se via the App; that people could modify the setting in situ; set venue notifications; and, trigger breaches. People also appeared to have a positive attitude towards the PAS and saw particular benefits in the ability to be able to engage with RG features privately. A number of activity statements were requested and, in interviews and surveys, customers reported that these were generally useful and clearly set out (although a

few early respondents also believed that these could sometimes cause some distress if large amounts had been spent). The majority of patrons reported being positively disposed towards the RG features, but there was clearly evidence of a 'third party' effect in that the perceived utility did not equate to greater self-use. In other words, these would be features which were useful for 'other people'. Most customers indicated that they already had their own personal budgets and so having a more formal limit setting system was not something they needed to consider. Venue respondents generally concurred with these views and argued that the features were probably of greater value to higher value/ risk customers or people with gambling problems. The idea that these might be used for prevention did not emerge strongly in the evaluation.

Other RG features that were considered in the trial included the holding or quarantine wallet which was generally well-received by most respondents (although some still liked the idea of receiving their larger winnings immediately). There was also general support for the locational beacon that prevented venue wallet to gaming wallet funds transfers on the gaming floor. Some respondents believed that this was inconvenient, but also generally saw the logic of it. They were also amenable to other RG features being added to the App, including ones that provided real-time tracking data on their expenditure towards a limit or how much they had spent during sessions.

10.6 Implementation issues/ Barriers

In addition to the specific trial technology-specific barriers (the complex registration process), the trial gained insights into several issues that were not anticipated at the onset of the trial. The first of these was venue connectivity. Although gaming venues will have Internet connectivity, they are not necessarily specifically designed (e.g., like a university) to guarantee good wifi / Internet connectivity across the venue. This means that any App based system that requires a download will face challenges if the venue is not fully configured to have connectivity. In the trial, people had to find the right spot in the venue to download the App and often had to make several attempts. Second, many older patrons do not have mobile/cell-phones, so the use of an App is not viable for them. Third, not all phones are necessarily up-to-date and may sometimes (due to provider or tower issues) not be able provide a connection when it is needed. Fourth, phones need to be charged and

having to maintain connectivity and utilize locational tracking utilizes battery power and this leads to the potential danger of the phone App not being available after a certain period of time. The need for USB charging of phones both in the gaming area, on machines, or across the venue in general may need to be considered (although the need to have to leave the gaming floor to recharge a phone might also be a way to create breaks). A fifth issue was the location for the sign-up process. If this requires staff support then there needs to be a quiet area where this process can be undertaken. Dedicated staff would need to be available to assist with this process and at the time when people need this assistance (the trial "ambassador" system at Wests appeared to work quite well). In addition, as the venue staff noted, it is important for technical support to be available in a timely way if any problems arise with the technology which they cannot resolve on the spot.

The trial also supported the importance of staff training and knowledge as key drivers to the potential uptake of new technology. Wests staff were generally happy with the amount of support provided by Aristocrat during the trial, but suggested that having clearer documentation and perhaps more opportunity for "demo modes", top-up and scenario-based training would help in future deployments. The importance of Wests staff was particularly emphasized in the earlier uptake phases of the trial and suggest that any venue attempting to run a trial or implement new technology would need to plan for this additional workload. Once the technology was up and running, this would probably (as this trial indicates) become less of a concern. However, the observations from this trial indicate the need for staff to have the skills, knowledge and support to provide effective face-to-face engagement with patrons. Wests New Lambton appeared to have the ability to do this well, but it is a large venue which is well-resourced, so that more careful considerations may need to be given for any future deployment cashless gaming in smaller venues with lower staff numbers. These findings generally support previous research in NSW on cashless gaming by Nisbet (2005).

Another important implementation issue that needs to be considered is the venue's demographics. Not all people are comfortable with using modern digital technology. Younger people are generally more likely to utilize digital technology for everyday financial transactions and so it will be harder to shift to cashless gaming in venues such as Wests New Lambton than some other areas due to the demographic profile of the patrons. The majority

of the regular patrons are aged over 60 years of age and many do not own phones (as noted earlier). For this reason, the venue believed that a rapid transition to cashless gaming may be very difficult and would need to be staged over time. Implementation would be much easier at venues that attract a higher proportion of younger "tech-savvy" people. However, there was general agreement that a transition to cashless gaming was desirable and likely to be inevitable given the broader trends in the industry and the broader society.

10.7 Insights into trial operation

The project also provided important insights into the operation of trials and these are consistent with what is known from other trials (Delfabbro & King, 2021), particularly in relation to previous attempt to deploy pre-commitment technology. First, it showed that recruitment into these trials is difficult. Many people are suspicious of the technology and do not like the government tracking their expenditure. They also have concerns about privacy and security after the well-publicised Optus and Medicare hacks (which were further fuelled by the fact that the Banktech technology experienced a cyber incident) during the trial itself). A particular concern amongst patrons was whether their bank would know that they were spending money on gambling and if this would affect their credit rating. Second, people tend to have low levels of engagement with new technology. As noted in Chapter 2, Rogers, 2003; Venkatesh et al., 2003), whether people move to a new technology will be strongly influenced by whether they perceive an advantage over existing solutions. At present, people can already load up a ticket and transfer value to an EGM in NSW, so that the incremental advantage of any digital cashless solution may be diminished. Third, the trial shows that there will be a selection bias in who takes part in trials. Here, the trial had an over-representation of younger males and under-representation of older women. Those who did take part may also have been more confident than other patrons in using new technology. They took part because they were curious and were also keen on receiving a reward for participation. This means that any future trials that wish to go beyond technology testing (the focus here) and examine naturalistic uptake (i.e., make it available and see how many use it) may face considerable barriers. Even if cashless were made mandatory on machines, a similar directive would probably also have to apply to the RG features in order to examine their impact in any detail.

Finally, the trial showed that some forms of recruitment potentially worked better than others. Email and in-venue approaches appeared more effective than hosting members events because people were concerned about the stigma associated with being seen to sign up for a trial on safer gambling in front of others. However, face-to-face recruitment had its own challenges. Venue staff reported that it was often stressful approaching people because it was not always clear if the person might have been approached already by someone on a different day or shift. Moreover, they found it difficult on occasions to deal with the rejections and negative patron reactions that sometimes occurred when approaches were made. These observations suggested that some considerations for venue staff wellbeing and training in future larger-scale trials. It also suggests the potential need for other marketing methods that went beyond using emails or poster and QR codes, e.g., co-advertising the trial with other broader venue marketing pushes for other activities.

10.8 Improvements

The trial indicates that the main area of attention in any future deployment of the PRIME app technology relates principally to improving the sign-up and registration process. How does one reduce the number of “clicks” or steps involved? The fact that customers had to set up a new App-based wallet rather than use an existing debit-account as might be used in sports-betting accounts might be an ongoing challenge. However, as industry respondents indicated, some redundancy in the KYC process might be achieved in the future by having the same ID used for both cashless gaming and updates or sign-ups to membership at the venue. In other words, both processes could reference the same ID information so as to avoid this having to be done twice. A second area is the careful calibration of the location beacons and checking on Bluetooth connections (possibly with different phones) to check that this rarely arises as an issue for patrons. A third area is to ensure that venues are set up in a way that makes it unlikely that people will experience connectivity issues; there are dedicated wifi areas that are consistently tested and which are suitable for sign-up processes (rather like the side/ consultation rooms or areas commonly used in Australian banks). Other important areas include the refinement of training materials, having clear glossaries of terms (wallet names), easy-to-follow schematic diagrams, and training that enables venue staff to play with the technology themselves in a

demo mode.

10.9 Strengths and limitations

The conclusions in this trial were based on a methodological design that attempted to triangulate information from multiple sources. It combined objective data with qualitative interviews and also quantitative surveys. This proved to be a strength of the trial in that nearly all the major conclusions appear to converge across multiple data sources. For example, the higher level industry views (e.g., on the slow sign-up process) are reflected in the experiences of patrons and venue staff. The mixed use of the technology is reflected in both the post-trial survey and objective data. However, several important challenges confronted the data collection, of which are common to previous trials in this area. First, it was difficult to recruit people into the trial, so there is a selection bias in the responses which may lead to an over-estimation of the usability of the technology. The results may be less positive if less technology confident people had participated. Second, the trial was not, due to low usage, able to provide any insights into whether RG features change people's behaviour. Much of the activity appears to be out of curiosity based on the limits set (e.g., $2 or $1m). Third, a short-term trial does not provide insights into the long-term impact of the technology. A fourth issue is that there was a lot of overlap between old and new technology use so it is not possible to determine how the new system affected people's behaviour in isolation. Finally, some methodological techniques used self-report which can sometimes lead to socially desirable responding or responses based on what seems reasonable rather than what people actually experienced themselves.

In conclusion, however, the trial generated a lot of information relating to the operation of the technology, issues in trial implementation, and this is likely to have value for future technology deployments in NSW as well as the future design of larger trials.

10.10 Final take-home messages

- The PRIME technology implemented by Aristocrat generally worked well after some initial re-calibration.
- The principal technological improvement required is a faster onboarding and registration process.
- Having to set up a venue wallet or digital bank account makes this technology solution initially complex for some people.
- The quality of the Internet infrastructure and level of staff resources at venues is crucial for the success of cashless gaming trials.
- Patron recruitment is difficult and tends to favour younger and more technologically confident people.
- Usage of responsible gambling features is very low, but this functionality works and usage can be reliably monitored.
- People will be reluctant to shift from existing gambling technologies if these are already working quite well.

References

2CV (2021). *Gambling and Finance: Exploring cashless and other payment methods*. London: 2CV.

Auer, M., Hopfgartner, N., & Griffiths, M.D. (2018). The effect of loss-limit reminders on gambling behaviour: A real-world study of Norwegian gamblers. *Journal of Behavioral Addictions, 7(4),* 1056-1067. https://doi.org/10.1556/2006.7.2018.106

Auer, M., Hopfgartner, N., & Griffiths, M. D. (2019). An Empirical Study of the Effect of Voluntary Limit-Setting on Gamblers' Loyalty Using Behavioural Tracking Data. *International Journal of Mental Health and Addiction*, *17*, 1-12. https://doi.org/10.1089/cyber.2019.0202

Auer, M., Reiestad, S.H., & Griffiths, M.D. (2020). Global limit setting as a responsible gambling tool: What do players think? *International Journal of Mental Health and Addiction, 18(1)*, 14-26. https://doi.org/10.1007/s11469-018-9892-x

Auer, M., Hopfgartner, N., & Griffiths, M. D. (2020). The Effects of Voluntary Deposit Limit-Setting on Long-Term Online Gambling Expenditure. *Cyberpsychology, Behavior, and Social Networking, 23(2)*, 113-118. https://doi.org/10.1089/cyber.2019.0202

Australian Treasury (2019). *Currency (Restrictions on the Use of Cash) Bill 2019*. Available at: https://treasury.gov.au/consultation/c2019-t395788

Braun, V., & Clarke, V (2006). *Qualitative research in psychology.* London: Taylor & Francis.

Caddy J., Delaney, L., & Fisher, C. (2020). *Consumer Payment Behaviour in Australia: Evidence from the 2019 Consumer Payments Survey*. RBA Research Discussion Paper No 2020-06.

Capgemini. (2019). "*World payments report 2019"*. Retrieved from https://worldpayment sreport.com/.

Churchill, G.A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research, 19,* 491-504

Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly,* 13, 319 – 39.

Delaney et al. (2019). Consumer Payments Survey. *Cash Use in Australia: Results from the 2019 Consumer Payments Survey*. Authors. Canberra: RBA. https://www.rba.gov.au/publications/bulletin/2020/jun/cash-use-in-australia-results-from-the-2019-consumer-payments-survey.html

Delfabbro, P.H., Osborn, A., McMillen, J., & Nevile, M. & Skelt, L. (2007). *The identification of problem gamblers within the gambling venue*. Report prepared for Gambling Research Australia. Melbourne, Victorian Department of Justice.

Delfabbro, P.H. (2011). *An evaluation of the Maxetag budget-setting feature. Final report.* Adelaide: Department for Treasury and Finance.

Delfabbro, P.H., & Stevenson, J. (2013). *Ongoing evaluation of the Playsmart voluntary pre-commitment system.* Adelaide: Department of Treasury and Finance.

Delfabbro, P.H., & King, D. (2021). The value of voluntary vs. mandatory responsible gambling limit-setting systems: A review of the evidence. *International Gambling Studies, 21,* 255-271.

Focal Research. (2010). *Evaluating the impact of the "My-Play" system in Nova Scotia: Phase 1. Regular VLT Player Benchmark Survey: Technical report*. Halifax, NS: Nova Scotia Gaming Foundation.

Forsstrom, D., Heser, H., & Carlbring, P. (2016). Usage of a responsible gambling tool: A descriptive analysis and latent class analysis of user behavior. *Journal of Gambling Studies, 32,* 889-904.

Gainsbury, S.G., & Blaszczynski, A. (2020). "Digital gambling payment methods: Harm minimization policy considerations," Gaming Law Review, 24(7), Sep 2020, 466-472. https://www.liebertpub.com/doi/10.1089/glr2.2020.0015

Gambling Commission. (2021). Cashless payment technologies in gambling premises. https://www.gamblingcommission.gov.uk/licensees-and-businesses/guide/cashless-payment-technologies-in-gambling-premises

Gainsbury, S.M., Angus, D.J., Procter, L., & Blaszczynski, A. (2020). Use of Consumer Protection Tools on Internet Gambling Sites: Customer Perceptions, Motivators, and Barriers to Use. *Journal of Gambling Studies, 36(1)*, 259-276. 10.1007/s10899-019-09859-8

Gainsbury, S.M., Jakob, L., & Aro, D. (2018). Understanding end-user perspectives to enhance perceived value uptake of harm-minimization tools: considering gambler's views of a pre-commitment system. *International Gambling Studies, 18(1)*, 22-38 https://doi.org/10.1080/14459795.2017.1370723

Gafeeva, R., Hoelzl, E., & Roschk, H. (2017). *What else can your payment card do? Multifunctionality of payment modes can reduce payment transparency. Marketing Letters, 29, 61-72.*

Griffiths, M., Wood, RTA., & Parke, J. (2009). Social responsibility tools in online gambling: A survey of attitudes and behaviour among Internet gamblers. *Cyberpsychology and Behavior, 12(4)*, 413-421. DOI: 10.1089/cpb.2009.0062

Harrigan, K. A., MacLaren, V. V., & Dixon, M. J. (2010). Effectiveness of a Brief Educational Intervention and ATM-removal in Reducing Erroneous Cognitions and Over-Expenditure

during Slot Machine Play in Problem and Non-Problem Gamblers. *Guelph, ON: Ontario Problem Gambling Research Centre*.

Heath, C., & Soll, J. B. (1996). Mental budgeting and consumer decisions. *Journal of Consumer Research, 23*, 40–52.

Huebner, J., Fleisch, E., & Ilic, A. (2020). Assisting mental accounting using smartphones: Increasing the salience of credit card transactions helps consumer reduce their spending. *Computers in Human Behavior, 113,* art. no. 106504. DOI: 10.1016/j.chb.2020.106504

Humbani, M., & Wiese, M. (2019). An integrated framework for the adoption and continuance intention to use mobile payment apps. International Journal of Bank Marketing, 37, 646-664.

Jackson, A. C., Christensen, D. R., Francis, K. L., & Dowling, N. A. (2016). Consumer Perspectives on Gambling Harm Minimisation Measures in an Australian Jurisdiction. *Journal of Gambling Studies*, *32*(2), 801–822.

Kaye, J., McCuistion, M., Gulotta, R., & Shamma, D. (2014). Money talks: Tracking personal finances. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 521–530).

Kim, C., Mirusmonov, M., & Lee, I. (2010). An empirical examination of factors influencing the intention to use mobile payment. *Computers in Human Behaviour, 26*, 310-322.

Liébana-Cabanillas, F., Ramos de Luna, I., & Montoro-Ríos, F.J. (2015). User behaviour in QR mobile payment system: the QR Payment Acceptance Model. Technology Analysis & Strategic Management, 27, 1031-1049.

Limbrick-Oldfield, E. et al. (2022). Cashless gambling and the pain of paying: effects of monetary format on slot machine gambling. *Addiction Research and Theory, 30*, 220-230.

McMillen, J., Marshall, D., & Murphy, L. (2004). *The Use of ATMs in ACT Gaming Venues: An Empirical Study*. *Update* (Vol. 2). https://doi.org/10.3109/10903127.2014.942478

Nisbet, S. (2005). Responsible gambling features of card-based technologies. *International Journal of Mental Health & Addiction*, *3*, 54–63. Retrieved from http://www.ijma-journal.com/content/abstracts/3/2/00005

Oakes, J., Pols, R., & Lawn, S. (2020). The frantic seeking of credit during poker machine problem gambling: A public health perspective. *International Journal of Environmental Research and Public Health*, *17*(14), 5216. https://doi.org/10.3390/ijerph17145216

Parke, J., & Griffiths, M. (2007). Chapter 9: The Role of Structural Characteristics in Gambling. In G. Smith, D. Hodgins, & R. Williams (Eds.), *Research and Measurement Issues in Gambling Studies* (pp. 211–244). New York, NY.

Parke, J., Rigbye, J., & Parke, A. (2008). *Cashless and Card-Based Technologies in Gambling: A Review of the Literature*. London, England.

Pham, T.T.T., & Ho, J.C. (2015). The effects of product-related, personal-related factors and attractiveness of alternatives on consumer adoption of NFC-based mobile payments. Technology in Society, 43, 159-172.

Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnila, S. (2004). Customer acceptance of online banking: an extension of the technology acceptance model. *Internet Research, 14*, 224-235.

Prelec, D., & Simester, D. (2001). Always leave home without it: A further investigation of the credit-card effect on willingness to pay. *Marketing Letters, 12*, 5–12.

Pymts.com (2022). “China nears fully cashless economy” https://www.pymnts.com/digital-payments/2022/china-nears-fully-cashless-economy/

Productivity Commission (1999). *Australia's gambling industries*. Canberra.

Queensland Government (2007). *Queensland Household gambling survey 2006-07.* Brisbane:

Queensland Government (2009). *Queensland Household gambling survey 2008-09.* Brisbane:

Queensland Government (2012). *Queensland Household gambling survey 2011-12.* Brisbane:

Raghubir, P., & Srivastava, J. (2008). Monopoly money: The effect of payment coupling and form on spending behavior. *Applied Journal of Experimental Psychology, 14*, 213.

Ramya, N., Sivasakthi, D. & Nandhini, M. (2017). Cashless transaction: Modes, advantages and disadvantages. *International Journal of Applied Research, 3,* 122-125

Reserve Bank of Australia (RBA) (2021). *Payment Systems Board Annual Report. Canberra: RBA*. https://www.rba.gov.au/publications/annual-reports/psb/2021/the-evolving-payments-landscape.html

Rintoul, A., Deblaquiere, J., & Thomas, A. (2017). Responsible gambling codes of conduct: lack of harm minimisation intervention in the context of venue self-regulation. *Addiction Research & Theory*, *25*(6), 451-461. https://doi.org/10.1080/16066359.2017.1314465

Rodda, S. N., Bagot, K. L., Manning, V., & Lubman, D. I. (2019). 'Only take the money you want to lose' strategies for sticking to limits in electronic gaming machine venues. International Gambling Studies, 19(3), 489-507. https://doi.org/10.1080/14459795.2019.1617330

Rogers, E. M. (1995). Diffusion of innovations (4th ed.). New York: The Free Press.

Rogers, E.M. (2003). *Diffusion of Innovations*. New York: The Free Press.

Schottler Consulting. (2009a). *Major findings of a trial of a card-based gaming product at the Sandgate RSL: Card-based trial evaluation, March to September 2008*. Brisbane: Schottler Consulting.

Schottler Consulting. (2009b). *Major findings of a trial of a card-based gaming product at the Redcliffe RSL*. Brisbane: Schottler Consulting.

Schottler Consulting (2010). *Major findings and implications: Player tracking and precommitment trial*. Adelaide, S.A. Treasury.

Schottler Consulting. (2017). *Research Into the Separation of ATMs and Gaming Machines in NSW*. Sydney, Australia.

Schottler Consulting (2020). *What is the impact of cashless gaming on gambling behaviour and harm?* Melbourne: Victorian Responsible Gambling Foundation.

Soman, D. (2003). The effect of payment transparency on consumption: Quasi-experiments from the field. *Marketing Letters, 14*, 173–183.

South Australian Centre for Economic Studies (SACES) (2019). *Evaluation of Yourplay: Final report.* Melbourne: Department of Justice and Community Safety.

Susanto, A., Chang, Y., & Ha, Y. (2016). Determinants of continuance intention to use the smartphone banking services: an extension to the expectation-confirmation model. *Industrial Management & Data Systems, 116,* 1-8.

Stevens, M. (2017). *2015 Northern Territory Gambling Prevalence and Wellbeing Survey Report*. Casuarina, Australia.

Tan, M., & Teo, T.S. (2000). Factors influencing the adoption of internet banking. *Journal of the AIS, 1*, 1-40.

Thomas, A., Moore, S., Kyrios, M., Bates, G., Meredyth, D., & Jessop, G. (2010). *Problem Gambling Vulnerability: The Interaction Between Access, Individual Cognitions and Group Beliefs/Preferences*. Melbourne, Australia.

Thomas, A., Pfeifer, J., Moore, S., Meyer, D., Yap, L., & Armstrong, A. (2013). *Evaluation of the Removal of ATMs from Gaming Venues in Victoria, Australia: Final Report*. Melbourne, Australia.

Thorne, H. B., Rockloff, M. J., Langham, E., & Li, E. (2016). Hierarchy of Gambling Choices: A Framework for Examining EGM Gambling Environment Preferences. *Journal of Gambling Studies*, *32*, 1101–1113.

Trust Networks (2021). *Responsible Gaming Features for ATMs and Accessing Money at Gaming Venues: An Impact Evaluation of Suppression Features on Automated Teller Machines (ATMs) in Gaming Venues.* Ontario: The Responsible Gambling Council

Venkatesh, V., Morris, M.G., Davis, G.B., & Davis, F.D. (2003). User acceptance of information technology: toward a unified view. MIS quarterly, 23, 425- 478.

White, V., & Guerreiro, D. (2020). “Why cashless gaming technology will dominate”. Inside Asian Gaming.

Wohl, M., Parish, A., & Kim, A. (2014). Building it better: applying human-computer interaction and persuasive system design principles to a monetary limit tool improves responsible gambling. *Computers in Human Behavior, 37,* 124-132.

Zhang, C. Y., & Sussman, A. B. (2018). Perspectives on mental accounting: An exploration of budgeting and investing. *Financial Planning Review, 1*(1–2), Article e1011.

Zhou, T. (2011). An empirical examination of users' post-adoption behaviour of mobile services. *Behaviour & Information Technology, 30,* 241-250.