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1. Executive summary

Good Shepherd Microfinance is Australia’s largest microfinance company, partnering with more than 150+ community organisations to deliver a suite of people-centred, affordable financial products and services for people on low incomes, across 650+ locations. Our flagship program, the No Interest Loan Scheme (NILS), offers clients loans of up to $1,500 with no fees or interest, to purchase essential household items such as whitegoods, or services such as education, healthcare or car registration.

Previous research indicated that NILS clients experience a boost in financial capability and confidence\(^1\) during the financial conversation that takes place as part of the loan application process. Yet without ongoing support, their capability and confidence normalises to pre-conversation levels. Conversations to Capability, an 18-month study funded by Financial Literacy Australia, aimed to co-design and test interventions to strengthen and sustain the clients’ financial capability and wellbeing\(^2\) over time.

In particular, this project was designed to explore technology-led supports that can be delivered at scale, including dynamic tools to help Good Shepherd Microfinance staff and microfinance workers from our service provider network, offer resources and tools that are tailored to the specific needs and aspirations of NILS clients. The research also sought to measure changes in clients’ financial capability.

A mixed-methods approach enabled the project to combine qualitative and quantitative techniques in ways that complemented one another, while also generating robust, insightful data. This data has helped to facilitate the co-design of practical support tools which clients are more likely to use. The project involved two distinctive phases - Phase I (Co-design) and Phase II (Testing). Phase I (October to November 2017) used a Living Lab approach to identify and co-design technology-led supports for 22 clients over their NILS journey via 8 workshops held in 2 locations (Bendigo, Victoria and Bankstown, NSW). Interviews with 2 NILS providers and 6 journals maintained by workshop participants provided additional data to inform the co-design. As Figure 1 below shows, NILS clients prefer text messages and online resources, to phone-based applications (‘apps’).

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Phase II (April to June 2018) built on the Phase I findings and recommendations to test two specific technology-led interventions (text message nudges and an online financial information toolkit) across 4 distinctive client groups. These groups were comprised of those who received only the information toolkit; those who received only text message nudges; those who received both; and a control group who received none. The impact of these supports on financial capability was measured via a quantitative survey with 301 clients. Interviews were also held with 22 NILS clients, and 5 NILS providers completed a qualitative survey, to gather additional qualitative data about the impact of the technology-led support tools. This phase also enabled us to further explore the daily challenges NILS clients face in managing their money on limited incomes, building on previous Good Shepherd Microfinance research, Measuring the Impact of Microfinance ‘Money Conversations’ on Financial Capability and Pathways to Resilience.

The findings from Phase II (Figure 2 below) reiterated the importance of recognising that NILS clients are a diverse group, and interventions can impact them in different ways. For example, whilst 10 of 22 clients interviewed reported feeling more supported and confident in their NILS journey after receiving the text messages and financial information toolkit, others did not find the information relevant.

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4 Randrianarisoa and Eccles, 2016.
Combining the learnings from both Phase I and II of the Conversations to Capability project, the Good Shepherd Microfinance research team found the following important insights, which can inform our ongoing program design, product development and process improvement efforts, as well as contribute to knowledge and policy across the domestic and global financial literacy community.

1. **Multiple communication methods and channels, including face to face and technology-led options, are needed to support NILS clients**

The project has found that text message nudges and online financial information toolkits have the potential to support NILS clients. However, a range of communications methods and channels are needed to best support clients. This includes face-to-face support, physical information (for example, brochures or hardcopy materials), and technology-led support tools. It is important to ensure that support tools are designed to be accessible for a diverse range of NILS clients.
2. Text message nudges are useful in providing information and support, yet clients also want to better connect with other NILS providers and clients

Text messages nudges were seen as useful tools to help some clients manage their money. Some clients described feeling a sense of support and encouragement in their NILS journey when they received tools, because ‘someone cares’. This is supported by the Phase I findings which showed that clients want opportunities to connect with NILS providers and other clients, in building a stronger sense of community. The project also found that text message nudges are not accessible to all NILS clients and they should be used to support clients when appropriate.

Recommendation One

Design technology-led support tools which can be accessed by clients with a broad range of needs, including digital exclusion, low levels of literacy and numeracy and languages other than English.

Design support tools which are not technology-led, for clients who prefer face-to-face or hardcopy materials.

Recommendation Two

Use behaviourally-informed text messages when appropriate.

Test technology-led options to build clients’ social connectedness and feeling of support, in addition to their financial capability.

3. Customised financial information is useful, yet clients also need clear and simple information about the NILS process

The customised financial information toolkit was seen as useful in helping some clients to manage their money. Some clients mentioned that they valued the sense of support provided by the tools, even though they may not have acted on the financial information when they received it. The project also found that it was difficult to customise the financial information toolkit because the resources, investment and technical expertise needed to develop and test a range of customised technology support tools are beyond the scope of most not-for-profit organisations. Given that NILS clients are a very diverse group, further work is needed to design tools that are truly tailored to individual needs and circumstances.
This project also found that clients wanted access to more information about the NILS process, in addition to financial information. Clients spoke of wanting to receive updates about the progress of their loan, such as the remaining loan balance.

**Recommendation Three**

Provide clear and tailored information about the NILS process.

Further explore what type of information is relevant to which clients, at which point of their NILS journey, given differences in needs, circumstances and levels of financial capability.

Design and test more tailored tools to support financial capability building.

4. **Providing support tools does not necessarily change financial knowledge and behaviour in the short-term**

Some clients found the support tools useful, and reported increased knowledge and confidence after using them. Four clients also reported changing their behaviour such as saving more, using a budgeting app and quitting smoking after receiving the supporting tools. Yet, not all clients agreed the support tools were useful or relevant to their needs. The quantitative survey also did not find any significant difference between the average scores of financial knowledge and behaviour between the intervention groups (clients who only received the financial information toolkit, clients who only received text message nudges, clients who received both) and the control group who received none.

We know that financial capability encompasses three domains – financial knowledge, skills (i.e. the ability to put the knowledge into practice) and longer-term behaviour. Our research focused only on changing clients’ financial knowledge via text message nudges and an online financial information toolkit. Our findings of no significant difference therefore suggests the need to test skill-building opportunities, as well as longer-term research to identify targeted interventions that can better support diverse client groups, and sustain their financial capability at different stages of their NILS journey.

**Recommendation Four**

Continue to investigate the different impacts of support tools on clients’ financial capability, beyond building their financial knowledge.
5. Low income is a significant barrier to enhancing clients’ financial capability

Clients consistently report that their limited incomes impact their ability to improve their financial capability. Most clients surveyed felt that a lack of money was preventing them from managing their finances the way they would like to. Efforts to support clients to improve their financial capability should be made alongside efforts to change the structural drivers of inequality which impact on clients.

As we complete this study, we reflect that the technology-enabled support tools which we explored, such as test messages and customised financial information toolkits, focused on changing clients’ financial knowledge as a pathway to behavioural change. More recent research has found little evidence that demonstrates a direct link between financial literacy education and longer-term behaviour change.⁵

Future research focusing on other aspects of capability building such as saving mechanisms and edutainment to more actively engage users in applying knowledge in practice (i.e. building skills) may better enable longer-term behaviour change. We therefore look forward to further opportunities to conduct research in this important area, in the hope that we can contribute to the global knowledge on what works to enhance financial behaviour over the longer-term.

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2. Background

Good Shepherd Microfinance offers a suite of safe, affordable and appropriate financial products and services designed to meet the needs of people on low incomes. In collaboration with key partners from across industry, government, academia and civil society, we aim to enable our clients to realise their own financial wellbeing, moving away from financial hardship towards stability and income-generation. As a result, people feel valued, accepted and included, and in control of their own finances and lives.

Good Shepherd Microfinance has long undertaken action-focused research to better understand our clients’ financial capability; i.e. an individual’s financial knowledge, skills, and behaviours, as well as the social factors that influence their financial decisions. This is the third research project exploring this theme, beginning with Measuring the Impact of Microfinance ‘Money Conversations’ on Financial Capability, which found that there was an improvement in financial capabilities of No Interest Loan Scheme (NILS) clients as a result of the financial conversation. The study showed that overall, there is a link between the financial conversation that clients have when they apply for a loan and improved financial capability, and that this improvement can be measured.

The second study, Pathways to Resilience, measured the financial capability and confidence of NILS clients over a three-month period. This research found that clients’ financial capability and confidence peak during the financial conversations that take place during their loan application, but normalise back to pre-conversation levels just three months later. The research also noted that clients have varying experiences with financial knowledge, skills, and confidence, and that the needs of clients differ according to these experiences. For instance, while some clients find value in learning to realistically budget their income and expenditures, other clients already have high levels of financial knowledge and skills but can still benefit from the support of microfinance products and services.

Building on these findings, the Conversations to Capability project was designed to deepen Good Shepherd Microfinance’s understanding by designing and testing a range of interventions/support tools to improve financial capability and confidence for NILS clients over the medium term. A key proposition being tested was that the clients’ financial capability could be strengthened by incorporating technology-led support tools which also facilitate longer-term impacts, lasting beyond the financial conversation.

Adopting human-centred design via a Living Lab methodology, the project aimed to enable researchers to work intensively with current NILS clients and providers, explore diverse client experiences, and find ways to increase and sustain their financial capability and confidence. In particular, the project strove to address common challenges faced by clients on low incomes which compromise their capability and confidence, including a scarcity mindset; less access to timely, relevant information; lower visibility to those who design

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7 Corrie, 2013.
8 Randrianarisoa and Eccles, 2016.
financial products and services; less time to follow through on efforts to achieve positive change; lower margin for error; and low savings buffer to provide a cushion in times of difficulty.

The project was designed to meet the following key objectives:

1. To increase the financial capability of clients on low incomes by providing appropriate information at ‘teachable moments’ and tools catering to their individual circumstances, needs and aspirations.

2. To enable positive behavioural change by encouraging and facilitating key drivers which link clients’ financial capability to action to improve their financial circumstances.

3. To design and promote support tools and resources that can meet individual client needs (based on socio-economic, demographic and individual factors).
3. Financial capability, wellbeing and technology-led capability-building supports

3.1 Financial capability, wellbeing and social capital

There is a growing body of research on innovative approaches to improve individual financial capability and longer-term behaviours in order to enhance financial wellbeing, both in Australia and overseas. The Conversations to Capability project focuses on supports to strengthen and sustain financial capability as a way to contribute to overall financial wellbeing. Financial ‘capability’ refers to the ability to utilise the tools and resources at one’s disposal to make informed financial decisions. Atkinson et al. identify four domains of financial capability: managing money, planning ahead, choosing products and staying informed. Financial capability shapes financial wellbeing, which is defined as, ‘when a person is able to meet expenses and has some money left over, is in control of their finances and feels financially secure, now and in the future’ (see Appendix 1 for more information).

Financial wellbeing is shaped by social and economic dynamics which create contextual opportunities or limitations that are largely beyond the control of individuals (such as the global and national economy; government programs and policies; mass culture; advertising media etc.) as well as individual factors such as family wealth, social capital, demographic factors including gender, race, education, geographic location and personal income. Additionally, life events such as accidents, births and deaths, marriage and divorce, and health and sickness can also have a large and often sudden impact on individuals’ financial wellbeing, particularly if social safety nets are not sufficient to mitigate the impact. Whilst most individuals cannot control the socio-economic factors and life events that affect them, strong financial wellbeing can help individuals to make the most of the tools and resources at their disposal. In fact, Taylor et al. argue that people across societal strata require financial management skills to maintain control of their money, regardless of wealth or income.

In the Australian context, an ANZ survey found that the average financial wellbeing score for adults in 2017 was 59 out of 100. The study also found that 23 percent of respondents were ‘getting by’ and

12 CFPB, 2015.
13 percent were ‘struggling’ with their financial situation.\textsuperscript{15} The statistics on financial capability also show that many Australians are struggling to manage their finances. In 2015, 64.3 percent of surveyed Australians reported facing some level of financial stress or vulnerability.\textsuperscript{16} Low financial capability is associated with low wellbeing and high stress, so it is concerning that almost one in ten Australian adults have ‘no understanding’ of financial products and services. A further 17 percent report being over-indebted, and barely managing to meet their loan repayments; 16.6 percent have difficulty in covering living expenses; and one in ten do not have any savings.\textsuperscript{17}

Low levels of social capital are also linked with low financial resilience and wellbeing, as one’s network of relationships can be a source of financial information, advice, and assistance such as informal loans in case of emergency. Social capital can reduce financial stress and promote financial resilience through changing conditions, thus contributing to overall financial wellbeing. Yet, 22 percent of surveyed Australians reported having limited or no social connections.\textsuperscript{18} Those on low incomes, born overseas in non-English speaking countries, or suffering mental illness are more likely to have lower social capital.\textsuperscript{19} Others, such as Indigenous Australians, may choose to share wealth with their social networks rather than save for themselves. This builds social capital rather than individual financial wealth, yet this ‘social investment’ also allows people to draw on their social resources in the future.\textsuperscript{20}

Efforts to build financial capability and wellbeing must therefore take all of these factors into account. In particular, building the financial capability of individuals can boost their overall financial wellbeing by supporting the active and responsible use of existing financial services,\textsuperscript{21} yet it is important to first understand the ways in which the meaning and practice of financial wealth and social capital vary among sub-populations, and tailor interventions to clients’ needs in order to align positive financial impacts with cultural values. To the extent possible, financial capability-building interventions should prioritise building social capital as an essential contributor to financial resilience and overall wellbeing.

### 3.2 Insights from behavioural economics

Individuals do not always make ‘rational’ decisions according to the rules prescribed by traditional economic models.\textsuperscript{22} As Arnold and Rhyne note, “Behavioural economists argue that intrinsic human biases often inhibit our ability to make good decisions, even when we know better”.\textsuperscript{23} For example, people may choose to follow the path of least resistance, such as sticking with default retirement savings plans, rather than searching for better options; may avoid or delay

\textsuperscript{15} Blackmore et al., 2018.
\textsuperscript{16} Muir et al., 2016.
\textsuperscript{17} Muir et al., 2016.
\textsuperscript{18} Muir et al., 2016.
\textsuperscript{19} Muir et al., 2016.
undesirable tasks, such as spending time on job searches, in spite of benefits in the long term; or may value smaller rewards in the present rather than larger rewards in the future.²⁴

The field of behavioural economics has emerged to explain and predict individual decision-making by applying psychological insights to human behaviour.²⁵ Behavioural economics aims to understand the patterns of human behaviour and use that understanding to encourage, or ‘nudge’, individuals toward making decisions that will benefit them. Policymakers have increasingly embraced behavioural economics in their attempts to encourage beneficial behaviours in individuals, including in personal financial decision-making.

Behavioural economics is most commonly associated with the concept of ‘nudges’, or strategic small actions taken to gently push people in the direction of positive choices – manipulate the ‘architecture of choice’, or the way in which different options are framed, to make good decisions appealing. Nudging was popularised in a 2008 book by Richard Thaler and Cass Sunstein, with the central argument succinctly summarised by Thomas Leonard: “Nudge defends three main claims: one, the architecture of choice greatly influences how people make choices; two, choice architecture is unavoidable (so why not design in ways that improve wellbeing), and three, [policymakers] can nudge while preserving freedom of choice”.²⁶ In the microfinance context, nudges could be used to encourage clients to prioritise savings, for example, or to pay bills on time.

Another common technique embraced by behavioural economists is the ‘commitment device’, a term that denotes any of several methods used by individuals to hold themselves accountable to their goals.²⁷ A commitment device is often intangible: for example, a person wishing to improve their fitness may speak about the goal to friends and family, or may find a gym partner with the same goal in the hopes that each partner will hold the other accountable for keeping to their workout schedule.

The Behavioural Insights Team (BIT) in the Cabinet Office of the United Kingdom government has worked to identify and alleviate the barriers to economic wellbeing that are experienced by people living in poverty. A 2016 BIT report concluded that policymakers should strive to minimise the costs, in terms of time and mental energy, of accessing government services in order to make it easier for individuals with low incomes to make good decisions for themselves.²⁸ BIT has identified four simple principles for applying behavioural insights, stating: “If you want to encourage a behaviour, make it Easy, Attractive, Social and Timely (EAST)”.²⁹ The EAST framework (summarised in Table 2 below) encapsulates many of the

²⁸ Gandy et al., 2016.
lessons learned through the application of behavioural economics interventions in diverse contexts around the world.

Table 2: Principles for applying behavioural insights

<table>
<thead>
<tr>
<th>Principles of the EAST framework</th>
<th>Easy</th>
<th>Attractive</th>
<th>Social</th>
<th>Timely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Simplify messages</td>
<td>• Utilise attractive images and design</td>
<td>• Utilise and foster beneficial social networks</td>
<td>• Recognise and emphasise the power of short-term costs and benefits</td>
</tr>
<tr>
<td></td>
<td>• Reduce hassle</td>
<td>• Personalise messages when possible</td>
<td>• Encourage commitments made to others</td>
<td>• Help people to plan for the future</td>
</tr>
<tr>
<td></td>
<td>• Make beneficial options the default (pre-set) option</td>
<td></td>
<td>• Show that most people perform the desired behaviour</td>
<td>• Prompt good behaviours at appropriate teaching moments, when they are most likely to be receptive.</td>
</tr>
</tbody>
</table>

Source: Service et al., 2014

3.3 Technology-led financial innovations

In the microfinance context, thoughtful application of technological innovations has the potential to contribute to financial wellbeing by increasing clients’ financial inclusion, literacy, resilience and capability. Many of these innovations rely on insights gleaned from behavioural economics research, including methods to mitigate and counteract human tendencies towards forgetfulness, procrastination, and boredom that can lead to negative financial outcomes.30

Financial technology innovations abound; in particular, there is a proliferation of apps to help users track their spending and stick to pre-defined budgets, such as Mint, Pocketbook, Albert, Toshl and many others. However, many of these apps require paid memberships, linkages to existing bank accounts (which raises issues of privacy), and/or some degree of previous financial knowledge. For this reason, many existing financial technology innovations are beyond the scope of Good Shepherd Microfinance’s focus at this point in time, though this is likely to change as the industry continues to evolve.

Text message reminder nudges

As noted previously, a nudge is a method of steering people in a particular direction, whether toward a positive behaviour (e.g. saving for retirement) or away from a negative behaviour (e.g. smoking

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cigarettes), while maintaining the individual’s freedom of choice. Nudges are integrated into numerous digital budgeting and financial management tools; for instance, users of Mint and other financial apps can add recurring bills to their account and receive an email or phone notification shortly prior to the date of the next payment, or receive alerts when spending is higher than usual.

Text message reminders are a common form of nudging to encourage healthy behaviours at a low cost to the provider. Sending simple reminders to people helps to encourage beneficial actions by bringing previously existing goals and intentions to people’s immediate attention, particularly when those messages are delivered at strategic times when people are more likely to take action. Juntos, a financial behaviour change service based in the United States, initiates two-way SMS conversations with clients who have low incomes and are often first-time bank users to answer questions about banking services and their financial needs. Over time, as the client relationship is strengthened, Juntos delivers personalised financial information and helps clients to track behaviour and make progress toward goals. Other services, such as Arifu in Kenya, and Banamex and KIWI in Mexico, send one-way text messages to communicate reminders or account advice to their clients.

The results of text message reminder trials have been varied. A study in Uganda found that text message reminders resulted in a 7-9 percent increase in the probability of microfinance clients paying their loans on time. In Peru, Bolivia, and the Philippines, text messages containing specific savings goals were associated with a 14 percent increase in the savings accounts of participants. A field experiment in Chile found that regular text messages nearly tripled the number of weekly bank deposits among participants, but only for the duration of the experiment; when the text messages stopped, the effects did not persist.

In Australia, Wesley Mission ran a trial to test the effectiveness of text message reminders in improving financial outcomes for clients who had completed their In Charge of My Money financial literacy program. The trial found mixed results: though text message nudges were found to positively impact participants’ behaviours surrounding savings, monitoring, and emotional spending, there was no detected impact on participants’ level of financial strain, achievement of financial goals or debt reduction. The body of research surrounding text message nudges is still emerging, but appears to show that the content, source, and timing of messages must be carefully tailored to their intended audience. The authors of the study concluded that, “Text message nudges can be a useful tool for short term behavioural change in some situations, for some people, some of the time, and further research is required to identify a set of guidelines for their application.”

34 Arnold and Rhyne, 2016.  
36 IPA, 2017a.  
38 Zanoni et al., 2016.
use”. This suggests that text messages can reinforce positive financial behaviours for some people, and they can be used to support individuals to manage their finances when appropriate.

**Commitment devices**

A ‘commitment device’ is any one of numerous tools and methods designed to pre-commit users to a certain intended behaviour in order to increase the likelihood of fulfilling the commitment. Simple everyday commitment devices can include cutting up or freezing credit cards to make them less accessible; keeping alcohol or junk food out of the house to avoid temptation; or signing up for long-term gym membership contracts to create a perceived obligation to exercise. Many technological innovations integrate commitment devices into their functionality as a way to keep users on track toward their goals.

Commitment devices often incorporate nudges. For example, the aforementioned KIWI system in Mexico provides consumers with structured savings plans to enable them to purchase goods and services, primarily health treatments. KIWI sends SMS notifications to customers to keep them on track with their savings plan. Nudges are shown to be more effective when personalised; in one study, loan repayment reminders had an impact only when the messages included the name of the loan officer.

Commitment devices can also work by setting up defaults, or automatically diverting money for a certain purpose. In the US, the Digit app helps clients save by connecting to their bank accounts, analysing their spending habits, and using that information to automatically move manageable amounts of money out of transaction accounts and into savings accounts. Another US-based service, the Mission Asset Fund, facilitates lending circles, similar to traditional rotating savings groups, for financially-excluded clients. The lending circles allow participants to save toward specific needs with the support of their group members, while decreasing their debts and building their credit scores. Group-lending has also been shown to increase social capital.

Many commitment devices utilise a combination of techniques to keep users on track. StickK, a US-based program developed by behavioural economists at Yale University, allows users to set their own goals (financial or otherwise); receive reminders via text notifications and emails; leverage their own social capital by nominating a trusted referee to hold them accountable; and even ‘set the stakes’ by committing the user to pay a pre-defined amount of money to an acquaintance or charity (including enemies or charities the user would otherwise not support) if the goal is not achieved. This technique can be applied informally by simply making a declaration of intent to a friend or family member who will keep an individual accountable to their stated goal. In the context of financial capability, a commitment device may involve meeting regularly to discuss the

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39 Zanoni et al., 2016, p.38.
40 Bryan et al., 2010.
41 Arnold and Rhyne, 2016.
43 Lapowsky, I. *This digital piggy bank could finally get you to start saving*. Wired. 16 December 2014. Retrieved from https://www.wired.com/2014/12/digit/
achievement of financial goals, or pooling together joint savings with a friend to achieve a mutual goals.

Financial entertainment games

Financial entertainment games have also been designed to combat the perception that personal finance is necessarily difficult or boring, and to increase individuals’ financial capability in a way that is accessible, inviting, fun and effective. Financial games can be simple, as in the Australian Securities and Investments Commission’s (ASIC) Money Match card game designed to teach children to identify Australian coins and notes. Other games are designed to increase players’ financial capability surrounding basic concepts such as savings, budgeting and interest rates. For example, US-based non-profit Doorways to Dreams Fund (D2D) has created a suite of financial education games, including Bite Club, Refund Rush, Farm Blitz, and Con ‘Em If You Can, providing an engaging way for users to become familiar with retirement planning, spending control, debt repayments, emergency savings and budgeting.

Games can be integrated with other tools to increase financial capability. For example, D2D hosted experimental gaming tournaments on their website; these tournaments served as commitment devices to maintain the participation of the players. In a separate randomised control trial, Farm Blitz participants improved their financial confidence and financial knowledge after 45-60 minutes of gameplay. Another D2D trial integrated action prompts into gameplay; for example, at certain points throughout the game, users were given opportunities to sign up for retirement savings information or make changes to their retirement savings plans.45

Other examples of gamified financial education include Absa Bank, which teaches customers in South Africa to check account balances on their mobile phones; Banamex and Banco Azteca, two Mexican banks that provide personal finance games to their clients; and CRISIL Foundation in India, which created financial games based on the regional games that many clients played while growing up.46 The social aspect of gameplay (e.g., competition or playing together with others) can also take advantage of social networks and potentially bolster social capital in the process.47

3.4 Conclusion

Microfinance organisations in Australia are well situated to incorporate capability-strengthening tools into the ‘teachable moments’ that exist in their client relationships. These teachable moments include loan applications, financial conversations, loan repayments, and many more, depending upon the products and client relationships offered by the institution. Individual financial wellbeing, or the ability to confidently and comfortably meet financial commitments and desires while maintaining protection against future shocks and stresses, comprises a number of interrelated and overlapping components. These include financial literacy, financial


47 Service et al., 2014.
inclusion, financial resilience, and financial capability. Using technological support tools to strengthen each of these components has the potential to build overall financial wellbeing for individuals.

A number of technology-led supports were explored in the research, including text message nudges, commitment devices and financial entertainment games, in encouraging individuals to make positive financial choices. This literature review found that the evidence supporting text message nudges in encouraging behaviour change was promising and further research is needed to test these types of technology-led supports with clients with low incomes. The advent of low-cost, scalable financial technology solutions makes behavioural change tools such as text message reminders and commitment devices more accessible than ever. However, in order to have a positive impact, it is essential to tailor interventions to the context and to the individual as much as possible. Furthermore, there are also privacy concerns with financial entertainment game apps, as they often require paid memberships and linking the app to an existing bank account. As a result, text messages and an online financial information toolkit were chosen to be tested in this project to strengthen financial capability for clients with low incomes while also contributing to the body of research surrounding technological innovations.

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4 Methodology

The Conversations to Capability project adopted a mixed methods design, using qualitative and quantitative data to co-design and iteratively test a number of financial technology supports, and understand the impact of the support tools on clients’ financial capability. Technology-enabled solutions were chosen due to their potential to be scaled up and delivered to a large number of geographically dispersed people at low cost, as well as the ability to quickly and easily tailor these supports to the needs of diverse clients in real time.

There were two phases to this project. Phase I involved a co-design process to develop financial technology support tools, while Phase II involved testing the tools. A Living Lab is also at the heart of this research. Good Shepherd Microfinance defines Living Labs as both an environment and a research approach. Specifically, a Living Lab is a physical and/or digital space in which users can co-design, test, evaluate, and re-test new or existing products, services, approaches, and programs in a real-life context.

Phase I (from October to November 2017) consisted of four 90-minute workshops with 22 NILS clients over a period of six weeks. Workshops were held at NILS provider locations in Bendigo, Victoria and Bankstown, New South Wales, and consisted of focus group discussions, one-on-one interviews, and support prototype co-design with participants. Each workshop focused on a different aspect of co-design, including:

1. Needs analysis
2. Text message co-design
3. Enquiry pack and financial information toolkit co-design
4. Refining prototypes.

In addition to the workshops, the research team gave workshop participants blank notebooks to serve as journals throughout their Living Lab experience, and they held two one-on-one interviews with NILS providers. These additional activities provided complementary data that served to inform and augment the findings of Phase I.

Through adopting a Living Lab approach, Phase I aimed to understand NILS clients’ needs and develop support prototypes using a co-design process. This is supported by previous research on financial technology supports which has shown that in order to have a positive impact, it is essential to tailor interventions to the context and needs of the individual as much as possible. This project has been informed by the principles of the EAST framework, which include:

- Define the desired outcome
- Understand the context from the perspective of the situations and people involved
- Build the intervention using the EAST (Easy, Attractive, Social, Timely) framework

49 Service et al., 2014.
• Test, learn and adapt the intervention according to the needs of the people involved.

Phase II (April to June 2018) sought to test the support tool prototypes that had been designed with NILS clients during Phase I. The support tools included an online financial information toolkit (‘FIT’) and a series of text message nudges. The content for the financial information toolkit and text messages comprised a number of financial topics on everyday money management, which were based on participant feedback from Phase I. The topics included: budgeting, tracking spending, saving money on groceries, managing bills, savings goals, saving for emergencies and avoiding scams.

Participants for the testing phase were chosen through the 2,000+ loans under the management of Good Shepherd Microfinance. The research team used random sampling to divide the testing cohort into the following four groups:

1. Clients who received the financial information toolkit only (FIT)
2. Clients who received the financial information toolkit and text message nudges (FITSMS)
3. Clients who received text message nudges only (SMS)
4. Control group – clients who received no additional support (CTRL).

At the end of the intervention, all members of the testing cohort were invited to take a quantitative survey. The survey aimed to measure clients' financial capability and confidence as integral aspects of overall financial wellbeing (indicated by measurements of knowledge and behaviours around money management, planning ahead, and making financial choices adapted from the work of Elaine Kempson50 as well as the Pathways to Resilience51 research).

Survey results from the control group served as a baseline measurement of financial capability among all four groups, while the results from the testing groups show the impact (if any) of the different supports. After completing preliminary quantitative analysis of the survey, the research team conducted phone interviews with 22 clients who received the support tools to gather qualitative data on the impact of the tools on clients. In addition to this, 5 NILS providers in urban and regional locations completed an online survey to seek their feedback on the financial information toolkit.

4.1 Limitations

A number of limitations need to be taken into account when considering the findings of this research. These include:

• Participation in the Living Lab required physical access and free time.
• The research team was not able to explore the majority of financial apps available due to concerns regarding data

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privacy and security policies of apps; download fees and in-app purchases; marketing or ads included in apps; and affiliations with other financial products.

- The testing period was limited to 12 weeks, and previous research has shown that the effects of financial planning may take some time to be observed.\textsuperscript{52}

- Clients self-reported their financial knowledge and behaviours, which might differ from actual knowledge and behaviour.

- Due to resource and time constraints, the research team was unable to conduct a matched pre- and post-intervention survey, which may have yielded more meaningful results than an aggregated survey at one point in time with a control group as the baseline.

- Clients had varying levels of internet access and computer literacy.

- There were also varying levels of English comprehension and literacy among clients.

5. Phase I: Co-design

Phase I of the Conversations to Capability project aimed to develop a number of prototypes of technology-led supports in a co-design process with NILS clients. The scope of Phase I focused on measuring changes in clients’ capability and confidence relating to ‘planning for the future’. Planning for the future was chosen based on the data collected during the Pathways to Resilience research, which showed low levels of client confidence around planning for large expenses, saving for emergencies, saving toward goals, and saving for something special.

5.1 Methodology

Phase I of this project was implemented using a Living Lab approach. The research team designed a Living Lab consisting of workshops; focus group discussions; one-on-one interviews and at-home/real-life prototype testing. These activities were intended to enable clients to co-design and iteratively test support tools that can strengthen financial capability and confidence over the medium term. The research team presented clients with technology-enabled solutions for improving financial capability and confidence: namely, text message nudges and financial apps. Good Shepherd Microfinance engaged clients in this research in ‘real time’ as they undertake their financial capability-building journey.

The Living Lab approach prioritised enabling clients to co-design support tools that are relevant to their real-life experiences and perspectives. Therefore, the research remained open to the possibility that the Living Lab participants might take the co-design process in another direction that differed from what the team had envisioned, based on participants’ own priorities and needs.

Phase I consisted of four workshops over a period of six weeks. The research team worked with the Operations team at Good Shepherd Microfinance to identify two appropriate NILS provider partners: Bendigo Family and Financial Services in Bendigo, Victoria (regional), and BaptistCare Relationship Services in Bankstown, New South Wales (urban). These partners agreed to host the workshops on their premises and to recruit approximately 10 participants at each location. Each provider recruited 11 participants, for a total of 22 recruited participants across the two locations. In order to encourage the development of supports that would be appropriately designed for the broad spectrum of NILS clients, the research team asked NILS providers to strive to recruit a cohort of participants who were representative of the larger NILS population (68 percent women, 24 percent Aboriginal or Torres Strait Islander, and 34 percent single-parent families with dependent children). In the end, while the recruited participants were not proportionally representative of the overall NILS population, each of these client groups was represented by at least one participant.

NILS providers were compensated with $1500 per location, while workshop participants received a $75 Coles or Woolworths voucher for each session attended (the total possible compensation was $300

53 A Living Lab is a physical and/or digital space in which users can co-design, test, evaluate, and re-test new or existing products, services, approaches, and programs in a real-life context.

per participant for all four workshops). Participants who attended all four sessions were rewarded with a bonus $75 Coles or Woolworths voucher in December 2017. Facilitators took notes during each session to record participant discussions and facilitator observations. These notes, in addition to participant documents such as notebooks and text message prototypes, formed a qualitative data set that was used for analysis.

**Workshop 1: Needs analysis**

Workshop 1 was held on 9 October 2017 (Bendigo) and 12 October 2017 (Bankstown). The workshop aimed to identify the needs of participants in order to clarify the priorities of the research. The session explored the NILS journey with participants. The facilitators showed a graphical representation of the NILS journey, from enquiry to repayment and asked participants to discuss potential tools that might support clients along the NILS journey including a financial information toolkit and an enquiry pack. The research team mapped the challenges, supports and ideas identified by participants onto a visual depiction of the NILS journey. At the end of the session, participants were given journals to record their thoughts about financial capability, confidence, products and services in their daily lives.

![Mapping the NILS journey](image)

**Workshop 2: Text message co-design**

Workshop 2 was held on 23 October 2017 (Bendigo) and 27 October 2017 (Bankstown). It aimed to evaluate and co-design potential text message nudges to address the high-priority needs that were identified during Workshop 1. In between Workshop 1 and 2, the research team sent bulk text messages to remind participants about the second workshop and prompt them to write in their journals.

Participants worked in pairs to refine and improve the prototype text messages that were provided, and to develop new messages. The facilitator then collected the amended prototypes from all participants. Lastly, participants were given new prompt sheets for their notebooks. These new sheets invited participants to spend the next
two weeks exploring two recommended apps for discussion during Workshop 4. The apps were developed by the Australian Securities and Investments Commission (ASIC) as part of its MoneySmart financial guidance program.

Workshop 3: Enquiry pack and financial information toolkit co-design

Workshop 3 was held on 6 November 2017 (Bendigo) and 9 November 2017 (Bankstown). Based on the findings of Workshop 1, the research team developed a preliminary list of priority needs for NILS clients both before and after the financial conversation, which were used to develop prototypes of the enquiry pack and financial information toolkit. Workshop 3 involved a series of individual interviews with participants in order to elicit their individual user experiences with the prototype documents.

Participants were asked to discuss their perceptions of the document, including the purpose of the document; first impressions; what participants would normally do with this type of document; and whether participants could locate certain pieces of information within the document (e.g., possible uses of a NILS loan or how to schedule a financial conversation).

In the days following Workshop 3 in Bendigo, the research team received additional testing materials designed by Good Shepherd Microfinance, including an alternative enquiry pack as well as a brochure, poster and animated video advertising NILS. They were designed to spread awareness about NILS and to guide NILS clients through the loan process; both of these needs were raised by participants during Workshop 1. These materials were tested with participants during the third workshop in Bankstown.

Reviewing the support tool prototypes
Workshop 4: Refining prototypes

Workshop 4 was held on 20 November 2017 (Bendigo) and 23 November 2017 (Bankstown). The session aimed to discuss and refine the support prototypes in order to refine the text messages; financial information toolkit; and NILS enquiry pack; and select a financial app for wider testing (if appropriate). While a wide variety of financial apps are available to consumers, the research team was constrained in its choice by a number of voluntarily imposed limitations that were recommended by the reference group in order to protect participants. They encouraged the research team to avoid apps that involved download fees, in-app purchases, marketing or ads, or affiliations with other financial products. The reference group was also concerned over the data privacy and security policies of financial apps.

The research team also wanted to avoid burdening participants with apps that would require significant data usage and/or internet access. Therefore, the most appropriate apps for Phase I were two of ASIC’s mobile finance apps: TrackMyGOALS, designed to help users create, prioritise, and track progress toward financial goals; and TrackMySPEND, designed to help users track their personal expenses and provide a picture of users’ overall spending. Participants shared their impressions of the apps and their experiences with using the apps as part of the ‘homework’. They also amended the list of topics for the financial information toolkit.

Post-session interviews with NILS providers

The research team conducted two individual interviews with NILS providers in Bendigo and Bankstown (one provider per location) following Workshop 4. The interviews allowed the research team to test the validity of the co-designed support prototypes from the perspective of NILS providers, thus serving to identify additional provider concerns, suggestions and implementation challenges so that the support tools could be amended before they were tested in Phase II.

Participant journals

Workshop participants received journals at the end of Workshop 1, along with prompt sheets at the end of Workshops 1 and 2. The prompts from Workshop 1 asked participants to use the journals to write or draw their thoughts about a financially capable individual; financial and emotional goals, and the steps taken to achieve these goals; and everyday money experiences, such as receiving income, buying groceries and paying bills. The prompts from Workshop 2 probed further into these everyday money experiences, asking specific questions such as “Why do you prefer to pay for things in a certain way?” and “How do you decide how much money you can spend on something?”.

The Workshop 2 prompts also gave instructions for downloading the ASIC apps and asked participants to record their user experiences. The journals were intended to supplement the workshop discussions by providing a mechanism for participants to record their thoughts, experiences and ideas as they went about their daily lives. Of the 17 journals that were given to participants, six were returned to the research team at the end of Workshop 4.
5.2 Findings

The following eight main findings of Phase I are informed by the four co-design workshops, participant journals, and interviews with NILS providers. The findings were incorporated into the Phase II testing activities of this project. A number of preliminary recommendations were also developed during Phase I (see Appendix 2).

Clients want clear, simple, tailored financial information to assist them with everyday money management

Participants perceived everyday money management techniques as more relevant than techniques related to planning for the future. They felt that they were unable to save or think about future goals because of their limited incomes. Their primary interest in planning for the future was related to bill smoothing and planning for regular expenses such as car registration. Participants made a number of suggestions regarding the types of financial information that would be beneficial to receive following the financial conversation. These included (but were not limited to) the following:

- Bill smoothing
- Budgeting
- Saving on utilities
- Cheap recipes and shopping tips
- Local recommendations and discounts
- Controlling spending and making good choices
- Teaching children about financial matters
- Family money management
- Commitment devices.

Participants were not interested in receiving financial information that they did not perceive as relevant to their immediate situation. Large amounts of financial information were also seen to be overwhelming or boring. However, participants said that all of the financial information should be available on the Good Shepherd Microfinance website so that anyone who wants additional information can find it easily at a later date. The journals included a variety different of financial topics, which provides further evidence to suggest that each client has unique needs.

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55 Bill smoothing refers to a method of paying bills with instalment payment plans. It is commonly offered by utility providers.

56 For example, posting the due dates of bills on the refrigerator; pre-paying bills with Centrepay so that the money cannot be spent elsewhere; and paying more than the amount owed on bills as a way of saving toward future bills.
Clients want clearer information about the NILS process throughout all steps of the NILS journey

In Workshop 3, participants reviewed a prototype NILS enquiry pack which outlined the NILS process. Most participants felt that receiving a standardised information pack would have helped them to mitigate the feelings of confusion and difficulty experienced by some clients when they first learn about NILS. Participants identified the following sources of stress during a NILS enquiry:

- Long wait times for financial conversations; this caused stress because participants could not access their loan quickly.\(^57\)

- Compiling financial documents in preparation for the financial conversation can be stressful in terms of the difficulty of locating documents, as well as the potential of facing a harsh financial reality.

- Some clients experience feelings of shame or stigma about the need to access NILS; they suggested that NILS providers need to make clear that their space is a friendly, judgment-free zone where the client will be welcomed rather than judged.

Participants also suggested different types of information about their NILS loan that they wanted. This included: checklist of necessary documents; overview of what to expect during the financial conversation and information about what types of expenses can be covered by NILS.

Clients want to feel more supported throughout the NILS journey

During the workshops, participants validated and amended the NILS client journey, which was identified in the Pathways to Resilience research. The essential milestones along the NILS journey are outlined in Figure 3 below. Participants felt that the financial conversation was the most important stage of the journey. They felt that the financial conversation increased their confidence for a short period of time, primarily due to the informative budgeting exercise and the encouraging feeling of being supported by the microfinance worker.

\(^{57}\) The issue of wait times is currently being addressed as part of the overhaul of the NILS program.
Participants also expressed a desire for more frequent contact with providers throughout the NILS journey, including receiving periodic information on the status of the loan, particularly the remaining time and balance, during the repayment period. In addition to this, participants also wanted to receive content from NILS providers beyond financial information, such as lists of local resources that clients can access when they need assistance or services beyond NILS. Some participants suggested that any financial information provided to NILS clients should include encouraging and nonjudgmental language to assure clients that everybody needs help sometimes, and there is no shame in accessing NILS or taking advantage of the tips and advice contained in the toolkit. The post-session provider interviews also revealed that providers would like to see changes to enable staff to better support clients. One provider who was the only NILS worker in her location expressed a need for more staff, such as a new division to check in on clients and connect them with local resources. Another provider, who was one of a team of NILS workers at her location, wanted more in-depth training for existing staff.

Clients want a stronger sense of community with other NILS clients and providers

Participants frequently suggested that community events and initiatives be held at NILS provider locations in order to keep clients feeling engaged and supported beyond the financial conversation. The suggestions included: barbeques, garage sales, community garden, cookbook and recipe-sharing and skills-trading club. Participant journals also reflected a strong desire for human connection, including strengthened relationships with NILS workers as well as other NILS clients.
Two workshop participants reflected on the support tool prototypes by saying:

“As soon as you see the faces of the three people (in the photos), they look like everyday people in the community. It makes you think, ‘If they can do it, I can too.’”

Workshop participant

“I like the financial information toolkit and the NILS brochure because they're straight to the point. Have real people, not a lot of words. Community is important. [It’s important to] show normal people that live in the community.”

Workshop participant

Social media was repeatedly suggested as a way for NILS clients to connect with one another and share their resources, tips and tricks with the community. The post-session interviews with NILS providers showed that they support the idea of increased social media presence, but they had limited time and resources to properly moderate social media pages. One provider stressed that, based on her own experience, strict moderation is paramount to the success of these groups. This finding that clients want a stronger sense of community with other NILS clients and providers is supported by previous research which shows that social capital can be helpful for individuals’ financial wellbeing and low levels of social capital are linked with low financial knowledge and behaviour.58

Clients find text messages helpful

When testing the text message prototypes, participants expressed an interest in receiving periodic text messages to provide financial information and nudges, and to remind them that they were being supported on their NILS journey. Participants did not make many suggestions for text message topics or content. This is not surprising given that these messages are intended to contain information that the recipient may not know; however, participants expressed general approval of many of the prototype messages, with a number of suggested modifications.

The text messages that participants received in between the workshops helped to remind participants of the date and time of the workshops. However, the messages did not seem to have a large impact on participants’ likelihood of writing in their notebooks. This suggests that text messages have limited power to encourage clients to take actions they do not already wish to take. Overall, participants did not have strong feelings about the timing or frequency of text messages.

58 Muir et al., 2016.
When asked how often they would like to receive messages, participants suggested that once per week should be the maximum frequency. Participants appreciated having the ability to respond to the messages. They were not concerned about privacy with regard to text messages, but said that to ensure the protection of all clients’ privacy, clients should be able to choose whether or not they receive the messages. Participants felt that the text messages should containing the word ‘NILS,’ as this was the best way to identify the sender. One participant described how receiving text messages would make them feel supported:

“When you’re just sitting in your house alone and then you get that message on your phone, you’re going to feel good.”

Workshop participant

Participants also wanted the ability to choose the content of the text messages they receive. A number of clients suggested that using a checklist of text message topics, such as budgeting, savings and grocery shopping tips, would allow NILS clients to select the types of messages they would like to receive. Participants also wanted to receive text messages that provided personalised loan information and messages of support, such as an update on the time and balance remaining on their loan.

The workshops also revealed that text messages can evoke an emotional response in clients. Some participants stated that messages such as “Saving money is important. Even a little bit can make a difference” were nice in theory, but seemed unhelpful, patronising, or unattainable because participants did not have enough money to save after managing their everyday expenses.

**Clients vary in their willingness and ability to utilise digital tools**

The workshops showed that participants preferred different methods of contact including, emails, text messages and letters. Participant interest in the apps was very low, as only three participants downloaded and used the apps at home across both workshop sites. A number of participants in both locations did not own smartphones. Other participants expressed that they had no interest in using apps, instead preferring to call, text, or have face-to-face conversations with people; it was suggested that because of these preferences, the older generation in particular is not likely to take up financial apps.

One participant commented about their communication preferences:

“I can call, I can text. I have no interest in apps. I prefer face-to-face.”

Workshop participant
Participants also reviewed the ASIC financial apps during the workshops. A number of participants felt that the goal-setting app (TrackMyGOALS) was more appealing than the spending tracker app (TrackMySPEND), but acknowledged that the appeal was due to the hopeful and optimistic nature of goal-setting, contrasted against the difficulty of tracking spending each day. Participants were also interested in receiving notifications about their financial goals and commitments.

Participants strongly emphasised the importance of personal contact with real people, even when interacting with technology; in fact, many participants appeared to value technological tools such as social media and text messages not for their capacity to impart financial information, but for their ability to build and strengthen relationships and feelings of being supported by others.

Digital exclusion and low literacy and numeracy act as barriers hindering current and prospective NILS clients’ financial capability and confidence. Participants were also concerned about their privacy when using financial apps. The workshops and journals demonstrated varying levels of literacy among participants. Nearly all participants were native English speakers and could communicate easily during the workshop discussions; however, the journals showed that some of these participants had difficulty reading and writing. During the workshops, the research team observed that some participants relied upon the images contained within the prototypes while appearing to ignore the written words. One participant, a refugee who spoke English as a second language, told the research team that she needed to enlist the help of a friend who could help her translate her thoughts into English to write in her journal. These findings highlight the importance of providing written materials in simple English (and other languages, as capacity allows) with accompanying images where possible.

**Clients want appropriate, accessible savings mechanisms**

A number of participants in both locations said that they would like a savings account that would penalise them for withdrawing money too early. Participants wished to set up automatic transfers into these savings accounts, stating that this type of ‘set and forget’ system would encourage them to save without effort or thought. In fact, two participants said that they had already set up automatic transfers into their savings account. These participants stated that they could always find a reason to spend the money in their transaction accounts, but if the funds never came into their transaction account in the first place, the participants did not miss the money. These observations indicate an opportunity to promote savings among NILS clients, despite many participants’ belief that it is impossible for them to save.

**Providers and clients are enthusiastic about the support tool prototypes**

When participants were presented with the support tool prototypes (NILS brochure, enquiry pack, poster and financial information toolkit), they expressed enthusiasm about the materials. Participants appreciated the step-by-step instructions in the brochure and enquiry pack. Participants stated that they found the prototypes welcoming and friendly and felt comfortable using them, due to their simple and
informative nature. In fact, a number of participants asked if they could keep the financial information toolkit, which suggests that is likely to be valued and utilised by NILS clients. However, it is important to note that these prototypes were printed in hard copy; it is therefore possible that a digital financial information toolkit would be less appealing to clients, particularly those who are affected by digital exclusion and would be unable to utilise it.

Providers are enthusiastic about the support prototypes, but they emphasised the need to balance technology-led supports with personal interactions. Both providers expressed enthusiasm for all of the support tools tested during the workshops, stating that the tools could assist NILS clients in the future. One provider said that these tools and resources should serve to supplement, rather than replace, face-to-face interactions with clients. Personal contact, she said, is paramount: “I would hate if we lost that altogether – that’s where all the learning happens.”

The post-session interviews also showed that providers vary in their ability to spend time tailoring resources for clients. One provider said that clients should self-administer a questionnaire to generate the financial information toolkit. She felt that clients should seek out the information on their own time (rather than during the financial conversation) if they felt they could use it. This was related to her perception that many new and returning NILS clients are ‘stuck in a rut’ and lack aspiration to change their situation. Another provider took the opposite view, stating that the NILS workers at her location already discussed many of the potential toolkit topics during their financial conversations, and having a standardised checklist or questionnaire would help to structure and streamline the conversation for all workers.

5.3 Discussion

The Phase I findings identified different types of support that clients wanted to receive on their NILS journey. This included access to clear, simple and tailored information, and a preference for receiving information and support through text messages and online resources, rather than via phone apps. The following decisions were made to change the original research plan, which informed Phase II of this project.

- The project initially sought to measure the impact of two support tools on client behaviours relating to planning for the future. During the Living Lab workshops, participants felt that planning for the future was secondary to gaining control over their immediate, day-to-day finances, due to their limited incomes. Therefore, the research team decided to focus on client behaviours relating to everyday money management.

- During Phase I the research team planned to test a package of text message nudges and a financial app. However, many participants expressed very little interest in the apps that were tested in Phase I. As a result, the financial information toolkit was chosen to replace phone apps in the testing phase of this project.
• The findings from Phase I indicate that many NILS clients respond more favourably to images than text, and have varying skills in literacy and numeracy. Therefore, the team developed a series of reader-friendly, accessible infographics for the online financial information toolkit.

• In order to customise the financial information toolkit, the research team engaged a professional web designer to develop an online questionnaire that automatically generated an individually tailored financial information toolkit based on each client’s responses.
6. Phase II: Testing

During Phase I of this project, a number of support tools and resources were developed that aimed to strengthen and sustain financial capability and confidence of NILS clients over the medium term. Phase II sought to test text message nudges and the financial information toolkit in order to better understand how technology-led support tools can impact on clients’ financial capability.

6.1 Methodology

In testing the support tools, Phase II employed a mixed methods approach which combined qualitative and quantitative methods to understand the impacts of support tools on clients’ financial knowledge and behaviour. Participants were chosen from the 2000+ loans under the management of Good Shepherd Microfinance. Phase II participants were not the same participants who served as co-designers during Phase I. The research team used random sampling to divide the Phase II cohort into the following groups:

1. Clients received the financial information toolkit only (FIT)
2. Clients received text message nudges plus financial information toolkit (FITSMS)
3. Clients received text message nudges only (SMS)
4. Control group (no additional support provided) (CTRL).

The research team used Clicksend.com to send a bulk text message to 1,821 NILS clients (the three intervention groups) which invited them to participate in the research. Clients were offered a $20 Woolworths voucher for their participation. A total of 374 clients indicated that they were willing to take part in testing the support tools. Each respondent then received one of the following, based on their randomly assigned group: (1) tailored financial information toolkit sent via email; (2) periodic text message nudges or (3) both. Table 3 below shows the number of clients who participated in each intervention group. An additional 606 clients in the control group were contacted to take part in the quantitative survey after the testing period had ended. The testing period lasted 12 weeks from April to June 2018. The financial information toolkit was sent to clients once, while the text messages were sent intermittently throughout the testing period. An online questionnaire was developed to tailor the financial information toolkit, so that a toolkit would be generated based on a client’s responses. The text messages that were sent to clients are detailed in Appendix 3.

Table 3: Participants in Phase II research

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of clients that were contacted</th>
<th>Number of clients that participated</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIT</td>
<td>607</td>
<td>124</td>
</tr>
<tr>
<td>FITSMS</td>
<td>607</td>
<td>125</td>
</tr>
<tr>
<td>SMS</td>
<td>607</td>
<td>125</td>
</tr>
<tr>
<td>Total</td>
<td>1,821</td>
<td>374</td>
</tr>
</tbody>
</table>
To test the impact of the support tools, data was collected using three methods: a quantitative client survey, client interviews and a provider survey. This project adopted a sequential explanatory design, where quantitative data is collected first and analysed. Then qualitative data is collected from the same sample to further explain and interpret the quantitative findings.\textsuperscript{59}

The survey results from the control group were intended to serve as a baseline measurement of financial capability and confidence among all four groups, while the results from the testing groups would show the impact (if any) of the different supports. The survey was completed by 301 clients in the following groups: FIT (n=65), FITSMS (n=57), SMS (n=67), CTRL (n=112). The survey was analysed using the following methods:

- Demographic data was analysed using frequencies.
- A number of survey questions were comprised of a series of response options and clients were asked to ‘tick all that apply’. The multiple response sets were analysed using cross tabulation and frequencies.
- Clients’ financial knowledge and behaviour were measured using a 5 point scale, with 5 being the highest score. Reliability analysis showed that the survey items on financial knowledge\textsuperscript{60} and behaviour\textsuperscript{61} had high internal consistency. One-way analysis of variance tests (ANOVA) were conducted to examine whether there were statically significant differences between the mean scores of the three intervention groups and the control group in terms of their financial knowledge and behaviour.

The demographics of the clients that were surveyed showed that most of them were female (78.7 percent), aged 25-54 (68.8 percent), lived with dependents (51.7 percent), and English was their first or preferred language (96.7 percent). This is similar to the demographics for NILS clients more broadly, which includes 68 percent women, 66 percent are aged 25-54, and 24 percent identify as Aboriginal and Torres Strait Islander.\textsuperscript{62} Refer to Appendix 4 for the demographic profile of the clients that were surveyed.

After the implementation and preliminary quantitative analysis of the survey, client interviews and a provider survey were conducted to collect qualitative data. This data was used to triangulate the quantitative findings, in order to further explain the survey findings. Phone interviews were held with 22 clients who received the support tools (8 FIT, 8 FITSMS, 6 SMS). The clients were chosen using convenience sampling, and the research team conducted interviews until they achieved saturation and no new themes emerged in the findings.


\textsuperscript{60} \(\alpha = 0.88\)

\textsuperscript{61} \(\alpha = 0.83\)

\textsuperscript{62} Good Shepherd Microfinance, 2017.
Five NILS providers from community organisations also completed an online survey with open-ended questions to provide qualitative feedback on the financial information toolkit. The NILS providers were chosen using purposive sampling, where the research team contacted providers suggested by the Good Shepherd Operations team. A deliberate effort was made to select NILS providers from regional and rural areas who might have different clientele to the clients who were involved in the research thus far.

Phase II Findings

A number of key findings emerged during Phase II from the client survey, client interviews and NILS provider survey, which validate and support the findings of Phase I.

1. Clients found the information in the support tools interesting and useful

Clients found the information in the support tools useful in helping them to manage their money. Of the clients that were interviewed, seven thought that the information they received from the support tools was useful. These clients came from all three intervention groups, and most of them received the text messages as part of the intervention (1 FIT, 3 FITSMS and 3 SMS). Reminders and nudges were seen as useful tools to help clients think about their finances. A few clients from the FITSMS and SMS groups also spoke of writing down and keeping the messages to use the information later. Another client from the FITSMS group who did not own a smartphone was interested enough in the content of the text messages that they typed the links into their computer by hand to access the information. Another client in the FIT group shared information from the toolkit with their family on social media.
Four clients reported changing their behaviour towards managing money after receiving the support tools. Again, it is worth noting that all of these clients were in the intervention groups that received text messages. The types of behaviour change that clients reported included:

- Started using TrackMYSPEND (SMS group)
- Stopped smoking because the messages made them think about the cost (SMS group)
- Saved more because of the information received (SMS group)
- Started saving $10 a week because of the toolkit (FITSMS group).

Two of these clients commented:

“I started saving $10 a week. It was good to see it. It made me look into other avenues. [I felt it] did have an impact.”

Client interviewee FITSMS group

“I found it useful to have a tool like TrackMYSPEND. It was useful in looking at where finances were going. It was something that can be done easily on the go. I have at times tried to do it on the computer but it’s hard to remember to do it once you get home.”

Client interviewee SMS group

This shows that some clients found the support tools useful in helping them to manage their money, even if this was on a small scale. These positive impacts on clients were not captured in the client survey results, which suggests that further research needs to be done to understand the different ways in which technology-led support tools can impact on clients.

Two of the five NILS providers surveyed felt that the toolkit could be helpful for clients because the information was easy to read and understand. However, another two of providers commented that similar resources are available, and clients might want more in depth knowledge. Providers suggested some additional topics for inclusion in the toolkit such as paying bills online, information about Centrepay, reducing debt, what ‘good debt’ is, comparing options before making purchases and understanding bank accounts and statements. One provider commented on the toolkit:

“It may be helpful for the client to work on their budget. This would, in turn, make their application more accurate.”

Provider survey respondent
In addition to this, some clients did not find the support tools useful or relevant to them. One of the main findings from Phase II was that client’s limited incomes prevented them from managing their money the way that they liked. This could have impacted on clients’ ability to use the support tools, for example if clients did not have enough money to build any savings. A similar study that evaluated the effects of a financial education program on participants with low incomes, found that when programs focus solely on goals that are unattainable to participants (such as saving money), they run the risk of being irrelevant. As a result, participants might feel discouraged and fail to take any actions to change their behaviour.\(^{63}\)

One client made the following comment about the text messages:

> “Many people who have been on Centrelink for a long time don’t have $10 to save… [It] wouldn’t benefit them.”

Client interviewee FITSMS group

Furthermore, the Phase II client interviews found that some clients did not read the toolkit or the text messages. This suggests that clients may not have been motivated or interested in using the technology-led support tools. Similarly, the Living Lab found low client engagement with the financial apps, because most clients did not want to use them, or experienced digital exclusion.

One NILS client felt that the financial information toolkit was not relevant to them:

> “I don’t use things that are readily available to me – with kids, I don’t have time. I never get a chance to sit down and read a whole page of anything – didn’t even look at the whole thing. I felt that it didn’t really apply to me… The toolkit wouldn’t be completely unhelpful, but I wasn’t looking for the help at the time. I’m not working at the moment. I’d like to be able to use it at some point.”

Client interviewee FIT group

2. Clients felt supported through receiving the technology-led support tools

Although clients’ financial capability did not increase as a result of the tools, clients felt supported, encouraged and confident after receiving the support tools. Of the 22 clients that were interviewed in Phase II, seven clients expressed this view. It is worth noting that these clients came from the two intervention groups that received text messages (FITSMS and SMS). These clients spoke of feeling less alone because ‘someone cares’ and ‘someone bothered’ to send them the information to support them on their NILS journey. There was also a sense of peer support among clients with the knowledge that other

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\(^{63}\) Lyons et al., 2006, p.41.
NILS clients were experiencing similar challenges in managing their money on low incomes.

Two clients made the following comments:

“I feel like I’m not the only one having money issues… [I felt] good because someone’s out there texting me.”

Client interviewee FITSMS group

“I know I’m getting the messages, so other people are too. I thought I’m not alone in this boat, which is encouraging. I’m not the only one who finds it hard sometimes.”

Client interviewee SMS group

This sense of support that clients felt validates some of the findings from Phase I, namely, clients want more support from NILS providers; they want a stronger sense of partnership or community; and they want to receive more information throughout their NILS journey. Furthermore, the client interviews showed that clients often valued the sense of support provided by the text messages and financial information toolkit, even though they may not have found the information relevant to them. This validates another finding from Phase I, where many of the co-design workshop participants appeared to value technological tools such as social media and text messages not for the information that was provided, but for their ability to build and strengthen relationships and feelings of being supported by others.

Previous research on financial wellbeing has shown that building or maintaining social capital can be crucial to an individual’s financial resilience and wellbeing. In addition to this, a similar study that sought to measure the impact of a financial education program on participants with low incomes in changing their behaviour had mixed results. The study found that some participants were unable to change certain financial behaviours regardless of the amount of financial education they received. Despite this, the authors concluded that, “If participants are feeling better about their financial situation at the end of the program, this is a positive reflection of what the program is trying to achieve”.

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64 Muir et al., 2016.
66 Lyons et al., p.43.
It is also important to note that some clients did not feel supported when they received the tools. The client interviews found that two clients from the FITSMS group said that they felt a lack of confidence when they thought about their financial situation after receiving the tools. One of the respondents in the NILS provider survey also raised this issue when they reviewed the financial information toolkit (see the quote below). A similar finding was also observed in the previous Good Shepherd Microfinance study, *Pathways to Resilience*, which found that some clients felt less confident after having the financial conversation and receiving financial information and advice. The previous research found that 15 percent of clients surveyed felt less confident in accessing financial help and information, managing their money, and planning ahead. For this group, the financial conversation was a ‘reality check’ moment which gave them a more accurate picture of their financial situation.\(^67\)

One NILS provider commented:

> “As many of our NILS clients live on very little and are fully aware of where their money goes, they may not see this as a helpful tool but a reminder of how little money they have. We need to be very careful [because] not all our clients will want this tool.”

Provider survey respondent

3. **There was no significant difference in clients’ financial knowledge after receiving the technology-led support tools**

The client survey measured clients’ financial knowledge and behaviour on a 5 point scale to determine the impact (if any) of the support tools on the three intervention groups (FIT, FITSMS, SMS), when they were compared with a control group. Two separate ANOVA tests found that there was no statistically significant difference between the average scores of the three intervention groups and the control group for financial knowledge\(^{68}\) and

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\(^{67}\) Randrianarisoa and Eccles, 2016, pp.46-52.

\(^{68}\) F (3,297) = .5, p > 0.05
The average scores for both financial knowledge and behaviour were similar across the four groups, as shown in Figure 4 below. Based on these findings, we cannot conclude that the support tools had an impact on clients' financial knowledge.

Figure 4: Financial knowledge and behaviour

The client survey also found that there were no observed differences between the three intervention groups and the control group for a range of other survey items. Clients were asked what strategies they used when they run out of money for regular expenses. The majority of clients in all four groups indicated that they ‘go without' when they ran out of money (64.5 percent FIT, 66 percent FITSMS, 58.1 percent SMS, 63.5 percent CTRL). Other common strategies included spending less, borrowing from family or friends and delaying paying bills (see Figure 5 below). When clients had left over money, the majority of them spent it on something needed (59.6 percent FIT, 62.3 percent FITSMS, 60 percent SMS, 57.6 percent CTRL).

When considering the survey findings, it is important to take a number of methodological factors and the complexity of changing individuals’ financial behaviour into account. The testing period was limited to 12 weeks, and it may not be feasible to observe changes in financial capability in such a short time frame. Previous research conducted by Good Shepherd Microfinance found that three months after having the financial conversation, NILS clients’ financial capability normalised. If the support tools had been provided over the course of a client’s loan cycle (12-18 months), we may have observed higher levels of change. Furthermore, using different methods such as pre- and post-intervention surveys may have yielded more significant results, than comparing the intervention groups to a control group.

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69 F (3,297) = .41, p > 0.05
70 Composite variables for financial knowledge and behaviour were created. The average scores on a 5 point scale were as follows: Financial knowledge 3.5 FIT, 3.4 FITSMS, 3.5 SMS, 3.5 CTRL; Financial behaviour 3.3 FIT, 3.3 FITSMS, 3.4 SMS, 3.4 CTRL.
71 Randrianarisoa and Eccles, 2016.
During the testing phase of this project, there were also low rates of client uptake and use of the support tools. The financial information toolkit was sent to 249 clients, and it was downloaded 113 times. This means that approximately 45 percent of clients who received the financial information toolkit downloaded it.\(^{72}\) Eleven text messages were sent to 250 clients during the testing period and clients clicked on the links in the text messages 554 times, which was an average of 50 times per text message. This shows that on average, approximately 20 percent of the clients who received the text messages clicked on the links.\(^{73}\) A further 28 clients also chose to opt out of receiving the text messages during the testing period.

It is also important to take into account the impact of similar studies on changing financial behaviour and knowledge. A meta-analysis of 188 financial education studies found that 40 of these studies showed no impact or only a modest impact, and that the level of impact may not have justified the cost of the interventions.\(^{74}\) In addition to this, another meta-analysis found that these types of studies tend to overstate the effects of financial education on changing behaviour, as only 0.1 percent of the change in financial behaviour was attributed to the interventions.\(^{75}\) A similar study by Wesley Mission that used text message nudges to reinforce positive financial behaviour also had mixed results. The study found that although text message nudges were found to positively impact participants’ behaviours regarding

\(^{72}\) Note that this figure is an estimate. The toolkit was downloaded 113 times during the testing phase, but the research team was unable to determine if the downloads were made by unique users.

\(^{73}\) This figure is also an estimate. The research team was unable to determine if the links were accessed by unique users, and the same clients may have clicked on the links in the text messages more than once.


savings, monitoring, and emotional spending, there was no detected impact on participants’ level of financial strain, achievement of financial goals, or debt reduction.\textsuperscript{76} The authors of the study concluded, “Text message nudges can be a useful tool for short term behavioural change in some situations, for some people, some of the time, and further research is required to identify a set of guidelines for their use.”\textsuperscript{77} This suggests that these interventions face a number of challenges in changing financial behaviour and in sustaining change in the medium and long term. Further research is needed to better understand the ways in which financial technology interventions impact on clients.

4. Accessibility to digital support tools varied, and clients preferred a range of communications options

Throughout the testing phase of the project, clients experienced a number of issues in accessing the support tools such as lack of internet access and having low computer literacy. Five clients had trouble accessing the support tools due to digital exclusion. Clients and providers both emphasised the importance of using a range of communication methods to support clients including online, text messages and hardcopy. Two clients expressed a preference for hardcopy information. Of the five NILS providers surveyed, three thought that email was a good method of communication to reach clients. Two providers thought that SMS message and hardcopy were also good communication methods. This is also supported by the Phase I finding that some clients experienced digital exclusion and preferred to receive hardcopy information. A similar study conducted by Wesley Mission aimed to test the impact of text message nudges in affirming positive financial behaviours among participants with low incomes. The study found that only 65 percent of the text messages that were sent during the project were received by participants, as many participants did not have reliable access to mobile phones or data.\textsuperscript{78}

“\textit{There is still a significant number of clients who report low computer literacy or who do not have regular access to affordable internet/data connection.}”

Provider survey respondent

“\textit{Not all of our clients have email or SMS facilities. Some only trust a hard copy version.}”

Provider survey respondent

\textsuperscript{76} Zanoni et al., 2016, p.12.
\textsuperscript{77} Zanoni et al., 2016, p.38.
\textsuperscript{78} Zanoni, et al, 2016, p.111.
Another aspect of accessibility that was identified in this project was that the support tools need to be user-friendly and appeal to clients with a broad range of literacy and numeracy levels. Both clients and providers felt that clear and simple content, and use of visual information was important. The journals from the Living Lab showed that clients had mixed literacy levels. During the Phase I workshops some clients also tended to rely on visual cues, rather than referring to the written text when reviewing the support tool prototypes.

Language was identified as another accessibility issue for clients. The demographics from the survey showed that English was the first language or preferred language for 96.7 percent of the NILS clients that were surveyed. However, when the NILS providers were reviewing the financial information toolkit, they felt that it should be provided in languages other than English so that it can be accessed by a broad range of clients.

Case Study: Ann

Ann sees people every day who are struggling with finances. Some have had an unexpected expense they can’t manage, some have had something sudden change their financial situation and some just don’t have the money available to them. Working for a NILS provider means she get to help people when they need it most. Beyond the immediate impact, getting a loan often is a key step to building a better financial situation for her clients. While she has some information and support available for clients, having all of it together in one place and in a form pitched at clients with low incomes is key to making it useful. Ann sees clients from all different demographics and with various levels of literacy and financial knowledge. Some speak very little English and some are not very good with technology. Ann needs to be to give clients tailored information to meet their needs and capabilities.

5. Clients felt that their limited incomes prevented them from managing their money the way that they like

A key finding that emerged in Phase II of this research, was that clients felt that they were unable to save or think about future planning because of their lack of money. The survey asked clients what prevents them from managing their money the way they would like. As Figure 6 shows below, lack of money was the most common barrier identified by clients across the three intervention groups and the control group (60.9 percent FIT, 70.2 percent FITSMS, 61.2 percent SMS, 50.9 percent CTRL). This finding also emerged in the client interviews, where clients frequently mentioned that their limited incomes prevented them from using the information provided by the

“[It was a] hassle to follow the links because I don’t have a smartphone. Email would be better, post would be best. Email [would work] for those links.”

Client interviewee FITSMS group
support tools. One client described their ability to save money on a limited income as being like, “getting blood out of a stone”.

**Figure 6: Barriers that prevent clients from managing their money**

Two clients made the following comments about how their low incomes limit them in managing their money:

"When you don’t have any (money) left and you’re in debt to start with, it’s frustrating. You can’t do anything."

Client interviewee FITSMS group

"It’s very difficult for people on low incomes to plan their money. They juggle, go without something to buy another thing. They rarely have any money to put aside."

Client interviewee FITSMS group

An individual’s financial capability is often shaped by forces that are beyond their control, such as the economy, government policies, and demographic factors such as gender, race, education and geographic location. As Corrie argues, financial capability encompasses, “the individual’s financial skills and knowledge, in the context of having appropriate financial information and supports, a non-exploitative market, an emergency buffer and an adequate income.” Therefore, it is important to not only place the burden on individuals with low incomes to change their behaviours, but rather...
address social inequalities which can shape financial wellbeing. In a recent submission to the House of Representatives Inquiry into Intergenerational Welfare Dependence, the Brotherhood of St Lawrence called on the inquiry to address the causes of intergenerational disadvantage, rather than just the symptoms. They identified a number of structural drivers of intergenerational disadvantage, including: social assistance and support; the availability of decent work; access to early learning, schooling and training; and the disadvantages of location (place).

One respondent from the NILS provider survey also raised this issue. They commented:

"Automatically giving clients a toolkit implies that they need to be told how to manage their money better, but many clients are already managing well on a fixed income due to circumstances beyond their control."

Provider survey respondent

A client also talked about their capacity on a limited income when discussing the financial information toolkit:

"Overall it was positive and helpful, but it overestimates people’s capacity in our circumstances."

Client interviewee FITSMS group

Case Study: Mary

Mary is living on a Centrelink benefit and at the end of the week, she doesn’t have anything left. All her money goes on necessities, paying for food, rent and trying to cover her bills. If there is anything left after that, then there’s always another bill or something she needs just to get by. The concept of saving and having money put aside sounds great but she just can’t do it. The toolkit contains great information on how to budget and why she should save but that doesn’t change her circumstances. She knows what she needs, she needs more money and less expenses. A NILS loan has helped her in an emergency, her fridge broke down and she had no way to pay for a new one. She was eager to learn about money and understood everything in the toolkit but without the money available, the toolkit can’t help.

This finding is supported by previous Good Shepherd Microfinance research which found that NILS applicants were more comfortable with keeping track of their money on a day-to-day basis, rather than
planning for future spending and saving due to their limited incomes.\textsuperscript{81} Furthermore, in evaluating a financial education program for participants with low income, Lyons et al. found that the largest impact the program had was on financial behaviours that could be changed in the short term (e.g. comparison shopping and talking to family members about money). However, there was no significant impact on behaviours that depended on an individual’s financial situation (e.g. running out of money and paying bills on time).\textsuperscript{82} The authors of the study argued that, “If financial education does not result in behaviour change, it may not be that the program is ineffective.”\textsuperscript{83}

In developing financial technology-led support tools it is important to recognise that not all clients are in a position to improve their financial capability. A more feasible approach might be to understand how these clients can sustain their current level of financial capability and not fall backwards into more financial crisis. This finding also suggests that efforts to support clients to improve their individual financial capability should be made alongside efforts to change the structural drivers of inequality which impact on clients.

\textsuperscript{81} Randrianarisoa and Eccles, 2016.
\textsuperscript{82} Lyons, 2006, p.41.
\textsuperscript{83} Lyons, 2006, p.43.
7. Conversations to Capability: So What? Key Project Findings

A number of key findings emerged from the Conversations to Capability project, which can help Good Shepherd Microfinance in designing products and delivering services to support clients in building their financial capability. The following key findings contribute to the growing body of knowledge on financial literacy education. The research team has also identified a series of recommendations for policy and practice that arise from the key findings. It is important to note that implementing the following recommendations requires significant resources.

7.1 Multiple communication methods and channels, including face-to-face and technology-led options, are needed to support NILS clients

This project has identified that technology-led supports, in particular text message nudges, and financial information toolkits which are tailored to client needs, do have the potential to support NILS clients. Yet technology-enabled channels alone cannot satisfy their needs – a range of communication methods including face-to-face support and physical information (for example brochures or hardcopy materials), are also vital to support NILS clients. The co-design process in Phase also identified that clients wanted clear, simple and tailored information.

The project also highlighted a number of accessibility challenges in Phase II, including evidence of digital exclusion, as 5 clients who were interviewed lacked internet access, had low computer literacy, or did not own a smartphone to access the digital support tools. Clients and providers also identified the need for user-friendly tools that include graphics and other visual supports, as clients have a broad range of literacy levels. Language was another barrier identified by providers, who thought that many clients might benefit from the tools being provided in languages other than English.

The research team therefore recommends that Good Shepherd Microfinance continues to ensure accessibility and support clients in a range of ways including face-to-face communication, hardcopy materials and technology-led support tools.

**Recommendation One**

Design technology-led support tools which can be accessed by clients with a broad range of needs, including digital exclusion, low levels of literacy and numeracy and languages other than English.

Design support tools which are not technology-led, for clients who prefer face to face or hardcopy materials.
7.2 Text message nudges are useful in providing information and support, yet clients also want to better connect with other NILS providers and clients

Text message reminders and nudges tested during this study were seen as useful tools to help some clients focus on their finances. The research team developed the text messages using insights from the Behavioural Insights Team’s EAST framework to encourage behaviour change, which recommends that information is easy, attractive, social and timely (EAST). Some clients described feeling a sense of support and encouragement in their NILS journey when they received the text messages, because they felt that ‘someone cares’. In particular, some clients reported that they felt less alone after receiving the tool, as the information made them realise that they are not the only ones experiencing difficulties in managing their money on limited incomes. Furthermore, the Phase I findings showed that clients wanted opportunities to connect with NILS providers and other clients, in building a stronger sense of community. This finding validates previous research on financial resilience that shows that building or maintaining social capital can be crucial to an individual's sense of financial wellbeing.

However, not all clients found the text messages useful. As mentioned previously, 5 clients found it difficult to access the technology-led support tools due to digital exclusion. This suggests that text message nudges are not accessible to all NILS clients and they should be used to support clients when appropriate.

**Recommendation Two**

Use behaviourally-informed text messages when appropriate.

Test technology-led tools designed to build clients’ social connectedness and feeling of support, in addition to their financial capability.

7.3 Customised support tools on capability-building are useful, yet clients also need clear and simple information about the NILS process

The customised financial information toolkit was seen as useful in helping some clients to manage their money. However, the degree to which the online toolkit could be customised to client needs was limited by the current organisational capability and technology. Some clients mentioned that they valued the sense of support provided by the tools, even though they may not have acted on the financial information when they received it. In fact, of the 10 clients who did not find the financial information toolkit relevant, most of them felt that the toolkit had no impact on their financial knowledge, because they knew how to budget and plan their spending.

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84 Service et al., 2014.
85 Muir et al., 2016.
NILS providers who were surveyed agreed that the financial information toolkit could be helpful for clients as the content was user-friendly and easy to understand. However, they felt that it was important to further tailor the information to individual needs and circumstances, and deliver technology-led supports to clients at different stages of their NILS journey, such as before the financial conversation and during loan repayment. Given that NILS clients are a very diverse group, further work is needed to design tools that are truly tailored to individual needs and circumstances.

Phase I revealed that some clients also wanted access to more information about the NILS process, in addition to financial information. During the Living Lab workshops, participants identified the types of information they wanted to receive. This included, a checklist of necessary documents; overview of what to expect during the financial conversation; information about what types of expenses can be covered by NILS; and information about Good Shepherd Microfinance as an organisation, including its history and mission. Clients also spoke of wanting to receive updates about the progress of their loan, such as the remaining loan balance. One client from the Phase II interviews also wanted a phone number to be included in the text messages, so that they could contact the sender if they had any questions.

Recommendation Three

Provide clear and tailored information about the NILS process.

Further explore what type of information is relevant to which clients, at which point of their NILS journey, given differences in needs, circumstances and levels of financial capability.

Better, more tailored support as a whole.

7.4 Providing support tools does not necessarily change financial knowledge and behaviour in the short-term

Four clients who were interviewed during Phase II reported changing their behaviour after receiving the supporting tools, such as saving more, quitting smoking because of the associated costs and using a financial application from ASIC’s MoneySmart site to track their spending. Yet not all clients agreed the support tools were useful or relevant to their needs, and the survey did not find any significant difference between the average scores of financial knowledge and behaviour between the intervention groups (clients who only received the financial information toolkit, clients who only received text message nudges, and clients who received both the toolkit and text messages) and the control group who received none.

Moreover, two clients reported that they felt a loss of confidence after receiving the support tools, as the tools made them think about their precarious financial situation. This finding validates previous research which showed that the impact of the financial conversation varies based on the unique needs and circumstances of individual clients.

Conversations to Capability Final Report
The *Pathways to Resilience* study found that 15 percent of clients surveyed experienced a ‘reality-check’ where their initial over-confidence was made more accurate in the financial conversation.86 These findings highlight the need for longer-term research to identify targeted interventions that Good Shepherd Microfinance can design to better support diverse client groups, and sustain their financial capability at different stages of their NILS journey. As the financial technology sector continues to expand, further research could explore other technology-led innovations such as commitment devices and financial entertainment games in supporting clients to make positive financial choices.

**Recommendation Four**

Continue to investigate the different impacts of support tools on clients beyond building their financial knowledge.

Conduct further research on commitment devices and financial entertainment games in supporting clients to change their behaviour.

### 7.5 Low income is a significant barrier to enhancing clients’ financial capability

Clients consistently report that their limited incomes impact their ability to improve their financial capability. Most clients surveyed felt that a lack of money was preventing them from managing their finances how they would like to. This includes 60.9 percent of the financial information toolkit group, 70.2 percent of the financial information toolkit and text message group, 61.2 percent of the text message group, and 50.9 percent of the control group. Of the 22 clients interviewed in Phase II, six said that they were unable to save, or think about future planning because of their limited incomes, highlighting the need to address social and economic inequalities which undoubtedly shape financial wellbeing.

Efforts to support clients to improve their individual financial capability should be made alongside efforts to change the structural drivers of inequality which impact on them. Good Shepherd Microfinance should therefore continue to advocate for policy change in this important area. Three clients interviewed in Phase II also wanted a savings mechanism to be incorporated into the NILS loan. Previous research suggests that beyond providing financial education, behavioural interventions may be needed to increase the financial security of vulnerable consumers.87 Choi et al. argue that, “Financial strategies such as savings defaults, direct deposit and debt management plans represent mechanisms where individual behaviours are strongly guided. Coupled with consumer product regulation these have proven to be a highly effective way to change real financial behaviour.”88 Good Shepherd Microfinance is well placed to further investigate offering this type of support to clients to promote savings behaviour.

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86 Randrianarisoa and Eccles, 2016, p.46.
87 West, 2012.
References


Lapowsky, I. This digital piggy bank could finally get you to start saving. Wired. 16 December 2014. Retrieved from https://www.wired.com/2014/12/digit/


Appendix 1 Financial wellbeing terminology

### Terminology

**Financial literacy** has traditionally been used to describe an individual’s understanding of financial products, services, and practices, placing little emphasis on the individual’s behaviours or practical application of knowledge.

**Financial inclusion** focuses on the extent to which people can access and use appropriate financial products. In Australia, financial inclusion is commonly measured in terms of access to appropriate and affordable insurance, credit, and transaction accounts (Connolly, 2014). However, access is not sufficient to ensure wellbeing, and a purely product-based approach is too narrow to meet a population’s complex financial needs.

**Financial capability** refers to individual financial knowledge, skills and behaviours, as well as the social factors that influence them. This approach highlights the need for accessible mechanisms, including innovative approaches such as nudges, commitment devices, and financial games and entertainment, to encourage positive financial behaviours in individuals.

**Financial resilience** takes a broader view of individuals’ situations to assess their ability to access and benefit from their own capabilities in addition to appropriate external resources during financial shocks or stresses. Financial resilience takes into account economic resources (e.g., savings and income level), financial products and services (e.g., access to insurance or credit), financial knowledge and behaviour (e.g., confidence and willingness to utilise financial services), and social capital (e.g., social support, including government and community resources, when needed).

**Financial wellbeing** incorporates elements of financial literacy, capability, inclusion, and resilience. Financial wellbeing prioritises applied behaviours rather than only knowledge or skills, and reflects the ability to comfortably meet all financial commitments and needs with confidence while having the resilience to withstand future shocks and stresses.

## Appendix 2 Phase I preliminary recommendations

<table>
<thead>
<tr>
<th>Phase I finding</th>
<th>Preliminary recommendation <em>(For consideration during Phase II)</em></th>
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</table>
| **1. Clients want a stronger sense of community with other NILS clients and providers** | 1. Develop and strengthen active partnerships between NILS and other local community organisations and services.  
2. Increase the social media presence of NILS and/or Good Shepherd Microfinance. |
| **2. Clients want clearer information about the NILS process throughout all steps of the NILS journey** | 3. Finalise and roll out a standardised enquiry pack to be administered to all prospective clients enquiring about NILS.  
4. Keep in contact with NILS clients during the repayment period using periodic loan balance updates and occasional friendly check-ins. |
| **3. Clients want to feel more supported throughout the NILS journey**           | 5. Ensure that the information, tools and resources resulting from the Conversations to Capability project will serve to reinforce the positive impact of the financial conversation for NILS clients as well as NILS providers.  
6. Explore the ways that supports can be accessed and utilised during all of the teachable moments along the NILS journey.  
7. Provide participants with periodic information on the balance and time remaining on the NILS loan during the repayment period.  
8. Continue to promote NILS provider training and discussion through the Good Learning platform.  
9. Provide NILS clients with (a) a friendly and encouraging cover letter from GSM to help clients feel supported, and (b) a list of local resources that can assist with financial and other matters. These items could potentially be included as part of the financial information toolkit and/or enquiry pack. |
| **4. Clients want clear, simple, tailored information to assist them with money management** | 10. Develop a master financial information toolkit with a variety of financial topics that are relevant to NILS clients. Create an online questionnaire that automatically generates toolkits tailored to each individual NILS client based on his or her questionnaire responses (while keeping the full toolkit available online).  
11. Ensure that financial information tools and resources feature an emphasis on daily money management, while... |
integrating future-planning knowledge, skills, and behaviours (for instance, clearly showing how tools such as insurance and savings are possible on low incomes and can save the client money over the long term).

<table>
<thead>
<tr>
<th>5. Clients find text messages helpful</th>
<th>12. Develop a set of text messages that can be tailored to individual clients.</th>
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<tr>
<td>6. Clients vary in their willingness and ability to utilise digital tools</td>
<td>13. Plan to develop a client-facing NILS app in the future, but first prioritise more accessible methods such as text messages and financial information toolkits that can be provided via email (and potentially via hard copy).</td>
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<td>14. Make some products available in hard copy. For instance, periodically print the 4-5 most popular financial information pages and send to providers for distribution to NILS clients.</td>
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<td>15. Rather than providing clients with wordy, text-based financial information pages, develop a series of easily digestible infographics to comprise the toolkit.</td>
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<td>7. Clients want appropriate, accessible savings mechanisms</td>
<td>16. Ensure that future GSM savings products are designed with NILS clients in mind, and explore the potential to set up automatic savings transfers and early withdrawal penalties.</td>
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<td></td>
<td>17. Encourage NILS clients to take advantage of existing savings products. Use the financial information toolkit and text message nudges to show clients the benefits of integrating savings behaviours into everyday money management strategies, even on a low income.</td>
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<tr>
<td>8. Providers and clients are enthusiastic about the support tool prototypes developed during Phase I</td>
<td>18. Ensure that support tools and resources are designed to enhance and streamline providers’ duties, especially the financial conversation, rather than burdening or detracting from the financial conversation.</td>
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<td>19. Strive to make support tools and resources accessible to all NILS clients, making appropriate accommodations for digital exclusion, literacy, English ability, disability, and other barriers.</td>
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<td>20. Continue to refine support tools and resources based on client feedback, both during the Conversations to Capability project and into the future.</td>
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<td>21. Ensure that technology-led supports do not fully replace face-to-face interactions with NILS providers.</td>
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## Appendix 3 Text messages

<table>
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<tr>
<th>Topic</th>
<th>Text message</th>
<th>Date sent</th>
<th>Number of clients that opted out</th>
<th>Number of clicks</th>
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<tr>
<td>Savings</td>
<td>NILS: Pay yourself first! This week, put money in savings before you spend anything. For more savings tips, visit <a href="http://bit.ly/nilstips">http://bit.ly/nilstips</a>, Reply STOP to opt out.</td>
<td>April 19</td>
<td>0</td>
<td>37</td>
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<td>Bills</td>
<td>NILS: Did you know? Sometimes you can pay big bills in small amounts throughout the year. Find more tips @ <a href="http://bit.ly/nilspay">http://bit.ly/nilspay</a>, Reply STOP to opt out.</td>
<td>May 3</td>
<td>1</td>
<td>46</td>
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<td>Spending</td>
<td>NILS: Track all your spending to see where your money is going. It’s easy with the free TrackMySpend app: <a href="http://bit.ly/nilstms">http://bit.ly/nilstms</a>, Reply STOP to opt out.</td>
<td>May 10</td>
<td>3</td>
<td>41</td>
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<td>Budgeting</td>
<td>NILS: Think budgeting has to be boring or scary? Think again! Budget your way to financial peace and freedom at <a href="http://bit.ly/nilsbud">http://bit.ly/nilsbud</a>, Reply STOP to opt out.</td>
<td>May 17</td>
<td>5</td>
<td>43</td>
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<tr>
<td>Savings goals</td>
<td>NILS: To help reach your savings goal: (1) Write it down. (2) Tell a friend. Find more savings info @ <a href="http://bit.ly/nilssaving">http://bit.ly/nilssaving</a>, Reply STOP to opt out.</td>
<td>May 24</td>
<td>1</td>
<td>35</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>28</td>
<td>554</td>
</tr>
</tbody>
</table>
Appendix 4 Client survey demographics

**GENDER**
- 78.7% Women
- 19.6% Men
- 0.3% Other
- 1.3% Prefer not to answer

**AGE**
- 20.6% 18-24
- 24.3% 25-34
- 23.9% 35-44
- 19.6% 45-54
- 7.0% 55-64
- 0.3% 65+
- 4.3% Prefer not to answer

**LIVING ARRANGEMENTS**
- 31.7% Living with dependents
- 29.6% Living alone
- 8.5% Living with a partner
- 3.1% Living with other family members
- 3.1% Living with parents
- 3.1% Living with friends
- 0.3% Living with carers
- 0.3% Living with grandparents

**Conversations to Capability Final Report**