UNCDF

Unlocking Public and Private Finance for the Poor

IMPACT PATHWAYS
MAPPING THE BENEFITS OF FINANCIAL INCLUSION

Financial inclusion is seen as a key means of helping low-income people out of poverty and building resilience in vulnerable communities. However, financial inclusion projects have sometimes struggled to link their interventions to tangible progress towards achieving the UN Sustainable Development Goals (SDGs). Financial inclusion practitioners argue that access to formal financial instruments provides a number of intermediary benefits that contribute towards achieving a number of SDGs. However, the rigorous academic studies needed to confirm this are beyond the budgets and timeframes of most projects.

The Impact Pathways methodology was first developed by the Pacific Financial Inclusion Programme (PFIP) as a lightweight and cost-effective tool that allows projects and institutions to quantify the impact of their interventions and identify contributions towards achieving the SDGs. The strength of the methodology, which relies extensively on survey data, is that it provides a wealth of primary data connecting particular uses of a financial instrument with benefits that the account user obtains as a result. It then makes use of an extensive body of literature that links those benefits and the SDGs to extrapolate the impact of the project.

PFIP has applied the Impact Pathways methodology to gauge the impact of digital financial instruments developed in Fiji, Solomon Islands and Papua New Guinea. The focus note also includes data from a similar project conducted in Zambia, a country with similar levels of development, to

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act as a point of comparison. The resulting data identifies a number of links between particular tools and specific benefits identified by their users, some of which confirmed previous assumptions while others were unexpected. The key findings and recommendations of the study were as follows:

- Digital financial instruments contribute to reducing the number of cash transactions which customers identified as leading to *greater physical safety*. This benefit was reported by over 70% of total respondents and contributes to achieving **SDG 11: Sustainable Cities and Communities** by reducing the overall rate of crime within a community.
- For lack of alternatives, many customers use transaction accounts to GROW their savings and building up lump sums. This use case is strongly associated with multiple benefits linked to resilience and wellbeing, as is the less frequently occurring PROTECT behaviour. Additionally, the study suggests that money used to invest in new business is obtained through savings rather than loans. Service providers should develop features to facilitate and encourage these behaviours which can be linked to **SDG 1: No Poverty** and **SDG 3: Good health and Wellbeing.**
- Use cases leading to *greater control and privacy* had the greatest impact on women's empowerment. Providers should build in features that emphasize privacy to increase their female customer base and help address the inclusion gender gap. This would make an important contribution to achieving **SDG 5: Gender Equality.**
- Finally, a key finding of the research was that the more features a transaction account has the more benefits it will be able to provide to its customers. More benefits lead to higher satisfaction levels among clients and ultimately more pathways to the SDGs.

The impact pathways methodology is data driven so more trends and impacts will become apparent as it is applied to more financial services and the volume of data analysed increases. The methodology has great potential to inform strategies for development practitioners and donors, and for financial service providers. For development practitioners and donors, the data can identify priority areas where support to financial service providers can have the greatest impact. For financial service providers it gives an insight into how customers are using the service and what benefits they are receiving – critical information to tweak and adapt their value proposition to low-income clients.

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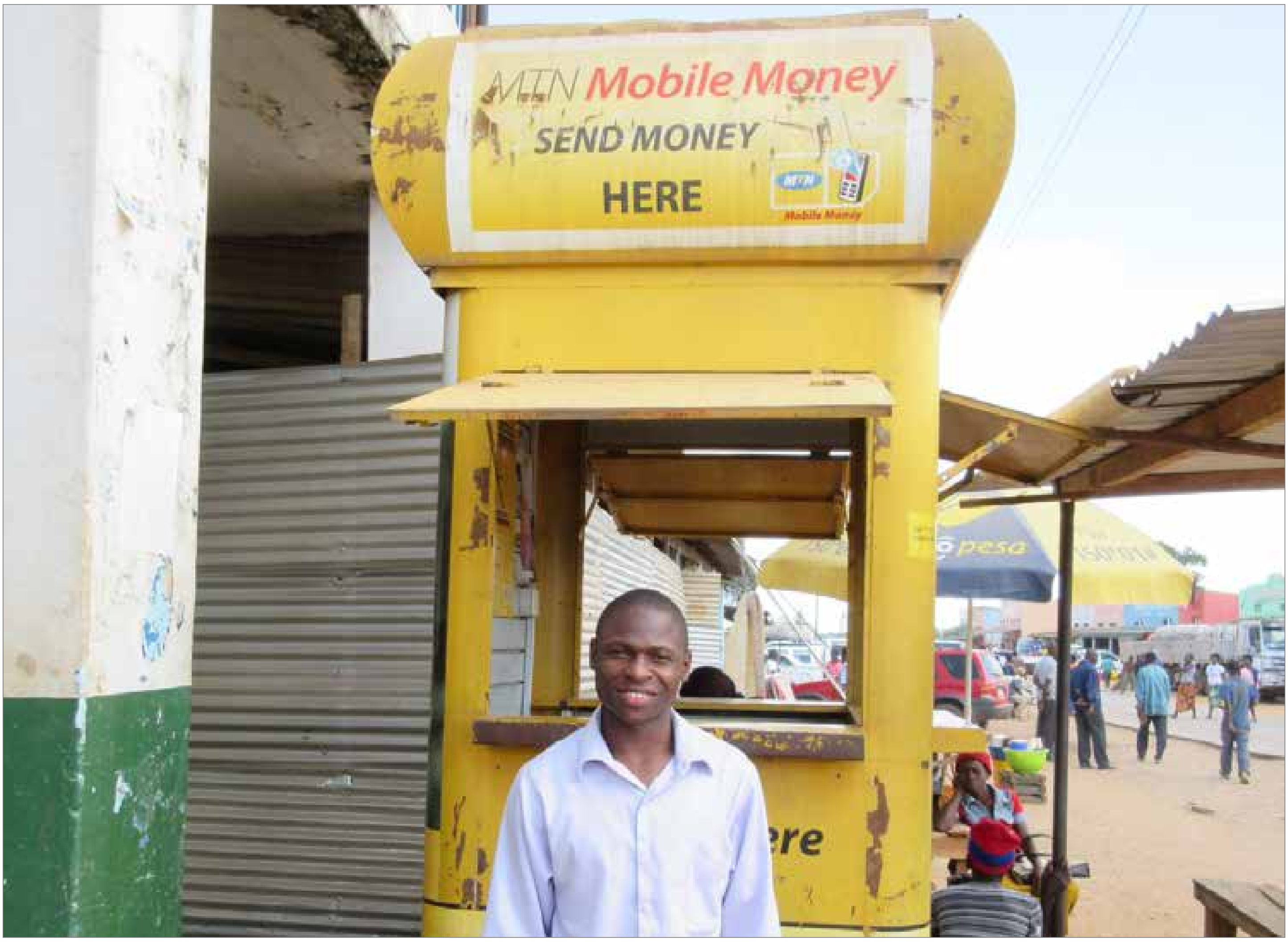


INTRODUCTION

Financial tools are so ingrained in many of our lives that we often forget about multitude of pathways that they open up, allowing us to access a range of benefits that impact most aspects of our lives. For financially excluded communities this network of pathways can be difficult to access, perpetuating vulnerability and making it harder to move out of poverty. However, in recent decades, a concerted global effort to expand access to financial services has borne fruit and, according to the World Bank Global Findex, account ownership in developing countries has increased from 42% in 2011 to 63% in 2017.

Although these figures show steady improvement in the number of low-income people using a formal financial instrument, they also raise the question of how to measure the actual impact of higher rates of financial inclusion. Donors, financial service providers and impact investors often ask: how do we go beyond large access and usage numbers to ascertain that financial inclusion is contributing positively to people's lives and moving them towards achieving the SDGs?

To help answer this question Impact Pathways was developed as a lightweight, cost-effective means of connecting the use of financial services to perceived benefits, which are then linked to the SDGs. The methodology uses extensive analysis of transactions and balances but its strength lies in the use of survey data to create a nuanced picture of the multitude of ways in which access to finance creates benefits that impact people's lives and which contribute to reaching larger goals.

This note outlines the results of Impact Pathways analysis conducted in four different UNCDF projects. It is based on a survey of active bank and mobile money customers from across four countries (Solomon Islands, Papua New Guinea, Fiji, and Zambia) combined with behavioural data science analysis of transactions and balances. Zambia offers an interesting point of comparison to Pacific Islands states, with similar levels of development though a much larger population.

This note highlights the role that the Impact Pathways methodology can play in identifying how access to finance can contribute to the lives of low-income people. These insights can be used to influence the design of financial products to offer the most benefits to their users. They are also valuable to development agencies, and the donors that support them, when they aim to ascertain how digital financial services contribute to the SDGs.

CONTEXT

This focus note presents the analysis of survey data collected from customers of four financial service providers operating across one African country and three Pacific countries. A comparison was conducted between the Zambian mobile money account 'MTN MoMo' and its equivalent in Fiji called 'Vodafone M-Paisa'. A second comparison was done between accounts offered by two banks: ANZ goMoney' in Solomon Islands and Westpac 'Choice Wantok' in Papua New Guinea (PNG).

While we were able to draw a number of important conclusions from the research, it is important to note the differences in local context in each country: variations such as population density, income, security and levels of financial inclusion exist between them and can influence how informal alternatives develop. For instance, Fiji's population density is considerably higher (48[1] people/ km2) than that of Zambia, Solomon Islands and PNG. The average income of Fiji is also the highest of these four countries with a Gross National Income per capita of USD 10,140[2], higher than Papua New Guinea and Zambia and more than double that of Solomon Islands.

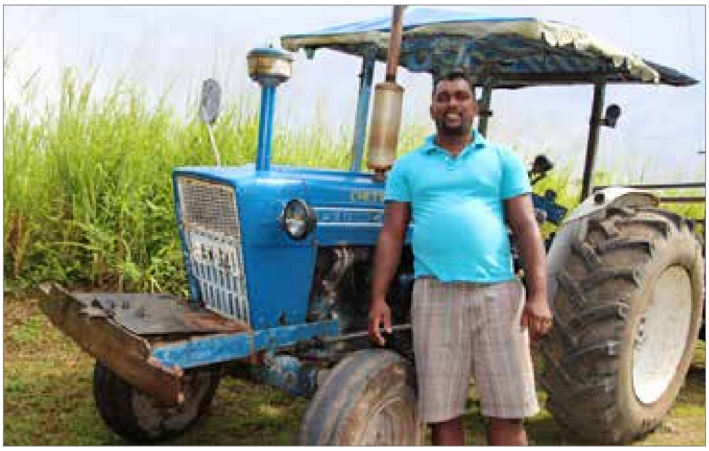
Fiji is also ahead when it comes to financial inclusion in the form of access to a formal bank or mobile money account. In Fiji 74.8%[3] of the population makes use of these financial services. Zambia has lower rates of inclusion than Fiji but is significantly ahead of both Papua New Guinea and Solomon Islands, both of which have some of the lowest inclusion rates in the World.

While customers in all four countries show a tendency to keep cash savings at home, there is variation in alternative avenues open to customers which can be assumed to have an effect on the percentage. For example, 73% of the population of Solomon Islands keep their savings in their home. The percentage is also relatively high in Fiji with 33% choosing this method of saving. However, in Fiji the state sponsored pension scheme offers a useful alternative option for long term saving which has been adopted by 27% of the population. Annex 1 offers further details on country level characteristics.

Product design and fee structures vary considerably between the service providers selected for comparison,

[1] Food and Agriculture Organization and World Bank population estimates.
[2] Gross national income per capita 2018, PPP, World Bank
[3] 2018 Financial Inclusion Indicators for Fiji, Fijian National Financial Inclusion Taskforce

which influences the way in which customers use the services, rates of uptake and the impact that they have. For example, the fees for P2P transfers in Solomon Islands and PNG are relatively high, which is likely to make them less attractive to lower income users. Unlike the other providers, MTN chooses to charge for a 'Bill Pay' option. Different service providers offer different features. For example, ANZ offers a school fee payment option for free, however it is not frequently used. Customers can access short-term credit through MTN MoMo. Vodafone's M-PAiSA account can be used to process electricity payments, but it is a relatively under-used sub-case. See Annex 2 for details of product features.



RESULTS OF THE RESEARCH

Step 1 - Customer behaviour patterns: identifying the potential pathways to benefits

A key feature of the impact pathways methodology is to focus exclusively on active users to ensure that the recommendations reflect the reality on the ground. Working with the service providers, all inactive and dormant accounts were stripped from the dataset.

Quantitative analysis of the clean dataset was then used to detect behavioural transactions and different types of savings behaviour. PAY/SEND as the most common use case, followed closely by GROW, GET and MANAGE. PROTECT was the least frequently employed use case. INFORM did not feature in this research.

Table 1: Percent of customers in use cases calculated through transaction and balance data*

Service Provider	ANZ goMoney	Vodafone M-PAiSA	Westpac Choice Wantok	MTN MoMo
Country	**Solomon Islands**	**Fiji**	**PNG**	**Zambia**
Number of customer accounts analysed	18,806	233,885	4,411	1,671,815
GROW	80%	0%[4]	64%	18%
PAY/SEND	71%	30%	55%	75%
GET	-[5]	33%	68%	47%
MANAGE	52%	19%	39%	23%
PROTECT	2%	15%	5%	8%

*This table differs from Table 2, which calculates the percentage of customers in the survey who engage in the various use cases.

[4]Analysis of M-Paisa data showed no GROW behaviour suggesting that customers use other types of product for this use case, as explored in the context section.

[5]The table does not show GET for ANZ goMoney as this data was not provided. The transaction data for ANZ goMoney only showed one side of the transaction, so the GET use case could not be established at this stage. Therefore, respondents were asked how other use cases allowed them to GET money at the next stage of the study.

GROW: Grow assets by having the ability to save up money or pay down a loan

GROW behaviour is often associated with savings groups: they instil the sort of group discipline that allows their members to build up lump sums with small incremental contributions. The fact that GROW is so common in Solomon Islands and Papua New Guinea may be due to the fact that savings groups remain uncommon in both countries and efforts to encourage their use have met with little success[6]. The other countries in the study approach GROW very differently. In Zambia savings group play a more important role and GROW may be less frequent in digital accounts as a result. In Fiji, there are alternatives such as growing a lump sum with the National Provident Fund or in an interest-bearing bank account. Banks have much higher penetration rates in Fiji than in the other countries in the study.

PAY/SEND: Send money directly to another person or use the account to pay for bills and purchases

The most common transactional use case is PAY/SEND as it captures a number of important sub-use cases:

- P2P payments are the most common sub-use case across all of the countries showing the important role that digital finance can play in strengthening social networks.
- Payments for mobile phone credit and data also figure consistently across all countries in the study. The higher incidence in Zambia is potentially down to MTN MoMo being a more established product with more functionality.
- Other PAY/SEND sub-use cases are very country specific. PayGo solar energy was only offered in by MTN MoMo. It is specific to Zambia and at the time of the study there were no equivalents in the other countries. The prevalence of pre-paid electricity in Solomon Islands encourages digital payment to top up the account quickly and efficiently when it runs out.

GET: Receive a payment

GET P2P transactions occur at similar rates to PAY/SEND P2P, reflecting the social network element of these transactions – one balances the other. Even in recently created products like ANZ goMoney and Westpac Choice Wantok both use cases grew at similar rates, reflecting their interdependence.

MANAGE: MANAGE money during the short-term (< 1 month)

Lower income households frequently try to MANAGE money by saving in their homes - under the proverbial mattress, but this comes with both the risk of theft and the temptation of using it to cover day to day needs. 73% of respondents in Solomon Islands save money at home. The risks associated with this may be why we see a higher percentage of people using ANZ's goMoney to MANAGE relative to the other products.

[6]http://www.pfip.org/wp-content/uploads/2016/08/PFIP-focus%E2%80%A2December-Issue-FINALWEB-1.pdf for Enduring Value: Savings Clubs in the Solomon Islands, PFIP Focus Note, December 2014

PROTECT: Retain or have the right to receive a usefully large lump sum

Finally, PROTECT is generally an uncommon behaviour pattern, with the exception of Fiji. This might be because Fiji is relatively wealthy when compared to the other countries in the study: a higher income is usually a prerequisite for being able to set aside long-term savings. It might also be due to pre-existing informal patterns of behaviour, which are slowly being transferred to a digital medium using a mobile money wallet such as Vodafone M-PAiSA. Money-guarding (the practice of looking after a friend or relatives' money to stop them from spending it), for example, is relatively well-known concept in Fiji and is considered the informal equivalent to PROTECT. Enabling customers to PROTECT their money is, therefore, a key area of missed opportunity for financial service providers.

It is also worth identifying which of these use cases tend to be used together: customers rarely use an account in only one way; pathways within the network go on to generate more pathways. In almost all instances, account use involves a combination of GET, PAY/SEND and MANAGE. This makes intuitive sense as both PAY/SEND and GET are transactional use cases while MANAGE is a part transactional and part savings use case. MANAGE is the behaviour pattern that tries to MANAGE money between GET and PAY/SEND.

Step 2 – Linking use cases and benefits: mapping the network of pathways to impact

Impact Pathways analysis aims to identify the specific benefits that result from the use cases described above. To avoid unwarranted conclusions, respondents were also asked how they performed the task before they had access to digital financial tools. For the vast majority, this was not the first time they had performed the transaction: they had been performing them before, as detailed in Annex 3, but they identified a clear benefit from using their current product to carry out the transaction or manage their money. The table below outlines the benefits identified in the study along with the percentage of respondents who experienced them, through one pathway or another. While a single customer can reach the same benefit through multiple pathways, these benefits are only counted once to ensure that the figures reflect the reality of the impact.

Table 2: % of respondents with benefits, in decreasing order (More Privacy and Control is over number of women)

Service Provider	ANZ goMoney	Vodafone	Westpac	MTN MoMo
Country	**Solomon Islands**	**Fiji**	**PNG**	**Zambia**
No. survey respondents/No. women respondents	1012/416	1053/551	828/188	1344/551
Greater Physical Safety	71%	73%	67%	81%
More Privacy and Control	63%	66%	61%	70%
Sustained Resilience	60%	56%	57%	74%
Less Stress	24%	47%	61%	76%
Enriched Income	63%	10%	68%	57%
Broader Social Networks	45%	21%	31%	56%
Consistent Nutrition	27%	25%	19%	27%
Supported Education	14%	4%	11%	51%

Note that we take these percentages over total respondents (or total women respondents in the case of More Privacy and Control) because we can only speak to the responses of the clients.

Below we analyse each benefit individually and give of the percentage of people within each relevant use case who identified a particular benefit. This offers valuable insights into the impact of digital financial services at a granular level and helps identify use cases that have low incidence rates but produce high benefit rates and which should therefore be prioritised in future product design.

1. *Greater Physical Safety* was the most commonly cited benefit. This is because it features across all the use cases to some extent, and it is often the most commonly experienced benefit within those use cases.

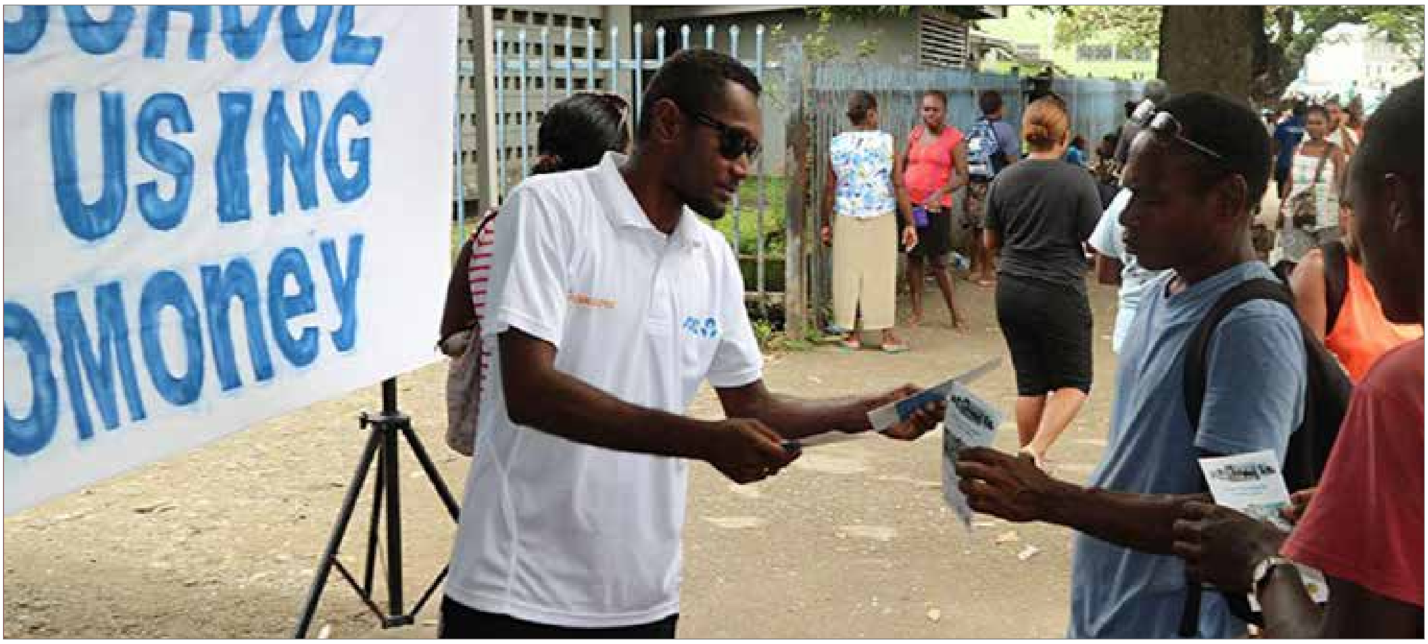
Upon closer inspection it becomes clear that this benefit was most frequently linked with use cases associated with handling cash: GET, PAY/SEND and MANAGE. Customers felt a significant improvement in their safety by avoiding having to hold or transact in cash, which inherently involve a physical risk due to the threat of robbery.

Greater Physical Safety				
Use case	**ANZ goMoney**	**Vodafone M-PAiSA**	**Westpac Wantok**	**MTN MoMo**
PAY/SEND	38%	35%	50%	93%
GET	64%	71%	37%	64%
PROTECT	39%	42%	-	95%
MANAGE	4%	34%	59%	71%

2. *More Privacy and Control* is especially relevant to women. Women respondents considered the majority of their transactions to be private, including work income, payments to their family and especially savings. We see that the biggest opportunities to increase privacy come from transactional use cases like PAY/SEND, GET and MANAGE. In a GSMA Women study[7] of Kenyan women who sent remittances, 94% saw mobile money as a means of ensuring privacy compared to 52% who said the same about cash transfers.

More Privacy and Control				
Use case	**ANZ goMoney**	**Vodafone M-PAiSA**	**Westpac Wantok**	**MTN MoMo**
GET	31%	30%	45%	87%
PAY/SEND	51%	57%	29%	0%
PROTECT	39%	43%	-	96%
MANAGE	37%	34%	53%	76%

[7]GSMA (2013) Unlocking the Potential: Women and Mobile Financial Services in Emerging Markets.



3. *Sustained Resilience* is a widely felt benefit of digital financial services and an important part of financial health. Annex 4 indicates that having "money in the bank" is the main way in which customers felt resilient, making MANAGE and PROTECT the most important pathways. GET plays a smaller role – although the literature suggests that friends and family are an important source of funds in a financial emergency. However, in many cases, people do not want to reach out to family and friends and save it as a last recourse.

Customers associated Sustained Resilience with job security and identified specific sub-use cases that made them feel more secure in their employment. The fact that customers were able to receive payments, pay for phone data and manage their resources remotely meant they missed fewer workdays and created a tangible feeling of job security.

Sustained Resilience				
Use case	**ANZ goMoney**	**Vodafone M-PAiSA**	**Westpac Wantok**	**MTN MoMo**
GET	32%	34%	36%	33%
GET Remotely	18%	0%	17%	92%
PAY/SEND	33%	27%-	17	-
PAY/SEND Data	11%	-	13%	22%
Pay Talk time	12%	-	12%	11%
PROTECT	45%	41%	-	96%
MANAGE	42%	33%	60%	71%
Remotely	21%	-	27%	21%

4. *Less stress* is something that features across all use cases. However, it features most prominently in activities that enable the acquisition of a lump sum of money such as GET, MANAGE and PROTECT. It is also interesting to note the positive impact of being able to pay for data and talk time remotely which, given the prevalence of pay-as-you-go services in the region, can remove the stress of being suddenly disconnected.

Less stress				
Use case	**ANZ goMoney**	**Vodafone M-PAiSA**	**Westpac Wantok**	**MTN MoMo**
GET	26%	35%	4%	93%
PAY/SEND - Talk Time	11%	0%	18%	15%
PAY/SEND - Data	8%	7%	6%	13%
PAY/SEND - Electricity	-	4%	-	32%
PROTECT	33%	39%	-	94%
MANAGE	30%	29%	37%	72%
GET	26%	35%	4%	93%

5. This study reveals how the ability to keep money aside, as in use cases GROW or PROTECT, can lead to *Enriched Income.* When people have ready money set aside, they are able to take advantage of a business opportunity or invest in their business. Taking out a loan which, out of these four products is only available through MTN's MoMo app, is another type of transaction that leads to increased income. When we looked at what customers did with loans taken out through MTN's MoMo app in Zambia it provided an example of how different use cases can lead customers along multiple pathways. Many of customers (36%) used part or all of the loan to invest in their businesses. However, 26% said it was to improve sanitation in their homes and 25% said it was for school fees and other education expenses. It suggests that a benefit like increased income may lead to improvement against multiple SDGs.

   Enriched Income also comes from PAY/SEND, potentially relating to business owners who can avoid the opportunity cost of closing their businesses to pay bills or top up talk time, electricity or data.

Enriched Income				
Use case	**ANZ goMoney**	**Vodafone M-PAiSA**	**Westpac Wantok**	**MTN MoMo**
GET	-	2%	4%	-
PAY/SEND	5%	3%	3%	24%
PROTECT	39%	16%	-	90%
GROW	69%	0%	79%	47%

6. *Broader Social Networks* are, naturally, linked to transactional use cases that allow communities to support each other. It is interesting to note that while incidence rates of GET and PAY/SEND are mostly balanced, the perception of benefit is heavily skewed towards PAY/SEND. This is relatively counterintuitive but would suggest that communities prioritise being able to help their social networks over receiving help.

Broader Social Networks				
Use case	**ANZ goMoney**	**Vodafone M-PAiSA**	**Westpac Wantok**	**MTN MoMo**
GET	10%	27%	26%	39%
PAY/SEND	84%	35%	23%	86%

7. *Consistent Nutrition* is linked exclusively to the MANAGE use case and show high benefit levels across all of the countries in the study. The combination of relatively low incidence and high benefit suggest that MANAGE behaviour should be encouraged through policy tweaks and product design.

Consistent Nutrition				
Use case	**ANZ goMoney**	**Vodafone M-PAiSA**	**Westpac Wantok**	**MTN MoMo**
MANAGE	35%	27%	39%	69%

8. *Supported Education* was a benefit that varied greatly between countries. Respondents in Zambia relied heavily on support from relatives to cover education expenses, reflecting the importance of GET. This is true to a lesser extent in Papua New Guinea.

Supported Education				
Use case	**ANZ goMoney**	**Vodafone M-PAiSA**	**Westpac Wantok**	**MTN MoMo**
PAY/SEND - Data	7%	13%	0%	7%
GET	-	0%	25%	77%
GROW	13%	0%	0%	0%
PAY/SEND - Electricity	0%	13%	0%	0%

Step 3 – The pathways between benefits and the SDGs

After identifying the pathways between use cases and benefits, we then need to analyse how the long-term experience of these benefits contributes to the SDGs. The main observations are as follows:

1 NO POVERTY

- *Sustained Resilience* plays an important role in preventing families from falling into poverty. Krishna (2003) shows that for every household that escaped poverty, others were falling back into it, so increased resilience is therefore therefore an important contributor to reducing poverty.
- *Enriched Income* was generated by people able to build up a lump sum to invest in businesses. The assumption has always been that credit products allow investment in businesses, but our research found that even when loan products were available, like Kongola in Zambia, investment was more likely to come from savings than from borrowing.
- *Social networks* are broadened and maintained through financial tools, allowing friends and relatives to maintain social equilibrium and support each other in times of need. Research by Jack and Suri (2014) shows that well established social networks contribute to reducing poverty and inequality.

2 ZERO HUNGER

- *Nutrition* is strongly impacted by irregular incomes, with families cutting back on food quantity or quality to make ends meet. By giving families the means to MANAGE out lump sum payments, ensuring that their income lasts the whole month, low-income households no longer need to compromise on essentials.

3 GOOD HEALTH AND WELL-BEING

- *Reduced stress* was consistently identified as an important benefit for customers. Research by Weich and Lewis (1998) documents the link between stress, financial management, and well-being showing that stress levels have a profound impact on peoples' health.

4 QUALITY EDUCATION

- *Social networks* play an important role in education. Research from the Jacobs Foundation (2015) found that most school fees in Kenya are paid for by relatives.
- *Sustained Resilience* also plays a role in education. Education can be seen as a luxury by families that can'tcannot make ends meet, either because they can'tcannot afford the school fees or because they rely on the income generated from child labour.

5 GENDER EQUALITY

- *More Privacy and Control* allows women to take charge of their own financial future, a vital step in achieving gender equality. Financial tools allow women to save money and conduct transactions in private, ensuring greater control over their financial affairs.

11 SUSTAINABLE CITIES AND COMMUNITIES

- *Greater Physical Safety* is an important feature of Sustainable Cities and Communities. Research by Skillings & Rogers (2017) determined that crime rate fell in Kibera, Nairobi with the introduction of M-Pesa thanks to the reduction in the number of cash transactions.

RECOMMENDATIONS

Impact Pathways has great potential to inform strategies for both donors and financial service providers, especially if both adopt comparable methods for tracking benefits. Based on the findings of the study, we have developed the following recommendations:

Over 70% of total respondents identified *Greater Physical Safety* as a benefit of digital financial tools. It is clearly linked to use cases that reduce the number of cash transactions thereby reducing vulnerability to crime. By making people feel more secure, mobile money can make an important contribution to **SDG 11: Sustainable Cities and Communities.** Financial inclusion projects should therefore promote account features that promote increased security, specifically in transaction-focused use cases (GET, PAY/SEND and MANAGE) .

While all of the use cases impact women's empowerment, *More Privacy and Control* has the most direct impact: empowerment comes down to control over money, which is reliant on keeping balances and transactions private. On many occasions we asked a woman about their financial transactions and many of them were considered private, such as payments for work, to their family and into savings accounts. As with *Greater Physical Safety*, we see the biggest opportunities to increase Privacy and Control from transactional use cases (GET, PAY/SEND and MANAGE). Building in features that facilitate privacy will help increase the number of female customers, contribute to addressing the inclusion gender gap and contribute to achieving **SDG 5: Gender Equality**. Providers should also look to make call centres woman friendly. Women tend to have fewer people to ask about new financial tools and the case of MTN in Zambia shows that, when women use call centres, they feel much more confident in using the service.

Mobile money products generally do not encourage PROTECT and GROW behaviour even though both these use cases are strongly linked to benefits associated with wellbeing such as *sustained resilience, less stress and enriched income.* These benefits are in turn connected to **SDG 1: No Poverty and SDG 3: Good health and Wellbeing.** Service providers should develop features that allow clients to leave money in accounts, as well as adding to balances over time, opening new pathways to high impact benefits for their customers. Possible features include interest on balances.

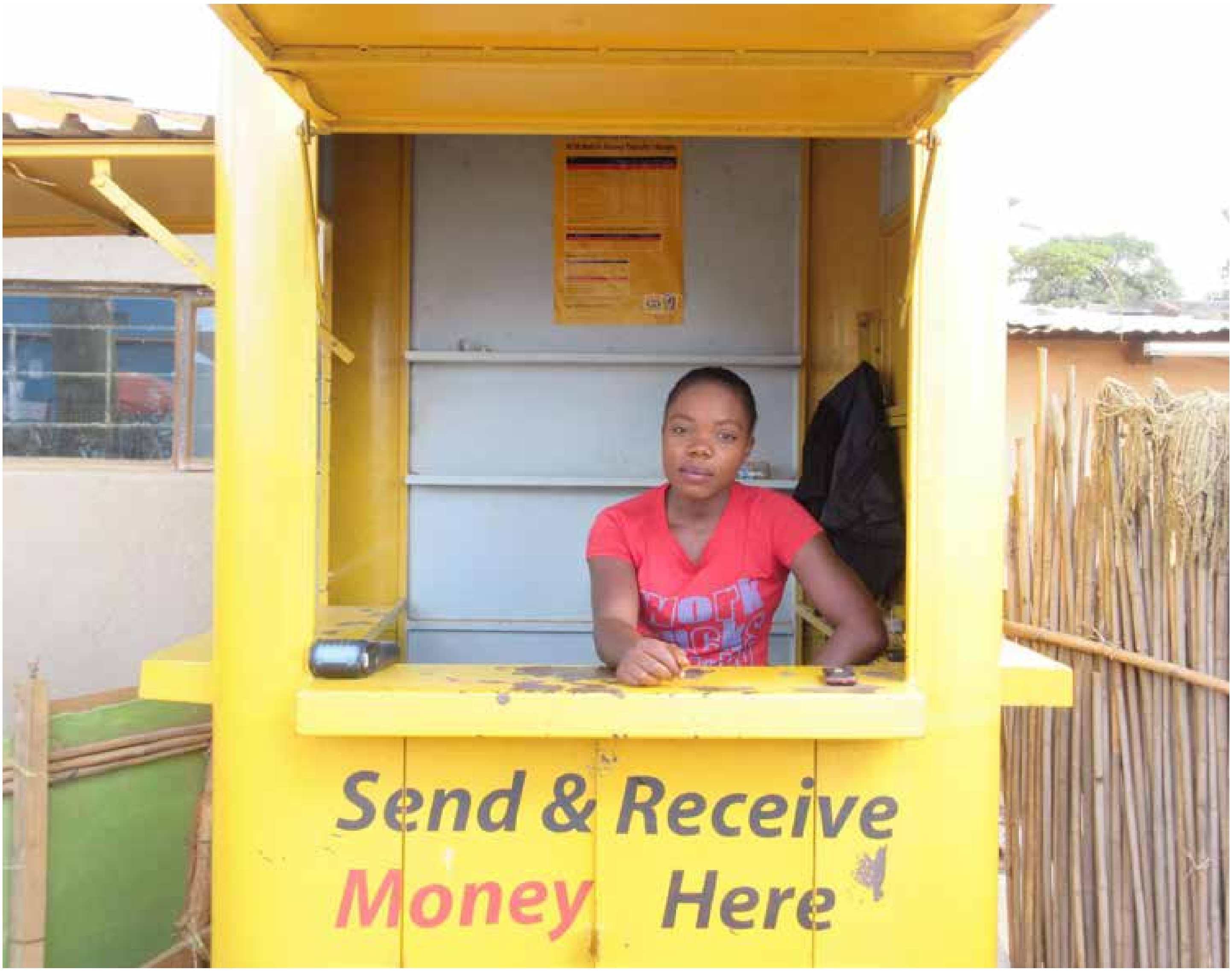
Finally, a key finding of the research was that more leads to more. The more features a transaction account has, the more benefits it will be able to provide to its customers. And by connecting accounts to a greater number of other products, such as PayGo solar energy solutions, mobile loans, or a time deposit account, it can be linked to a greater range of benefits. More benefits lead to both higher satisfaction levels among customers and ultimately more pathways to multiple SDGs.

ANNEXES

Annex 1: Country-level characteristics

Country	Solomon Islands	Fiji	PNG	Zambia
Total Population (mil)	0.68	0.89	8.94	18.38
Population density (per square km, 2018)	23	48	19	23
Income (PPP per capita, 2018)	2320	10140	4220	4100
Financial inclusion (% with formal account)	34%	74.8%	37%	59%

Source: FI: PFIP PoWER research; PFIP demand side research (2014); Food and Agriculture Organization and World Bank population estimates; Gross national income per capita 2018 PPP World Bank; National Financial Inclusion Taskforce, Update of 2018 Financial Inclusion Indicators for Fiji; UNCDF State of the DFS Market in Zambia, 2018



Annex 2: Product features at time of research (2018)

Service Provider	ANZ goMoney	Vodafone M-PAiSA	Westpac Choice Wantok	MTN MoMo
Country	**Solomon Islands**	**Fiji**	**PNG**	**Zambia**
Type of account	Mobile banking account on top of an ANZ bank account; USSD	Mobile money wallet; USSD	Basic bank account	Mobile money wallet; USSD
Payment capabilities	- Talktime top up - Data top up - P2P transfers - School payments	- Talktime top up - Data top up - P2P transfers - Electricity payments - PayGo solar	- Talktime top up - Data top up - P2P transfers	- Talktime top up - Data top up - P2P transfers
<u>Fees</u> P2P transfer Generate send money voucher Goods purchase Cash out	$0.61 $2.43 $0.06 $0.97 Free: Cash in; Redeem send money; Balance check; Transaction history; Pay bill; Top-up mobile phone voucher; Transfer between accounts	$0.23 - $0.45 - - $0.45 - $0.91 Free: Cash in; balance inquiry; Pay bill; top up; transfer between accounts	$0.74 - - - Free: Balance enquiry; top up; bill pay	$0.02 - $0.15 (MTN users) $0.38 - $2.66 (nonMTN user) $0.19 - $2.28 Bill pay: $0.08 - $0.27 Free: balance enquires; buy airtime
Important features	Can send a redeemable voucher which recipients can redeem at any goMoney merchant; Can transfer to another ANZ bank account			PayGo Solar energy; can apply for and repay microloans through the Kongola platform
Information access	Contact centres open from 8 – 5 Mon – Fri.			Service centres open from 9 – 6 Mon - Sat; some hours on Sunday
Access to credit				Access to short-term loans
Number of agents		2016: 207 agents		

Annex 3: How did respondents previously utilize this use case?

Service Provider	ANZ goMoney	Vodafone M-PAiSA	Westpac Wantok	MTN MoMo
Country	Solomon Islands	Fiji	PNG	Zambia
GET				
P2P	60% transfer through bank; 8.5% never received	44% transfer through Post Office; 4% never received	66% received through bank transfer	50% used another service; 16% would give when they visited
PAY/SEND				
P2P	54% transfer through bank; 13% never sent	45% through Post Office	66% through bank transfer; 7% never sent	50% used a different formal service; 21% brought cash when they visited; 20% gave cash to someone else
Talk time	79% cash at agent; 66% ran out	92% paid cash at agent	69% paid cash at agent	55% cash at agent; 40% scratch cards on street
Data	81% cash at agent; 66% ran out	90% cash	72% paid cash at agent	95% paid cash at the agent
Electricity	-	78% cash to agent	-	94% paid cash at the agent
School fees	-	-		Access to short-termloans
PROTECT				
	-	75% would keep in bank; 15% keep in the house; 7% didn't save		64% keep in bank; 34% in house; 9% said they never kept money before
MANAGE				
	96% would withdraw all at once	96% would withdraw all at once	98% would withdraw all at once	99% said they withdrew the money all at once
GROW				
	55% keep in bank; 37% keep in house;10% did not save			52% would save up in the bank; 40% saved up in the house; 8% said they never saved before

Annex 4: Which sub-use cases had the largest proportion of respondents identifying a perceived benefit?

Service Provider	ANZ goMoney	Vodafone M-PAiSA	Westpac Choice Wantok	MTN MoMo
Country	Solomon Islands	Fiji	PNG	Zambia
GET				
P2P: Social networks	10%	27%	26%	39%
Safety	38%	35%	50%	93%
More Privacy and Control	31%	30%	45%	87%
Sustained Resilience	32%	34%	36%	33%
Well-being (stress)	26%	35%	4%	93%
Enriched Income	-	2%	4%	-
Supported Education	-	-	25%	77%
Sustained Resilience **	18%	0%	17%	92%
Sustained Resilience: Talk Time	12%	-	12%	11%
PAY/SEND				
P2P: Social networks	84%	35%	23%	86%
Talk time: Well-being (stress)	11%	0%	18%	15%
Data: Well-being (stress)	8%	7%	6%	13%
Talk time: Enriched Income	0%	7%	0%	0%
Data : Sustained Resilience	11%	-	13%	22%
Data: Supported Education	7%	13%	0%	7%
Data: Enriched Income	0%	11%	0%	0%
Electricity: Well-being	-	4%	-	32%
Electricity: Consistent Nutrition	-	15%	-	-
Electricity: Supported Education	-	13%	-	-
Pay Solar Energy	-	-	-	3%
School fees: Supported Education	17%	-	-	-
Safety	64%	71%	37%	64%
Enriched Income	5%	3%	3%	24%
More Privacy and Control	51%	57%	29%	0%
Sustained Resilience	33%	27%	17%	0%
PROTECT				
Enriched Income	39%	16%	-	90%
Sustained Resilience	45%	41%	-	96%
Safety	39%	42%	-	95%

Service Provider	ANZ goMoney	Vodafone M-PAiSA	Westpac Choice Wantok	MTN MoMo
Country	**Solomon Islands**	**Fiji**	**PNG**	**Zambia**
More Privacy and Control	16%	27%	-	40%
Well-being (stress)	33%	39%	-	94%
MANAGE				
Sustained Resilience	42%	33%	60%	71%
Consistent Nutrition	35%	27%	39%	69%
Well-being (stress)	30%	29%	37%	72%
Well-being (health)	-	24%	0%	0%
Safety	4%	34%	59%	71%
More Privacy and Control	16%	18%	0%	30%
Resilience**	21%	-	27%	21%
GROW				
Enriched Income	69%	-	79%	47%
Supported Education	13%	-	0%	3%
More Privacy and Control	-	-	-	65%

**Resilience in this circumstance refers specifically to a customer saying that, because they could make remote payments, they did not need to leave work and therefore risk losing that job.

Note: Dashes are where a use case or sub-use case did not apply. 0% is where no respondents replied.

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