COMMERCIAL IN CONFIDENCE



USER NEEDS FOR MONEY MANAGEMENT **AND PAYMENTS** QUALITATIVE RESEARCH REPORT

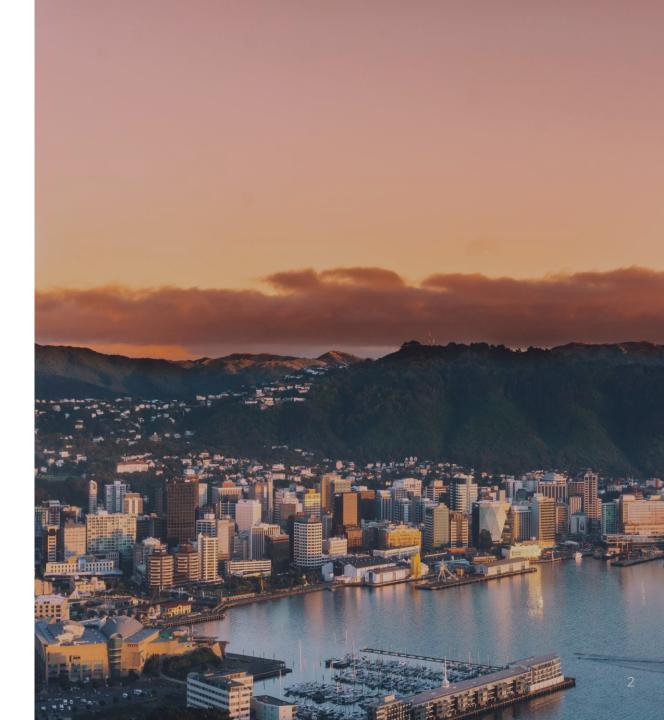
A REPORT BY GRAVITASOPG AND ONE PICTURE **AUGUST 2023**



One Picture. gravitas OPG

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EXECUTIVE SUMMARY

The Reserve Bank of New Zealand - Te Pūtea Matua has the purpose of enabling economic wellbeing and prosperity for all New Zealanders. The Bank commissioned qualitative research to inform understanding of current needs, money and payments attitudes and behaviours, and to develop personas to describe consumer types.

The research was conducted in May and June 2023 with a wide range of consumers, sole-traders and charities, involving 115 participants in total. Data was gathered via 54 in-depth interviews and 3 World Café deliberative workshops.

Money management is a serious task

Money management and payments are serious topics for participants, particularly those with more limited income or under financial pressure. The anxiety around money has increased post the COVID-19 pandemic, as well as under the economic headwinds and uncertainty at the time of the research. Having easy control and clear oversight are important to most participants. The digital environment is a powerful enabler of management but can feel like a risky place to some.

Understanding of the wider macro money system, beyond simple engagement with banks, is quite mixed among participants and this includes awareness and understanding of the Reserve Bank.

Participant's systems deliver transparency and control

Bank apps and websites facilitate participant's money systems, providing structure and offering easy control, good transparency and oversight. This is empowering, stress relieving and underpins people's satisfaction with banks. Functionality in relation to scheduling and paying bills, spending online, transferring and general purchasing is felt to be easy and convenient. Māori participants were drawn to this functionality, noting that some Māori do not have easy access to traditional banking services due to remoteness. Contactless payments support convenience further, though some are put off by fees, or fear of losses.





EXECUTIVE SUMMARY

Simplicity is the watchword

Participants keep their money systems logical and simple - often with one central receiving and distributing bank account, and permutations of secondary destination accounts and automatic settings for various expenses payments and savings.

Generally, people express trust that their banks will protect their money and their interests, but also acknowledge that banks will act firmly in their own commercial interest.

Cash use has declined for many participants

COVID-19 clearly accelerated the switch to reducing cash use in favour of online payments. Whilst nostalgia around cash is expressed, participants often report no longer using cash as a core payment medium and generally anticipate its presence will likely continue to decline.

Some participants retain a reliance on cash with more incidence of continued use of cash in rural and provincial areas, than in the metropolitan cities and among vulnerable consumers. Participants' marginal use of cash tends to be in relation to Koha and community situations such as markets or school fairs, for short term savings, payments to children and in case of emergencies. Some lament the loss of cash as an educational tool for children.

The decline of cash use is often a positive for sole traders and charities interviewed, as digital transfers are less time consuming, require less management and have lower risk of loss or error.

The anonymity of cash appeals to some participants and the grey cash economy is referenced commonly.





EXECUTIVE SUMMARY

Participants are generally happy with system functionality

Discussions revealed only minor frustrations and few unmet needs in people's banking and payment systems. A few minor frictions exist - slowness of payments was most prominent, though that has now been mostly addressed with 7-day processing. International money transfers can be seen as requiring more effort and are more costly than seems necessary to consumer and commercial participants.

Online banking can be a powerful management tool for vulnerable consumers

More vulnerable consumers can find money and money management particularly stressful, often in relation to lack of funds, additional expenses, and the high vigilance and management necessary when budgets are tight. Payment timing can become critical and preoccupying.

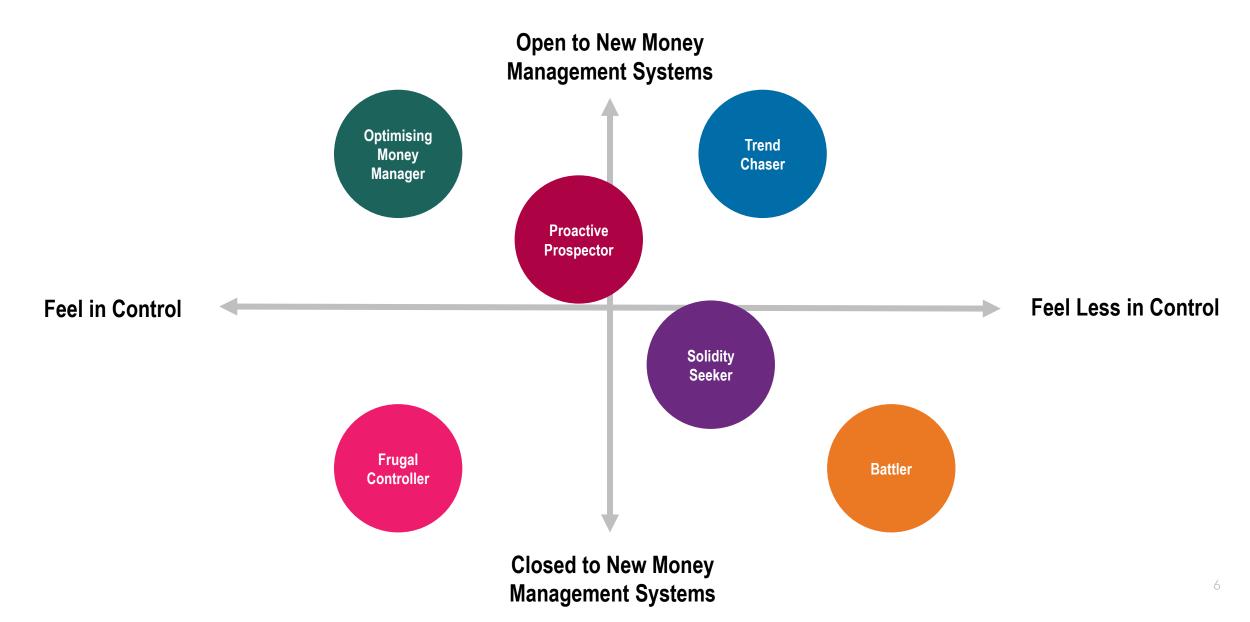
Digital banking can be an invaluable tool for more vulnerable consumers - though delays in payment processing and fund transfers can be very problematic, as can un-expected bank fees. Higher cash use (alongside their digital banking) is evident in order to manage spending and be clear on balances. It is also preferred in situations they operate in (markets, church). These consumers can be more nervous about the perceived risks of changing their system, providers or trying new technology. Frustration at low ability to save was often observed and some vulnerable participants are interested in learning more about how to manage their money.

Consumer personas

Six consumer personas have been developed based on the attitudes and behaviours observed among participants. These are intended to define the range of consumers and to inform decisions around product development, positioning and communication.

The personas are based around the key differentiating attitudinal dimensions pertinent to money and payments innovations identified from discussions: the extent of control consumers feel over their money systems and their openness to new money innovations.

AN OVERVIEW OF THE PERSONAS AND THEIR POSITIONING



OVERARCHING OBJECTIVE

The Reserve Bank sought a detailed understanding of New Zealand consumer needs, attitudes and behaviours in relation to money and payment methods, along with those of sole-traders and charities, to inform the future of money programme

Understand New Zealander's wants and needs in relation to money and payment methods today Explore the underlying attitudes, wants, needs and motivations of New Zealanders surrounding money and payments. Identify and describe any shared tensions and nuance by respective end user groups, including vulnerable consumers who may be financially or digitally disadvantaged. Investigate how users manage and interact with money and payment methods to meet their needs Understand New Zealander's money systems. Establish how user context, needs, enablers and constraints shape the practical approach taken to managing money and payments; including behaviours, payment ecosystem set-up and preferences, and money movements within systems. Identify satisfaction levels with systems and providers, and explore any gaps, or current frictions.

A MIXED-METHOD QUALITATIVE RESEARCH APPROACH WAS USED

1

In-depth Interviews

What: One on one, in-depth interviews and some dyads (with joint decision makers) to delve into financial ecosystems, needs and attitudes that underpin and explore any areas of friction or opportunity.

Why: As money and finances are **personal** topics, to really get the details and specifics it is best to talk to people in a private setting and create an environment and discussion that is tailored to the individual to be **comfortable and safe.** A broad sample allows us to delve into many different people's lives and understand how their systems differ based on their situations and experiences.

2

World Café Workshops

What: A larger workshop setting (total 20 people) with mini groups (4-5 people) within to focus on, evaluate and deliberate on the key aspects influencing attitudes and needs in relation to money and payments management.

Why: The process affords the time for participants to reflect, clarify and discuss, and to hear a range of other people's views and perspectives. This provides additional assessment of attitudes and needs in a social context and also highlights differences, to support persona development.

A DETAILED SAMPLE WAS PURPOSEFULLY RECRUITED TO SPAN A RANGE OF NEW ZEALANDERS

A sample structure was developed to provide a suitable range of participants. All were responsible for their personal banking and payment set-ups. We included people from a mix of geographic locations, including North and South Island, urban and rural and by socio-demographic profile including ethnicity, life stage, gender, household income level and employment status.

We also recruited participants by screening on two key dimensions: complexity of money management and confidence with money and digital technology, to ensure we included a suitable cross-section of people.

A simple sample overview is shown below:

In total the research included 23 Māori participants and 13 Pasifika participants. We also included more recent migrants.

Vulnerable people were carefully recruited by assessing people on a number of criteria: capability, resilience, health and physical factors, access, literacy and income referencing the Financial Conduct Authority and Department of Internal Affairs frameworks as guides.

For a more detailed breakdown of the sample and methodology please refer to Annex A.



54 Overall interviews



30 Consumer



Sole Trader and NFP interviews



Vulnerable consumer interviews



World Café attendees



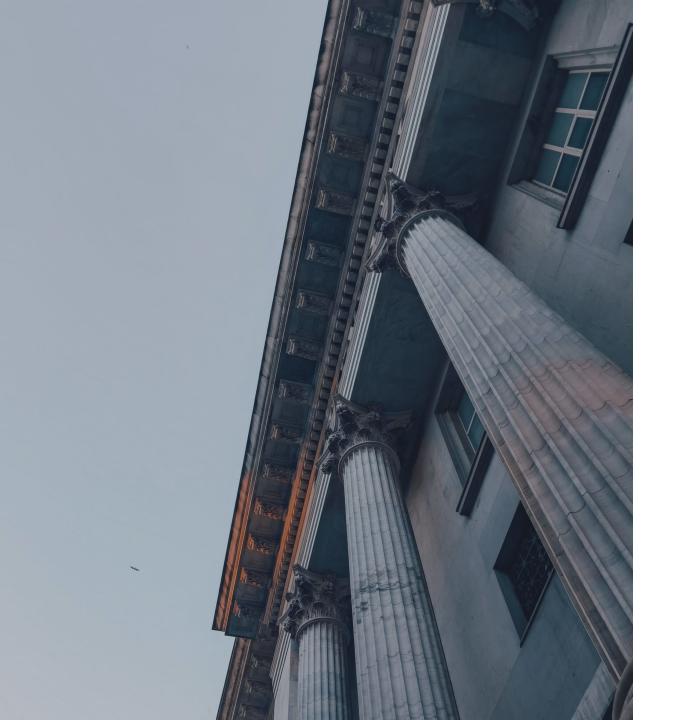
INTRODUCTION: DISCUSSION COVERAGE

Interview participants described their payment and money management systems (graphically and verbally), and we evaluated these together in detail, identifying and exploring any areas of friction or frustration and assessing what needs people's system met and met well. The discussions were focused on payment approaches and the functionality of money flows, rather than saving and investments.

In both the interviews and the World Café sessions we also discussed people's general attitudes and feelings surrounding money and money management, and how these have been influenced, formed and what's most important. Interviews provided the depth of understanding of individual situations and the World Cafés enabled discussion and socialisation of views.

The research process also assessed the range of attitudes and approaches to new innovations and change within the financial and payment system world generally, and in this context, we explored and assessed potential functionalities with consumers, and with sole traders and charities/not for profits.

CONSUMER INSIGHTS



SUMMARY: CONSUMER INSIGHTS

For consumers in this research, money in banks is broadly felt to be safe, though participants are often concerned about security and particularly the risks of online financial scams.

The availability, control, ease of use and efficiency of the online banking and app experience means that banks are enablers of money and payment systems - though most people are aware that banks make high profits and unexpected fees are an issue for some.

Participants demonstrated that simplicity, control and transparency were core objectives for their money systems. Discussions revealed only minor frustrations and few unmet needs. Some new functionalities tested with consumers have appeal, but none considered to be game-changers and more often seen as innovations that are likely to come soon.

Money and payment system innovations do not appear to generally be felt to be slow-moving or lagging in New Zealand. Though some have experienced innovative and handy P2P/P2B payment platforms overseas.

There are a range of attitudes to control of money systems and of levels of openness change. Some consumers are drawn to innovation, greater functionality and new things, others will gravitate towards solid offers that are proven and support their need to manage finances easily, effectively and primarily safely.

CONSUMER ATTITUDES TO MONEY AND PAYMENTS

"[money means?] Being careful, not splashing money around, being very mindful about it - particularly at the present moment when there's talk about a recession - making sure my wife and I and the family don't get overwhelmed with debt and expenses."

MONEY IS A SERIOUS MATTER. CAUTION AND SECURITY CONSIDERATIONS ARE TO THE FORE

People learn values and beliefs for how to approach and manage their money from parents, peer groups, trusted friends, available educational resources and via providers. Attitudes to money are also influenced by culture and religion.

- Money and banking is a serious matter for most participants. Some are carefully managing
 household budgets and looking after the finances of others, as well as their own.
- Collective understanding and accepted wisdom underpin money management approaches

 people tend to do what others are doing, as this is logical and safest. Bank apps and websites
 facilitate money management approaches and provide structure and confidence.
- The COVID-19 pandemic impacted people's sense of security generally, increased
 nervousness and anxiety has also influenced attitudes to government and to paternalism, to
 money and exposure to new technologies. It certainly accelerated participants move away from
 cash use to digital payments.
- **Security and risk are key** considerations. The need for security and control appear to have increased since the pandemic and are now exacerbated by the challenges and uncertainty of the economic environment at the time of the research: the rising cost of living, high interest rates, and asset value declines for some.
- The digital environment is powerful and enabling. However, it is also perceived as a riskier
 and less secure place, with concerns and experience of scams and awareness of fraud quite
 common among participants, as well as concerns about exposing personal data when
 transacting online.



"Our payment system feels like a little hamster in a wheel. Running and running and getting nowhere.

Money comes in and money goes out. It can be stressful especially when the money goes out. I do like more coming in than what's going out but those are choices we make, considered choices, like the travel..."

"People can hack you, plus all your money is on your phone and they just have to take it... seen how people pay with their phone but I don't trust it. Looks too easy."

"At the moment the wage I get isn't too bad. I spend a little bit but the rent here is quite high. I put a little bit into my online saver account when I can. I have a little bit left over fortnight to fortnight. Sometimes I have to wait until the next time I get paid, depending on if there are some unexpected things happening."

- There is a **spectrum of openness to change** and new things but generally, **caution dominated** the discussions in relation to new money products and systems.
- Reflecting this, **some participants had dabbled, or were still invested in cryptocurrencies**, drawn in by the perceived opportunity for gains, the allure of an alternative system in a digital paradigm, or following the lead of others. Others have considered cryptocurrencies but were put off by the complexity and need for thorough research or the risk of loss. Yet others saw them as very risky, or even as an unregulated pyramid scheme.
- Money management is a **dominating concern and ever-present stressor for those struggling** financially, or with uncertain, or fluctuating incomes this can include those on benefits, students and the working poor. Economic headwinds and uncertainty at the time of the research exacerbated this. Generally, many people in New Zealand feel the pressure of making ends meet and there never being quite enough money to relieve worry, especially about unexpected expenses.
- Some participants had taken steps around **budgeting and learning more about money management**, several saw improved access to learning and budgeting tools/functionality as areas that would be beneficial.
- There is **mixed understanding** among participants of the wider money system **beyond** engagement with **banks** and this includes varying levels of awareness and understanding of the Reserve Bank and its role.



APPROACHES TO MONEY MANAGEMENT

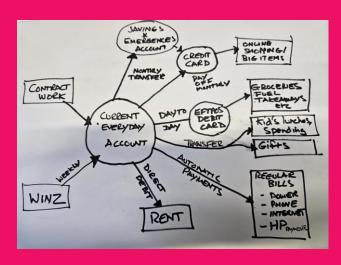


Image is a hybrid mock-up example of participant generated money system diagrams

DIGITAL MONEY MANAGEMENT DELIVERS EASY CONTROL AND TRANSPARENCY

- Online banking and bank apps provide the ability to easily establish, manage and update an
 account and payment system structure and are the core element of participants money systems,
 affording easy control and transparency.
- Participants keep regular tabs on their payments and systems some several times each day, others less often. Vigilance seems related to the level of funds and volume of transactions and the need for more management where day to day balances are tighter.
- **Ease and convenience** are **fundamental** with technology enabling 24/7 access and the ability to "set and forget" taking the worry out of bill payments. Some consumers described using third party apps to further enhance their systems e.g., for budgeting, P2P payments, international transfers and for investments. Workarounds are apparent where functionality was lacking e.g., opening accounts at banks solely for the purpose of making immediate transfers to particular friends and whanau.
- Some use a system of a general spending account that is topped up very regularly, so that spending can be controlled and to reduce exposure to loss, should the account become compromised - exemplifying the focus on managing risk and controlling spending and budgeting.
- **Spending and paying bills online is felt to be easy** with spending online a bit too easy for some participants sometimes enabling impulse purchasing, later regretted. A response to this temptation can be to structure accounts to allocate spending money, or to store some physical cash for a specific purpose.
- Except for those more vulnerable, in terms of digital access and confidence, **participants have generally adopted and found their way around banking apps/platforms fairly easily**, we had only a little feedback on difficulties or deficiencies.



BANKS

"My concern is at least you have that relationship with a bank and they help you with some aspects [compared to pure digital]."

"... that I can say all my cash on hand is no more than \$20 because I think money in the bank, especially big banks like XXX, is quite safe."

"XX bank took 27 minutes today [on hold]..."

"I do trust the banking system almost absolutely."

ONLINE BANKING FUNCTIONALITY UNDERPINS SATISFACTION AND ENJOYMENT OF BANK USE

- Online banking platforms are the backbone of people's payment and transaction systems. Apps and online platforms work well and empower people. They offer easy control of finances, enabling people to be masters of their own money, reducing the risk of missing payments, and though not perfect (because of delays), giving transparency on balance of available funds and of payment and transaction accuracy. Opening savings accounts, moving money around and structuring their own system makes managing money easy and generally satisfying and supports greater engagement with money and finances.
- Banks are noted as sometimes difficult to deal with, particularly where personal interaction is sought for advice, problems or more complex scenarios, but they generally appear to be **trusted** and **supportive** when things go wrong e.g., refund fraudulent transactions.
- A general positivity was expressed towards the personal customer experience when it's
 achieved. Some participants like that there is someone you can speak or meet with if they need
 to and note good service generally but acknowledge it may take some time to achieve contact.
 Some lament the closing of bank branches and the personal touch. Many manage fine just
 online.
- Generally, **people are confident in payments made through banks**, less so with online retailers and via credit cards. Fear of scams seems pervasive, and several participants had been victims, most often of online purchase scams, or incorrect or illegal transactions on credit cards.

"Banks need to be far more accessible to each other in New Zealand. And of course, they make too much money. Their fee structure is ridiculous."

"I'd like to have more trust in my bank."

"Banks make too much profit. I've got a mortgage; it speaks for itself."

"... it seems crook when you've got people out there struggling and the banks are still making this much money."

PARTICIPANTS GENERALLY TRUST BANKS TO KEEP MONEY SAFE BUT ACKNOWLEDGE THEY ACT IN THEIR OWN INTERESTS

- **Banks making high profits** is a commonly held view. Unexpected fees and high interest rates can fuel this further, leaving a sense of price gouging for some. Some are angry about this, others accept that whilst profit levels may need to be regulated it is also reassuring and to be expected that banks are financially strong, with a depth of assets and the acumen to accumulate and manage wealth.
- In this context, **some like the idea of cheaper fees**, but for others this is not a big issue in the context of their income and spending. Those more vulnerable/financially constrained are more drawn towards lowering any costs.
- Most people didn't have a sense of a real risk of bank failure. Some are aware of this as a
 possibility, but tend to feel it is highly unlikely and certainly not something they could mitigate, or
 should worry about (a typical psychological response to risk of a catastrophic event of any
 nature).
- So, people generally have trust that banks will protect their money but can have **mixed trust that banks will always act in customers or society's best interests,** as the profit motive is the dominant driver of their business model. High interest and profits aside, participants generally see banks as their money system enabler and have faith in their stability.
- **Some would prefer to bank Kiwi**. Australian bank ownership is accepted by others as a fact of life, and some see security in scale. Participants that would prefer to bank Kiwi, generally feel a New Zealand entity would be more likely to protect home interests and that New Zealand could do a better job of keeping money in the country and economy and not let profits go off-shore.



CASH

"If you need to carry cash you need a proper wallet. I'll show you. Where will you fit any cash in this?"

"I would love to use cash but it's just not convenient having to go and get cash out."

"... it doesn't surprise me that when you read in the newspaper that in a few years we won't be using cash."

"I used to like cash but with the Covid situation it made me want to do cashless. It's much more simple because a lot of people have adopted PayWave more."

CASH IS NO LONGER A CORE PAYMENT MEDIUM FOR MOST PARTICIPANTS

- Participants often now have little or no use for cash. The effort of sourcing and risk of loss/theft render it as inconvenient and outdated compared to the functionality and ease of digital money. Some people carry a little "just in case", others still use for some purposes (markets, "cashies", for children/gifting/Koha). Some only have cash when they are given it by others, and it often stays in their wallet for a long time.
- A **smaller group still prefer cash** and anecdotally more rural communities still retain a reliance on cash. In towns and cities though, cash now feels very outdated and particularly among younger generations.

MIXED EMOTIONS

• There is some discomfort about the decline of cash. This can be expressed as nostalgia and as consideration for others that may rely on it. Nostalgia may be partly a manifestation of uncertainty or fear of change, as well as about small losses surrounding cash, such as the reassurance of having cash available if needed i.e. in emergencies, or if systems fail. These feelings can be expressed by people who have ceased using cash and show no inclination to resume. Others (younger, urban) feel cash use is now really superseded and not very cool.

SLIPPING OUT OF VIEW FOR SOME

Anticipation among some participants that cash will disappear in terms of use in the not-too-distant future is not uncommon, with some feeling it just about has already (e.g. in cities). Though generally people had not considered that cash could potentially be withdrawn from circulation and cease to exist at some point. Others haven't given cash decline much thought, or assume it will always be around, even if they don't use it.

"Cash was terrible to me. When you're behind in your learning for 10 years and you're given money in an envelope it's very bad if you're not trained by your parents."

"What about school fairs? I'm on the PTA and we rely on cash for that, people give their kids cash to spend."

"I think cash is going to go and we'll become a plastic society and that's fine. As long as security is good enough."

"I think it's going out of fashion."

BENEFITS OF CASH ARE STILL EVIDENT TO SOME PARTICIPANTS – BUT THAT OFTEN DOESN'T MEAN HIGH USE

- Physical **cash is seen by some participants as a useful tool to teach children** about money management and the value of money by some participants. Providing greater tangibility in terms of seeing money compile in savings and disappear in payments and exchanges "once it's spent, it's spent...". Digital money is felt to not be as effective as a learning tool currently since it is virtual, easier to spend and to regenerate "just numbers", with some believing it has an ease that belies how difficult money can be to earn and save.
- Though participants have often transitioned to digital transfers for small everyday transfers, some feel cash is useful for gifting and small payments such as for Koha, birthday and other gifts to family and friends, small rewards and payments to children, for lunch money and so on, noting some children may not have bank cards, or their caregivers may not want them carrying and using them every day. Those preferring cash can feel digital transfers for Koha and gifting don't have the same significance.
- Cash's anonymity appeals to some, with the ability to "hide it" from others (even yourself) as compared to digital bank balances that may be shared, or more present. Others since you can "only spend it once" and it easier to track and know where you are whereas errors can be made with online banked money especially among those managing tighter budgets and where payments may not be up to date.
- Some Māori participants lamented the potential loss of cash as a more useful and meaningful educational tool for tamariki and rangatahi and in terms of higher reliance on cash in rural communities and by kaumatua.
- Some cultures are reported as storing relatively large amount of **cash as precaution** against bank collapse, and financial or civic emergencies.



MIXED VIEWS ON THE "CASH" ECONOMY

"If you get paid in cash [IRD] they have no idea about that sort of stuff and that's sort of safeguarded. But if you take that away and there's no cash and it's all digital then you can't do stuff."

"If you pay by cash and somebody says you haven't paid them then you have a problem."

- The grey economy and the role of cash is referenced both directly and obliquely by participants. There is some support for this, both functionally and culturally people like to 'win a little' and fly under the radar, avoid a little tax, but can be conflicted over the potential role of cash in enabling illegal activity. For others, cash payments and transactions may form quite a significant part of their micro-economy and they are concerned about the prospect of its removal.
- Some people are drawn to "cashies" (paying cash for tradespeople, or for other goods and services from individuals, or small organisations) others are aware but say they avoid, concerned about the risk of having no recourse without receipts or payment records.
- It is not possible to provide any sense of scale of the grey or cash economy from this work, other than to say reference was reasonably common in the discussions we held.



UNMET NEEDS?

"[referring to money system].. it flows really smoothly...there is a simplicity to this that works for me."

"I've set up APs for things like savings for the kids, savings for us as well. The day money goes in is the same day that money goes out, to the expense account, to the mortgage account. What I have in the account is what I have to play with essentially."

PARTICIPANTS GENERALLY FEEL THEIR MONEY SYSTEMS WORK WELL

- **Significant unmet needs** for day-to day money management and payments **are not apparent** for consumers in the research. Apart from some minor frictions, participants were generally happy with only a little evidence of inconvenient aspects or frustrations.
- The move to **seven-day payment processing** by banks has alleviated the small frustration of previously having to wait until Monday morning for a payment to go through.
- Some participants love the speed, convenience and the modernity of contactless payment,
 others are more cautious about the perceived risk of incorrect payments, or other security
 risks and are yet to adopt, or use it only selectively at retailers they trust. Some participants
 find the fees for this convenience irritating and avoid.
- **Using credit cards to advantage** (free revolving credit from paying off each month) is seen as a benefit by those who use it, with others more wary, noting the real disadvantage of high credit card interest, should you lapse into debt.
- Immediate transfers/receipt/payment would be appreciated; as would no surprise fees.
- Easier and cheaper **international transfers** would deliver improvement to those regularly sending money overseas.
- Some participants noted that it would require a lot of work and some risk to have to set up their system again, particularly around payment scheduling creating inertia towards their existing bank/s.



"In China, they just use one app (Alipay) and QR code system, for everything - so easy."

"[No ApplePay] I don't want Apple to have all my access like banking details which makes no sense because it's saved to my Google account. I don't use the face scanner on my phone because I find it too creepy. I try to limit big corporations' access to my information unless it really makes my life more convenient."

THERE IS STILL ROOM FOR INNOVATION AND IMPROVEMENT

- No aspects of participant's payment systems really stand out as needing "fixing", the functionality of digital banking is generally viewed as useful and enabling and its use is second nature now.
- Participants had **only a few suggestions for improvement**. These centred around:
 - speeding up or achieving immediate payments (felt to be happening),
 - reducing/minimising any costs (and for some, bank profits), and
 - a potential opportunity around learning and budgeting enablement...
- This doesn't mean there isn't opportunity, or expectation of improvements rather that
 participating consumers most often didn't identify problem areas, or any particular aspirations.
- In the digital world, there is a **general environment and expectation of ongoing innovation** and improvement. This was reflected in participant expectations, for example, payment speeds will improve, or immediate P2P transfers, or cardless systems with biometric security would likely become available in New Zealand (among those aware from overseas).
- Participants were most often reactive and would consider innovations, or new superior money management tools, if they came along - especially from trusted providers and once they had confidence.
- Other participants are **on the look-out for and drawn to innovation**, and to new ways of doing things. This can be simply the appeal of new digital solutions, or to change that has clear user benefits saves time, or money, or enables greater control and ease.

PARTICIPANTS WERE PROMPTED WITH A RANGE OF POTENTIALLY BENEFICIAL FUNCTIONS

These are the functions people were most drawn to... but enthusiasm wasn't high, and the benefits didn't seem strong enough to many consumers

Most Appealing Appealing

Split bills at restaurants/cafés easily

Buy something online and set up the payment so you only pay once it is delivered Pay with a contactless card or phone without the surcharge

Younger consumers especially

Claim a tax refund immediately after donating to a charity

Make a digital payment without being connected to the internet i.e. using Bluetooth

Instantly pay for Trade Me purchases at the pick-up without using cash Receive job seeker support payment immediately after the application is approved

Instantly donate to a busker on the street with your phone

Strong for beneficiaries

Receive money from a friend instantly by digital payment

Money is safe from any potential bank collapse

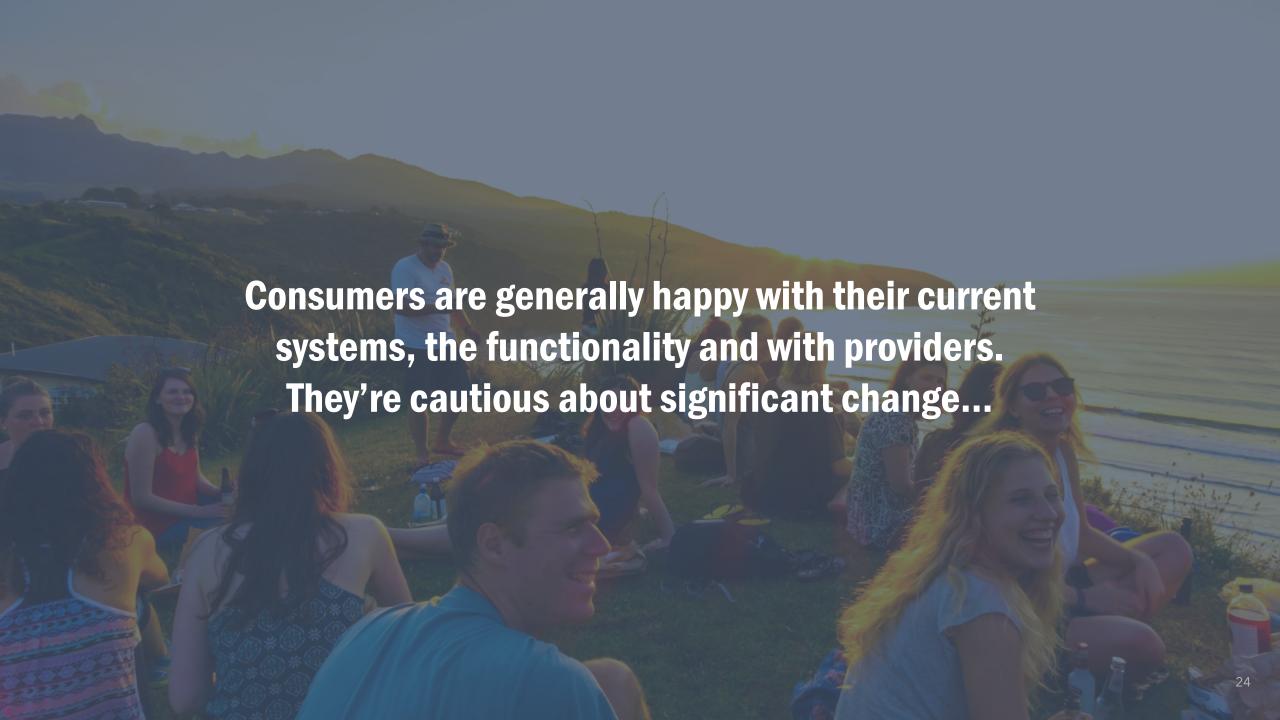
Small payments at farmers markets without the need for change Instantly gift money to friends/family without having to get cash out

Vulnerable consumers/migrants who use markets for regular food shop

Context: Consumers in the research generally don't have a problem with the current payment solutions in NZ but can see some marginal benefits when presented with new functionality that offer some improvement on current systems. Some are happy with workarounds they already have for some cases.

There is also a sense that providers will continue to evolve user-centric payment functionality and little view that NZ may be behind in this area. i.e. participants were either unaware or may have experienced other useful systems overseas and anticipate they will come eventually.

Younger consumers especially



PEOPLE FELT THAT MOST OF THEIR MONEY MANAGEMENT NEEDS ARE MET

Fundamental Money Needs Fulfilled

Transparency

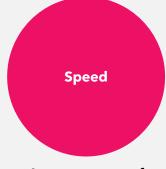
Online banking and apps have provided people with more transparency, along with the ability to easily establish an account and payment system structure they can easily manage and check and oversee everything.

Simplicity

One central account for receiving and distributing helps keep things simple, with permutations of secondary destination accounts for various expenses payments and savings.



Technology enables ease such as third-party apps to enhance bank platforms e.g. budgeting, P2P payments and investments. People also find the banking apps intuitive and spending, paying and scheduling online easy.



Announcement of weekend payments has alleviated this previous small frustration. Other than that people felt NZ banks were quick at processing payments.



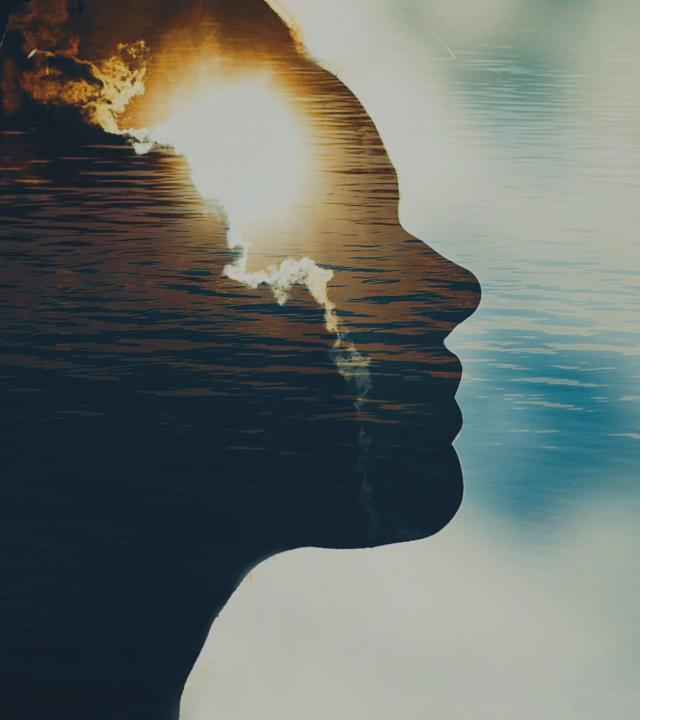
Fundamental Money Needs Not Fully Met

Contactless fees are an annoyance. People often love tapping with their card and phone but some resent that they have to pay an extra fee to do so.



High awareness of scams means people feel the system could be a bit more secure, they are not sure of the true risk, although they trust their bank to help them out if they get into trouble.

VULNERABLE PEOPLE



SUMMARY: VULNERABLE PEOPLE

Money is often a key source of stress for vulnerable participants.

Tight budgets, and often additional expenses, create the need for careful management and high vigilance over their money position and spending, the focus being a need to protect what you have and avoid debt and payment defaults. Payment timing can become critical and preoccupying. Frustration at low ability to save was often observed.

Money management stress can influence other facets of life and relationships and drive feelings of exclusion. Vulnerable people can have a lower sense of control stemming often from their lack of ability to generate more income. This can result in a more conservative approach to money management, and heightened sensitivity to risk – as the stakes are high.

Electronic banking is a powerful support tool for some vulnerable consumers, enabling control of tight money situations. Slow transaction speeds can be problematic along with unforeseen bank charges. Reliable online access can also be challenging.

Higher cash use (alongside their digital banking) was discussed by some to manage spending, be clear on balances and because it is essential in some situations (e.g., markets, church donations, paying family/friends).

Some vulnerable participants are interested in learning more about how to manage their money.



VULNERABLE PEOPLE

"I've never really had a stable income before. I've never had a steady flow coming in. I've always had minimum wage jobs or just above, just enough to get by or survive until the next week or the next pay. I've never had enough to save or put into a savings account before. I feel stink. You want to go and have fun times. I'm 22 and I want to do what every other 22 year old is doing currently but you can't. So, you feel left out."

To ensure we included a range of at-risk consumers, we used two frameworks to structure, along with our own understanding of markers of financial and digital exclusion and lower access.

FMA 'drivers of vulnerability' definition

- 1. Health and physical factors health conditions or illnesses that affect the ability to carry out day-to-day tasks such as disabilities or mental health conditions.
- 2. Life events such as bereavement or relationship breakdown
- 3. Resilience low ability to withstand financial or emotional shocks
- 4. Capability low knowledge of financial matters or low confidence managing money

Financial Conduct Authority FG21/1 Guidance for firms on the fair treatment of vulnerable customers. https://www.fca.org.uk/publication/finalised-guidance/fg21-1.pdf

DIA 'underlying challenges' definition

- 1. Socioeconomic factors
- Geographic factors
- 3. Cultural bias
- 4. Low literacy levels
- 5. Demographic challenges
- 6. Lack of accessibility

Source: Department of Internal Affairs (2019), 'The Digital Inclusion Blueprint', March.

Using these, ten in-depth interviews were recruited and conducted. These interviews were mainly conducted face-to-face and people were offered the opportunity to bring support.



VULNERABLE CONSUMERS

"I feel like money dictates how I live, controls what I can and can't do. It's at the back of my mind on a daily basis, a necessary evil."

"I'm retired now, and I worry about whether I'm going to have enough to live on for the rest of my life. I look at how much I have and how much I theoretically need per week, month, year and what I have in the bank isn't going to do it. I need to win Lotto or find a rich man with one foot in the grave (laughing). I laugh about it but it's a real concern now my earning capacity has gone."

"..It can be problematic if something breaks down and I've got to replace it... so I have to put more money into the savings account... or the car registration is due. It's manageable. People who have less, manage more..."

VULNERABLE PARTICIPANTS FIND MONEY MANAGEMENT PRE-OCCUPYING AND STRESSFUL

- Money is often a constant source of stress, for vulnerable consumers interviewed with negative associations with exclusion. Most feel they necessarily spend too much time thinking/worrying about money, and many have lived experiences of harm caused by money issues e.g. arguments, relationship breakdowns, crime. For many vulnerable consumers, their key money objective is to manage their cashflow and payment timings, so they stay ahead of bills and don't default.
- **The inability to generate (more) income**, due to age, disability, language, unemployment/low skills and/or family commitments is often frightening for vulnerable consumers. Most feel a lack of control and vulnerability over their financial situation. This results in a more conservative approach to money management, the focus being a need to protect what you have; change is not worth the risk. Most can't see how they can easily improve their financial situation; the perceived path to financial independence often includes a significant windfall e.g. winning Lotto, or being left money in a will.
- Most have savings aspirations and dreams (for example, a particular pair of shoes, a trip home to family, buying a house) but are **frustrated at their inability to save**. But the pressure of paying bills feels constant and impacts of the cost-of-living crisis are strongly felt. Increased accessibility (through online banking) and convenient payment systems (e.g. PayWave) can make any saved money "too easy" to spend. Some have set up card-free accounts to assist with saving or will store cash as it is less immediately disposable than digital money.
- Many have additional expenses to the mainstream population tithing to church, remitting
 money to family overseas, paying for ongoing medical expenses for self/family members. These
 payments are considered essential and will be prioritised over personal saving and sometime
 over personal needs.

"What's the process for changing banks? I imagine it would be very timeconsuming. Can I be bothered doing all of that for the little money I have in the bank? Probably not."

"With [buy now, pay later platform] I can make mid or big purchases and pay it over eight weeks. I find it more sustainable for the amount I earn each month."

"I've always been told not to have one [credit card] because you go into debt. My parents never had one, I never did... you spend, go into debt, how are you going to pay it back?"

ONLINE BANKING CAN BE A POWERFUL ENABLER; MINIMISING CHARGES AND AND FEAR OF DEBT ARE COMMON

- Electronic banking is a powerful budgeting tool for some more vulnerable consumers (e.g. automatic payments to control cashflow and transparency of activity) but the lack of immediacy of digital payments (especially PayWave) can pose challenges; payments are often made 'last minute' so even minor delays in funds transferring can be problematic and may result in penalty fees. Some use multiple banks to minimise delays but managing multiple bank accounts is stressful. Not having reliable access to data on their phone/at home can make online banking problematic, particularly when payments are time-critical.
- Vulnerable participants often had a **strong fear of debt** (aware of how quickly interest can accumulate, and their limited ability to re-pay and have often observed/experienced negative impacts); consistent with this is a strong wariness of the risk of credit cards.
- **'Buy now, pay later'** are not always perceived as debt in the same way as credit cards as there are no interest rate charges, and can be used to make the funding of purchases more manageable. Though lack of immediacy of funds transfer can contribute to late payments and penalties.
- Some vulnerable participants are very aware of bank fees and surcharges and will proactively
 take steps to minimise these (e.g. refusing to use PayWave); others unaware of fees and charges.
- Vulnerable participants often have more limited education (especially maths), lower understanding of the banking system, and English as a less familiar language. These contribute to a lack of confidence dealing with 'authority' and to fear of not being able to fix things when they go wrong with financial/banking system. This manifests in reluctance to change banks, use new digital technologies e.g., Apple/Google Pay, and explore new money options e.g., cryptocurrencies. Fear of losing money through being hacked also makes them more wary of digital technologies.



CASH USE IS OFTEN IMPORTANT TO THOSE MORE VULNERABLE

- Those more vulnerable often indicated **higher cash use** (albeit often still declining and alongside their digital banking) relative to other participants. Benefits described included: greater visibility of spending, supporting budget management (e.g., only spend what's in your wallet), immediate "balance" (can see what you've spent), bargaining power (although declining), lower risk of embarrassing failure (always works), avoiding tax, and the only method available in some common situations (e.g., markets, church donations, paying family/friends). But participants were aware that cash is becoming more challenging to use, as no longer accepted everywhere (e.g. public transport, 'card-only' checkouts), ATM limits, change not always available, unsafe to carry.
- Often vulnerable consumers have very **limited knowledge of the banking and finance sector**. Few have ever changed banks. Most can't see any benefits to changing (especially as they have so little money invested with the bank) and it is potentially risky if something was to go wrong during the switch. There is very little thought given to bank control, banks potentially losing customers' money, or making excessive profits. There is also limited understanding of the Reserve Bank, who they are and what they do.
- Some vulnerable participants are **interested in learning more** about how to manage their money, and what tools and support are available to help build skills and confidence.

"I love getting cash and I love paying with it - it seems more personal in a way... and it represents something. Cash is easy, it's direct and immediate and I can just look in my wallet to see how much I can spend."

"Cryptocurrency - what is that? It's a nothing. If I can't see it, touch it or smell it, I don't believe it exists. I completely don't understand crypto at all. It doesn't make any sense to me. How can something that doesn't exist have any value at all, let alone go up and down in value?"

CONSUMER PERSONAS: A REFLECTION OF THE DIFFERENT ATTITUDES AND BEHAVIOURS



DEFINING PERSONAS

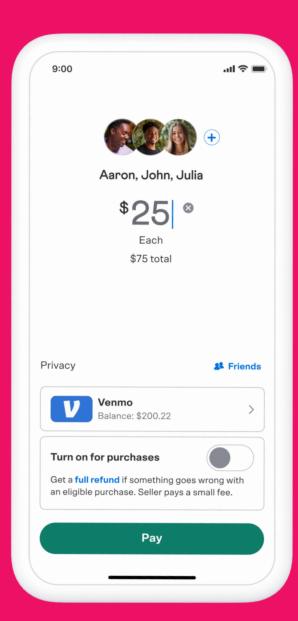
Personas are intended to communicate the attitudes and combinations of attitudes observed in the research to better define the range of consumers. They are helpful when considering how to optimally consider product developments, positioning and communication approaches.

THE FEELING OF BEING IN CONTROL IS A KEY DIFFERENTIATOR OF CONSUMER ATTITUDES AND MINDSETS

While most fundamental money needs are being met (as discussed), we observed a dimension around how in control of their money system people felt.

- Feeling in control is not the same as financial wealth, it's a mindset driven by a variety of factors such as proactivity, skill, life events etc. Therefore, a person with less wealth can feel more in control than someone with more financial means and vice versa.
- Feeling in control is the ideal state people seek. It's achievable for some, but for others they concede their personality, skills or lifestyle may not get them there, even though they want to.
- **Feeling in control is a moment in time** and not stagnant. Once people get to this feeling, there's always a risk they can lose it due to a range of factors.
- **Feeling in control can mean and look different** as it's a feeling, not fact. This research found that it was within the realm of (but not limited to):
 - Being on top of bills
 - Budgeting and organised
 - Knowing when and where money is coming and going
- The other end of the spectrum isn't 'out of control', rather feeling LESS in control.
- Consumers who are feeling less in control aren't dissatisfied with their system or the tools available to them, but rather have a feeling they could do better to be on top of it all.





A SPECTRUM OF OPENNESS TO NEW SYSTEMS ALSO DIFFERENTIATED ATTITUDES AND MINDSETS

While most people are happy with their systems, there were a range of attitudes to whether and how enthusiastically they would be open to introducing new elements into their money management systems.

- Being open to a new system represents mindsets that looks to improve on what they are already doing or have access to. This does not mean they aren't uncomfortable with change, however.
- Being open to a new system does not mean someone will necessarily adopt. While there are some people who are instinctively and quickly drawn to the new and latest things, there are others who are open to new options but will take more time to research and consider the compatibility with their needs and values before acting.
- **Being closed to a new system** is usually means an individual is uncomfortable with change, prefers status quo, or fells the risk of change outweighs the potential benefits.
- Being closed to a new system doesn't necessarily mean they won't adopt something new;
 however, it will likely take longer and need the reassurance of use and endorsement by others and
 as effective and beneficial.
- In relation to money systems, security and risk are often fundamental concerns and consideration factors.

WE FOUND TWO KEY ATTITUDINAL DIMENSIONS THAT REFLECT THE DIFFERENT CONSUMER ATTITUDES AND BEHAVIOURS WE CAME ACROSS THAT ARE PERTINENT TO MONEY AND PAYMENTS INNOVATION

The polarities of these dimensions are shown below, though most people sit somewhere along the continuum

Feel in control:

Know how their current money systems works for them and are on top of their money management

Feeling of control with money management system

(not wealth or financial security)

Feel less in control:

Don't fully understand their own system and don't feel on top of their money management

Open to new money systems

Always looking for new things and new ways to improve their current system

Level of openness to new money management systems

Closed to new money systems

Unlikely to change and want to keep their current system as it

Cross referencing these two dimensions allows us to place attitudinal types observed on a map that starts to define the wider consumer base into six consumer personas, as on the next page.



WE CATEGORISED PARTICIPANTS INTO SIX DISTINCT PERSONAS



Frugal Controllers have often had to learn their money management skills through life experience, but they're now at a point where they're content and feeling in control of their system.

They are less materialistic, either they have honed the skills of surviving on less or prefer a less consumption-based lifestyle, managing their money prudently and aren't interested in expensive or image/status possessions.



Trend Chasers are dynamic individuals that are always on the lookout for new opportunities to be 'ahead of the crowd'. This makes them enthusiastic consumers who seek opportunities to enhance their lifestyle and to be seen as leaders and future orientated. Digital innovations are especially appealing.

Money management is no different, they want to be in early when it comes to new and innovative tools and approaches and help carve the path for others to follow.



Solidity Seekers like to follow the crowd but also not be left too far behind. They don't shut down new ideas but take their time and do due diligence to ensure they don't get into something that has risk, may upset their system, or waste their time. They are socially connected and socially conscious.

Money management rather than wealth building is their focus, so they keep their ears to the ground and rely on trusted advisors like family, friends, colleagues and community for cues on what to do and use.

WE CATEGORIESED OUR INTERVIEWS INTO SIX UNIQUE PERSONAS



Proactive Prospectors are easily influenced by other people when it comes to new and interesting opportunities to make or save money. Over recent years they've also become more sceptical of government and paternalistic approaches.

They are always keen on a new possibilities, have some fear of missing an opportunity and will often invest time and sometimes money into new systems they've been shown, even if it isn't proven.



Battlers are limited in their ability to generate income. They rely more on cash and basic payment methods such as EFTPOS.

They often live week to week, payment to payment and consequently struggle to save. The drive to improve their money management system is overshadowed by risks of losing money/getting into (greater) financial difficulty.

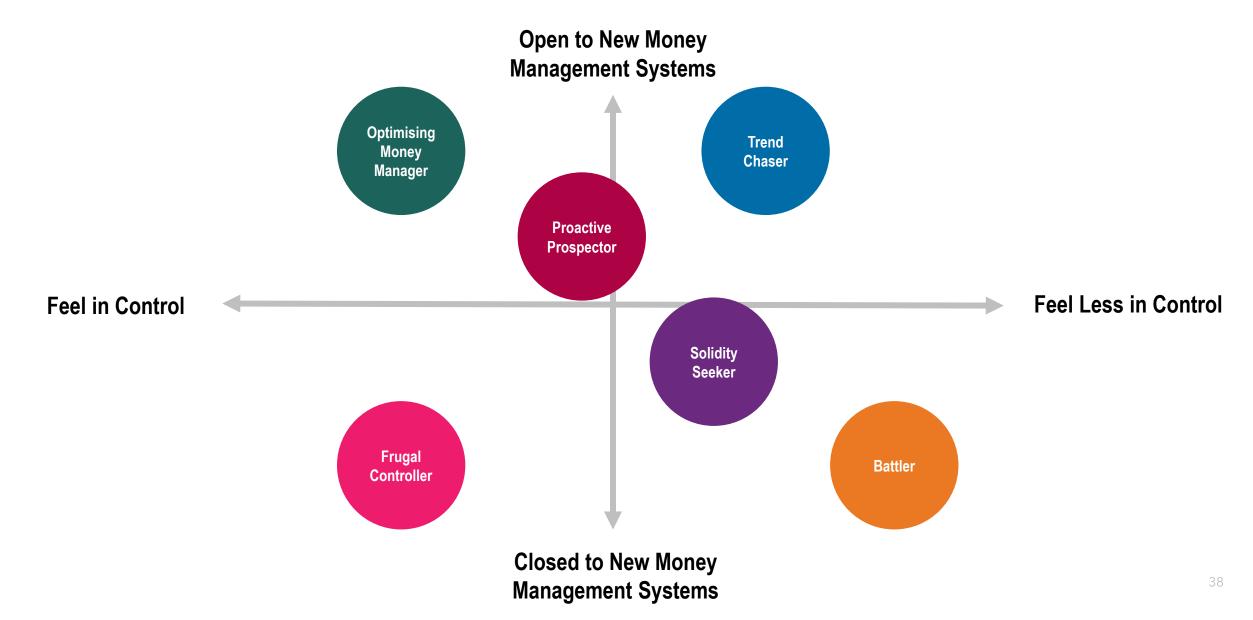
Money management can be a constant concern.

Optimising Money Manager

Optimising Money Managers are on top of their financial game. They have a solid and well thought out money management system, that may include savings and investments, that they have researched and done due diligence on.

While confident in their system there is always room to improve. They are often well connected to community and may have strong social and equity values. Open to new, but not risky, ideas, and will take their time to understand and evaluate fitness for purpose.

OFF THE BACK OF THE TWO DIMENSIONS WE MAPPED OUR PERSONAS



SOLE TRADERS AND CHARITIES



CHARITIES

"I'm a trained accountant, trained and worked overseas in commercial organisations, in audit... I do a lot of things because we're a small organisation. Apart from the accounting, I do payroll, the HR, contracts pass by me."

"[Improvements] I can't really think of anything - we're pretty efficient. I would like to find a way of not paying people by cash if I could. I don't want to handle the cash."

CHARITIES PRUDENTLY CONSIDER NEW INITIATIVES, BUT LARGE CHANGE IS SEEN AS COSTLY AND RISKY

- **Charities are often cautious** around money, needing strict accountability of every cent, but are looking for efficiencies and cost savings.
- Accounts personnel in med-larger NFPs interviewed were experienced professionals with a clear picture of and control of their payments system, the regulatory environment, suppliers offers and their organisational needs. Often sole charge, they may have multiple responsibilities.
- **Prudent and careful operators** feel a great responsibility for ensuring security, traceability and robustness of systems and processes. They exist in defined reporting and audit environments and can have many bosses, as they have manager/s that report to a board.
- They trying to be forward thinking with tech that helps them work smarter looking for efficiencies and control of their system. Charities/NFPs can be using a range of platforms and tech for inward payments and donations and usual business approaches for outgoings. Donations appear to be mainly digital now and these are the strategies being pursued, street collections are not such a big thing any longer.
- **Frictions are apparent:** Processing time, bank cut off times, cost of platforms (including donation platforms and online payment processing) and merchant payment tech (Eftpos, PayWave) fees (especially if low volume), fee complexity, reconciling donations, international payments clunky, managing staff expenses, petty cash viewed as problematic to manage and risky, and they would prefer it gone.



SOLE TRADER

"If something about interest rate or the budget goes into the media, we go quiet for about two days."

"My invoicing system is clunky, but there's probably good ones out there I just don't have the time."

"I feel like everybody is attacking us. It's hard to stay afloat. There's website host fees, fees for payment system, fees for domain name, fees for bank."

PAIN POINTS WITH SYSTEMS ARE MORE PRONOUNCED THAN FOR CONSUMERS

- They see speed and transparency of transaction as a significant pain point. More than for consumers, a few hours delay or waiting over the weekend for payments to clear can have a significant effect on their business.
- The inconsistency for speed of payment is not understood. Small businesses describe that some payments come through swiftly while others can take days. They don't understand why and makes it difficult to plan for.
- **They have complex systems** with multiple types of payments coming and going from invoicing, card, contactless and cash.
- They feel the effects of consumer confidence. Some small businesses mentioned that they were weary of the economy and noticed when financial related news hits the media it has an almost instant affect on demand for their services.
- They move with consumer demand for payment technology, as they can't risk losing out on revenue. Contactless payment was mainly cited in this instance, with sole traders mentioning contactless cards, phone and watch payments from their customers.
- **COVID-19 sped up the adoption of payment technology** as people become more aware of hygiene when handling cash, pressing buttons on cash machines and ordering online.
- Cost and time are significant barriers to streamlining systems. Even though they acknowledge
 that their systems are a little clunky and know there are better systems out there, time and cost of
 upgrading stops then.
- They feel banks make it difficult to set up accounts and often need multiple signatories. This makes small businesses more resistant to change once they're set up.
- They feel 'attacked' by fees from banks, especially with needing to adopt new technology like contactless terminals.



FUNCTIONALITIES HIGHLIGHTED ARE OF APPEAL ON INITIAL EVALUATION BY CHARITIES AS THEY IMPROVE SPEED, REDUCE FEES AND SAVE ON ADMIN

Most Appealing					Least Appealing
4 Make a digital payment without being connected to the internet	16 Make or receive a charity payment on phone. e.g. street collection	12 Simple way to receive donations	22 Provide money for employees to make business transactions	8 Issue and settle invoices without invoicing software	18 Streamline/automate end of year accounting
5 Cheaper way to process donations and give donation receipts	17 Make a tax rebate claim immediately after donating to a charity	14 Save money on bank fees	2 Shift money between business and personal instantly	10 Process a refund easily and quickly	19 Hold money in an account that cannot be traced/viewed by banks
6 Save money on merchant solution fees	1 Easily track what you owe in GST and simplify payment to IRD	20 Receive money from a customer instantly following a sale or donation	3 Simple way to receive money from government e.g. tax refunds, job seeker support payments	11 Make payments to people without a bank account	23 Receiving smaller payments from customers
15 Enable payments with a contactless card or phone without the surcharge	9 Get an online business transaction account without having to deal with banks	21 Emergency payments to businesses/Charities impacted by disasters	7 Instant transfer to government service providers e.g. NZ Transport Agency for Car Rego	13 Automatic payment for toll road	24 Everyday business expense like buying fuel

FOR SOLE TRADERS AND SMALLER CHARITIES - SOME CONSISTENCIES EMERGE WITH TENSION POINTS TESTED

11
Card payment solutions for small businesses are too expensive

3
New payment technology is confusing

It can be hard to get visibility of all ingoings and outgoings

Context: The stars indicate the tensions that resonated the most with consumers. Overall, they ladder up to three key points that can be focused on.

4
I try not to accept PayWave payments

24
Resolving payment problems is difficult

5
I often find transferring and receiving money for business to be too slow

17
There are too many parties involved in processing merchant payments

Lack of service support

Lack of control & speed

Fees!

PAIN POINTS WITH SOLE TRADERS AND SMALLER CHARITIES MORE APPARENT THAN WITH GENERAL PUBLIC. THESE ORGANISATIONS BEAR THE COST OF TRANSACTIONS MORE

Small Businesses:

Fees... fees... and more fees:

"I feel like everybody is attacking us... it's hard to stay afloat... there's website host fees, fees for link to pay system, fees for domain name, fees for bank..."

Managing alternative means of payments for customers (e.g. bank transfer, Google wallet) but hard to check/follow up (especially if it doesn't go through) and to reconcile

Setting accounts up

Changing needs within account.

(largely due to the multiple administrators needed)

Small Charities

Tracking/reconciling payments

(especially at fund raising events when 'borrow' Eftpos machines, or when a mix of groups vs individuals pay):

Requires extra admin to avoid loss of transparency and control

Taking cash to banks (especially if ATM doesn't take notes)

Almost everybody had a story to tell:

Inconsistent communications, difficulty in set ups/changes online, delays in helping, trying to coordinate administrators, security codes not working. Banks are hard work...

But perceived cost of changing outweighs potential benefits

"I'd much rather stay put where we are... it's the lesser of the evils"

"The whole process of changing was so horrific that it will put me off changing regardless of the value"

ANNEX A: REPORT DETAILS

IN-DEPTH INTERVIEWS – SAMPLE STRUCTURE

SAMPLE BREAKDOWN

We conducted **50** carefully recruited in-depth interviews, plus **4 pilot** interviews, as follows:

Consumers:

Individuals making payments to, and receiving payments from individuals and businesses

	Simple set-up	More complex set-up	Total
Innovators and Early Adopters	3 x Individual 2 x Paired	3 x Individual 2 x Paired	10
Early Majority	3 x Individual 2 x Paired	3 x Individual 2 x Paired	10
Late Majority & Laggards	2 x Individual 1 x Paired	1 x Individual 2 x Paired	6
Total	13	13	26

All responsible for their personal banking and payment set-ups. **Mix of:** Geographic location incl. North and South Island, urban and rural. Socio-demographic profile including ethnicity, life stage, household income, employment status. Financial profile incl. confidence, bank relationships and products held.

Sole Traders and Charities: Sole traders and charities receiving payments

	Simple set-up	More complex set-up	Total
Innovators and Early Adopters	1 x sole traders 1 x charity/ NFP	1 x sole trader 1 x charity/ NFP	5
Early Majority	1 x sole trader 1 x charity/ NFP	1 x sole trader 2 x charity/ NFP	4
Late Majority & Laggards	2 x sole traders 1 x charity/ NFP	1 x sole traders 1 x charity/ NFP	5
Total	8	6	14

All to be key decision makers in their organisation's revenue management, banking and payment set-up.

Mix of: Geographic location incl. North and South Island, urban and rural. Business profile incl. industry, size, maturity of business. Mix of charity sizes.

Vulnerable Consumers:

People who need to make and receive payments

A vulnerable consumer is someone who, due to their personal circumstances, is especially susceptible to detriment (harm), particularly when a firm is not acting with appropriate levels of care.

We will recruit to reflect the FMA 'drivers of vulnerability':

1. Health and physical factors – health conditions

- or illnesses that affect the ability to carry out day-to-day tasks such as disabilities or mental health conditions.
- Life events such as bereavement or relationship breakdown
- Resilience low ability to withstand financial or emotional shocks
- 4. Capability low knowledge of financial matters or low confidence managing money

10 Interviews to cover a mix of vulnerability situations

All wholly or partially responsible for their personal banking and payment set-ups or be supported in this by others.

Most of these

interviews were

conducted face-to

face and some with

a support person..

WORLD CAFÉ DELIBERATIVE WORKSHOPS

SAMPLE

Our World Café workshops were held in 3 locations across Aotearoa. These locations were carefully picked in collaboration with the Reserve Bank.

It was clear we needed to travel to 2 metropolitan cities, one in the North Island (Auckland) and one in the South Island (Christchurch) to represent a national coverage. The third location, Rotorua, was selected to support attracting getting rural residents and Māori perspectives.

We carefully designed the sample structure based on each location. Sample was recruited through a research panel, to a detailed specification.

	Rotorua
Table 1	4 x Māori Participants
Table 2	5 x Mid-higher Income Participants
Table 3	4 x Rural Participants
Table 4	3 x Younger 18-25 Years Participants
Table 5	4 x Lower Income Participants

Auckland	
Table 1	5 x Māori Participants
Table 2	4 x Pasifika Participants
Table 3	3 x Newer Migrant Participants (moved to NZ in the last 3 years)
Table 4	4 x Younger 18-25 Years Participants
Table 5	3 x Later Adopter Participants

Christchurch		
Table 1	5 x Lower Income	
Table 2	5 x Mid-higher Income Participants	
Table 3	3 x High Users/Preferrers of Cash Participants	
Table 4	4 x Retiree Participants	
Table 5	4 x Rural Participants	

Cultural diversity: We included 15 Māori participants and 10 Pasifika participants in the World Cafés along with a mix of other ethnicities.

DIGITAL CURRENCY FUNCTIONALITY EXAMPLES USED AS STIMULATION CONSUMERS

1 Instantly gift money to friends/family without having to get cash out 2 Receive money from a friend instantly by digital payment 3
Have a back-up way to
make payments if cards
aren't working/cannot
get to an ATM

4
Receive job seeker
support payment
immediately after the
application is approved

5
Send digital money
to people without that
don't have their own
bank account

6
Buy something online
and set up the payment
so you only pay once it
is delivered

7
Receive job seeker
payment immediately
from government after
approval

8
Pay with a contactless card or phone without the surcharge

9
Pay for public transport
using a card that you
don't have to keep
topping up

10
Immediately and easily pay for car registration or a parking ticket online

11
Conveniently pay an
electricity bill (without
using direct debit)

12
Small payments at farmers markets without the need for change

13
Buy items instore
without carrying a bank
card

14 Split bills at restaurants/cafes easily 15
Hold money in an account that doesn't increase bank profits

16
Instantly pay for Trade
Me purchases at the
pick-up without using
cash

17
Get an online
transaction account
without having to deal
with banks

18 Instantly donate to a busker on the street with your phone

19
Claim a tax refund immediately after donating to a charity

20
Hold money in an
account that cannot be
traced by banks

21
See how much you've
spent on coffees over
the last week to help you
budget better

22
Make a digital payment without being connected to the internet i.e using bluetooth

23
Check your balance
without needing internet
or a smart phone

24
Receive a refund
instantly when I return a
product instore

25 Money is safe from any potential bank collapse 26
Receive welfare
payments immediately
after a crisis

DIGITAL CURRENCY FUNCTIONALITY EXAMPLES USED AS STIMULATION – SOLE TRADERS AND CHARITIES

1
Easily track what you owe
in GST and simplify
payment to IRD

2
Shift money between
business and personal
instantly

Simple way to receive money from government e.g. tax refunds, job seeker support payments

4
Make a digital payment
without being connected to
the internet

5 Cheaper way to process donations and give donation receipts

6
Save money on merchant solution fees

Instant transfer to government service providers e.g. NZ Transport Agency for Car Rego

8
Issue and settle invoices without invoicing software

Get an online business transaction account without having to deal with banks

10 Process a refund easily and quickly

11
Make payments to people
without a bank account

12 Simple way to receive donations 13
Automatic payment for toll road

14 Save money on bank fees

15
Enable payments with a contactless card or phone without the surcharge

16
Make or receive a charity payment on phone. e.g. street collection

17
Make a tax rebate claim immediately after donating to a charity

18 Streamline/automate end of year accounting 19
Hold money in an account
that cannot be
traced/viewed by banks

Receive money from a customer instantly following a sale or donation

Emergency payments to businesses/ Charities impacted by disasters

22
Provide money for employees to make business transactions

23
Receiving smaller
payments from customers

24
Everyday business
expense like buying fuel

ANNEX B: PERSONAS

The six personas are rendered in more detail below.

Descriptions show their underpinning attitudes, drivers and behaviours in relation to money management and their likely barriers and drivers to adopting money system innovations.

Whilst some of the personas may skew to certain demographic characteristics it is their attitudes and needs that will determine how open they are and their adoption patterns.



THE FRUGAL CONTROLLER

"I used to get myself into some pretty bad situations with managing my money. I don't want to go there again, so I now make sure I'm always on top of our finances."

Description

Frugal Controllers have had to learn their money management skills through life experience, but they're now at a point where they're content and feeling in control of their system.

Frugal controllers aren't materialistic, either they have honed the skills of surviving on less or prefer a less consumption-based lifestyle, manage their money prudently and aren't interested in expensive possessions.

Attitudes

They've done the job of getting their system together to stay on top of things and don't want to risk change.

- **If it ain't broke..:** They believe there is no need to improve on something that's working well for them.
- Resistant to change: A preference for stability and reluctance to embrace new methodologies.
- **Doing it well, once:** once they have set their system up, they want to disengage with it, knowing it's working set and forget. Security is important.
- **Frugal:** They enjoy living consciously and cheaply and think of ways of staying ahead (e.g. paying insurance annually; buying second-hand etc.).

Behaviour

They continue with the well-oiled money system they've got in place, which can involve:

- Manually sense checking manual payments of big bills so they can check that amounts are correct.
- Timed payments to ensure they're not late on bills.
- Avoid fees by using chip and not going into overdraft.
- Some cash use to buy cheaper goods at markets/ garage sales etc.
- Only buy if in credit, unlikely to buy if they have to borrow i.e. don't like using AfterPay.

Key Drivers

Limited financial education growing up

Money
management
skills gained
through
harder life
periods

Non materialistic personality





THE FRUGAL CONTROLLER

"I don't purchase enough things for it to be worthwhile to change to this new payment method."

Adoption Drivers

- Money management tools: Enabling them to put money aside is key, so they can stay on top of things.
- **Speed:** Improve on their minor grievances with slow transfers.
- Trustworthy recommendations: Hearing that adopting this new payment method would be worth it and is secure from trustworthy sources such as family/friends.
- **Simplicity:** While they're comfortable with their system, they acknowledge that it's not that simple.

"We've always been somewhere between working and middle-class people. We've always had to be careful with money, although we've earned good money particularly in past years. Now that we're retired, we're very mindful that we have to be careful about money."

Adoption Barriers

- Risk averse: Something new needs to be the same or better to what's offered today; that allows them to easily manage their finances and offset concern that it would 'break their system' to say ahead; and be secure/safer.
- Practicality: Risk of it not being practical for their system; not interested in complexity.
- Losing current system benefits: Adopting would mean reworking their carefully layout system.

Potential Benefits

Pay with a contactless card or phone without the surcharge

Tools and features to help categorise spending budgets easily

Money currently takes too long to transfer between accounts

Immediately and easily pay for car registration or a parking ticket online



THE TREND CHASER

"I love trying new technology and be ahead of the curve."

Description

The Trend Chasers are dynamic individuals that are always on the lookout for new opportunities to be 'ahead of the crowd'. This makes them enthusiastic consumers who seek opportunities to enhance their lifestyle and be seen as leaders and future orientated. Digital innovations are especially appealing.

Money management is no different, they want to be in early when it comes to new and innovative tools and approaches and help carve the path for the rest to follow.

Attitudes

Always ready to try the latest tech that improve their lives

- Future and tech fascinated: Interested in all the new technology that comes out and how it could change our lives and benefit them.
- Knowledge sharers: When they find something new to help with money management, they're not scared to share.
- Money lovers: They are consumers and often love spending money, but can feel guilty about it.
- New Zealand is lacking: They see that the technology, the digital environment and payment methods in other countries are ahead of ours.

Behaviour

They have many systems and applications for different purposes:

- Multiple providers of accounts, credit cards that offer a range of different benefits.
- Contactless (even with the surcharge) has replaced the wallet in their day-to-day life.
- Payment apps that you upload money to, that makes it easier to send between friends or overseas i.e. Venmo, Wise.

Key Drivers

Connected to global trends Digital future focused high expectations of tech experiences

Trialled alternative payment solutions





THE TREND CHASER

"I'm definitely curious...its like cryptocurrency but with security."

Adoption Drivers

- New streamlining features: Management between multiple banks is a pain point, features for streamlining would make their lives easier.
- **Untraceable:** Knowing it's untraceable gives them more confidence in this concept.
- **Transaction speed:** Although minor, it's inconvenient waiting for money to transfer.
- Social Image: They like to be leaders and associate with new technology and the latest things.

"I am a part of Crypto. I do have some Ethereum, not that much. And a couple of others. Even though the Crypto market is not doing very well for the last year and a half. I'm just holding it, fingers crossed, one day."

Adoption Barriers

- **Security:** Understanding the security and how it protects your money and information.
- Digital currency perceptions: Crypto has been painted in a bad light recently and some have been burnt, this association is front of mind when considering digital currency.
- Validity: While they are tech early adopters, they struggle to understand how tangible this new concept is and have concerns around losing money.

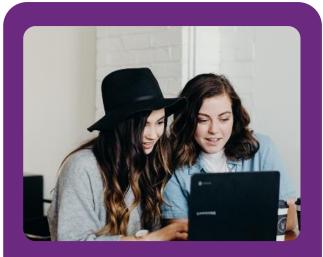
Potential Benefits

Receive money from a friend instantly by digital payment

Split bills at restaurants/cafés easily

Buy items instore without carrying a bank card

Pay with a contactless card or phone without the surcharge



THE SOLIDITY SEEKER

"I've been using PAYE.net. You put in your salary, you play around with the numbers, and it gives you your budget. That showed me that I could put more than I thought into savings."

Description

Solidity Seekers like to follow the crowd but also not be left behind. They don't shut down new ideas but take their time and do due diligence to ensure they don't get into something that has risk, may upset their system, or waste their time. Socially connected and conscious.

Money management rather than wealth building is their focus, so they keep their ears to the ground and rely on trusted advisors like family, friends, colleagues and community for cues on what to do and use.

Attitudes

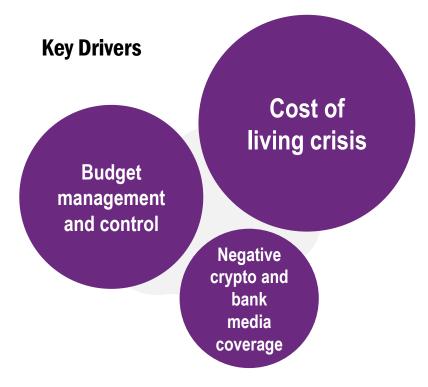
Always open to new ideas but only if it provides long term benefit for themselves

- Known sources of truth: Friends, co-workers and experts convince them to try new ways or systems.
- Trusting of the state: Sees the government and its subsidiaries as safer than banks and new systems like crypto.
- Solidity and safety are key: They aren't seeking a 'get rich quick' scheme, the aim is to prudently and steadily set themselves up for the future.
- Social endorsement: Looking for systems that are accepted by the majority of people and therefore lower risk.

Behaviour

They use range of trusted tools to keep their system stable:

- A few providers of accounts and credit cards, due to multiple reasons e.g. partners has an account, mortgage is with different bank, credit card benefits.
- Budgeting due to increased consciousness of rising costs.
- Balance of contactless use when it's convenient, not all the time to avoid unnecessary fees.







THE SOLIDITY SEEKER

"What about people who don't have access to (smart) phones or aren't very good with technology?"

Adoption Drivers

- **Security:** See potential for more security in the hands of the Reserve Bank rather than regular banks.
- Trust: Confident that the government will do well by them and New Zealanders.
- **Enabling**: Supports them to navigate ongoing budget and money management.
- **Following the crowd:** Seeing trusted people adopt gives them reassurance.

"The relationship with budgeting has been difficult. Initially there was a bad response from me because I just bought everything, I thought was good, but then I did my research and then I started breaking things down. So, I needed a plan."

Adoption Barriers

- Worried that it excludes minorities: People who may not have access to the correct technology or have restrictions like disabilities may be excluded from this concept.
- Have to see it proven: While they could be interested, they need to see evidence before taking it up.
- **Ease:** It can't be more complex than something they currently use; it must be easier.

Potential Benefits

Money is safe from bank collapse

Receive money from a friend instantly by digital payment

Claim a tax refund immediately after donating to a charity

Pay with a contactless card or phone without the surcharge



THE PROACTIVE PROSPECTOR

"I feel empowered finding the deals... I'm living happy... I'm not losing out on anything."

Description

Proactive Prospectors are easily influenced by other people when it comes to new and interesting opportunities to make or save money. Over recent years they've also become more sceptical of government and paternalistic approaches, due to pandemic management.

They are always keen on a new opportunity, have some fear of missing an opportunity and will often invest time and sometimes money into new systems they've been shown, even if it isn't proven.

Behaviour

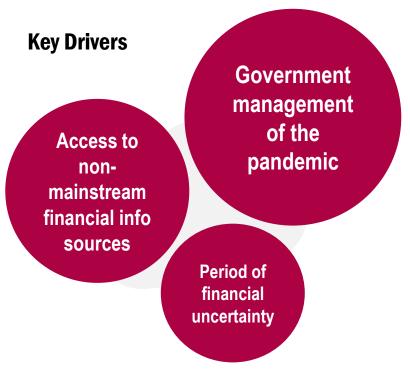
They are still on their financial journey, testing the waters and open to new things:

- Still finding their system they are searching for something that works for them and their lifestyle, always looking around.
- Yet to act on their non-mainstream views, while they
 think of themselves as early adopters, they may not
 always be first movers.

Attitudes

Trusting of non-mainstream sources:

- Curious about new ways to manage and make money: Open to more innovative solutions.
- Non-mainstream sources: Interested to hear what non-mainstream sources have to say about money management e.g. influencers, YouTubers.
- Scared to take the first step: Want to be unique with their money systems but not at the detriment of financial risk.
- Shift of financial perspective: Reassessment of financial security over the pandemic and cost of living crisis.







THE PROACTIVE PROSPECTOR

"The government want to open a bank without calling it a bank. It will be a monopoly; you won't get a choice."

Adoption Drivers

- New system of money: New piques their interest.
- Simple: Easy to pick up and use right away, no excessive learning needed.
- Digital currency: Allured by an innovative and streamlined new system that allows them to be rid of the wallet.

"If it comes to savings, I'd look into it. It's like changing power companies. I'll go in with all my information about what I'm paying now and see what somebody else can offer me and compare things like that."

Adoption Barriers

- Government backing unsure and have many questions about the government managing their money, influenced by how the government managed the pandemic.
- Tracing of money: While it states that the digital money will be untraceable, they are sceptical.

Potential Benefits

Buy something online and set up the payment so you only pay once it is delivered

Hold money in an account that doesn't increase bank profits

Money is safe from any potential bank collapse

Instantly pay for Trade Me purchases at the pick-up without using cash



THE BATTLER

"I've never really had a stable income before. I've never had a fulltime permanent job before. I've never had a steady income. I've always had part time jobs, casual jobs, so it's always been minimum wage or just above, just enough to get by or survive until the next week or the next pay."

Description

Battlers are limited in their ability to generate income. They rely on cash and more basic payment methods such as EFTPOS.

They often live week to week, payment to payment and consequently struggle to save. Drive to improve their money management system is overshadowed by risks of losing money/getting into (greater) financial difficulty.

Money management can be a constant concern.

Behaviour

- Prefer face-to-face banking; lower use of internet banking on computer or mobile.
- **Keep things simple**; often having to be very careful about timing money flows income and payment.
- Always looking for bargains, as they are trying to save as much money as they can.
- AfterpPay may be be used to get by.

Attitudes

They are very reserved when it comes to new money ideas:

- Not very tech savvy: They are restricted when it comes to technology, with little confidence to learn or get more involved.
- Don't desire change: They are just managing with the physical systems they have in place and have concerns around their ability to manage a new and more 'technical' change.
- The risks are too great: The risks of taking up new financial opportunities could have major repercussions in their livelihoods.







THE BATTLER

"There's just not enough. Live day to day, week by week. Especially being on ACC has been quite tough. It's difficult."

Adoption Drivers

- Streamlined features: Replacing and integrating a lot of their current payment methods into one place such as cash will make their process easier.
- Immediacy of payments: Assists with co-ordination of bill payments and allows current financial situation to be known at any point in time.
- Reserve Bank-backed: Perception that government has a duty of care to ensure access to all/no-one left behind and will look after them.

"Crypto currencies were created on lies and deception and that's why they're all in trouble now. That's why it needs to be people who stand by their morals, stand by their personal standards of what is right instead of just being swayed by everyone else"

Adoption Barriers

- Device and technology: May not have access to good technology (and data) which this is reliant on.
- Vulnerability: Low/no funds to risk on new systems, thought of 'learning' a new App/system can be daunting.
- What is the catch: They feel there is some other motive to low fees and all the benefits that is on offer.
- Lack of clarity around support: Unclear how support would be provided when errors are made, assistance needed, is there a safety net?

Potential Benefits

Small payments at farmers markets without the need for change

Buy something online and set up the payment so you only pay once it is delivered

Instantly pay for Trade Me purchases at the pick-up without using cash Receive job seeker payment immediately from government after approval



THE OPTIMISING MONEY MANAGERS

"Without money you're stuck. I realised I didn't want to be stuck and didn't want money to dictate my life."

Description

Optimising Money Managers are on top of their financial game. They have a solid and well thought out money management system that they have researched and done due diligence on.

While they are content with their system there is always room to improve. They are often well connected to community and have strong social and equity values. Open to new, but not risky, ideas, and will take their time to understand and evaluate fitness for purpose.

Attitudes

They are open and interested in new systems:

- Times change, they accept that: They accept that things will change, and they will need to adapt.
- Scared of future generations losing fundamental skills without cash: There are benefits to new tech, but we can't solely rely on it.
- Good fundamental knowledge and money values: They build upon that strong base of fundamental knowledge with new systems and ideas.
- Striving for more control over money: While they
 are already on top of their game there is always room
 to improve.

Behaviour

- Research and due diligence of multiple ways of payment and saving but only after research.
- May operate complex but logical system, digital wallets, contactless, banks, multi-accounts.
- Open to cash: Cash ensures they can help others that are digital excluded.
- **Give Koha** when they can in order to help close family, friends or the community.







THE OPTIMISING MONEY MANAGERS

"I suppose we're never going to stop progress but it's like calculators, kids can't add without a calculator now. The three Rs – reading, writing and arithmetic – it's like they don't learn it anymore."

Adoption Drivers

- **Inclusivity:** They have altruistic values and equity and supporting those less advantaged resonates.
- Secures New Zealand's financial system: Strengthening the financial system helps everyone.
- A national currency: Keeping the money in New Zealand is better for our economy then giving it to offshore banks.

"There must be a better way. To me the banks have so much control now.
Governments aren't even in control any more, it's all led by the banking system.
They create money, it's not even real money. They can even make money and then lend it to you. I don't quite understand it, but I know it's not quite right."

Adoption Barriers

- Worried that it may impact younger generations: Young people don't have the fundamental knowledge like they do, it will be making it too easy.
- Not enough information, or detail: Doesn't make enough sense currently and no big personal improvement evident at this stage.

Potential Benefits

Money is safe from any potential bank collapse

Instantly gift money to friends/family without having to get cash out

Buy something online and set up the payment so you only pay once it is delivered

Pay with a contactless card or phone without the surcharge

ANNEX C: EVALUATING THE CONCEPT OF A CBDC WITH USERS

CBDC EVALUATION OBJECTIVE

To further inform the development of a potential Central Bank Digital Currency (CBDC), user needs and the user response to a potential CBDC was addressed directly, in both the interviews conducted and the World Cafés, under objective 3

1

Understand New Zealanders' wants and needs in relation to money and payment methods today

Explore the underlying attitudes, wants, needs and motivations of New Zealanders surrounding money and payments. Identify and describe any shared tensions and nuance by respective end user groups, including vulnerable consumers who are financially or digitally disadvantaged.

2

Investigate how users manage and interact with money and payment methods to meet their needs

Understand New Zealander's money systems. Establish how user context, needs, enablers and constraints shape the practical approach taken to managing money and payments; including behaviours, payment ecosystem set-up and preferences, and money movements within systems. Identify satisfaction levels with systems and providers, any gaps, or frictions and future, ideal system expectations.

3

Unpack the potential of the CBDC concept by user group; motivations and barriers, and functionality

Investigate user response, comprehension, appetite and expectations for a CBDC both holistically and by user group. Assess the relevance and appeal of potential CBDC applications to inform both the development of the proposition configuration to deliver, position and communicate the most suitable, user-centric benefit hierarchy.

WE CONDUCTED A MIXED-METHOD QUALITATIVE RESEARCH APPROACH

1

In-depth Interviews

What: One on one, in-depth interviews and some dyads (with joint decision makers) to delve into their financial ecosystems, drivers and barriers, motivations and attitudes

Why: As money and finances are **personal** topics, to really get the details and specifics it is best to talk to people in a private setting and create an environment and discussion that is tailored to the individual to be **comfortable and safe.** A broad sample allows us to delve into many different people's lives and understand how their systems differ based on their situations.

2

World Café Workshops

What: A larger workshop setting (total 20 people) with mini groups (4-5 people) within to focus on, evaluate and deliberate on the key aspects influencing attitudes and needs in relation to money and payments management.

Why: The process allows the opportunity to explain complex or new products/services and affords the time for participants to absorb, clarify and discuss, and to hear a range of other people's views. This provides an effective assessment of motivations and barriers and strength of interest and likelihood to adopt (and on what terms). It also highlights differences to support segment development and allows exploration of potential CBDC design elements.



54 Overall interviews



30 Consumer interviews



Sole Trader and NFP interviews



Vulnerable consumer interviews



World Café attendees



ANNEX SUMMARY: RESPONSE TO CBDC CONCEPT

As well as impacting participants sense of security around money generally, the COVID-19 pandemic and response also appears to have heightened sensitivity to government control and paternalism for some participants.

CBDC purpose isn't clear and functionality improvements don't convince of the need

In response to a broad description of a potential CBDC to be provided by the Reserve Bank, consumers in the research are initially hesitant and can see no significant benefit over current digital bank account management systems. They seek more information and clarity, mainly surrounding the purpose of this type of currency. They were asking 'why would the Reserve Bank want to do this?', often speculating that the proposition is 'solving a problem that isn't there', or becoming suspicious of some other yet to be revealed motivation.

When a range of functional use examples are introduced, consumers can see some benefits, though these are described in fairly marginal terms and are often felt likely to be available via banks soon in any case, things that are nice developments but not game changers or big attractors.

Consumers were more likely to initially identify that a CBDC might exclude or reduce access by more vulnerable consumers (older, low digital literacy/access) due to digital exclusion and perceptions of potential complexity.



ANNEX SUMMARY: RESPONSE TO CBDC CONCEPT

Perceptions of the Reserve Bank are a challenge to manage

The Reserve Bank as deliverer, presents a significant perceptual challenge as there are mixed levels of awareness and understanding of its role. Some are comfortable with the Reserve Bank. However, others are less familiar, have reservations and draw association with interest rate hikes, formality or strong connection to government questioning whether this may be about paternalistic control.

Some question the ability of the Reserve Bank to develop user focused innovation as well as private sector banks may.

Lightbulb moment: Understanding the role of a CBDC in ensuring the stability of the system

As part of the research process the role of a CBDC in *stabilising* the money system was described to participants, and once this was considered and discussed consumers had a better sense of its purpose and associated benefits. This invoked feelings that this type of currency has the potential to be more equitable and of connections to national pride and the opportunity to put New Zealanders' interests before overseas bank profits – and to ensure we have a robust New Zealand dollar fit for the digital world. Participants then began to orientate themselves more clearly and positively towards the concept and its role.

Reserve Bank is the natural provider of this system protector role

With this context, consumers warm to the idea that the Reserve Bank is well placed to deliver this type of currency, it is the role in ensuring a stable and equitable money system that resonates, rather than use functionality. People still seek more information and reassurance surrounding the technology, privacy, security, interface with the banking system and costs - "the detail".



ANNEX SUMMARY: RESPONSE TO CBDC CONCEPT

Some Māori participants are interested in how a CBDC would be developed and controlled

Some Māori participants were concerned about who would have control of a digital currency and how much confidence they could have in the system. Sovereignty was also raised by some in terms of whether Māori would be involved in the design of a CBDC and in its implementation. Māori participants seek confidence in the system but also note the convenience of the current system for their community and also seek to understand how a CBDC would interact with the private banking system.

Education and financial literacy support is a potential role dimension

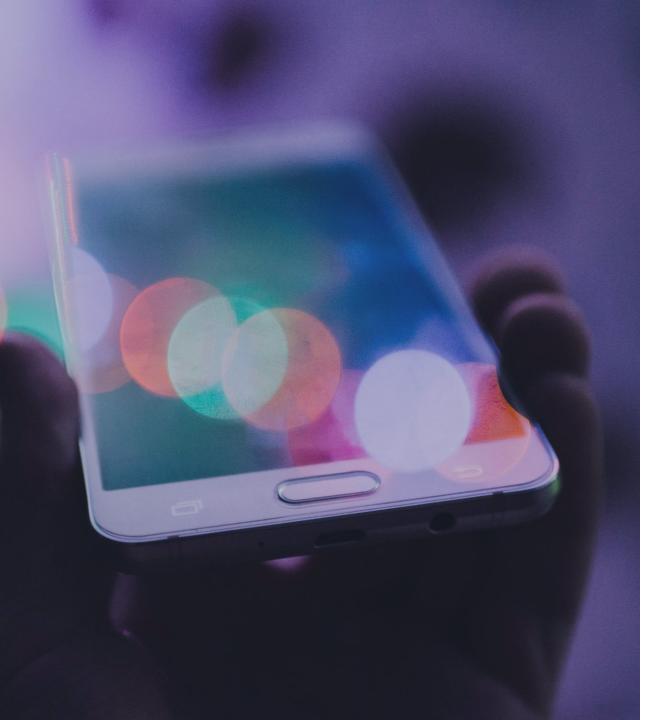
The research identifies a desire among some for greater literacy and support in educating children and enabling tools for budgeting. A CBDC could potentially have a role in these areas, which would be congruent with wider purpose of supporting the stability and equity of the nation's money system.

Charities can see functional benefits and approve of the Reserve Bank as provider

Contrasting with consumers, charity representatives can identify more frictions in their money management systems and are interested in several of the functionality improvements they were shown, including those that facilitated payments without being connected to the internet, reduced pay system fees and made it easier to give receipts and tax rebates. The Reserve Bank as provider offered reassurance of a robust and regulated system to the accounting staff in these organisations, boosting their confidence.

A positioning starts to emerge: A stable and secure, open payments platform with government backing

Presenting a CBDC as an evolution of the system: a digital form of cash to sit alongside physical cash is a logical extension. An evolution that better ensures a money system that is stable and meets New Zealanders needs, as we move into the future and one that the government is uniquely positioned to provide.



SUMMARY:

INTRODUCTION OF A CBDC

The concept of a CBDC was explored with participants in both the indepth individual interviews and in the World Cafés, This section describes the adoption drivers and barriers specifically for a CBDC from these discussions.

In the individual interviews a simple definition of a CBDC for New Zealand, provided by the Reserve Bank was introduced (see next slide for definition used). The response to this was then explored with participants in an unprompted way and then with some specific new functionalities (see Annex A) to test appeal.

The World Cafés provided more time to provide information and explanation and to discuss in groups. Subjects explored included money and the ways use is changing, the notion of digital currency generally; concepts of public and private money and the role and purpose of a CBDC for New Zealand provided by the Reserve Bank.

The forums allowed information to be shared incrementally, supported the socialisation of responses and reactions. It enabled a concluding discussion based on deliberations and positions reached through the process. Together these two approaches provide a good baseline sense of individual's needs and attitudes, how they engage with the concept of a CBDC, how this is socialised and the key factors influencing people's reactions and perspectives.

Following is an assessment of barriers and drivers of adoption for consumers.

DEFINITION OF A CBDC USED IN DISCUSSIONS

A new digital form of money that NZ's government (the Reserve Bank) creates and controls. It's accessible to everyone without the need for a bank to act as a middleman.

ADOPTION BARRIERS

Preliminary adoption barriers to any new digital currency

RESPONSES TO THE CONCEPT OF A DIGITAL CURRENCY

Offering a range of new functionalities was influenced TO AN extent by uncertainty and consumers tended to avoid the options that are more ambiguous*

- Questions/seeking more detail was the typical reaction to the broad concept presented. Some are intrigued; others unsure and some reject/are more cynical about the idea.
- Inertia is apparent (as it almost always is) as most can't see any immediate and significant improvement over their existing system that would warrant change. "Another" bank/account/app would need careful consideration, especially if it potentially increases system management, system reconfiguration, or particularly risk.
- A reluctance to evaluate was evident without more understanding and confidence in the security of the system and technology. Confidence in security being the bottom line.
- More clarity on the purpose is needed for people to be able to consider and trust the concept as a realistic option their future money systems. People naturally want to know who the provider is/are, what is the business model, what are they trying to achieve, what will the provider get out of this. Lack of clarity here undermines the ability to assess trust in the system, its safety, longevity, purpose and so raises more questions than answers.
- Questions around who guarantees and regulates the stability of the system is a key missing piece for people to be able to fully consider.

"Why make the effort and the change if there's no benefit for me. If they said your mortgage will be less and your interest will be higher, then yeah. Otherwise, you're comparing apples and apples and just changing the name of it."

"What's the difference for me... it feels just like Apple Pay or Google Pay. Those benefits could be done by anyone if they wanted to"

THE USER BENEFITS OF A CBDC ARE PERCEIVED TO BE MARGINAL OVER WHAT'S CURRENTLY AVAILABLE

- **New functionalities generate some interest**, though often the gains in efficiency/ease seem marginal and people can often only identify one or two.
- **Solving a problem that isn't there** was the consensus, with the functions shown seemingly replicating what's available currently, or likely soon to be available in the market.
- There are limited gaps in current systems, people were happy, could only identify odd niggles and didn't have any real epiphanies when they viewed possible functionalities.
- **No fees on contactless payment** is a nice to have but, not a game changer as people value convenience and often are willing to pay the fee.
- 'Instant' transfers resonate but is seen now as already met by banks, especially with the recent announcement of 7-day processing times.
- Splitting bills is a minor annoyance that some people saw some value in.

"These benefits are good, but they don't really offer that much... My Mum donates to charity a lot and I always tell where to claim it back, but why can't a regular bank just do this?"

"If it was a week ago, I'd say the one about being able to transfer funds instantly... With the government [instant payment] one maybe they have some instant transfers between person to person. But with the new rules now it kind of makes this one redundant"



PARTICIPANTS WERE PROMPTED WITH A RANGE OF POTENTIALLY BENEFICIAL FUNCTIONS THAT COULD BE PROVIDED BY A CBDC

These are the functions people were most drawn to...but enthusiasm wasn't high, and the benefits didn't seem strong enough to many consumers

Most Appealing

Split bills at restaurants/cafes easily

Buy something online and set up the payment so you only pay once it is delivered

Pay with a contactless card or phone without the surcharge

Claim a tax refund immediately after donating to a charity

Appealina

Younger consumers especially

Make a digital payment without being connected to the internet i.e. using Bluetooth

Instantly pay for Trade Me purchases at the pick-up without using cash

Receive job seeker support payment immediately after the application is approved

Instantly donate to a busker on the street with your phone

Strong for beneficiaries

Receive money from a friend instantly by digital payment

Money is safe from any potential bank collapse

Small payments at farmers markets without the need for change

friends/family without having to get cash out

Vulnerable consumers/migrants who use markets for regular food shop

Instantly gift money to

Context: Consumers in the research generally don't have a problem with the current payment solutions in NZ but can see some marginal benefits when presented with new functionality that offer some improvement on what bank systems currently offer.

Uptake would be dependent on a range of factors, of course, including most critically, confidence in security (of funds and data).

There is also a sense that banks will continue to evolve user centric payment functionality and little view that NZ may be behind in this area. i.e participants were either unaware or have experienced other useful systems overseas and anticipate they will come eventually.

Younger consumers especially

WELL COMMUNICATED INCLUSION BENEFITS OF CBDC ARE YET TO BE UNDERSTOOD BY THE PUBLIC

Respected sources* have outlined inclusion benefits of a CBDC, but also highlight pitfalls that could exacerbate the problem; which consumers focused on with the information they were given in this study

- **Limited digital access and skills** was thought to heighten exclusion e.g those who don't have have reliable access to smartphones/data/online banking. These were two of the key elements for digital inclusion outlined in a study from the Department of Internal Affairs in 2019. The concept and information that people were shown in this study were deemed to deliver neither of these and perceived to contribute to exclusion.
- **English as a 2nd language** was highlighted in the study from the Department of Internal Affairs in 2019 as a driver of exclusion; which was confirmed in this study with the concept in its current form felt to exacerbate this problem.
- **Distrust in online services** due to being stung by scams in the past, puts some people off trusting new systems. Vulnerable consumers who have less confidence and understanding of how the internet works are particularly susceptible and thus are wary of the concept.

*Sources:

FSI April 2022

Digital Inclusion Blueprint | Te Mahere mō te Whakaurunga Matihiko
Department of internal affairs (2019)
CBDCs for Financial Inclusion: Risks and Rewards
International Monetary Fund (2022)
Behind the Scenes of Central Bank Digital Currency: Emerging Trends, Insights, and Policy Lessons
Gabriel Soderberg et al (2022)
Central bank digital currencies: A New Tool in the financial inclusion toolkit?
Raphael auer et al (2022)
CBDC: a new tool in the financial inclusion toolkit?

"What about vulnerable people? Lots of people don't have access to technology or aren't technology savvy. Like homeless people! What about them?"

"I've been scammed before, someone stole over \$10,000 form my account. That was all because of some website I bought something from. So now I try to avoid online shopping unless it's absolutely necessary"

AWARENESS AND UNDERSTANDING OF THE RESERVE BANK REPRESENT A SIGNIFICANT PERCEPTUAL CHALLENGE

- There's mixed understanding of the Reserve Bank's role in NZ society and its activities and powers, leading to some people drawing on the limited connections they have. Others understand the bank's role more fully and have confidence.
- **OCR interest rate 'hikes'** are the most recent piece of information that consumers can connect with the Reserve Bank, creating negative feelings towards the 'brand' for some, since they are associated with an increase in costs and have a stringent feel.
- **Recessionary concern** is on the tip of everyone's tongue at this point in time and the Reserve Bank is deemed to be playing a role in this in the minds of some consumers.
- Independence from government is a difficult idea to grasp, with many consumers seeing them one and the same (as the government bank). This means consumers can attribute negative government associations with the Reserve Bank:
 - Reduced confidence in government to manage the economy effectively partly drives perceptions that the Reserve Bank may not be the experts to help manage personal finances.
 - Perceptions of overly paternalistic government control in the pandemic incite concerns about the Government gaining too much control and reducing privacy.
 - **Ability to innovate** a somewhat dry image and perceived role as a regulator of the system (by some) is not seen as very compatible with innovating at detailed consumer functionality level. The private sector is seen as more likely having the aptitude and incentives for this role.

"If it's alongside banks, then it's essentially become a bank. You say you've taken out the middleman, so your money is now going into the Reserve Bank bank. So you've just elected to go from a privately or shareholder owned bank to a government owned bank. Didn't they do that in Russia in the 40s - communism is coming around again."

"I don't know enough about that to form an opinion 100%. From what I hear my confidence in them is not massively high.....competence I think. And whether they're doing the right thing with the rates or whether they've just made everything worse with the official cash rate. I don't know enough."

"They set the OCR, what the value your money is depending on is how much debt they've gone into because they've decided to spend it on changing the flag."



ALTHOUGH THESE PERCEPTIONS POSE A CHALLENGE, COMMUNICATING WHAT THE RESERVE BANK STANDS MAY BE INFLUENTIAL

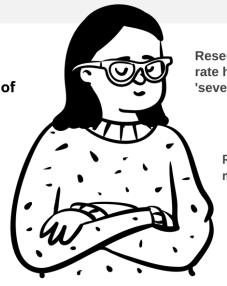
What consumers see and hear

The most politically consequential rates decision of Adrian Orr's tenure

- Stuff

New Zealand sees bigger deficit as economy sputters, spending boost to fan inflation

- Global Insolvency



Reserve Bank's latest official cash rate hike could make recession more 'severe and quicker', expert says

- Newshub

RBNZ stuns market with bigger rate rise, more tightening seen - Reuters

Reserve Bank lifts OCR to 5.5 per cent but shocks market by saying it's done enough

- The NZ Herald



ADOPTION DRIVERS

Preliminary adoption drivers to any new digital currency



SUPPORTING THE STABILITY OF THE MONEY SYSTEM DRIVES UNDERSTANDING OF PURPOSE AND CAN ENCOURAGE ADOPTION

Seen as an organisation that wouldn't fail, in the seemingly risky future scenario of increasing dominance of private money that is potentially less stable, the Reserve Bank is seen as more stable option.

Government backed is the positive flipside of not being seen as independent, and therefore will act in the best interest for the economy and all N7 citizens.

Money is safe from any potential bank collapse

NB. A bank collapse isn't front of mind, but there is some awareness with recent news coming out of the US at the time of the research.



Stability (of provider and for the system) is an assurance that the Reserve Bank can offer better than anyone else in the eyes of most consumers and provides a stronger chance of adoption if communicated alongside a new CBDC proposition.



THE RESERVE BANK IS SEEN AS RELATIVELY TRUSTWORTHY AND NOT 'IN IT' FOR PROFIT

Seen as the more trusted to effectively deliver a digital currency.

Although consumers weren't jumping out of their skins, the Reserve Bank is generally seen as the most logical choice to implement a digital dollar, compared to a commercial bank or tech firm.

Not in it for profit, unlike perceptions of the primary purpose of a bank or tech firm if they were to implement.

As people thought it through and considered that there were no fees, they generally came to the conclusion that the Reserve Bank would be preferable to implement a digital currency as they wouldn't be in it to make money, but rather look after (all) New Zealanders.

Banks make too much profit

NB. There is a mixed view on this, but a significant portion of consumers agree, for some it is a significant irritation.

When consumers come to the realisation that a digital dollar is potentially very likely, they start to see the Reserve Bank as the most suitable provider, trusted to have our society's best interests rather than profit at heart.



THE RESERVE BANK CAN LEVERAGE NATIONAL PRIDE AND LOCAL CONTROL TO DRIVE ADOPTION

There are benefits that consumers believe the Reserve Bank can leverage if they were to introduce a CBDC

A NZ based solution that could help address the feeling that NZ money is being lost overseas and controlled by mainly Aussie banks.

A sense of national pride can be stirred when consumers see a potential risk of overseas organisations playing a larger role in the NZ economy.

Something other than Kiwi Bank to use for money management that helps support the NZ economy.





THERE'S A POTENTIAL OPPORTUNITY TO USE CBDC AS A VEHICLE TO EDUCATE NZ'ERS ON MONEY

A modern way for young NZers to learn, that alleviates concern that young people are losing financial skills due to not managing and handling physical cash. This then speaks to the intention of the Bank stepping in to address issues that the market may not provide - stability, education on money etc.

Part of a wider purpose to help NZers understand money. Consumers don't generally know how the money system works in NZ, but once given more information they start to question it and often want to know more.

Helping Nzers gain control of their system. Although some of the personas developed feel in control, the majority of consumers are looking for more, which tools wrapped around a CBDC could help with.

MĀORI CONSUMERS AND CBDC CONCEPT



MĀORI INSIGHT

"I'm not opposed to the concept; I would consider the new digital dollar. But ultimately it comes down to control and trust."

"One of the main reasons I'd like to know is why are they wanting to do it? What's the benefit for the government controlling this? If they said for example the profits are going to be used to go back in to fund New Zealand things, then sure that definitely makes sense and would change my perspective quite quickly."

Confidence in the money system was a major consideration for Māori participants who were mainly concerned **with who was backing a Digital Currency**, what would happen if it crashed, and whether different populations with varying access to technology could use the new system (for example, kaumātua who may have poor digital literacy, or lack of device access), or how a NZ digital currency could work overseas.

Additionally, there were debates about whether they should **trust private or government-backed currency systems**; in general, Māori participants expressed more confidence in a system that was government-backed as opposed to private banking systems, as private banks were seen as being driven by profit, with much of these profits likely leaving Aotearoa New Zealand, or being prone to collapse and loss of people's money.

A government-backed system on the other hand was seen as more **reliable, accountable and secure**, and that the government was more likely to operate more fairly and equitably - looking out for the interests of the people, as opposed to a private bank driven by profit.

Control was also a major consideration for Māori participants; they were concerned who would be in control of the currency, whether it had autonomy or privacy implications, and who might be profiting from the system. In general, there was a desire for autonomy and control over their own money and how it is used. There were also some broader discussions amongst Māori participants around Māori control and sovereignty in relation to the currency, such as **whether Māori would be involved in its design** and in how it would be implemented.

Convenience was a perceived benefit for Māori participants; noting that an instant and secure system to make payments could be very convenient. This was seen as potentially beneficial for Māori who may not have access to traditional banking services due to remoteness, location, socio-economic status or other reasons.

Māori participants were also generally very happy with their current payment system, so they were interested in how the proposed digital currency system would either interact with existing bank systems or offer advantages or superior convenience so that it could replace or complement current systems.

CHARITIES AND SOLE TRADER CBDC CONCEPT RESPONSE



CHARITIES ARE INTERESTED IN CBDC

"Amazing from the point that it's not a bank ripping you off with lots of fees. To have instant access to everything sounds very good. It would need to be secure."

"[Functionality examples] Most of them are very good - lower merchant fees, track GST for IRD payments, simplify donations receipt, payments without internet connection, save money on bank fees...."

EFFICIENCY, SECURITY AND COST SAVING ARE THE MAIN DRIVERS FOR CHARITIES

- Can see several directly relevant benefits in the improved function examples, centering around reducing fees, and enabling digital payments.
- **Government delivery and backing supports confidence** in security and likelihood of lower/no cost and will ease adoption. Some still wary of RB control generally as per consumers.
- **Support the idea of inclusiveness** as often dealing with those less advantaged, or with older donors for example, and since they can see it needs large scale use to be worthwhile.
- Any new system should easily interface with existing platforms they use or efficiently replace them. Security or guarantee are strong attractors as they are wary of increased online risks.
- Participants were wary of substantial change, due to work and potential risk involved reestablishing their systems, as they have limited resources and systems are under control - so benefits would need to be clear and significant.
- Charities operate prudently and so seek more information and detail of how a CBDC would work exactly to satisfy their need for thorough evaluation and approval of their boards.
- Will evaluate any new offer carefully before committing but are potentially excited about some of the user benefits.



SOLE TRADER CBDC ADOPTION

"The whole process of changing was horrific that it will put me off changing regardless of the value"

"I like that they're removing the middleman"

"I don't understand why we have so many individual banks"

"It's a bit odd, but digital money is where we are going"

"Banks will become a thing of the past"

THEY SEE SOME VALUE IN HELPING SOLVE THEIR PAIN POINTS, ALBEIT WITH CAUTION

- There's concern about the costs of changing systems. With bank and technology fees in the back of their minds, they're worried similar sorts of charge will come their way if they were to adopt this new system.
- It's only relevant if the market adopts first. Just like other payment technology adoption, they say they will do what the market demands, this is no different for CBDC.
- **Some sole traders are concerned with privacy** and don't want any link between their finances and the IRD or government. This is because some jobs are 'cashies' and tax isn't paid.
- To appeal to small business, the focus needs to be on simplifying and a better service promise. They currently struggle with inconsistent communications and delays in helping from service providers and would therefore need reassurance this won't be the case for this concept.
- Some sole traders like the idea of not needing a bank, even if it does feel a bit odd. The idea of cutting out the middleman resonates once they think over the concept.
- There's some concern about Government control and security. Small business has some concern money could be 'taken' by the government, but when pushed to compare with whether they think banks are any better, the answer was inconclusive.



APPEAL OF CONCEPT STRONG AMONG SOLE TRADERS AND SMALLER CHARITIES, BUT QUESTIONS STILL PREVALENT

"I'd look at this straight away..."

Potential benefits:

- More control
- Less fees
- More security
- Status cues

"I like that they're removing the middlemen"

"Link with government may increase trust"

"If I'm not paying labour of somebody in a bank then there must be financial gains"

"The type of person I imagine would be into this would be a 35-55 year old man, an investor, lots of assets, and financially savvy"

"But, I'd be searching for answers .."

Questions raised:

- Will you be charged interest or would it be less?
- What's in it for me?
- Is the money real?
- How secure is it?
- How accessible is it in an emergency?

<u>Preferred</u> functionality

18
Streamline/automate end of year accounting

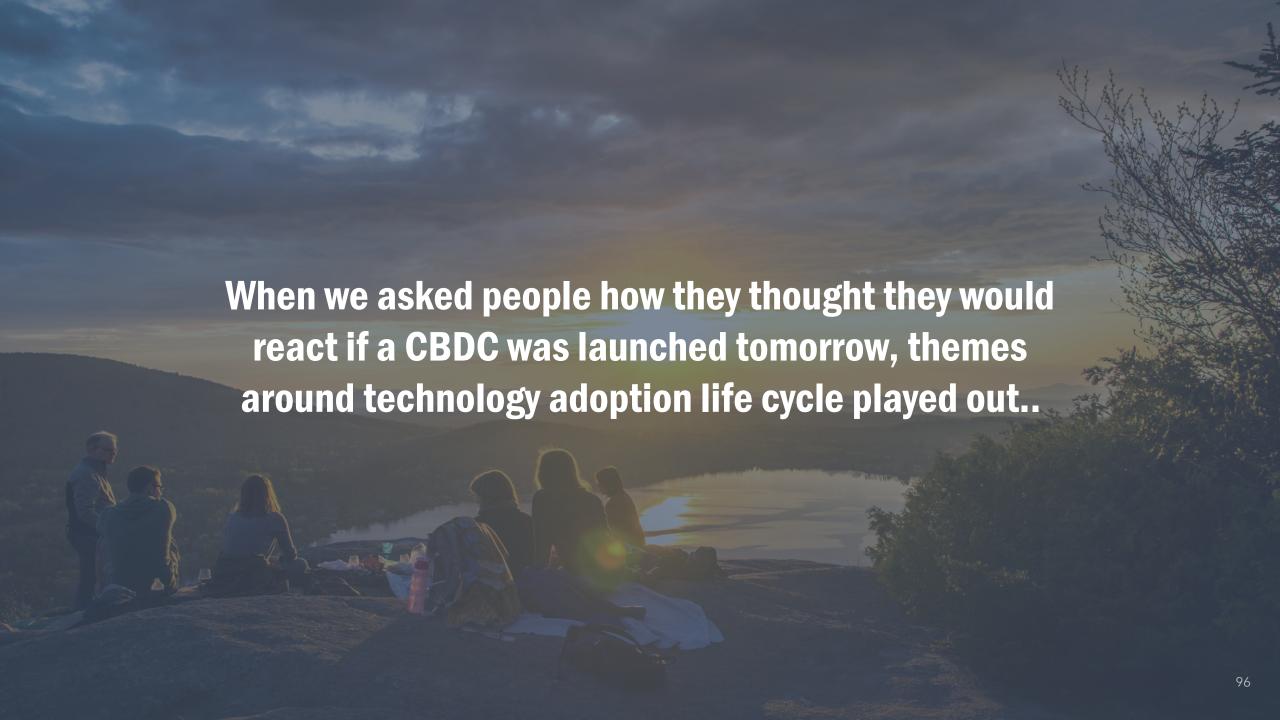
Easily track what you owe in GST and simplify payment to IRD

15
Enable payments with a contactless card or phone without the surcharge

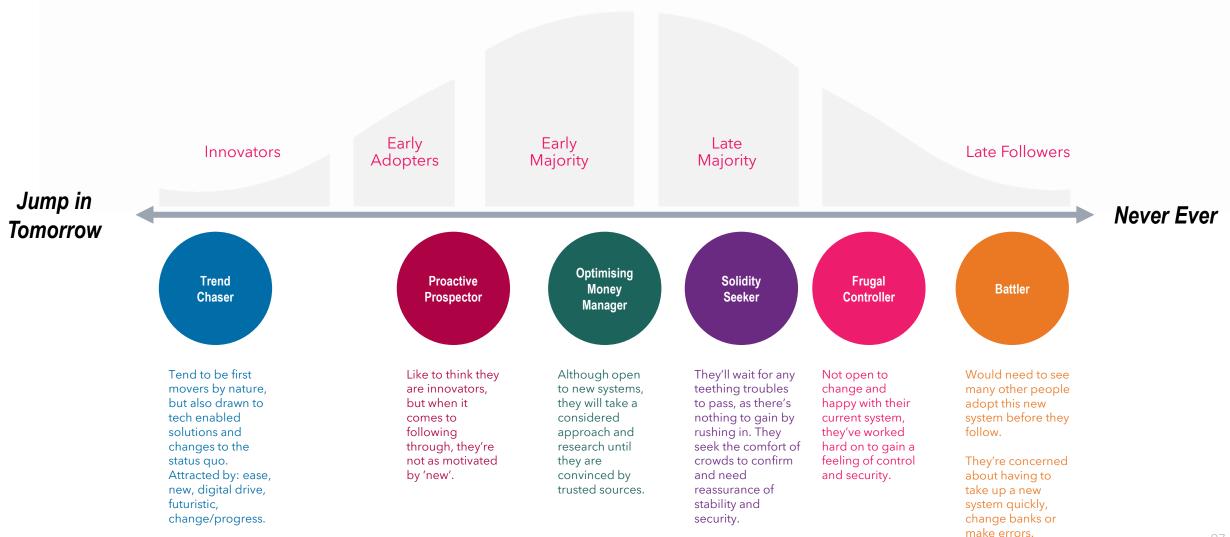
Make a digital payment without being connected to the internet

CBDC CONSUMER ADOPTION





LOOKING AT OUT OUR PERSONAS WE CAN HYPOTHESISE WHERE THEY FIT AND CAN QUALITATIVELY ESTIMATE THE POTENTIAL RELATIVE SIZE OF EACH



Adoption Group

Motivations/Attitudes

Innovators

Tend to be first movers/leaders by nature, but also drawn to tech enabled solutions and change to status quo. Attracted by:

- Easy, shiny, new
- Smart digital driven
- Future
- Change/progress

Early Adopters

Similar motivations but will seek more information/endorsement of trusted others and be more focused on the ease and convenience benefits and cleverness

Early Majority

Need more information and more reassurance that this makes sense and is secure. The benefits have some appeal and will follow if can see beneficial functions in action and have trusted endorsements from users. Don't want to be off the pace from the smart crowd.

Later Majority

Not motivated by the latest thing - pragmatic in their evaluation of net-benefits for their situation. Biased to status-quo. Will likely wait for any teething troubles to pass - as can see nothing to gain by rushing in. Seek the comfort of crowds to de-risk the decision and need reassurance of stability and security particularly.

Late Followers

Wary of government/cynical, can't see the need from benefits shown. Not concerned about the counterfactual scenario of less system stability. Strong inertia in current system. Suspicious of an agenda.... "I like it. Anything about taking money out of the bank and putting it somewhere else securely, is pretty cool. At the moment , what else do you have? I'd probably jump in early and put a little amount in. I feel it's like a like a safe Crypto, to be honest."

"Sticking it to the banks"

"I like things that make life easier and are fun. Interesting."

"My mates have used a few systems like this overseas and we chat, so I know these things work.

Transfers and stuff like that, convenience."

"I'm with the others. I feel like the Reserve Bank is pretty safe, but I wouldn't want to be one of the first people to use it. I'm one of those people who likes word of mouth so if my friends say it's good, then I might want to use it. I like how it's all digital and how there's no charges, that feels good to me. I'm not really worried about the government aspect."

"I'm not against the idea, I would just like to know more about it. Not reassurance, just to know why it would be more beneficial over what we currently have."

"I'm a bit sceptical about the Reserve Bank. I would go when the masses go....it shouldn't be forced, choice is everything"

"I could be interested but a bit wary. I'd have to see how it works first. I'd tend to hold back and be sure it's going to be stable. The process we've got at the moment works quite well"

"I've got everything worked out where my money is working for me, I've got a mortgage, so I'd just want to see something like that to be convinced to move to a different mode"

"I just don't see any benefit at all. I'm happy to use cash.... I'd want it [cash] to be there. There are situations where it's good and I don't want to see it taken away. There's no benefit. I'd go a step further. Not only would the government see what you're doing but they could potentially limit what individuals could actually spend things on..... put a block on it and say you can't use it in certain situations."

CBDC STRATEGIC CONSIDERATIONS

AT A HIGH LEVEL, WE SEE THREE BIG 'PROBLEMS TO ADDRESS' FOR CBDC GOING FORWARD

1

Consumer Problem

When it comes to money, a large portion of people are cautious and don't like change

2

Perception Problem

The Reserve Bank may have negative or uncertain associations for a significant proportion of people

3

Functionality Problem

The new offer tested isn't notably better than anything in market

POTENTIAL SOLUTION TO EXPLORE: FRAME AS A CASH TRANSITION TO LIMIT PERCEPTION OF CHANGE

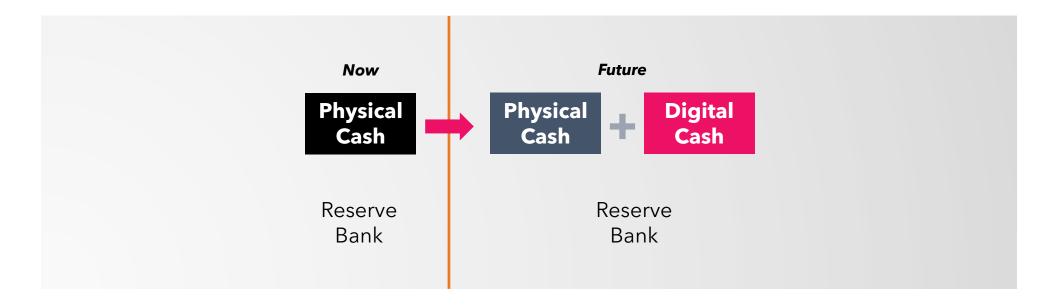
1

Consumer Problem

When it comes to money, a large portion of people are cautious and don't like change

Solution to Explore

A cash transition, "moving cash online" rather than a new and 'discretionary' currency, makes for easier launch and consumer comprehension. This provides potential to leverage the existing equity cash has of trust and familiarity as well as the role of government as the provider.



POTENTIAL SOLUTION TO EXPLORE: ALIGN PURPOSE WITH CONSUMER NEEDS AND COMMUNICATE IT CLEARLY

2

Perception Problem

The Reserve Bank may have negative or uncertain associations for a significant proportion of people

Context: some feel the RB has been 'heavy handed' in their post Covid inflation response and caused uncertainty and pain - in some people's eyes, this has influenced credibility in terms of whether they are truly supportive and competent as economic stewards.

Solution to Explore

Align consumer needs with the Reserve Bank's needs and be clear about the purpose and its collective benefits.



Purpose: ensuring the **stability** of our payment system in New Zealand (and possibly to play a role in financially educating society)

POTENTIAL SOLUTION TO EXPLORE: MATCH MARKET FUNCTIONALITY BUT WRAP IT IN THE CONTEXT OF SOCIETAL BENEFITS

3 Functi

Functionality Problem

The new offer tested isn't notably better than anything in market

Solution to Explore

Match or better the current market offering but communicate the values driven, societal benefits for NZ rather than pure functionality.

The understanding of a digital currency provided by the government, that is <u>secure</u> and lower cost, triggers appeal more than improved higher functionality without this context.

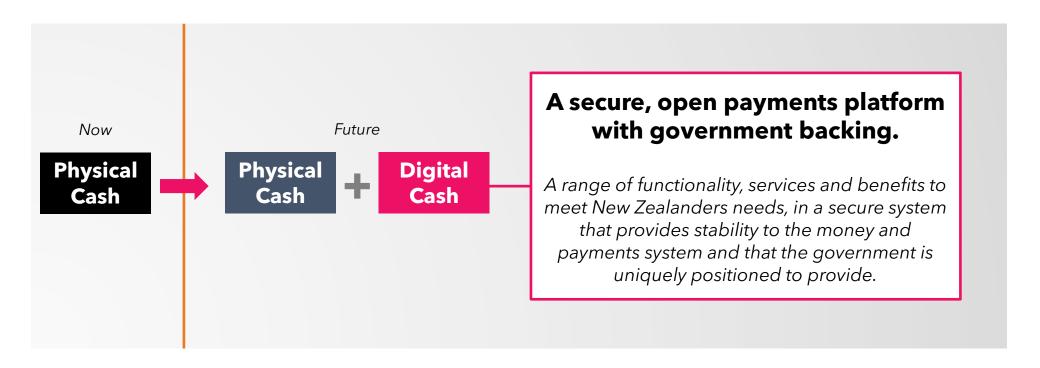
The value of government as deliverer is most effective in the context of :

- Improved **stability**, decreased risk the counter-factual of private money dominance and increased risk of instability, if/as cash use dwindles.
- A digital form of New Zealand currency, that is implemented fairly for NZ society (not overseas) and supports greater inclusiveness than private digital currency might.
- A potential role to be a trustworthy entity that contributes to the financial education of NZ society as it transitions to one with more use of digital currency.

PUTTING THESE POTENTIAL SOLUTIONS TOGETHER GETS US TO A HYPOTHESISED NORTH STAR

There is a story to tell, that potentially covers the future orientation of money and government acting in the prudent interest of society. A story that taps into our sense of national identity and of pride and fairness

Purpose: ensuring the stability of our payment system in New Zealand



RBNZ asked the researchers propose an elevator pitch to summarise the proposition derived from the research:

SUGGESTED ELEVATOR PITCH

The Reserve Bank's purpose is to enable economic wellbeing and prosperity for all New Zealanders, it is uniquely positioned to tune our money system and introduce new approaches to support New Zealanders and their finances.

Cash (banknotes and coins) that circulates in our economy supports transactions and establishes stable value for our national currency. It is one of the Reserve Bank's responsibilities to oversee its production and management.

The money system is changing - New Zealanders and the world are transacting more and more via digital technologies and the use of physical cash has declined substantially in recent times.

In response, the Reserve Bank is now providing a digital form of cash (the 'XXXX') to sit alongside physical cash. This provides a range of functionality, services and benefits to meet New Zealanders' money and payments needs, in a secure way. Importantly, it better ensures stability and strengthens the money and payments system in Aotearoa New Zealand.