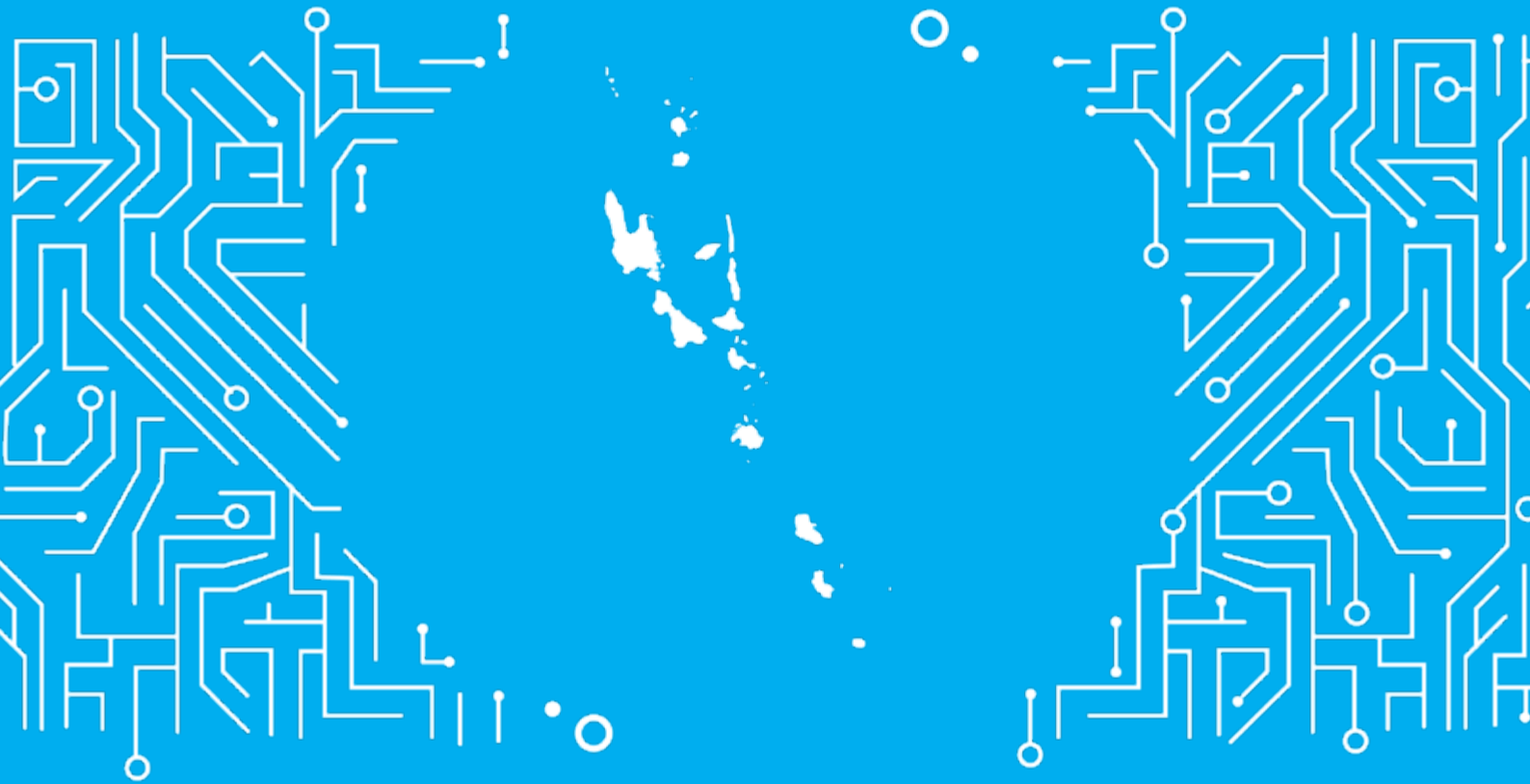




# ASSESSING DIGITAL AND FINANCIAL LITERACY IN VANUATU

| A Survey on Knowledge,  
Skills and Access





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## Acknowledgements

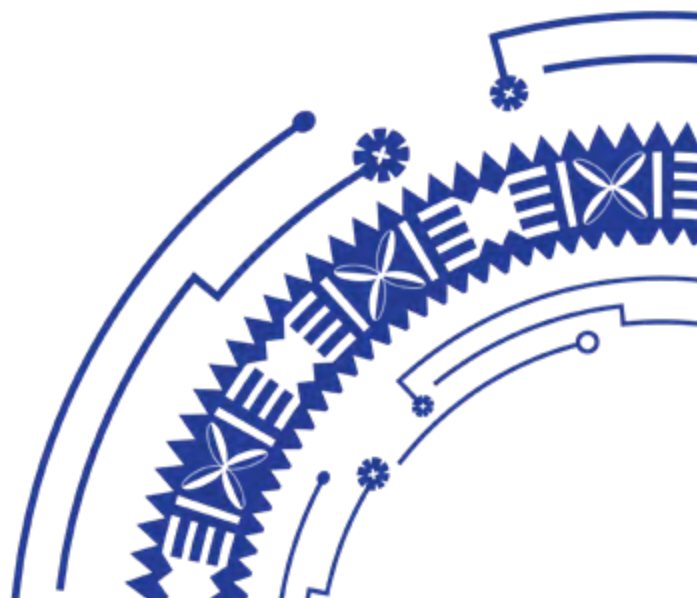
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# Contents

List of Acronyms and Designations.....	9
Glossary of Terms.....	10
Note on Significance Testing.....	11
<b>Executive Summary</b>	<b>12</b>
Digital and Financial Literacy Index Scores	12
Digital Integration	12
Digital Finances	13
DFS Outcomes and Education	14
<b>Background and Introduction</b>	<b>15</b>
<b>Methodology</b>	<b>15</b>
Survey Methodology .....	15
Survey Questionnaire .....	17
<b>Creation of a Digital and Financial Literacy Index</b>	<b>17</b>
<b>General Demographics</b>	<b>18</b>
Region and Density.....	18
Demographic Characteristics.....	20
<b>Digital and Financial Literacy Index Scores</b>	<b>20</b>
DFL by Demographic and Geographic Subgroups.....	23
<b>Detailed Findings</b>	<b>25</b>
<b>Section 1: Digital Access, Usage, and Literacy</b>	<b>25</b>
Access to and usage of digital devices and the Internet .....	25
Attitudes towards technology .....	30
Digital and online security .....	33
<b>Section 2: Financial Inclusion &amp; Literacy</b>	<b>34</b>
Access to payment products and services .....	34
Cash-based economy & experiences with remittances.....	36
Financial well-being .....	38
<b>Financial management – budgeting and savings behaviours</b>	<b>39</b>
Knowledge and skills related to money management.....	42



<b>Section 3: Digital Finance</b>	<b>45</b>
Perceptions about Digital Financial Services.....	45
Access to and Use of Digital Financial Services.....	46
<b>Safety Measures and Awareness Related to Safe and Efficient Use of DFS</b>	<b>47</b>
DFS Personal Outcomes – Positive and Negative .....	48
<b>Conclusions &amp; Recommendations</b>	<b>50</b>
<b>Appendix 1: Digital and Financial Literacy Questionnaire</b>	<b>53</b>
<b>Appendix 2: Scoring Guide</b>	<b>72</b>

# List of Tables

Table 1: DFL Index Score by Gender by Density	23
Table 2: DFL Index Score by Region	23
Table 3: DFL Index Score by Gender by Age	24
Table 4: DFL Index Score by Educational Attainment and Work Status	24
Table 5: DFL Index Score by Income and Disability Status	24
Table 6: Mobile Penetration by Country	25
Table 7: Access to Digital Devices by Gender by Age	26
Table 8: Access to Digital Devices by Density and Region	27
Table 9: Access to Digital Devices by Educational Attainment	27
Table 10: Access to Tablet or Computer and Frequency of Use	28
Table 11: Internet Access and Frequency of Use by Demographic and Geographic Subgroups	29
Table 12: Internet Access and Frequency of Use by Demographic and Geographic Subgroups	30
Table 13: Digital and Online Activities by Gender by Age	32
Table 14: Digital and Online Activities by Density and Educational Attainment	33
Table 15: Current Account by Gender by Age and Gender by Density	35
Table 16: Current Account by Educational Attainment, Income, Employment and Disability Status	35
Table 17: Current Account by Region	35
Table 18: Remittances Received and Sent by Gender, Gender by Age, and Gender by Density	37
Table 19: Financial Circumstances	39
Table 20: Budgeting and Savings Behaviour	40
Table 21: Savings Behaviour	41
Table 22: Financial Knowledge	43
Table 23: DFS Products	46
Table 24: DFS Outcomes	48

# List of Graphs

Graph 1: Town or Village	19
Graph 2: Density	19
Graph 3: Scoring Distribution	21
Graph 4: Scoring Distribution by Density	21
Graph 5: Access to Digital Devices	26
Graph 6: Frequency of Device Usage	28
Graph 7: Ability to Stay Apace of Technology	30
Graph 8: Digital Activities	31
Graph 9: Online Activities	31
Graph 10: Recent Payment Behaviour	37
Graph 11: Considerations when Sending and Receiving Remittances	38
Graph 12: Financial Knowledge	43
Graph 13: DFS Outcomes	49



# List of Acronyms and Designations

Acronym/ Designated Labels	Description
ATM	Automated Teller Machine
CATI	Computer Assisted Telephone Interviewing
CAPI	Computer Assisted Personal Interviewing
DFL	Digital and Financial Literacy
DFS	Digital Financial Services
MSMEs	Micro, Small, and Medium Enterprises
PDEP	Pacific Digital Economy Programme
PPS	Probability Proportional to Size
SES	Socioeconomic Status (referring to income)
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
VUV or VT	Vanuatu Vatu (the currency of Vanuatu)

# Glossary of Terms

Some of the terms used in the DFL 2022 Survey Report are defined as follows:

**Vanuatu adults** refers to individuals aged 15 to 74 years living in Vanuatu. The survey did not ask nationality, and some survey respondents may not be native to Vanuatu.

**Financial inclusion** refers to the concept that all working-age adults have effective access to banking, credit, savings, payments, and insurance services from formal service providers. Please note that while this definition refers to the whole of the concept of financial inclusion, this survey did not probe all dimensions of access.

**Adult population** refers to Vanuatu adults aged 15 to 74 years of age.

**Youths** refers to Vanuatu adults aged 15 to 24 years.

**Older Adults** refers to Vanuatu adults aged 45 to 74 years.

**High(est) income earners** refers to Vanuatu adults who say they and their partner have access to a combined income of VUV 16,999 or greater fortnightly. Income categories are based on a percentage of GNI.

**Low(est) income earners** refers to Vanuatu adults with a combined fortnightly income (personal income plus income from a spouse/partner) of less than VUV 3,399.

**Formal employment** refers to individuals who indicate in the occupation question that they are working for another person or company, full time or part time, also known as wage earners. Includes those temporarily absent from work due to sickness or maternity/paternity leave.

**n=** The number of respondents in the entire sample or subsets of the sample that were asked specific survey questions or comprise a demographic or geographic subgroup discussed in the report.

# Note on Significance Testing

Shading indicates statistically significant differences between the sub-group (e.g. females) vs the total (average) result at the 95% confidence level. We have used a two-tailed Z-test,  $p \leq 0.05$ .

To further clarify, we say that a difference between two groups of people (e.g. older respondents vs. the average) is statistically significant if it is mathematically unlikely to have happened purely by chance. This means it is likely there is a genuine difference between the sub-group and the average.

A cell shaded green indicates a result that is significantly greater than the average, while a red shaded cell means the result is significantly less than the average.

	Significantly greater than the average
	Significantly less than the average

It should be noted that “statistically significant” does not mean “relevant”, and not every statistically significant result is an important finding.

# Executive Summary

## Digital and Financial Literacy Index Scores

Vanuatu adults possess moderate levels of digital and financial literacy with significant room for growth in the uptake of digital financial services (DFS), along with familiarity and awareness of practical safeguards for DFS use. Assessments of digital and financial literacy – and the compilation of a digital and financial literacy (DFL) index – were made based on responses to measures in the areas of 1) digital integration, 2) financial literacy, and 3) digital finance. Out of a possible 52 points, Vanuatu adults achieved a mean score of 23.08 points. The majority of Vanuatu adults (63%) achieved DFL (digital and financial literacy) scores which fall in the moderate category, achieving an overall score of between 13 and 26 points. A small percentage of adults score on the low (7%) (low is defined as scoring between 0 and 12 points) or the high end of the DFL index (< 1%) (between 40 and 52 points). Three-in-ten (30%) achieved an above average score of between 27 and 39 points.

Digital and financial literacy in Vanuatu tracks closely with gender, age, region, educational attainment, and socio-economic status. Urban men, men aged between 15 to 44 years, higher-educated and higher-income groups perform significantly higher on all measures than their female, rural, older, lower-educated, and lower-SES counterparts.

Differences between subgroups exist in relation to all measures – digitalisation, financial competencies, digital financial competencies, and outcomes. However, at the generational level, Vanuatu men and women between the ages of 15 and 24 years score significantly lower in the area of financial competencies than adults overall, whereas men aged 45 to 74 years score significantly lower in relation to digitalisation (and digital access) specifically. Women aged 45 to 74 years score lower than the overall population across all areas explored. Persons with disabilities also score significantly lower for DFL than the overall population largely as a result of significantly lower levels of digital access – both access to a smartphone and the Internet.

Overall DFL index scores differ significantly between Vanuatu women and men, with women aged 45 to 74 years and rural women in particular achieving significantly lower DFL scores than the overall population, as well as men of the same age. The largest gaps in competencies between Vanuatu men and women exist in the areas of digitalisation and attitudes and behaviours pertaining to digital financial services and transactions. Differences are less apparent in adults' approach to budgeting and savings behaviours more generally (on- or off-line) or their financial knowledge. Nonetheless, increasing access to financial products as well as digital technologies for women will continue to be as important to overall financial health as improving DFL.

## Digital Integration

80% Vanuatu adults have access to a smartphone for personal or work use, either their own or belonging to someone else. Smartphones comprise the most accessible digital device by a wide margin, with other digital devices compared in the survey – tablets or computers (38%), smart watches or speakers (25%), smart TVs (19%), or Internet routers or modems (17%) – accessible to far fewer Vanuatu adults. Vanuatu adults are more than twice as likely to have access to a smartphone (80%) than they are a mobile phone that is only used for calls or texts (38%).

Two-thirds of Vanuatu adults (67%) confirm they have (ever) used the Internet. With only 17% of adults aged 15 to 74 years reporting access to an Internet router or modem, it is likely that most Vanuatu adults access the Internet via a smartphone rather than some other digital device. Though a majority of Vanuatu adults have used the Internet, regular Internet usage is limited to a smaller subset of the population – 41% of Internet users or 28% of all Vanuatu adults use the Internet daily. Half of Internet users (54%, 36% of all Vanuatu adults) go online weekly (once to several times a week). Five percent (5%) of Internet users go online rarely (3% of all adults). This is in addition to the one-third (33%) of adults who have never accessed the Internet. Urban dwellers (81%) are almost twenty percentage points more likely to have ever used the Internet than individuals living in rural areas (63%). Internet usage is highest in the province of Shefa (75%) and lowest in Tafea (55%).

Despite most Vanuatu adults having access to a smartphone (80% access) or having ever used the Internet (67% have gone online), more than half worry that technology is leaving them behind (57% agree). Moreover, participation in online activities, including finance-related activities, is limited beyond news and social media consumption. Two-in-five Vanuatu adults learned something from an online video or course (38%), which drops to 30% among rural women. One-in-five (20%) searched online for information about money matters. Just 11% of Vanuatu adults bought something online, and 9% completed or submitted a government form online.

**Uptake of digital security practices – on- or off-line – varies considerably depending on the practice.** Results more likely highlight gaps in information – a lack of familiarity with digital safety measures – than an ambivalence towards digital security. The reuse of passwords across online accounts comprises one of the most obvious safety vulnerabilities evaluated. Half (53%) of Internet users reuse passwords across online accounts. Given lower usage of digital financial services – password usage may be largely limited to social media accounts.

## Digital Finances

Vanuatu's economy remains largely cash-based with limited uptake of traditional banking and payment services or digital financial services. Two-in-five adults (37%) do not have a bank account or digital financial service they can use to store money or make payments. Of the 63% of Vanuatu adults who have a financial service or payment product they can access for financial transactions, ownership is largely comprised of current accounts (53%). Payment services other than a current account accessed and used by Vanuatu adults include: a payment card of any sort, including public transport card or debit card (40% payment card of any sort), a digital/electronic/mobile wallet (9%), or cryptocurrency (less than 1%).

Vanuatu citizens largely rely on cash to pay for commonly accessed products and services (defined for the purposes of the survey as groceries, paid meals out, or utility bill payments). Vanuatu adults report having used cash for their most recent grocery purchase (91% cash), meal out (83% cash, 11% not relevant), or utility bill payment (71% cash, 23% not relevant). Just 2% of adults at most used a payment card to pay for any of the aforementioned transactions, and fewer than 1% paid with a digital or mobile wallet or via an online card or automatic payment.

Vanuatu adults understand the numerous benefits and inevitability of digital financial services in business, government services and personal finance, while at the same time expressed concerns about their ability to navigate these services safely and effectively. They generally worry about their ability to keep up with evolving technologies (57% agree with the statement, "I feel like technology is leaving me behind"), as well as their ability to manage or mitigate risks associated with the use of digital financial tools. Nevertheless, there is acknowledgement that digital financial services are the 'way of the future'; and are both beneficial and essential to many Vanuatu adults, particularly small business owners and individuals who send remittances. Half of adults (56%) agree digital financial services like mobile payments, online banking, and digital wallets will soon replace cash in Vanuatu. Two-thirds agree digital financial services are essential for people sending remittances (66%) and help keep costs down for small businesses (59%).

Men (58%) are more likely than women (48%) to own a current account for the purposes of conducting financial transactions in Vanuatu. Amongst women, rural (47%) and younger women (aged 15 to 24 years) (42%) are least likely to own a current account. Gender gaps are evident across other groupings. By way of example, women aged 25 to 44 years (54%) are fourteen percentage points less likely to own a current account than men from the same age category (68%).

## DFS Outcomes and Education

Cash-reliant Vanuatu adults (37% of adults) identify preference (80%) as the predominant reason for their reliance on cash-based financial transactions. Lack of trust on formal financial service providers is not identified as a barrier to product ownership or use, or at least not when it comes to services issued by the formal banking sector. That said, perceptions about risks associated with digital financial services exist, two-in-five adults (40%) believe DFS are risky for “ordinary people” (37% disagree and 23% are unsure). A similar number of adults (44%) would not trust an automated service to provide financial advice at the present time, and 15% are unsure.

Education is required to ensure efficient and safe uptake of DFS for all Vanuatu adults. While the Vanuatu citizens have general concerns about their ability to use and the risks associated with DFS, they are only somewhat familiar of what specifically to look out for in their online financial dealings and with regards to online safety more broadly. A majority of Vanuatu adults (61%) assume all digital financial services are regulated like banks, rising to 70% among degree-level or university-educated adults. One-in-ten adults aged 15 to 74 years shop online (11%), but among those that do, more than half (56%) fail to check websites are secure before entering payment details online. A majority of Vanuatu adults (58%) would reply to, or follow a link in, a hypothetical phishing email designed to mimic legitimate communications from a financial provider.

Financial education, including digital financial literacy, can be delivered online to a substantial portion of the population who already have access to smartphones and internet, but face-to-face education is also required to cover the full spectrum of society. 38% of all Vanuatu adults learned something from an online video or course in the three months prior to completing the survey, and 20% searched online for information about money matters. These segments who already have access to internet and digital services can be reached through digital channels, but face-to-face education will likely need to occur in conjunction with online education to cover the segments with limited access to internet and digital devices.

Safe and efficient uptake of DFS will require access, education, and repeated use across all segments of the Vanuatu population. There is a need to increase access to and ownership of digital devices such as smartphones; educate around safe online behaviours; and promote regulated and/or reliable DFS and online financial management tools. The findings of this study clearly substantiate the need for comprehensive, multi-faceted digital and financial literacy programs in Vanuatu.

# Background and Introduction

The growing availability of digital financial services (DFS) and emerging digital platforms in Vanuatu can provide unique capital-building tools and resources for accelerating financial inclusion and inclusive growth for the last mile. To realize this potential, strengthening digital and financial literacy (DFL) of all population segments, especially the marginalized and low-income groups is essential.

Vanuatu's National Financial Inclusion Strategy (NFIS) (2018-2023) incorporated Financial Literacy and Consumer Empowerment as its one of the four strategic goals. The strategy outlined following objectives as part of the activities under the strategic goal:

- i. Strengthen financial education in educational institutions at the national and sub-national level, the latter being within the TVET sector or other tertiary institutions.
- ii. Integrate financial literacy and product awareness by financial service providers into financial services offerings.
- iii. Raise awareness of the general public vis-à-vis the Secured Transaction Act and other Financial Services-related consumer impact legislation.
- iv. Ensure consistency in financial services product disclosure and transparency on fees and charges across all financial services providers.
- v. Ensure consistency in or wide awareness of financial services redress and recourse mechanisms across financial services industries.
- vi. Develop a financial literacy strategy.

In this context, it is essential to assess the status of financial and digital literacy in Vanuatu to design and implement evidence backed interventions. To date however, efforts to improve digital and financial literacy and implement targeted interventions have been significantly challenged by a lack of updated DFL data on which to base these efforts and track the progress. To address this gap, UNCDF conducted the Digital and Financial Literacy Survey in Vanuatu and six other Pacific Island countries (Papua New Guinea, Samoa, Fiji, Solomon Islands, Tonga and Timor-Leste) to assess the current state of digital and financial literacy within each country. The research explores experiences with traditional and digital financial services to-date, in addition to assessing basic competencies in the areas of digitization and finance.

The survey findings will be used to develop and implement targeted interventions for improving digital financial competencies among women, MSMEs, youth, migrant workers, and rural communities. The survey results are intended to serve as a baseline from which future changes in competencies, access, and usage can be measured by the regulators and development partners.

## Methodology

### Survey Methodology

UNCDF partnered with Tebbutt Research to roll out and conduct the Digital and Financial Literacy Survey in seven Pacific Island countries: Fiji, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, and Vanuatu. This report and the methodology that follows focuses on findings from Vanuatu



The telephone portion of the field took place between 19 September and 31 October 2022. Face-to-face interviewing took place between 17 October and 1 December 2022. Average interview length was 20 minutes. Interviews were administered

in Bislama and English.

Using the most recently available population data from the Vanuatu National Statistics Office, nested survey quotas by gender and by age within regions (defined by province) were loosely established ( $\pm 10\%$ ) for the CATI portion of the sample prior to commencing fieldwork. Face-to-face interviewing was conducted according to a PPS methodology utilizing CAPI technology. A Kish grid was used to select respondents within households with only one respondent per household selected for a face-to-face interview. No quotas were applied to face-to-face interviews. Ultimately, there was oversampling in some groups over the course of the CAPI (in-person) survey field; oversamples were weighted at the close of survey field to align with national population statistics for gender and age within province.

The survey sample has a margin of error of  $\pm 2.8\%$  at the 95% confidence level. In interpreting survey results, all samples are subject to possible sampling error. The size of the sampling error depends upon both the total number of survey respondents and the percentage distribution of responses to a particular question. For example, if 50% of respondents in the survey answer “yes” to a particular question, we can be 95% confident that the true percentage will fall within 2.8 percentage points, or from 47.2% to 52.8%. The margin of error decreases the nearer percent distributions are to 0 and 100.

The following table details population statistics upon which telephone sample quotas and back-end weights were based:

	Total	Malampa	Penama	Sanma	Shefa	Tafea	Torba
Men 15-24 years	28,667	3,357	3,074	5,591	12,910	2,729	1,006
Men 25-34 years	21,589	2,543	2,188	4,324	9,624	2,161	749
Men 35-44 years	16,331	2,103	1,867	3,063	7,062	1,651	585
Men 45-54 years	11,278	1,514	1,277	2,143	4,895	1,115	334
Men 55+ years	13,029	2,221	1,777	2,508	4,641	1,402	480
Women 15-24 years	29,295	3,469	2,981	5,834	12,815	3,146	1,050
Women 25-34 years	21,775	2,819	2,301	4,324	9,108	2,481	742
Women 35-44 years	16,175	2,275	1,845	2,947	6,770	1,748	590
Women 45-54 years	11,088	1,702	1,328	1,935	4,528	1,218	377
Women 55+ years	11,996	2,215	1,884	1,910	4,065	1,453	469

The survey conceived the multi modal methodology on the basis that:

- A minimum of 60% of interviews in each country including Vanuatu should be conducted face-to-face to ensure individuals without access to digital devices, including mobile phones, were accurately captured in the sample frame.
- The survey intended to incorporate technology into the final methodology in each country, through the inclusion of CATI in the methodological design.

The ultimate proportion of CAPI to CATI interviews in each country was decided based on mobile penetration figures and the COVID-19 situation in each country at the time of field. Again, it was determined that a minimum of 60% of interviews were to be completed face-to-face in each country. It was further determined that a minimum of 25% of interviews would be completed via telephone. In Vanuatu and other higher mobile ownership countries the remaining 15% of interviews were completed by CATI (and by CAPI in lower mobile ownership countries). Mobile penetration is calculated at 102.8% in Vanuatu (DataReportal, 2022)<sup>1</sup>. Mobile ownership is calculated as the percentage of mobile phone subscribers among the general population. Data for mobile penetration exceeds 100% in some countries, including Vanuatu, as a result of dual or multiple-SIM ownership among some individuals.

<sup>1</sup> <https://datareportal.com/reports/digital-2022-vanuatu>



## Survey Questionnaire

The questionnaire was conceived and designed to serve as a template for similar interventions in other regions including Asia and Africa. Dr. Adele Atkinson designed the survey questionnaire with input from an advisory team at UNCDF and Tebbutt Research, particularly as the instrument required localisation for Pacific Island. The survey was designed through an iterative process with feedback from partner Central Banks in the Pacific region, partner UN agencies, and UN country representatives, with further review and amendments following pilot tests. The final survey questionnaire has been provided as an appendix to this report.

UNCDF also intends to conduct a follow-up survey in 2025. Findings from the baseline survey will be compared with those of a follow-up survey to assess the impact of digital and financial literacy programmes designed in response to baseline survey findings and ongoing changes in the market.

## Creation of a Digital and Financial Literacy Index

A scoring system was applied to the questionnaire for the purposes of analysis, both in terms of comparing levels of digital and financial competencies between geographic and demographic subgroups and measuring changes in levels of digital and financial literacy over time (by acting as a baseline survey, with a follow-up survey to be conducted in 2025). This includes measuring growth in positive outcomes associated with the usage of digital financial services and increased digital and financial literacy over time.

Survey respondents could achieve a maximum of 52 points for digital and financial literacy based on their responses to survey questions<sup>2</sup>. The survey and scoring system was further divided into four subsections to better understand in which specific areas competencies are strongest or where gaps in knowledge are most notable. Access to mobile/digital devices contributes to the scoring framework and constitutes an important component of measuring digital-financial literacy. While the survey explores financial inclusion and access to electronic and digital financial products, inclusion questions do not factor into the scoring framework. These areas are however discussed in the detailed report that follows. Rather, attitudes, awareness, and online behaviours related to finances and financial management comprise the key inputs underpinning the DFL Index and in understanding levels of digital and financial literacy in Vanuatu.



### Digitalisation

maximum achievable score of 18 points, with a focus on access to digital devices, digital activities performed, Internet access and online activities, awareness of and participation in safe digital/online practices;



### Financial competencies

maximum achievable score of 13 points, with a focus on engagement with financial safeguards (e.g., budgeting and savings behaviours) and financial knowledge (i.e., basic understanding of the concept of inflation, how borrowing impacts MSME profitability, etc.).



### Digital Financial competencies

maximum achievable score of 9 points, with a focus on commonly-held beliefs about digital financial services and DFS behaviours (both practices for keeping financial information safe online and use of DFS for money management).



### DFS Outcomes

maximum achievable score of 12 points, with a focus on positive and negative outcomes associated with use of mobile or online financial services, including current financial circumstances and the impact of DFS services on financial well-being.

## General Demographics

The following graphs and information provide a demographic snapshot of the final, weighted survey sample.

<sup>2</sup> Not all questions asked in the survey were used in the scoring model. Responses to financial inclusion questions such as ownership and use of financial and digital financial products, experiences sending and receiving remittances, and preferences with regards to cash-based transactions do not contribute to DFL scores.

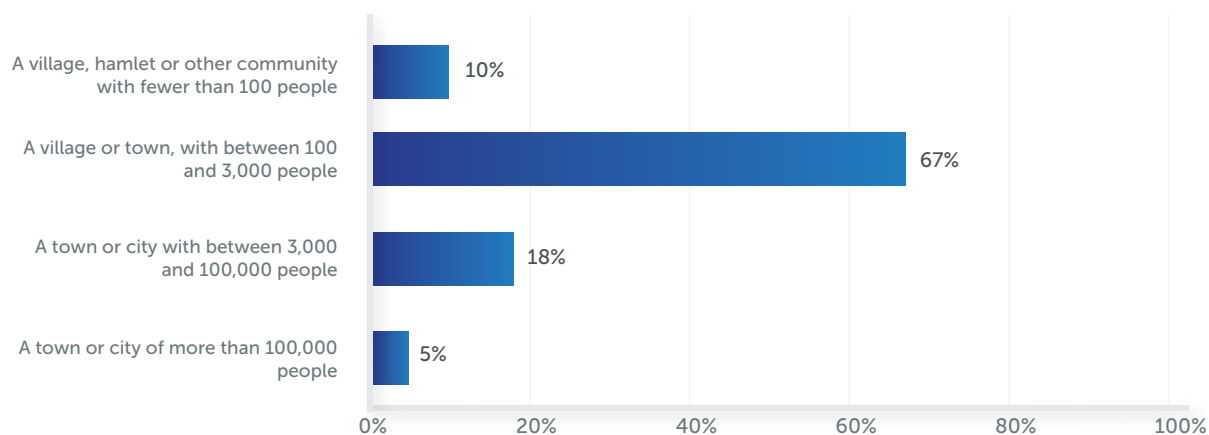


Region	Percentage of Sample
Malampa	14%
Penama	11%
Sanma	19%
Shefa	43%
Tafea	11%
Torba	3%

Graph 1: Town or Village<sup>3</sup>

<sup>3</sup> The most recent data available from the World Bank (2018) indicates that 74% of the Vanuatu population currently lives in a rural area: <https://data.worldbank.org/indicator/SP.RUR.TOTL?locations=VU>. The World Bank qualifies its urban-rural classifications with the following note: "There is no universal standard for distinguishing rural from urban areas, and any urban-rural dichotomy is an oversimplification. The two distinct images - isolated

[Total sample, n=1,212]



Graph 2: Density<sup>4</sup>

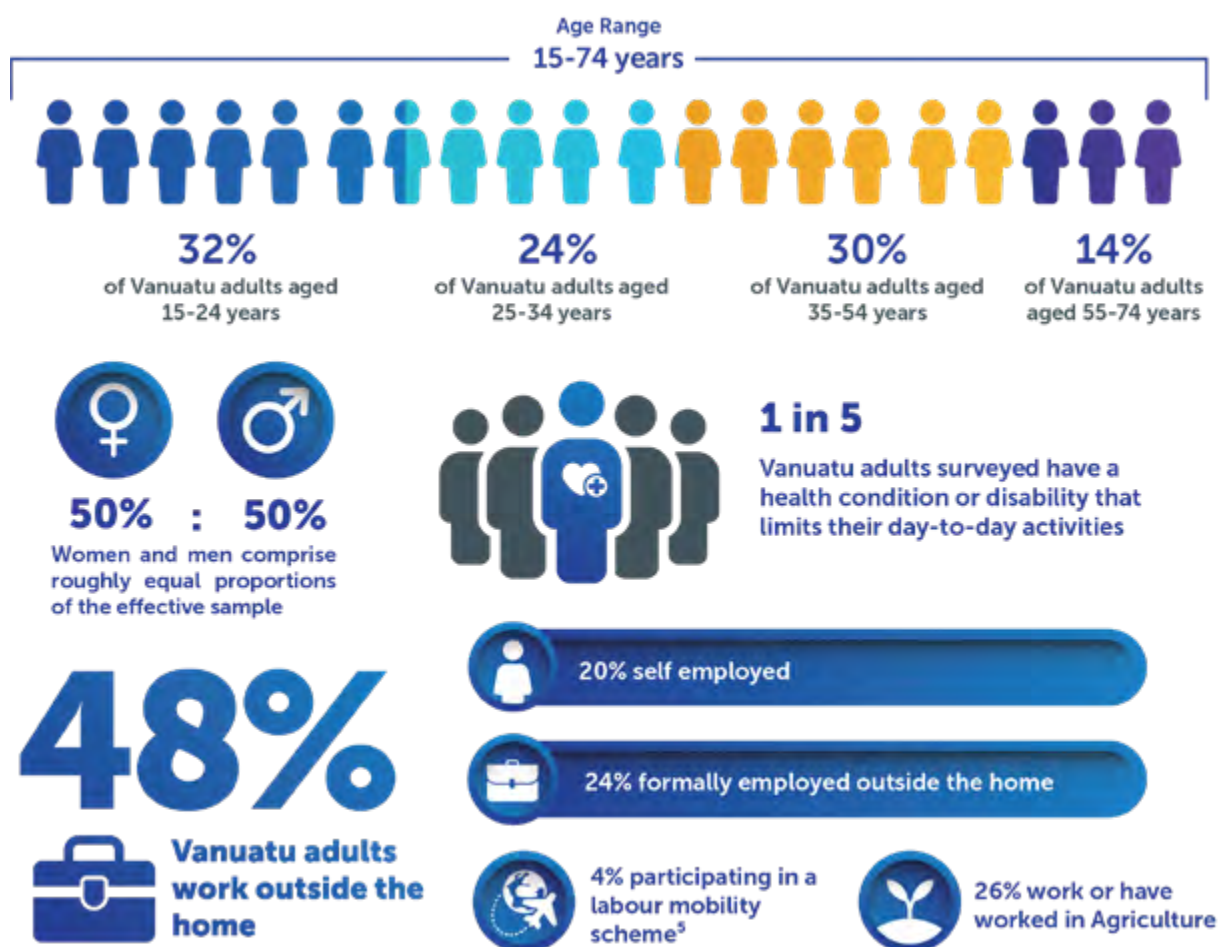
[Total sample, n=1,212]



farm, thriving metropolis - represent poles on a continuum. Life changes along a variety of dimensions, moving from the most remote forest outpost through fields and pastures, past tiny hamlets, through small towns with weekly farm markets, into intensively cultivated areas near large towns and small cities, eventually reaching the center of a megacity. Along the way access to infrastructure, social services, and nonfarm employment increase, and with them population density and income. A 2005 World Bank Policy Research Paper proposes an operational definition of rurality based on population density and distance to large cities (Chomitz, Buys, and Thomas 2005)."

- 4 Several measures were used to determine urban and rural designations in the administration of the survey. For greater accuracy in a local context, the survey analysis refers to urban-rural classifications derived in one of two ways depending on whether interviews were conducted face-to-face or via telephone. Interviewers recorded density for in-person interviews based on actual interview location. Telephone respondents were asked to self-identify whether they live in an urban or rural area with the understanding that not all respondents would be able to recall district information.

## Demographic Characteristics



## Digital and Financial Literacy Index Scores

Vanuatu adults possess **moderate levels** of digital and financial literacy with significant room for growth in the uptake of digital financial services (DFS), along with familiarity and awareness of practical safeguards for DFS use. Assessments of digital and financial literacy – and the compilation of a digital and financial literacy (DFL) index – were made based on responses to measures in the areas of:



**Digitalisation**



**Financial competencies**



**Digital Financial competencies**



**DFS Outcomes**

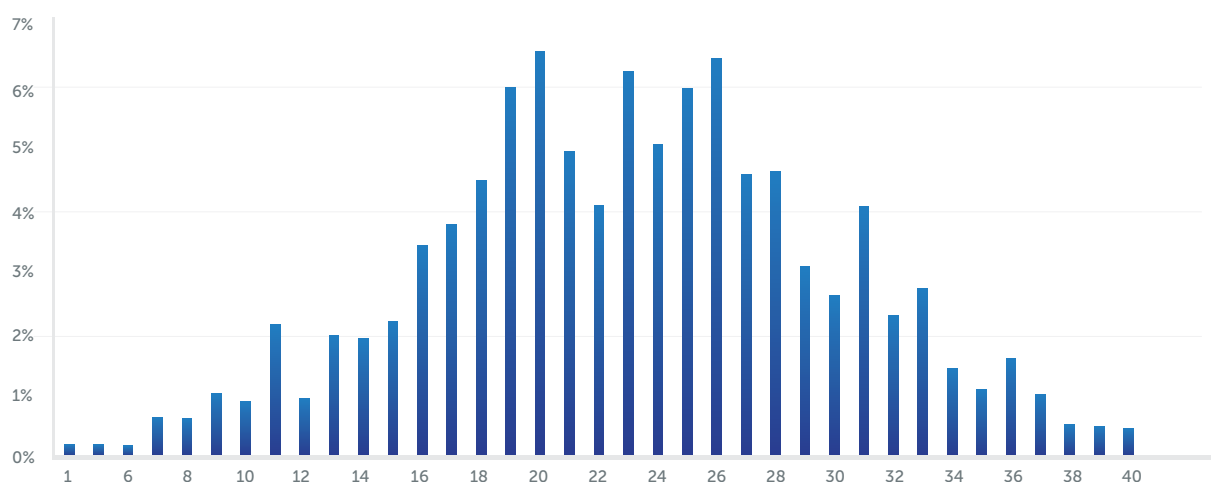
<sup>5</sup> The survey sample captured individuals currently residing in Vanuatu. Thus, the percentage of overseas workers captured in the sample is not reflective of the total proportion of Vanuatu adults who participate in overseas labour schemes.



The majority of Vanuatu adults (63%) achieve DFL (digital and financial literacy) scores which fall in the moderate category, achieving an overall score of between 13 and 26 points. A small percentage of adults score on the low (7%) or the high end of the DFL index (< 1%). Low is defined as scoring between 0 and 12 points and high between 40 and 52 points. Three-in-ten (30%) achieve an above average score of between 27 and 39 points.

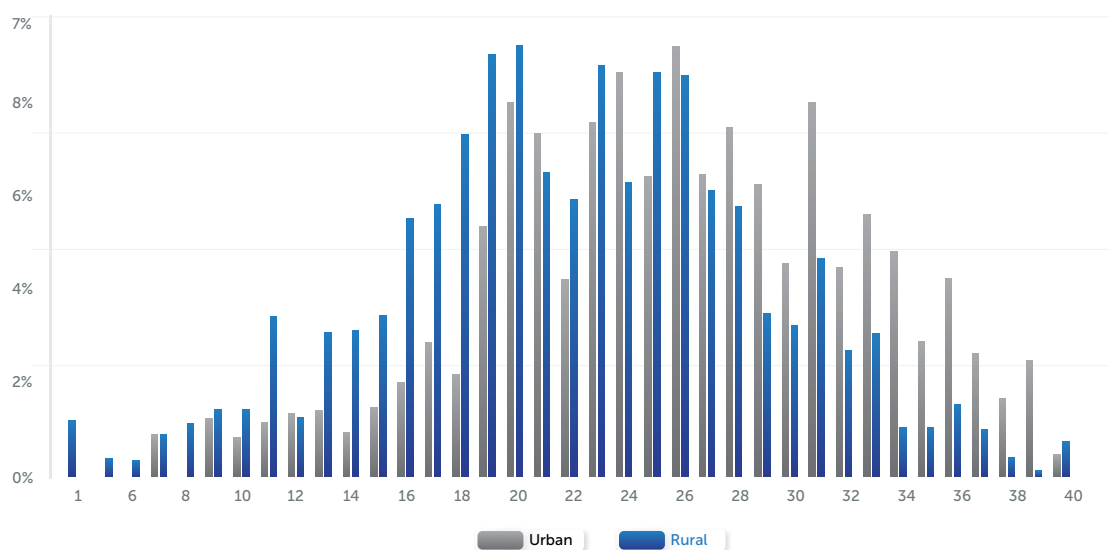
Graph 3: Scoring Distribution

[Total sample, n=1,212]



Graph 4: Scoring Distribution by Density

[Total sample, n=1,212]





Use of mobile and DFS in day-to-day transactions is low, as is the awareness and comfort that comes with more frequent and familiar use; comfort referring to both confidence in personal competencies and trust in digital finance providers. At a more generalized level, roughly one-quarter of Vanuatu adults access a digital financial service or use their mobile phone to complete financial transactions. For the most part, Vanuatu adults use cash to pay for day-to-day transactions such as groceries, eating out, or paying utility bills. But while relatively few Vanuatu adults currently use DFS to manage financial transactions, increased uptake over the long-term has the potential to substantially increase financial inclusion .

Digital and financial literacy in Vanuatu tracks closely with gender, age, region, educational attainment, and socio-economic status. Urban men, men aged 15 to 44 years, higher-educated and higher-income groups perform significantly higher on all measures than their female, rural, older, lower-educated, and lower-SES counterparts.

For the most part, differences between subgroups exist in relation to all measures – digitalisation, financial competencies, digital financial competencies, and outcomes. However, at the generational level, [Vanuatu men and women between the ages of 15 and 24 years score significantly lower in the area of financial competencies than adults overall, whereas men aged 45 to 74 years, score significantly lower in relation to digitalisation \(and digital access\) specifically](#). Women aged 45 to 74 years score lower than the overall population across all areas explored. Persons with disabilities also score significantly lower for DFL than the overall population largely as a result of significantly lower levels of digital access – both access to a smartphone and the Internet.

Overall DFL index scores differ significantly between Vanuatu women and men, with women aged 45 to 74 years and rural women in particular achieving significantly lower DFL scores than the overall population, as well as men of the same age. The largest gaps in competencies between Vanuatu men and women exist in the areas of digitalisation and attitudes and behaviours pertaining to digital financial services and transactions. Differences are less apparent in adults' approach to budgeting and savings behaviours more generally (on- or off-line) or their financial knowledge. Nonetheless, increasing access to financial products as well as digital technologies for women will continue to be as important to overall financial health as improving DFL.

## DFL by Demographic and Geographic Subgroups

The tables in this section provide a detailed snapshot of DFL index performance by geographic and demographic subgroups, including self-employed Vanuatu adults and persons with disabilities.

**Table 1: DFL Index Score by Gender by Density**

[Scores calculated of the total sample, n=1,212]

<i>(Shading where <math>p \leq 0.05</math>)</i>	Total	Urban Men	Rural Men	Urban Women	Rural Women
Total DFL Score (0-52)	23.08	27.23	23.62	23.77	20.96
1. Digitalisation (0-18)	6.99	9.62	7.04	7.84	5.81
2. Financial competencies (0-13)	7.68	8.14	7.79	7.64	7.43
3. Digital financial competencies and DFS outcomes (0-21)	8.41	9.47	8.79	8.29	7.72
% Low (0-12 points)	7	3	4	7	11
% Moderate (13-26 points)	63	42	65	58	69
% Above Average (27-39 points)	30	54	30	35	20
% High (40-52 points)	0	1	1	0	0

**Table 2: DFL Index Score by Region**

<i>(Shading where <math>p \leq 0.05</math>)</i>	Total	Malampa	Penama	Sanma	Shefa	Tafea
Total DFL Score (0-52)	23.08	21.58	21.59	23.71	23.74	22.05
1. Digitalisation (0-18)	6.99	5.97	6.61	6.79	7.73	5.87
2. Financial competencies (0-13)	7.68	7.27	7.13	8.30	7.63	7.66
3. Digital financial competencies and DFS outcomes (0-21)	8.41	8.35	7.85	8.63	8.38	8.52
% Low (0-12 points)	7	9	11	3	7	9
% Moderate (13-26 points)	63	68	69	64	59	62
% Above Average (27-39 points)	30	23	19	33	34	28
% High (40-52 points)	0	0	0	0	1	1

Table 3: DFL Index Score by Gender by Age

(Shading where $p \leq 0.05$ )	Total	Men 15-24 yrs.	Men 25-44 yrs.	Men 45-74 yrs.	Women 15-24 yrs.	Women 25-44 yrs.	Women 45-74 yrs.
Total DFL Score (0-52)	23.08	24.57	26.30	21.68	23.36	22.63	17.69
1. Digitalisation (0-18)	6.99	8.66	8.73	4.83	7.87	6.61	3.68
2. Financial competencies (0-13)	7.68	7.24	8.27	8.04	7.29	7.93	6.99
3. Digital financial competencies and DFS outcomes (0-21)	8.41	8.66	9.29	8.80	8.19	8.10	7.01
% Low (0-12 points)	7	6	2	3	8	5	21
% Moderate (13-26 points)	63	53	51	79	61	68	72
% Above Average (27-39 points)	30	38	47	17	31	27	7
% High (40-52 points)	0	2	1	0	0	0	0

Table 4: DFL Index Score by Educational Attainment and Work Status

(Shading where $p \leq 0.05$ )	Total	≤ Middle School	Secondary School	University+	Student	Self-Employed	Formally Employed
Total DFL Score (0-52)	23.08	20.80	25.95	29.73	24.96	22.96	23.08
1. Digitalisation (0-18)	6.99	5.57	8.86	10.92	9.34	6.20	6.09
2. Financial competencies (0-13)	7.68	7.39	8.07	8.51	7.19	7.96	8.16
3. Digital financial competencies and DFS outcomes (0-21)	8.41	7.85	9.03	10.30	8.44	8.81	8.83
% Low (0-12 points)	7	11	2	0	6	4	1
% Moderate (13-26 points)	63	71	54	33	55	69	49
% Above Average (27-39 points)	30	19	44	62	37	26	48
% High (40-52 points)	0	0	0	5	2	0	1

Table 5: DFL Index Score by Income and Disability Status

(Shading where $p \leq 0.05$ )	Total	≤3,399 VUV	3,400 – 10,198 VUV	10,199 – 16,998 VUV	16,999+ VUV	PWD*
Total DFL Score (0-52)	23.08	20.59	21.85	23.80	26.65	20.88
1. Digitalisation (0-18)	6.99	6.14	6.02	7.14	8.65	5.15
2. Financial competencies (0-13)	7.68	6.86	7.69	7.96	8.52	7.59
3. Digital financial competencies and DFS outcomes (0-21)	8.41	7.58	8.14	8.70	9.47	8.14
% Low (0-12 points)	7	15	4	4	1	9
% Moderate (13-26 points)	63	65	74	64	52	73
% Above Average (27-39 points)	30	20	22	33	46	17
% High (40-52 points)	0	1	0	0	1	0

\*Persons with disabilities



# Detailed Findings

## Section 1: Digital Access, Usage, and Literacy

### Access to and usage of digital devices and the Internet

Mobile phone penetration is estimated at 102.8% in Vanuatu or 327,000 cellular mobile connections out of a total population of roughly 318,000 Vanuatu adults.<sup>6</sup> Counts of mobile phone ownership may overcount coverage among some groups while undercounting coverage among others – statistics refer to the number of connections without taking into account multiple device ownership among individual users. As the table below indicates, mobile phone penetration, a baseline indicator of digital access, is higher in Vanuatu than in Pacific Island countries such as Papua New Guinea, Samoa, and the Solomon Islands, but lower than in Fiji where penetration is highest.

Table 6: Mobile Penetration by Country

Country	Mobile Penetration (SIM connections/pop) <sup>7</sup> Source: DataReportal 2022
<i>Australia</i> <sup>9</sup>	123%
Fiji	144.4%
Kiribati	54.2%
PNG	36.0%
Samoa	73.9%
Solomon Islands	71.9%
Timor-Leste	108.4%
Tonga	106.7%
Vanuatu	102.8%

Four-in-five Vanuatu adults (80%) have access to a smartphone for personal or work use, either their own or belonging to someone else. Smartphones comprise the most accessible digital device by a wide margin, when compared with access to other digital devices – tablets or computers (38%), smart watches or speakers (25%), smart TVs (19%), or Internet routers or modems (17%) – accessible to far fewer Vanuatu adults. Vanuatu adults are more than twice as likely to have access to a smartphone (80%) than they are a mobile phone that is only used for calls or texts (38%).

Access to smartphones in Vanuatu is high across demographic and geographic groups but drops off considerably among the oldest cohort compared to working-age adults. Vanuatu adults aged 45 to 74 years (62% have access to a smartphone and 50% a mobile phone for calls and texts only), retirees in particular (49%), access smartphones at a significantly lower rate than adults aged 15 to 44 years (87% among Vanuatu adults aged 15 to 34 years and 84% among Vanuatu adults aged 25 to 44 years). Smartphone access is also significantly lower among vulnerable groups: 63% among persons with disabilities access a smartphone and 57% among individuals parenting without the help of a partner, spouse, or other adult relative.

<sup>6</sup> <https://datareportal.com/reports/digital-2022-vanuatu>

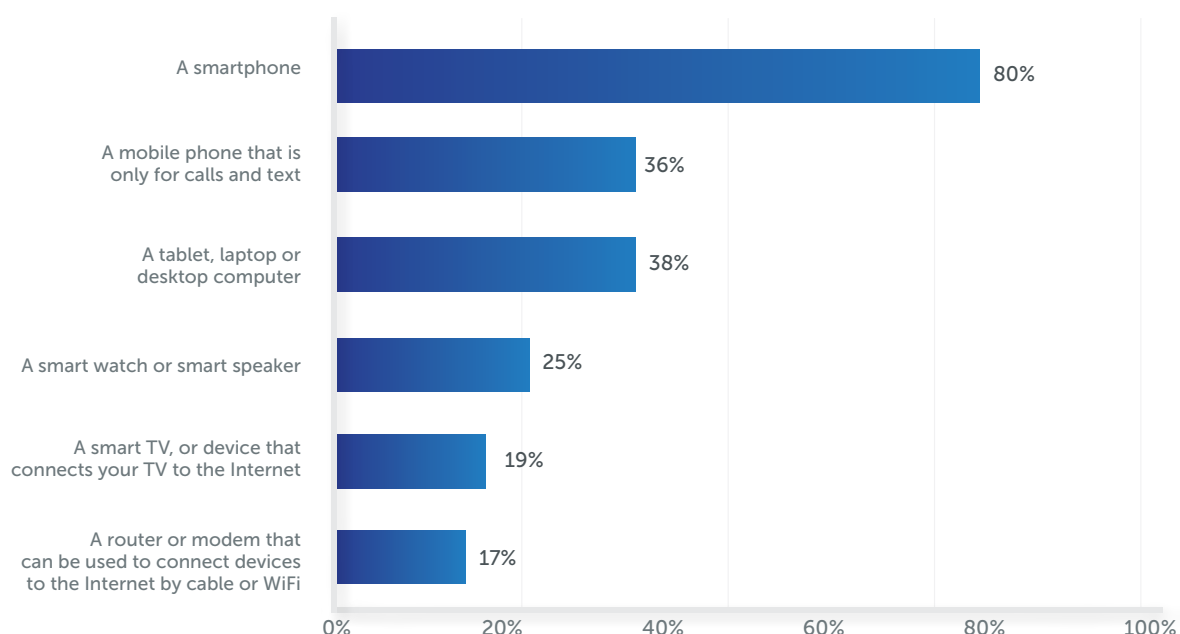
<sup>7</sup> These figures may under-report because they are based on total populations and are not restricted to teens/adults.

<sup>8</sup> Mobile phone penetration rates above 100% are due to dual sim ownership.

<sup>9</sup> Australia is included as a benchmark for comparison between high-, middle- and lower-income economies.

### Graph 5: Access to Digital Devices

D1. Do you have access to any of the following, for personal use, whether or not you currently use them? This could be at home or at work. [Asked of the total sample; n=1,212]



Access to digital devices other than smartphones varies significantly by age, region of the country, population density, educational attainment, and socio-economic status. Individuals with a middle school education or less, rural, lower-income, and older Vanuatu adults (aged 45 to 74 years, particularly women aged 45 to 74 years) are considerably less likely to have access to tablets/computers or smart devices other than a phone, than their urban, higher-educated, higher-SES, and younger counterparts. Shefa residents, home to the capital of Port Vila, are significantly more likely to access tablets, laptops, or desktop computers and Internet routers or modems than adults living in other provinces.

**Table 7: Access to Digital Devices by Gender by Age**

D1. Do you have access to any of the following, for personal use, whether or not you currently use them? This could be at home or at work. [Asked of the total sample; n=1,212]

% Yes (Shading where $p \leq 0.05$ )	Total	Men 15-24 yrs.	Men 25-44 yrs.	Men 45-74 yrs.	Women 15-24 yrs.	Women 25-44 yrs.	Women 45-74 yrs.
Smartphone	80	92	89	62	84	83	61
Mobile phone, only for calls or texts	38	34	38	50	25	38	46
Tablet, laptop, desktop computer	38	37	50	30	47	35	18
Router or modem	17	22	22	11	21	12	9
Smart watch or speaker	25	34	32	15	25	25	10
Smart TV	19	22	27	16	20	17	9

Table 8: Access to Digital Devices by Density and Region

% Yes (Shading where $p \leq 0.05$ )	Total	Urban	Rural	Rural Women	Malampa	Penama	Sanma	Shefa	Tafea
Smartphone	80	86	78	76	77	85	78	82	71
Mobile phone, only for calls or texts	38	44	35	34	43	50	38	36	25
Tablet, laptop, desktop computer	38	52	33	31	35	32	30	46	25
Router or modem	17	30	12	11	12	11	13	22	11
Smart watch or speaker	25	30	23	21	19	14	31	25	31
Smart TV	19	29	16	14	8	13	19	27	16

Table 9: Access to Digital Devices by Educational Attainment

% Yes (Shading where $p \leq 0.05$ )	Total	$\leq$ Middle School	Secondary School	University+
Smartphone	80	74	88	96
Mobile phone, only for calls or texts	38	35	40	38
Tablet, laptop, desktop computer	38	24	55	82
Router or modem	17	7	27	49
Smart watch or speaker	25	20	32	36
Smart TV	19	13	26	41

Access to and *regular use* of smartphones is relatively high in Vanuatu. Half of Vanuatu adults aged 15+ years (53%) use a smartphone daily. One-quarter (24%) use a smartphone weekly (anywhere from once to several times a week); an equal number use a smartphone rarely or never (23%).<sup>10</sup> Among those with personal or household access to smartphones, frequency of use climbs higher; two-thirds of Vanuatu adults with access to devices use their smartphones daily (66%), most multiple times a day (60% multiple times a day, 6% once a day). Another three-in-ten (30%) use a smartphone several times a week, reflecting the shared nature of these devices within some households. A scant 4% of those who *can* access a smartphone do so rarely or never.<sup>11</sup> It can be inferred that most individuals who use their devices daily, 66% of smartphone users, personally own the devices they use.

Usage of computers or tablets in Vanuatu (and elsewhere in the Pacific) is less common than smartphone usage. Fewer than two-in-five Vanuatu adults (38%) access a computer or tablet for personal or professional use. Fifteen percent (15%) use a tablet or computer daily; another 16% use a computer weekly (anywhere from once to several times a week). A full seven-in-ten (68%) use a computer rarely or never.<sup>12</sup> Among tablet and computer users – 38% of the population – 41% use their tablet or computer daily, 42% weekly, and while they may have access, 16% use a tablet or computer less than once a week or never.<sup>13</sup>

10 Calculated among all Vanuatuans [n=1,212].

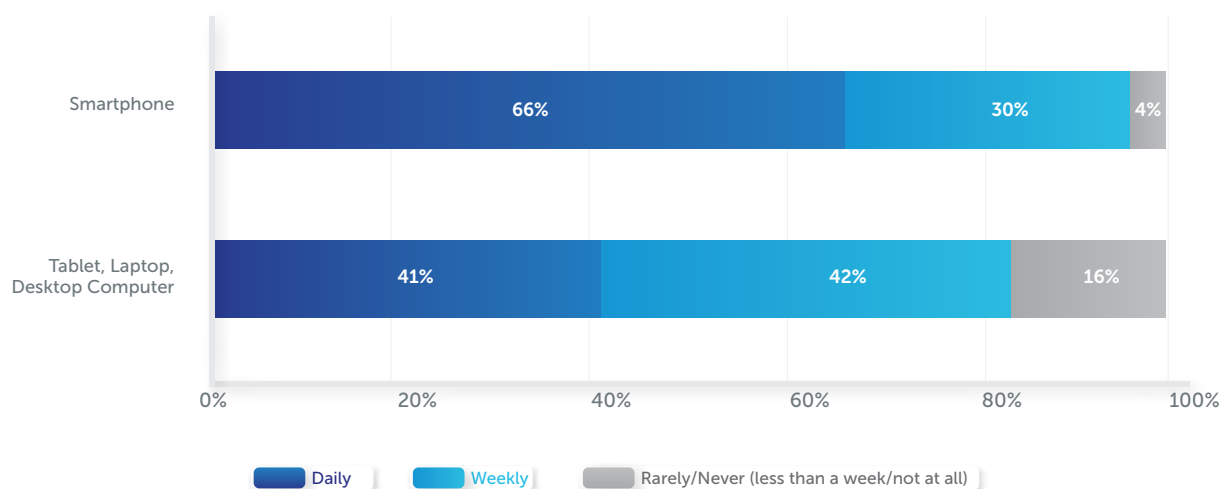
11 Calculated among individuals with access to smartphones [n=973].

12 Calculated among all Vanuatuans [n=1,212].

13 Calculated among individuals with access to tablets, laptops, or desktop computers [n=458].

### Graph 6: Frequency of Device Usage

D1. Approximately how often have you used a tablet, laptop or desktop computer/smartphone during the last three months? [Asked of individuals who report access to devices; n=973 smartphones and n=458 computers]



Adults with a university- or degree-level education are most likely to access a tablet or computer and to use those devices on a regular basis compared to other cohort groups.

**Table 10: Access to Tablet or Computer and Frequency of Use**

D1\_3. Do you have access to [a tablet, laptop, or desktop computer], for personal use, whether or not you currently use them? This could be at home or at work. [Total sample, n=1,212]

D1\_comp Frequency using computer. Approximately how often have you used a tablet, laptop, or desktop computer during the last three months? [Asked of those with computer/tablet access; n=458]

% Yes (Shading where $p \leq 0.05$ )	Total	University+	Student	Formally Employed	Higher Income (16,999+ VUV)
Total access to a tablet, laptop, or desktop computer	40	82	63	54	54
Several times a day	31	57	40	38	32
Once a day	10	5	6	8	7
<b>NET Daily</b>	<b>41</b>	<b>63</b>	<b>46</b>	<b>45</b>	<b>40</b>
Several times a week	31	26	38	31	31
No more than twice per week	11	7	10	9	11
Less than once a week	10	2	4	8	11
Not at all	6	2	1	6	7

Two-thirds of Vanuatu adults (67%) confirm they have (ever) used the Internet. Kepios, a data warehousing service providing global data on mobile, Internet, and social media usage, estimates there were 125,000 Internet users in Vanuatu in January 2022, accounting for 39% of the overall population or approximately 69% of the population aged 15 to 74 years.<sup>14</sup> With only 17% of adults aged 15 to 74 years reporting access to an Internet router or modem, it is likely that most Vanuatu adults access the Internet via a smartphone rather than some other digital device. Though a majority of Vanuatu adults have used the Internet, regular Internet usage is limited to a smaller subset of the population – 41% of Internet users<sup>15</sup> (28% of all Vanuatu adults) use the Internet daily. 54% of Internet users (, 36% of all Vanuatu adults) go online weekly (once to several times a week). Five percent (5%) of Internet users go online rarely. This is in addition to the one-third (33%) of adults who

<sup>14</sup> <https://datareportal.com/reports/digital-2022-vanuatu>

<sup>15</sup> Internet users [n=813]

have never accessed the Internet.

Similar to patterns around device ownership and access, Internet use varies significantly by region of the country/population density, age, educational attainment, and socio-economic status. Internet usage decreases with age. Upwards of seven-in-ten men and women between the ages of 15 and 44 years use the Internet, whereas only 35% of adults between 45 and 74 years of age use the Internet (40% among older males and 30% among older females). **Urban dwellers (81%) are almost twenty percentage points more likely to have ever used the Internet than individuals living in rural areas (63%).** (Rural men and women have accessed the Internet in relatively equal numbers). Internet usage is almost twice as high among university-educated Vanuatu adults (96%) than adults with a middle school education or less (55%) (86% among Vanuatu adults who have completed secondary school). **Internet usage is highest in the province of Shefa (75%) and lowest in Tafea (55%).**

**Table 11: Internet Access and Frequency of Use by Demographic and Geographic Subgroups**

*D3. Can I just check, do you ever use the Internet? For example, do you check email or social media, stream radio or videos, look things up, use apps to send messages or make calls, or work remotely? [Total sample, n=1,212]*

*D3\_time. Approximately how often have you used the Internet or been online for any reason at all over the last three months. You may have been <checking email or social media, streaming radio or videos, looking things up, using apps or working remotely>? [only asked of individuals who use the Internet; n=813]*

(Shading where $p \leq 0.05$ )	Ever use the Internet (%)	Daily* (%) [n=813]
Total	67	41
Men 15-24 years	82	29
Men 25-44 years	77	46
Men 45-74 years	40	51
Women 15-24 years	83	43
Women 25-44 years	73	40
Women 45-74 years	30	46
≤ Middle school	55	29
Secondary school	86	49
University+	96	65
Urban men	84	49
Rural men	64	36
Urban women	78	48
Rural women	61	39
Malampa	58	37
Penama	63	41
Sanma	63	31
Shefa	75	48
Tafea	55	23

*\*Daily is defined as individuals who use the Internet several times to once a day.*

Cost (58%) and connection quality/stability (56%) are identified as barriers to internet connectivity in slightly higher numbers Vanuatu than concerns about the security of available Internet services (49%) by Vanuatu adults. By way of reminder, just 28% of Vanuatu adults access the Internet daily. The study did not further elaborate on security concerns and whether privacy/surveillance and/or potential data breaches fuel concerns. Adults in Penama (67% quality, 62% cost) are most likely to identify the quality or availability of Internet and mobile data services in their area as a barrier to Internet usage, whereas cost concerns are highest in Shefa (68% cost, 62% quality) compared to other provinces. One-third of Tafea residents identify cost (34%), quality/availability (35%), or security (34%) as barriers to Internet usage; just 13% of adults living in Tafea access the Internet daily..

**Table 12: Internet Access and Frequency of Use by Demographic and Geographic Subgroups**

D3\_limits. Do any of the following limit your Internet use or prevent you from using it? [n=1,212]

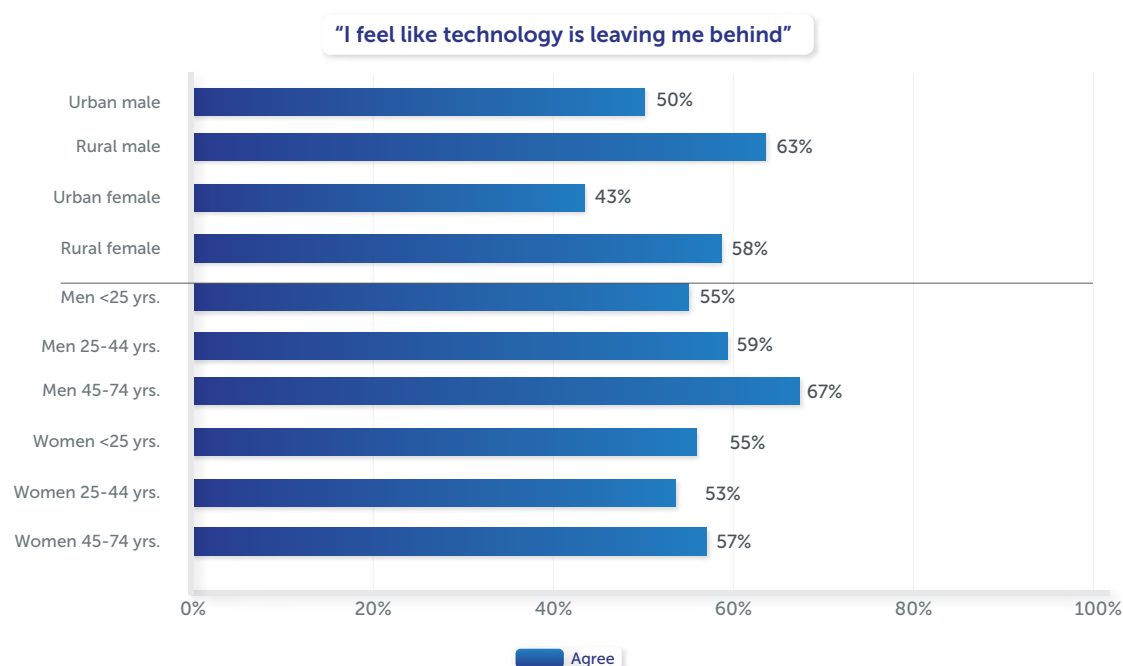
(Shading where $p \leq 0.05$ )	Cost	Quality or Availability	Security Concerns
Total	58	56	49
Urban	65	60	59
Rural	56	55	46
Malampa	57	58	48
Penama	62	67	48
Sanma	49	51	48
Shefa	68	62	53
Tafea	34	35	33

## Attitudes towards technology

Access to digital devices (smartphones) and available Internet connections may outpace digital proficiencies and levels of confidence engaging with digital tools. Despite most Vanuatu adults having access to a smartphone (80% access) or having ever used the Internet (67% have gone online), more than half worry that technology is leaving them behind (57% agree). Men aged 45 to 74 years (67% agree), adults residing in Sanma province (64%), rural men (63%), and adults with a middle school education or less (63%) are most likely to feel like technology is leaving them behind. For the most part, women (55%) express relatively similar levels of concern regarding their relationship to technology as their male counterparts (60%) with the exception of older and rural men who are even more likely than similarly aged women and women living in urban areas to worry technology is leaving them behind.

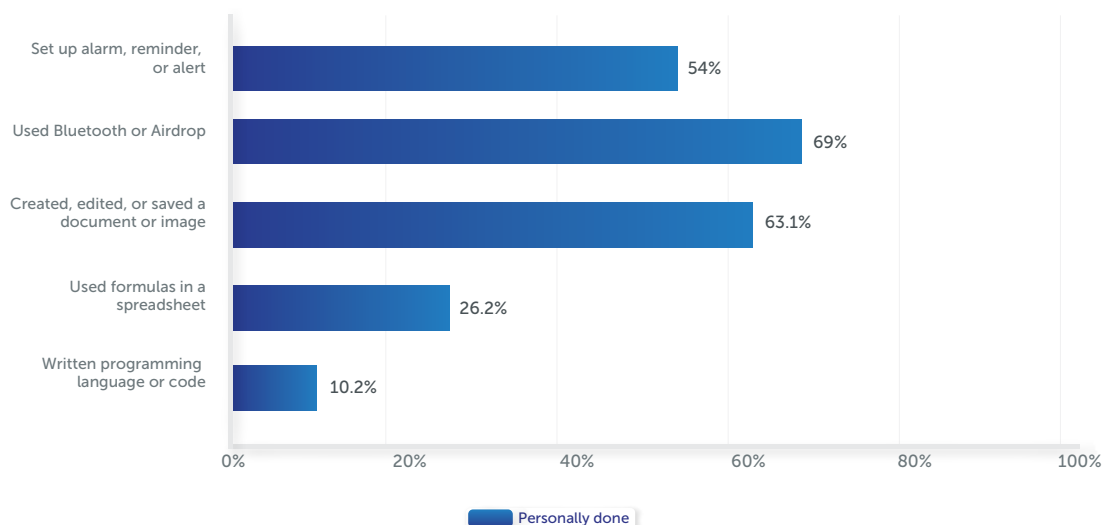
### Graph 7: Ability to Stay Apace of Technology

D5\_1. Do you agree or disagree with the following statement: I feel like technology is leaving me behind. [Total sample, n=1,212]



### Graph 8: Digital Activities

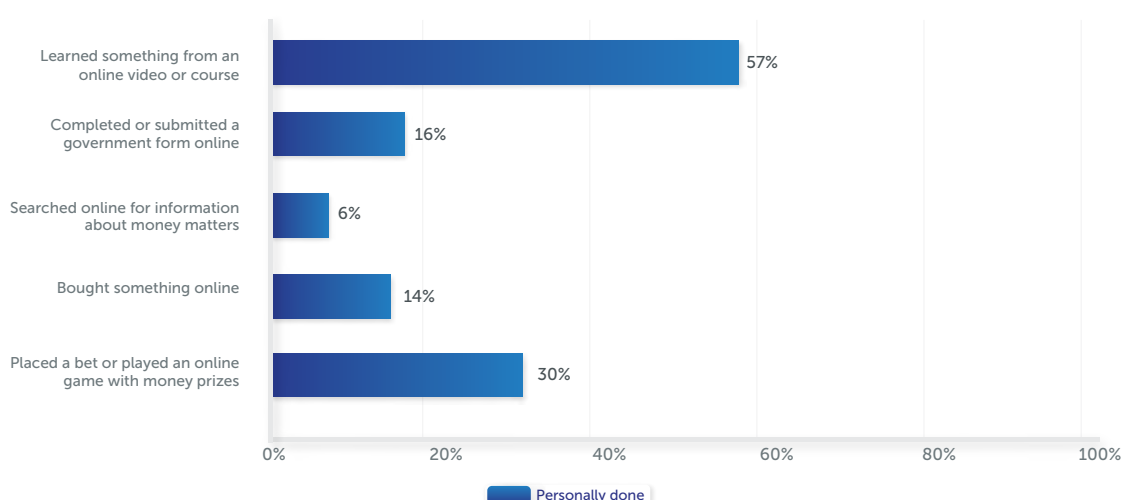
D2. Still thinking about technology, please can you tell me if you have personally used a digital device or electronic gadget to do any of the following in the last three months, whether for yourself or someone else? [Total sample, n=1,212]



Vanuatu adults were similarly probed regarding participation in a limited set of online activities, including two financial health-related activities: having learned something from an online video or course, completed or submitted a government form online, searched online for information about money matters, bought something online, or placed a bet online or played an online game with money prizes. (The latter was intended to explore participation in an online activity and is not evaluated as a positive financial behaviour.) The survey did not explore social media habits and usage. Among the 67% of Vanuatu adults who have ever used the Internet,<sup>16</sup> 57% learned something from an online video or course in the previous three months (accounting for 38% of adults) and 30% searched online for information about money matters (20% of all adults). Far fewer completed online activities beyond news/information consumption in the previous three months: 16% of Internet users bought something online (11% of all adults); 14% completed or submitted a government form online (9%); and 6% placed an online bet or played an online game with monetary prizes (4%).

### Graph 9: Online Activities

D4. I am now going to read out some more digital activities. Please could you tell me whether you have personally done any of these in the last 3 months? [Asked of individuals who use the Internet, n=813]



16 Online activities question asked only of individuals who use the Internet [n=813]

Like most measures evaluated in the survey, participation in digital and online activities tracks closely with population density, age, educational attainment, and socio-economic status. In comparison with all other age groups, older Vanuatu adults aged 45 to 74 years are significantly less likely to have completed any of the digital and online activities assessed (whereas those under the age of 35 years are most likely to have completed activities). Completion of digital activities also correlates with level of educational attainment, with university-educated Vanuatu adults significantly more likely to have completed activities in the previous three months.

Significant gender gaps exist as well, with rural and older women less likely to participate in digital and online activities compared to other cohort groups. Women aged 25 to 44 years are also less likely to have completed activities than males of the same age.

**Table 13: Digital and Online Activities by Gender by Age**

*D2 and D4. Please could you tell me whether you have personally done any of these in the last 3 months? [D2 asked of the total sample, n=1,212; D4 asked of individuals who use the Internet, n=813]*

% Yes (Shading where $p \leq 0.05$ )	Total	Men 15-24 yrs.	Men 25-44 yrs.	Men 45-74 yrs.	Women 15-24 yrs.	Women 25-44 yrs.	Women 45-74 yrs.
Set up an alarm, reminder, or alert	54	65	61	37	63	53	34
Created, edited, or saved a document or image	63	78	77	46	74	60	30
Used Bluetooth or AirDrop	69	86	84	43	78	70	36
Used formulas in a spreadsheet	26	35	35	13	28	21	21
Written programming language or code	10	16	15	7	11	7	2
Bought something online	16	26	20	8	12	11	7
Learned something from an online video	57	72	61	45	61	45	45
Placed a bet or played an online game with money prizes	6	8	10	3	7	3	1
Completed or submitted a government form online	14	19	21	10	10	9	5
Searched online for information about money matters	30	36	36	21	34	23	15

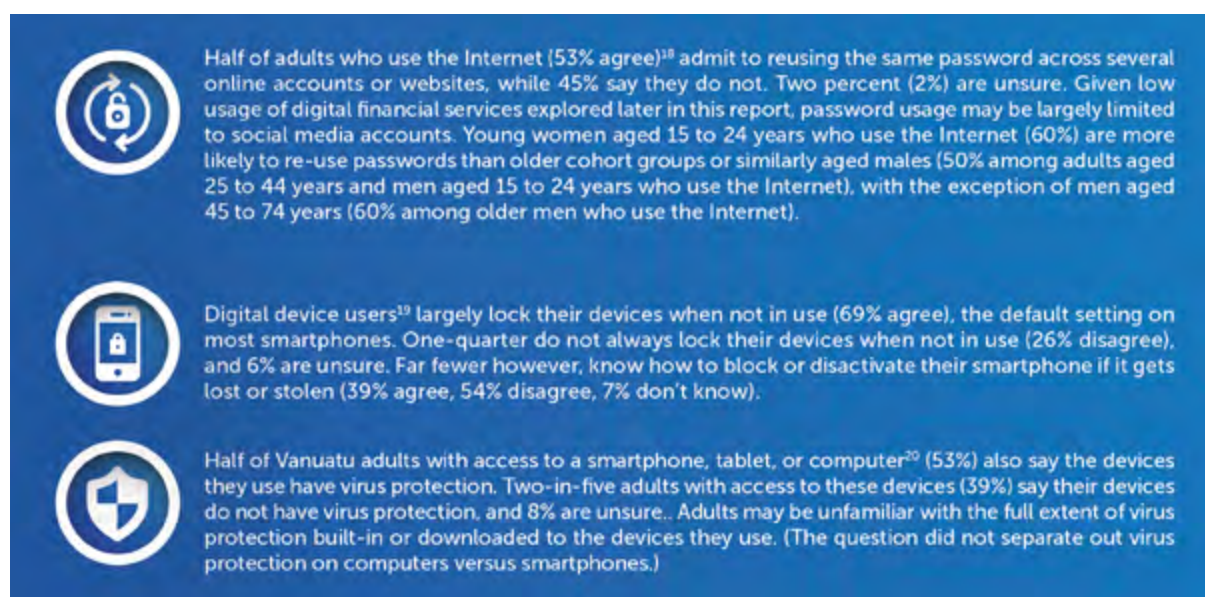


Table 14: Digital and Online Activities by Density and Educational Attainment

% Yes (Shading where $p \leq 0.05$ )	Total	Urban Men	Rural Men	Urban Women	Rural Women	≤ Middle School	Secondary	Uni+
Set up an alarm, reminder, or alert	54	74	50	56	50	43	70	73
Created, edited, or saved a document or image	63	80	66	60	56	55	75	82
Used Bluetooth or AirDrop	69	86	70	71	62	62	80	83
Used formulas in a spreadsheet	26	49	22	38	19	15	37	62
Written programming language or code	10	24	10	13	5	5	14	34
Bought something online	16	23	19	16	9	16	15	17
Learned something from an online video	57	67	61	59	49	46	64	81
Placed a bet or played an online game with money prizes	6	8	8	4	5	5	8	7
Completed or submitted a government form online	14	19	18	10	9	9	17	23
Searched online for information about money matters	30	48	27	30	25	23	35	44

## Digital and online security

The vast majority of Vanuatu Internet users believe themselves to be proactive in their approach to online safety, and to some extent users are; 88% agree with the statement, “I take steps to keep my information safe when online”.<sup>17</sup> Upwards of four-in-five Internet users across demographic and geographic subgroups describe themselves as taking necessary safety precautions online. (By way of reminder, 52% of Vanuatu adults use the Internet regularly, defined for these purposes as using the Internet daily or several times a week.) Notwithstanding assertions, uptake of specific digital security practices – on- or off-line – varies depending on the practice. The reuse of passwords across online accounts comprises one of the most obvious safety vulnerabilities evaluated, with virus protection and device locking features built-in to most in-market smartphones.



<sup>17</sup> Digital landscape question asked only of individuals who use the Internet [n=813].

## Section 2: Financial Inclusion<sup>21</sup> & Literacy

### Access to payment products and services

The majority of Vanuatu adults (63%) have a financial account or digital financial service they can use to store money or make payments.<sup>22</sup> The survey measured access to and ownership of a range of financial products, traditional or digital, that can be used to store money or make payments for the purposes of understanding the use of digital services in financial transactions and financial management.

Of the financial products and services<sup>23</sup> explored in this survey, Vanuatu adults are most likely to own a current account. Half of Vanuatu adults (53%) own a current account, including accounts held with a bank, credit union, or online provider. A majority of current account holders have a payment card associated with their account (70% of current account owners<sup>24</sup>; 37% of the adult population). In addition to the more traditional current account, the survey also explored ownership of electronic and digital financial services. Two- in-five Vanuatu adults (40%) have a payment card of any sort, including a public transport card or debit card; just 9% have a digital or mobile wallet. Ownership and use of digital financial services specifically are explored in greater detail in Section 3 of the report.

37% adults do not have a bank account, electronic payment card, or digital financial service they can use to store money or make payments. Cash-reliant Vanuatu adults identify preference (80%) as the predominant reason for their lack of financial service products and reliance on cash-based financial transactions. Another 5% don't know how to use other payment methods, and 4% identify mistrust of financial providers as a barrier to product ownership or use. One percent (1%) say someone else in their household handles non-cash transactions; fewer than 1% of the non-banked say they don't have the ID or proof of address needed for product ownership.<sup>25</sup>

Again, 53% of Vanuatu adults have a current account they can use to store money and make payments. While levels of financial competency are relatively similar between Vanuatu men and women as they relate to budgeting and savings behaviour and financial know-how, levels of financial inclusion are not. Men (58%) are more likely than women (48%) to own a current account for the purposes of conducting financial transactions. Amongst women, rural (47%) and younger women (aged 15 to 24 years) (42%) are least likely to own a current account. In general however, the youngest cohort group of adults aged 15 to 24 years is least likely to own a current account with minimal differences in access between men and women. Gender disparities are evident across other groupings. By way of example, women aged 25 to 44 years (54%) are fourteen percentage points less likely to own a current account than men from the same age category (68%). Two-thirds of urban men (66%) own a current account compared to 54% of urban women.

Disparities in access are also apparent at the levels of region, population density, educational attainment, and income. Vanuatu adults living in Penama, Tafea, and rural areas, Vanuatu adults with a middle school education or less, and Vanuatu adults who fall within the lowest income bracket are significantly less likely to own a current account than adults overall.

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18 [n=813]

19 Digital landscape question asked only of individuals who have access to a smartphone, tablet, laptop, or computer [n=1,004]

20 Digital landscape question asked only of individuals who have access to a smartphone, tablet, laptop, or computer [n=1,004]

21 For the purposes of this report, financial inclusion refers to the concept that all working-age adults have effective access to banking, credit, savings, payments, and insurance services from formal service providers.

22 The survey includes multiple questions that measure ownership of a financial product or service. The 63% [n=761] figure referenced in the text above is derived from responses to F5\_current account, F6\_payment behaviour, and DF2\_digital financial services and verified against DF5\_cash-based check.

23 Multiple survey measures explored use of financial products and services, including: current accounts, payment cards (associated with current accounts, as well as any other type of payment card, including virtual cards), insurance products, digital/electronic/mobile wallets, and cryptocurrency. The list was not intended to be exhaustive and was designed with understanding methods of payment and use of DFS.

24 [n=646]

25 Question asked of individuals who do not own or use any of the financial products or services tested and who confirm they do not have a bank account or digital financial service they can use to store money or make payments [n=449].

**Table 15: Current Account by Gender by Age and Gender by Density**

F5. Do you have a current account? This could be with a bank or credit union, for example, or with an online provider. [Total sample, n=1,212]

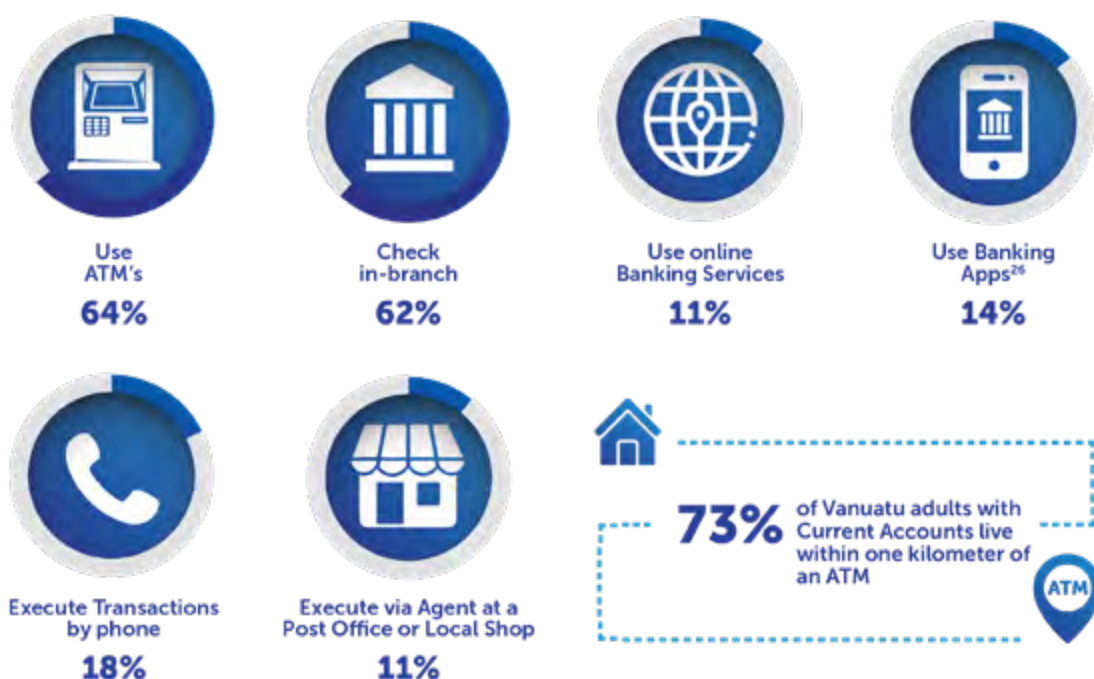
(Shading where $p \leq 0.05$ )	Yes (%)	No (%)
Total	53	46
Men 15-24 years	41	58
Men 25-44 years	68	32
Men 45-74 years	63	37
Women 15-24 years	42	58
Women 25-44 years	54	45
Women 45-74 years	47	51
Urban men	66	33
Rural men	56	44
Urban women	54	44 (2% Refused)
Rural women	47	53

**Table 16: Current Account by Educational Attainment, Income, Employment and Disability Status**

(Shading where $p \leq 0.05$ )	Yes (%)	No (%)
Total	53	46
≤ Middle school	46	54
Secondary school	63	36
University +	76	23
≤3,399 VUV	33	66
3,400 – 10,198 VUV	46	53
10,199 – 16,998 VUV	65	35
16,999+ VUV	77	23
Persons with disabilities	56	44
Self-employed	55	45

**Table 17: Current Account by Region**

(Shading where $p \leq 0.05$ )	Yes (%)	No (%)
Total	53	46
Malampa	63	37
Penama	35	65
Sanma	49	50
Shefa	60	40
Tafea	40	58 (2% Refused)



## Cash-based economy & experiences with remittances

Vanuatu adults almost exclusively use cash to pay for commonly accessed household items and services (defined for the purposes of the survey as groceries, paid meals out, or utility bill payments). As the graphs below indicate, Vanuatu adults report having used cash for their most recent grocery purchase (91% cash, 2% any card payment), meal out (83% cash, 11% not relevant, 1% any card payment), or utility bill payment (71% cash, 23% not relevant, 2% any card payment). Just 2% of adults at most used a payment card to pay for any of the aforementioned transactions, and fewer than 1% paid with a digital or mobile wallet or via an online card or automatic payment. While utility companies would be most likely to have the necessary infrastructure to support electronic or digital payments, where relevant, Vanuatu adults continue to pay their utility bills in cash.<sup>27</sup> This is true in urban areas and Shefa (83% and 77% respectively) and for university-educated (78%) and higher-income adults (76%), as well as the overall population.

<sup>26</sup> F5\_beh Current account behaviour was asked only of individuals who have a current account [n=646], with app and online (not using an app) usage asked only of current account holders who ever use the Internet [n=502]. Responses recalculated among all current account holders [n=646].

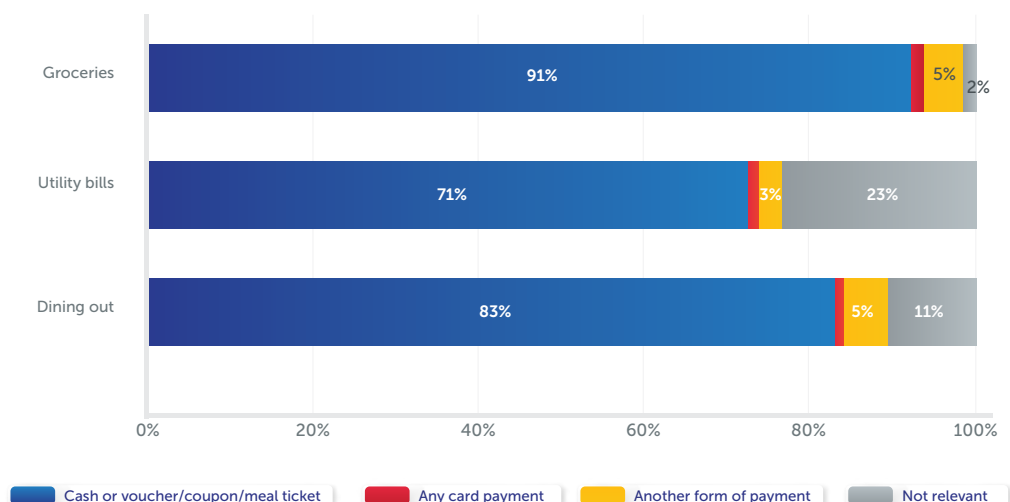
<sup>27</sup> The survey did not probe whether households reside in locations with no formal utility provider. It is possible that responses also include preferred methods of payment for fuel, generators, et cetera.

### Graph 10: Recent Payment Behaviour

F6\_1. Thinking about the last time that you bought groceries, please could you tell me how you paid? [Total sample, n=1,212]

F6\_2. And how did you pay your last household utility bill such as water or electricity? [Total sample, n=1,212]

F6\_3. And the last time you bought food or drink to eat in a restaurant or take-away – how did you pay? [Total sample, n=1,212]



According to data provided by the International Labour Organization for the 2017-2018 time period, 7,793 Vanuatu adults, largely men, participated in Australia's Seasonal Workers Programme and New Zealand's Recognized Seasonal Employer scheme. Vanuatu provided the highest number of temporary workers to both programs of Pacific Island countries.<sup>28</sup> It follows then that remittances comprise an important source of income, and a commonly-used financial service, for a substantial segment of the Vanuatu population. Two-in-five adults (39%) received a remittance in the three months prior to being surveyed, while only 8% had sent a remittance within the same period. Adults residing in Shefa (48%) and women aged 25 to 44 years (46%) and/or residing in urban areas (48%) are significantly more likely than adults overall to have received remittances.

**Table 18: Remittances Received and Sent by Gender, Gender by Age, and Gender by Density**

F4. Have you, personally, received money from abroad in the last three months? [Total sample, n=1,212]

F4. Have you, personally, sent money from one country to another in the last three months? [Total sample, n=1,212]

(Shading where $p \leq 0.05$ )	Yes – Received (%)	Yes – Sent (%)
Total	39	8
Men 15-24 years	38	10
Men 25-44 years	33	12
Men 45-74 years	38	8
Women 15-24 years	37	4
Women 25-44 years	46	7
Women 45-74 years	40	4
Urban men	36	11
Rural men	36	10
Urban women	48	6
Rural women	39	5

Whether individuals sent or received remittances, the speed of transfers, ease of collecting transfers, and exchange rates and fees all played highly significant roles in the transaction process – both in terms of how individuals chose to

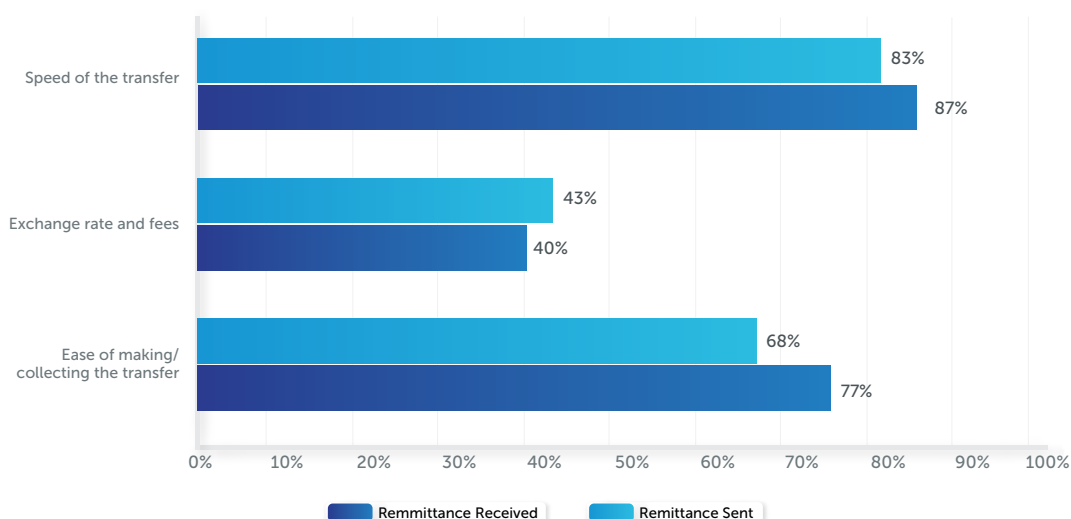
28 [https://www.ilo.org/wcmsp5/groups/public/-/asia/-/to-bangkok/-/ilo-suva/documents/publication/wcms\\_712549.pdf](https://www.ilo.org/wcmsp5/groups/public/-/asia/-/to-bangkok/-/ilo-suva/documents/publication/wcms_712549.pdf)

send remittances and satisfaction with the process on the receiving end. Of note however, exchange rates and fees are significantly less important factors in the remittance process than speed and ease of use. The survey did not however, probe how individuals send and receive remittances and whether they use mobile solutions or continue to send and receive cash payments. That said, 66% of Vanuatu adults believe digital financial services are essential for sending remittances.

#### Graph 11: Considerations when Sending and Receiving Remittances

*F4\_pay. Did you consider any of the following the last time you sent money from one country to another? You can just say yes or no for each one. [Asked of individuals who sent remittances in the previous three months; n=91]*

*F4\_exp. Could you tell me whether you were happy with the following the last time you received money from abroad, please? You can just say yes or no for each one. [Asked of individuals who received remittances in the previous three months; n=468]*



### Financial well-being

Financial uncertainty pervades significant portion of the Vanuatu households, and three-quarters of adults (77%) worry their money will not last, including seven-in-ten (69%) university-educated adults. Most adults are simultaneously optimistic however, that the future will bring greater financial security for their households; 77% agree that they will be financially secure in the future. Almost all adults attest to having some money to spend on themselves from time to time (91% agree). Table 17 illustrates the responses to three agree/disagree statements:

1. "I am often worried that my money won't last."
2. "I have some money to spend on myself from time to time."
3. "Five years from now I will be financially secure."

**Table 19: Financial Circumstances**

F2. Do you agree or disagree with the following statements? [Agree as a percentage of total sample, n=1,212]

% Agree (Shading where $p \leq 0.05$ )	Worried money won't last	Extra money to spend	Financially secure in 5 yrs.
Total	77	91	77
Men	75	92	82
Women	79	90	72
Men 15-24 years	75	92	82
Men 25-44 years	79	92	82
Men 45-74 years	69	93	84
Women 15-24 years	74	91	74
Women 25-44 years	86	90	74
Women 45-74 years	72	88	66
Urban men	68	88	80
Rural men	77	94	83
Urban women	73	90	69
Rural women	80	90	73
≤ Middle school	78	90	76
Secondary school	76	92	75
University+	69	93	87
≤3,399 VUV	79	88	73
3,400 – 10,198 VUV	82	89	76
10,199 – 16,998 VUV	74	90	85
16,999+ VUV	72	96	78

## Financial management – budgeting and savings behaviours

The vast majority of Vanuatu adults (76%) purport making plans to manage their income and expenses. However, there is a gap between stated intentions and participation in financial management activities. For the most part, planning includes keeping receipts or recording their spending (51%), including amongst self-employed adults (60%). That said, while self-employed adults keep records of their spending more generally (60%), they are considerably less likely to keep records of their work-related, self-employed earnings and expenditures (41%). Two-in-five self-employed Vanuatu adults keep records of their earnings and expenditures whether or not they have employees supporting their businesses.<sup>29</sup> Amongst all self-employed adults, the highest income earners (65%) are most likely to keep records of their employment earnings compared to the self-employed population overall.

Young adults are least likely to engage in financial management activities (e.g. make a plan to manage income and expenses and keep records of spending). Vanuatu adults aged 15 to 24 are roughly 10 percentage points less likely than older cohort groups to make a plan to manage their income and expenses (69%) or keep receipts or records of spending (44%). Differences are particularly glaring when comparing younger men to men aged 25 to 74 years. Educational attainment and income, though more so in the case of income, also correlate with financial management activities. Individuals who fall within the lowest income bracket manage (68%) and track (40%) their income and expenses at significantly lower rates than Vanuatu adults with higher fortnightly incomes. Use of loyalty cards to reduce costs or earn rewards in an effort to manage resources is limited to 11% of adults.

<sup>29</sup> Self-employed Samoans with employees comprise a small sample size [n=38]. Exercise caution in interpreting results.

**Table 20: Budgeting and Savings Behaviour**

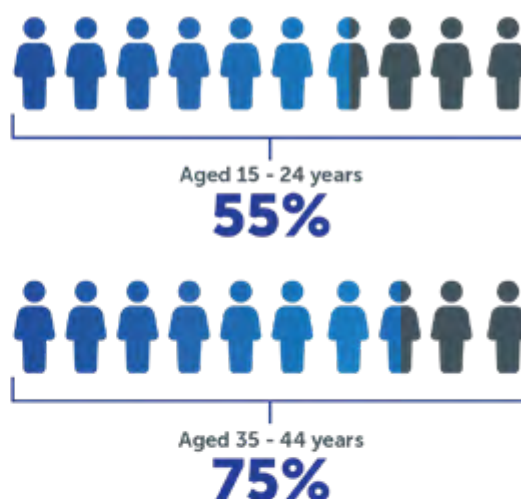
*F1. Do you do any of the following, either alone or with someone else? [Total sample, n=1,212]*

% Yes (Shading where p≤0.05)	Make a plan to manage income and expenses	Keep receipts/records of spending	Use loyalty cards
Total	76	51	11
Men	77	51	13
Women	76	51	9
Men 15-24 years	69	40	11
Men 25-44 years	80	55	16
Men 45-74 years	83	57	11
Women 15-24 years	68	48	9
Women 25-44 years	80	54	12
Women 45-74 years	77	50	5
Urban men	78	60	12
Rural men	77	47	13
Urban women	72	56	12
Rural women	77	50	9
≤ Middle school	73	44	11
Secondary school	81	63	12
University+	82	55	14
≤3,399 VUV	68	40	7
3,400 – 10,198 VUV	73	45	12
10,199 – 16,998 VUV	85	59	20
16,999+ VUV	84	65	13

Most Vanuatu adults self-describe as “savers” rather than “spenders”, and 87% adults agree with the statement, “If I have money left over, I prefer to save it than spend it.” Upwards of three-quarters say they prefer to save rather than spend leftover monetary resources across demographic and geographic subgroups. Savings activities largely pertain to both putting money aside for emergencies (81%) and saving or investing for the long-term (64%). Fewer, but still a significant number, contribute to savings and loans clubs (44%).

Participation in savings activities varies along generational lines, in line with educational attainment and income, and in accordance with population density (urban-rural). Relatively similar numbers of men and women profess to engage in savings activities.





**Higher education and higher income adults are more likely to participate in all savings activities tested than their lower-SES counterparts**

Table 21: Savings Behaviour

F1. Do you do any of the following, either alone or with someone else? [Total sample, n=1,212]

% Yes (Shading where $p \leq 0.05$ )	Put money aside for emergencies	Contribute to a savings & loan club	Save or invest for the longer-term
Total	81	44	64
Men	81	43	64
Women	80	46	65
Men 15-24 years	71	38	53
Men 25-44 years	87	51	71
Men 45-74 years	83	35	66
Women 15-24 years	73	40	57
Women 25-44 years	85	50	70
Women 45-74 years	81	46	66
Urban men	83	51	71
Rural men	80	40	62
Urban women	79	49	68
Rural women	80	45	64
≤ Middle school	79	39	60
Secondary school	84	51	71

% Yes (Shading where $p \leq 0.05$ )	Put money aside for emergencies	Contribute to a savings & loan club	Save or invest for the longer-term
University+	79	53	68
$\leq 3,399$ VUV	71	37	49
3,400 – 10,198 VUV	82	39	67
10,199 – 16,998 VUV	88	51	75
16,999+ VUV	89	56	81

Relatively few Vanuatu adults have or have been able to purchase insurance products to protect themselves from financial shocks (16%) or their businesses (16% of self-employed Vanuatu adults<sup>30</sup>, 3% of the overall population). Vanuatu adults most likely to have purchased a personal insurance product include adults with a degree- or a university-level education or higher (15%) and individuals employed formally outside the home (23%, particularly in finance or tech sector). Relatively equal numbers of men and women own insurance products (15% and 16% respectively).

## Knowledge and skills related to money management

There is both significant need, and opportunities for, increasing foundational financial knowledge. Graph 12 illustrates perceptions towards five different statements, and what Vanuatu adults believe to be true.

1. “When people talk about inflation, they mean that prices have gone up”
2. “Banks pay more interest on savings than they charge on loans”
3. “If someone offers you the chance to make a lot of money it is likely that there is also a chance that you will lose a lot of money”
4. “If a shopkeeper borrows money to stock her shelves, she cannot make a profit”
5. “It is possible to earn the same income by selling many items at a low price or selling one item at a high price”

Levels of engagement with financial services and digital financial services in Vanuatu are moderate to low; along with limited uptake of formal or informal financial services, there are gaps in knowledge around basic economic and financial principles. On the most basic level, almost all adults understand inflation's impacts on the cost of living (89%). Most (70%) also tend to understand that “if someone offers you the chance to make a lot of money it is likely there is also a chance that you will lose a lot of money.” There is greater confusion with regards to: differences in interest rates paid on savings versus those incurred on loans, the costs-benefits of borrowing to turn a profit, and small businesses and economies of scale. Knowledge gaps crosscut demographic and geographic divides. Women are more likely to register “don’t know” responses to financial knowledge questions than men but are no less accurate in their responses.

30 [n=245]

## Graph 12: Financial Knowledge

F3. Could you tell me if you think the following are typically true or false? [Total sample, n=1,212]

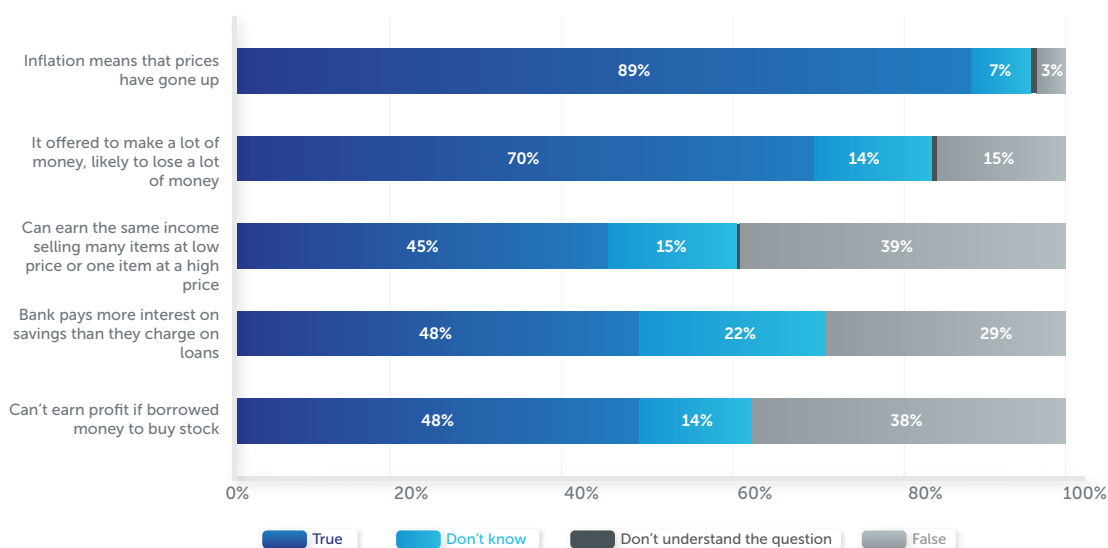


Table 22: Financial Knowledge

F3. Could you tell me if you think the following are typically true or false? [Total sample, n=1,212]

% (Shading where $p \leq 0.05$ )	Banks pay more interest on savings than they charge on loans			If offered to make a lot of money, likely to lose a lot of money			Can't earn profit if borrowed money to buy stock		
	True	False	DK <sup>31</sup>	True	False	DK	True	False	DK
Total	48	29	22	70	15	14	48	38	14
Men	51	31	17	74	15	10	50	40	11
Women	46	26	28	65	15	19	46	36	18
Men 15-24 years	49	26	25	68	20	12	48	39	12
Men 25-44 years	52	34	14	79	12	8	52	38	10
Men 45-74 years	52	34	13	75	15	10	48	41	10
Women 15-24 years	51	23	26	66	16	18	46	38	16
Women 25-44 years	48	26	26	71	15	15	46	38	16
Women 45-74 years	35	30	33	55	16	26	44	30	22
Urban men	55	30	14	79	13	8	50	38	10
Rural men	50	32	18	73	16	10	49	40	11
Urban women	55	21	22	67	16	15	46	39	13
Rural women	43	27	29	65	15	20	45	35	19

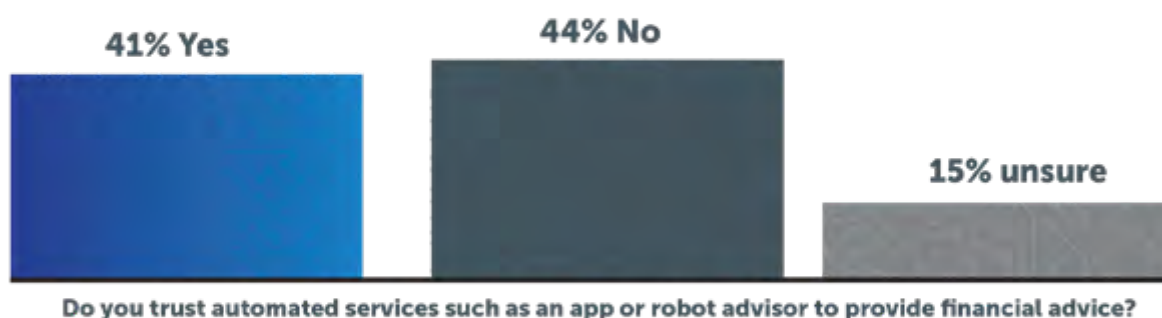
31 DK= Don't know

Financial education can be delivered online to a substantial portion of the population, but face-to-face education is still required if increases in digital and financial literacy are desired across the full spectrum of society. Upwards of half of Vanuatu adults who use the Internet (57%, 38% of all Vanuatu adults) learned something from an online video or course in the three months prior to completing the survey, and 30% (20% of all Vanuatu adults) searched online for information about money matters. Participation in online learning tools drops to 45% among female Internet users aged 25 to 44 years (32% among all women in this age group), 45% of Internet users aged 45 to 74 years (16% of all adults in this age group), and 49% of female Internet users living in rural areas (30% of rural women overall). Two-in-five Vanuatu adults (41% agree) would trust an automated service to provide financial advice, including 51% of urban males, though even among this more tech-savvy cohort, appropriate trust in the tools needs to be grown over time.

## Section 3: Digital Finance

### Perceptions about Digital Financial Services

Vanuatu adults understand the numerous benefits and inevitability of DFS use in business, government, and personal finance, while at the same time expressing some uncertainty about their ability to navigate these services safely and effectively:



**Individuals who are formally employed outside the home (47% agree) are also more likely to trust automated services to provide financial advice than adults overall.**

There is acknowledgement that digital financial services are the ‘way of the future’; and are both beneficial and essential to many Vanuatu adults, particularly small business owners, individuals who send remittances, and individuals receiving government payments: half of Vanuatu adults (56%) agree digital financial services like mobile payments, online banking, and digital wallets will soon replace cash in Vanuatu; two-thirds agree digital financial services are essential for people sending remittances (66%) and that digital financial services make it easier to receive benefits payments from government (67%), despite fewer adults receiving government payments at this time.

Many Vanuatu adults also see the benefit of DFS to their long-term financial health in the form of potential savings, despite uncertainty in using these services. Perceptually, 59% of adults agree that digital financial services help keep costs down for small businesses, including 63% of self-employed adults. Only 25% of self-employed adults who have access to or have used digital financial services previously however, attest to having saved money on their financial transactions by reducing fees or other costs. That is compared to 27% of Vanuatu adults overall who have access to or have used DFS.<sup>32</sup> It is important to note that savings data is calculated among roughly one-quarter of Vanuatu adults who report owning or using a mobile or digital financial service in response to other survey questions.

Vanuatu adults (77%) largely refute the notion that digital financial services are designed largely for men rather than also benefitting women. Just 8% of adults believe that “digital financial services are designed for men more than women,” and

<sup>32</sup> Question DF4 DFS Outcomes asked only of individuals who say they use or own digital financial services previously in the survey [n=270 among the overall sample and n=51 among self-employed adults].

14% do not know. Men aged 45 to 74 years (13% agree) are most likely to believe DFS are designed for men more than women, though the vast majority disagree (77%) that services favour men over women.

## Access to and Use of Digital Financial Services

Ownership and use of digital financial products is limited in Vanuatu. Two-in-five (40%) Vanuatu adults have an electronic payment card of any sort, including but not limited to payment cards associated with a current account. Uptake of other digital financial products is low, and 4% reported to have a parametric insurance policy that makes automatic payments to people affected by cyclones or other climate disasters; 9% have a digital/electronic/mobile wallet; 3% have another kind of insurance policy they took out online or via an app; and less than 1% owned cryptocurrency at the time of survey field. *It is important to note that parametric micro-insurance policies were introduced in market in late 2022 by the UNCDF in partnership with VanCare Insurance Limited and the Reserve Bank of Vanuatu.<sup>33</sup> The survey was already in field when parametric insurance policies were first made available in country. Respondents may have confused these policies with some other form of insurance, such as cyclone indemnity insurance.*

With regards to financial services other than payment products, banking apps and online money management tools are popular with 11% of Vanuatu adults for monitoring spending and saving. That number rises just slightly to 17% among the population of adults who access the Internet.<sup>34</sup> In addition, among Vanuatu adults who own current accounts, 14% use banking apps and 11% go online (not using an app) to check account balances, withdraw, or deposit funds associated with their account,<sup>35</sup> accounting for fewer than one-in-ten Vanuatu adults overall.

**Table 23: DFS Products**

*DF2. And do you, personally, have any of the following? [Data for digital/electronic/mobile wallets and payment cards re-calculated out of the overall sample, n=1,212]*

% Yes (Shading where $p \leq 0.05$ )	Payment card	Parametric insurance	Other insurance	Digital/Mobile wallet	Crypto-currency
Total	40	4	3	9	1
Men	45	5	4	10	1
Women	35	2	3	8	1
Men 15-24 years	33	7	4	14	1
Men 25-44 years	56	4	4	12	0
Men 45-74 years	42	3	3	4	1
Women 15-24 years	30	2	4	8	0
Women 25-44 years	43	3	3	8	2
Women 45-74 years	29	2	3	5	1
Urban men	57	7	4	16	0
Rural men	41	4	4	9	1
Urban women	39	3	4	14	1
Rural women	34	2	3	6	1
≤ Middle school	33	3	3	5	0
Secondary school	48	4	4	15	1
University+	64	9	8	13	1
≤3,399 VUV	23	3	3	8	1
3,400 – 10,198 VUV	32	3	1	8	0
10,199 – 16,998 VUV	60	3	3	8	2

33 <https://www.uncdf.org/article/7992/uncdf-launches-first-parametric-micro-insurance-product-for-climate-vulnerable-communities-in-vanuatu>

34 [n=813]

35 Data re-calculated among the total sample of current account holders [n=646]. Question originally asked only of current account holders who use the Internet [n=502].

% Yes (Shading where $p \leq 0.05$ )	Payment card	Parametric insurance	Other insurance	Digital/Mobile wallet	Crypto-currency
16,999+ VUV	60	5	5	12	1
Self-employed	37	3	2	10	2
Persons with disabilities	41	3	3	7	1

## Safety Measures and Awareness Related to Safe and Efficient Use of DFS

Vanuatu adults need more information that would allow them to make smart choices about which digital financial service providers to use as uptake of DFS grows. A majority (61% agree) of adults assume that [regulation of digital financial services](#) is equal to the formal banking sector. Another 23% are unsure how digital financial services are regulated. Just 16% of adults disagree with the assertion that “digital financial services are all regulated like banks.” Vanuatu adults with the highest levels of education and income are just as likely if not more so than other cohort groups to believe DFS are all regulated like banks: 70% among adults with a university-level degree or higher, 68% of adults with formal employment outside the home, and 67% of Vanuatu adults with a fortnightly income of 16,999 VUV or higher.

**Password protection and online banking security also constitute important areas for DFS education moving forward**

When it comes to pin numbers and passwords for financial services specifically, 45% of financial service users keep a record of pin numbers or passwords for their accounts compared to 54% who do not.<sup>36</sup> (The survey did not distinguish between the use of password managers and other forms of record-keeping.) Half of adults who are online<sup>37</sup> (53%) re-use the same password across several online accounts or websites.

Vanuatu adults need to know to look for “https” in a website’s URL before providing secure information online, like payment information. Only a segment of adults aged 15 to 74 years shop online (11%), but among those that do, more than half (56%) fail to check websites are secure before entering payment details online. Two-in-five (44%) online shoppers check that websites are secure before entering payment details when making an online purchase.

In addition, the survey explored familiarity with and anticipated response to phishing emails. Adults were provided a common scenario for bank customers and asked how a hypothetical consumer should respond:

*Sera has just received an email message from her bank. She didn’t even know that the bank had her email address! She reads the message carefully. It tells her that her account has been frozen because of suspicious activity. It apologises for the inconvenience and then says she should follow the link in the email as soon as possible to reactivate the account. Sera isn’t sure whether to reply to the message, delete it or follow the link.*

*Which of Sera’s three ideas would be safest in this instance?*

In response, 32% say they would delete the email, while more than half would either follow the link (40%) or reply to the email (18%). Another 9% are unsure how they would respond. Urban males (45%) are among those most likely to delete the email, especially compared to their rural (33% delete among rural men) and female counterparts (32% delete among urban and 27% among rural women). Degree-level/ university-educated adults are also more likely to recognize and respond appropriately – by deleting the email (48%) – than Vanuatu adults overall.

With just 11% of Vanuatu adults engaging in online shopping, very few have been subject to lending practices online in the form of Buy Now, Pay Later options (1% of Vanuatu adults).

<sup>36</sup> Question asked of individuals who own a financial service or product, including a current account, a payment card of any form, or a digital/electronic/mobile wallet [n=708].

<sup>37</sup> [n=813]

## DFS Personal Outcomes – Positive and Negative

Most Vanuatu adults (~75%) have not completed a mobile or digital financial transaction to experience either the positive or negative impacts of DFS use. Among the roughly one-quarter of adults who use a digital financial service (e.g. a digital wallet) or have completed a financial transaction via a mobile phone or online, have had positive rather than negative outcomes of DFS are more common, to date.<sup>38</sup> Three-in-five (62%) have found it easier to manage their money without help from others; 68% have found it easier to keep track of what they are spending. To-date, 27% of DFS users have saved money on financial transactions by reducing fees or other costs. Sample sizes are small at the sub-group level for DFS outcomes questions as a result of low levels of engagement with DFS, and differences in results between groups are not significant.

**Table 24: DFS Outcomes**

*DF4. And since accessing a financial service online or using your phone to make payments have you: [Asked of individuals who have used a mobile phone or digital financial product to make a financial transaction; n=270]*

% Yes (Shading where $p \leq 0.05$ )	Found it easier to manage your money without help from others	Found it easier to keep track of your spending
Total	62	68
Men	64	68
Women	59	69
Urban	65	67
Rural	60	69
Urban men	66	64
Rural men	63	70
Urban women	64	70
Rural women	57	68

DFS owners/users<sup>39</sup> are less likely to have experienced negative outcomes evaluated in the survey, with 20% saying they were locked out of a financial account for more than a day because they could not remember access details and 7% saying that they lost money because of online scams or phishing attacks.

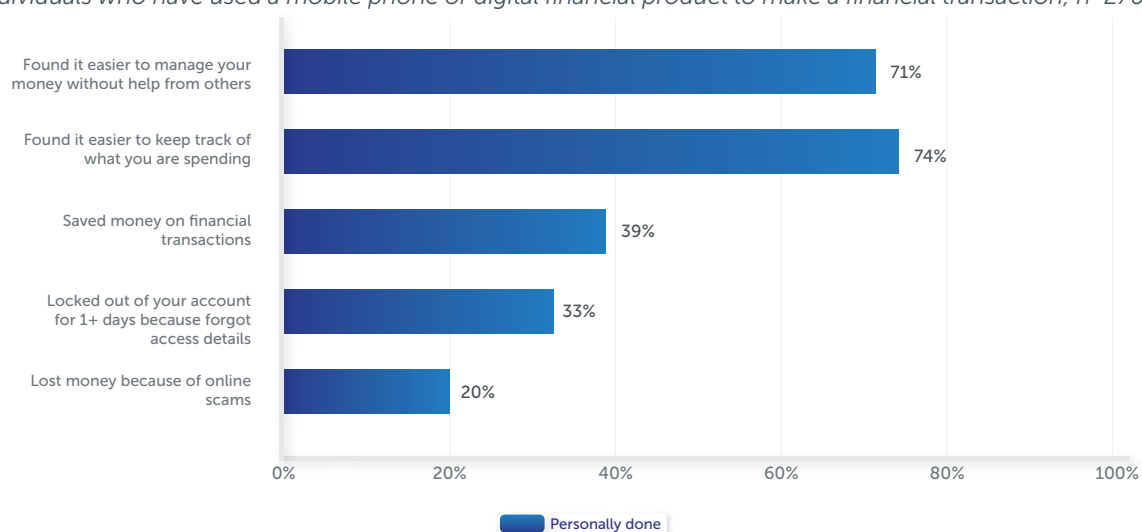
<sup>38</sup> [n=270] (the use of mobile or online banking include checking a current account balance on a phone or via a bank app or owning a DFS such as a digital or mobile wallet)

<sup>39</sup> [n=270]



Graph 13: DFS Outcomes

DF4. And since accessing a financial service online or using your phone to make payments have you: [Asked of individuals who have used a mobile phone or digital financial product to make a financial transaction; n=270]



# Conclusions & Recommendations

Vanuatu adults have acquired moderate levels of digital and financial literacy to date, achieving a mean of 23.08 points out of a possible 52 points on a DFL index devised for the purposes of this study. The index was designed with the intent of comparing DFL levels across the Pacific and tracking growth in access and skills over time. Moderate levels of DFL are in large part a result of more limited uptake of digital financial services (DFS) thus far, as well as familiarity and engagement with practical safeguards for DFS use. Access to smartphones and in turn, Internet usage are fairly high in Vanuatu compared to few other Pacific Island countries, but cash remains the preferred and dominant payment method in day-to-day transactions.

Targeted interventions to promote digital and financial literacy are required across geographic and demographic subgroups. Though most necessary among low-SES groups and among the oldest cohort groups, in addition to some female cohort groups (rural women), efforts are required among higher-educated and upper-income Vanuatu adults, as well as within and outside urban centres. Higher-educated and upper-income adults are considerably more likely to have access to digital and financial tools and resources. These groups are just as vulnerable, if not more, to the potential risks (as well as benefits) of DFS use simply because their financial means may provide greater exposure to DFS over time. Lower-SES groups require increased access to digital tools and foundational knowledge with regards to services available and their potential benefits in order to reap positive (or negative) outcomes associated with DFS.

Access to digital devices (smartphones) and Internet is high in Vanuatu but cost and availability of data services still pose a barrier to Internet access. Survey questions probed access to digital devices and whether individuals used the Internet more broadly. Adults in Penama (67% quality, 62% cost) are most likely to identify the quality or availability of Internet and mobile data services in their area as a barrier to Internet usage, whereas cost concerns are highest in Shefa (68% cost, 62% quality) compared to other provinces. More generally, urban dwellers are both more likely to use the Internet and identify barriers to usage than their rural counterparts.

Disparities in access to smartphones and the Internet contributes to significantly lower DFL among some groups. Digitalisation scores, which are in part a measure of access to digital devices and the Internet, are lowest among adults aged 45 to 74 years – but especially among older women, – among rural women, adults with a middle school education or less, self-employed individuals, the lowest income earners, and persons with disabilities. Targeted initiatives are required to promote access to smartphones and internet among these groups at affordable costs, to enable them effectively participate in the digital economy.

Gender gaps in accessing internet and formal financial services should be addressed through promoting suitable and affordable products and services for female customers, especially for rural women.

Limited experience with DFS, as yet, has constrained exposure to DFS outcomes, positive or negative. DFS offering is gradually expanding in the Vanuatu market, so DFL interventions and education efforts could potentially be coupled with new products and services offered and make a clear case for the positive benefits of DFS usage – i.e. potential cost savings, efficient and lower-cost option for sending and receiving remittances, greater control, management, and security of financial resources, no matter how limited – to all adults. While it will be important to educate Vanuatu adults to the potential risks of DFS usage and practices for safe usage, adults will first need to be persuaded as to why they should deviate from current reliance on cash transactions towards DFS usage. In addition to building confidence in individuals' ability to use DFS to their economic benefit, education efforts should build awareness of and trust in verified or regulated service providers.

Education efforts should also seek to identify the risks to DFS usage while simultaneously providing simple measures for diffusing and managing potential risks. Adults have general concerns about their ability to use and the risks associated with DFS but have limited awareness of the specific risks to consider beyond potential scams and fraud. At a basic level, Vanuatu adults need more information that would allow them to make smart choices about which digital financial service providers and types of services to use. Password protection and online banking security, identifying and responding to phishing attempts, how to identify verified, secure websites for the purposes of online financial transactions, and the use of virus protection and device-locking services are additional areas for potential education.

For younger adults aged 15 to 24 years, DFL interventions will need to focus on building basic financial competencies and increasing access to financial and capital-building products. Younger men and women score lower than older cohort groups in the area of financial competencies, while scoring highest in the area of digitalisation. Meaning, they have access to and are using digital tools but lack the financial competencies to harness DFS to their benefit at this time. Education should begin in, and include financial education within, secondary and post-secondary education institutions. Rates of financial inclusion (in the formal sector) are also lower among younger adults compared to other cohort groups, and just 42% own a current account. DFS should be considered as a means to increasing access to savings and other financial products among the youngest cohort of adults.

Online platforms should be leveraged to deliver digital financial education to Vanuatu citizens, but face-to-face education will still need to occur in conjunction with online efforts, to reach the segments with limited access to digital devices and internet.

Harnessing the reach of mobile providers in the market to roll out DFL interventions and promote existing services like mobile money/wallets can drive uptake and usage. Given the high rate of participation in Vanuatu in regional labour mobility schemes, promotion of mobile wallets constitutes an obvious opportunity ("low-hanging fruit") to introduce greater swaths of the population to DFS and provide cost-savings. Mobile wallets can be harnessed as a first step in promoting greater uptake of digital financial transactions as long as commercial vendors, small businesses in particular, are similarly equipped to support their use.

There are significant scopes of digitizing government service delivery and utility bill payments for the Vanuatu citizens through mobile money and other digital payments, which will drive uptake and diversify the use cases of DFS for different population segments. At this early stage of mobile money in the country, these payments can be the high-volume drivers and motivate customers to gradually become less cash reliant. Successful digitization of government payments and utility bill payments will require awareness raising and targeted digital and financial literacy campaigns to enable the users to effectively utilize these services.

Digital financial service providers should diversify use cases and product offerings, prioritizing merchant payments. Targeted payment products for small and micro vendors/ merchants to digitize a portion of these payments (such as in grocery shops, restaurants etc.) over next few years can drive numbers for the DFS providers, as well as initiate a behavioural shift among customers towards cashless transactions.

Survey findings suggest that targeted digital and financial literacy initiatives are required to enhance capacities of Vanuatu citizens to realize the potential of the emerging digital economy. UNCDF plans to conduct the next DFL survey in 2025 to monitor changes in DFL index scores between survey rounds as well as track progress on specific measures related to financial well-being, trust in financial service providers, money management and savings behaviours, and outcomes from DFS use.





## APPENDIX

# Appendix 1: Digital and Financial Literacy Questionnaire

## Introduction

We would like to find out more about your experiences with technology and money these days. Would you be willing for us to spend around 20 minutes talking about this? **Your answers will be confidential, and you can stop at any time.**

This questionnaire is about you, and all your experiences. If you run a business, please also think about your experiences as a business owner. Please don't tell us about things that other people in your household do, though – this is an opportunity to focus on you!

## Section 1 Background demographics

Thank you for agreeing to take part in this survey. I am going to start by asking some general questions. This helps us to make sure we have spoken to a cross section of the population.

### A1 Method

Automatic entry, or interviewer to record data collection method

Filter?	Options	Variable label	Values	Note to agency
No	Face-to-face	A1	1	
	Telephone		2	
	Other		3	Please record and inform us if any other method is used

### A2 Timestamp at start

Automatic entry, or interviewer to record date and start-time of survey

Filter?	Options	Variable label	Values
No		A2	Day/Month/Year HH:MM

### B1 Language of interview

Interviewer to record primary language of interview

Filter?	Options	Variable label	Values	Note to agency
No	English	B1	1	
	Pijin		2	

### B2\_classify Urban or rural

For CAPI, interviewer to record based on sample. For CATI, ask: *Do you live in an urban or rural area?*

Filter?	Options	Variable label	Values
No	Urban	B2_classify	1
	Rural		2

## B2 Town or village

For classification purposes, we would like to know what kind of area you live in. Do you live in a city, a town, or a village/settlement?

[If city, probe]: Is it a city with more than 100,000 people (code 1), or is it a smaller city (code 2)?

[If town, probe]: Is it a town with more than 3,000 people (code 2), or is it a smaller town (code 3)?

[If village/settlement]: Is it a village with more than 100 people (code 3), or less than 100 people (code 4)?

Filter?	Options	Variable label	Values	Notes
No	A town or city of more than 100,000 people	B2	1	
	A town or city with between 3,000 and 100,000 people		2	
	A village or town, with between 100 and 3,000 people		3	
	A village, hamlet or other community with fewer than 100 people		4	

## B2\_local Local access

Interviewer to record local access to services, or ask:

Do you live within 1km of...?

Filter?	Options	Variable label	Values	Note to interviewer/agency
Ask if B2=3 or 4	A neighbour	B2_local_1	No=0; Yes=1	A different household. Mark Yes without asking if the answer is obvious.
No	A place to buy basic provisions such as <bread, vegetables, bottled water or soap>	B2_local_2	No=0; Yes=1	This could be a market, shop or café. Use local examples
	An <ATM>	B2_local_3	No=0; Yes=1	Use local terminology for an automated teller machine or cashpoint

## B3 Gender

Interviewer to record gender

Filter?	Options	Variable label	Values
No	Male	B3	0
	Female		1
	Other response/other gender		2

Refused=-99

## B4 Age

Please could you tell me how old you were at your last birthday?

Filter?	Options	Variable label	Values	Note to interviewer/agency
No	[Do not read out: Whole years: 0-110]	B4	[Whole numbers]	If respondent is under 15 or over 74 years of age, terminate interview
	Refused		-99	Continue to next question

## B4\_cat Age

Instead, please could you tell me which of the following age categories you are in?

Filter?	Options	Variable label	Values	Note to interviewer/agency
Ask if B4 = -99	0-14	B4_cat	14	Terminate interview
	15-24		24	
	25-34		34	
	35-44		44	
	45-54		54	
	55-64		64	
	65-74		74	
	75+		75	Terminate interview
	Refused		-99	Terminate interview

## B5 Household composition

Do you live...? [Read each one in turn unless lives entirely alone, and record all responses - provide examples if needed]

Filter?	Options	Variable label	Values	Note to interviewer/agency
No	Entirely alone	B5_1	No=0; Yes=1	Alternative wording can be used to clarify, such as 'Is there only you living here?'
Ask if B5_1=0	With a partner/spouse	B5_2	No=0; Yes=1	Including partners who are currently working overseas
	With the family that brought you up	B5_3	No=0; Yes=1	i.e. are they still living parents, grandparents, etc.
	With children that you are raising	B5_4	No=0; Yes=1	e.g... your children, step-children, foster children
	With other relatives or in-laws	B5_5	No=0; Yes=1	e.g. aunt, cousin, brother-in-law etc.
	With friends or colleagues	B5_6	No=0; Yes=1	

Refused=-99



## B6 Occupation

Which of these *best describes your main occupation?* [Read each one in turn, and record 1 response – provide examples if needed; if the respondent feels that they have two or more ‘main’ occupations, choose the first one in the list]. Other employment options can be added.

Filter?	Options	Variable label	Values	Note to interviewer/agency
No	Self-employed, without employees	B6	1	Includes working on own account or contributing to family business. This can be formal or informal work, e.g. market stall holder, taxi driver, factory owner, IT company. Includes those temporarily absent from work due to sickness or maternity/paternity leave. Probe as necessary to find out about employees
	Self-employed or company owner, with employees		2	
	Employed		3	Working for another person or company, full time or part time. Includes those temporarily absent from work due to sickness or maternity/paternity leave
	A regular <overseas> worker		4	To be edited in countries to use local terminology, and where abroad is not overseas, or where seasonal work is not undertaken abroad.
	Unemployed and seeking work		5	
	Unable to work due to sickness or disability		6	
	Student		7	
	Caring for children or other family members		8	
	Retired		9	
	Other		10	e.g. not working and not looking for work

Refused=-99

## B6\_sector Employment sector

In the last year, have you worked in any of the following sectors?

Filter?	Options	Variable label	Values	Note to interviewer/agency
Ask all	Agriculture, farming or fishing or forestry		No=0; Yes=1	Directly responsible for raising crops or animals or fishing; or work related to the infrastructure around food production, farming etc. including manufacturing animal fodder, packaging, storage, haulage
	Finance		No=0; Yes=1	e.g. Work relating to banking, credit, insurance, accountancy
	Public sector including military		No=0; Yes=1	e.g. Policy maker, teacher, police, fire crew, refuse collector, higher education
	Technology		No=0; Yes=1	e.g. Developing software, maintaining IT equipment, creating websites
	Tourism, food and beverages and related services		No=0; Yes=1	e.g. Work related to travel; accommodation, preparing and serving food, tourist trips and activities

Refused=-99



## B7\_education Highest level of education

What is the highest level of education you have completed? [Read out if necessary and record 1 response].

Filter?		Variable label	Values	Note to interviewer
No		B7_education		Formal education or training includes school, college and university, as well as medical school, professional training, military college etc.
	Postgraduate		1	e.g., master's degree, PhD or advanced professional training
	University/degree-level education		2	e.g., first degree or equivalent vocational training
	Upper secondary/high school		3	
	Lower secondary/middle school		4	
	Primary school		5	
	No formal education		6	

Not relevant/didn't attend school -96; Don't know=-97; Refused=-99

## B8 Income

Thinking now about all the different sources of income that you [add and your <partner> if B5\_2=1] have access to, would you say that it is usually...

Filter?	Statements	Variable label	Values	Note to interviewer/ agency
No	No income	B8	0	Income may include pay from work, government support, retirement benefits etc.  If asked, please state that this is before tax is deducted.
	Less than \$181 per fortnight but not 0		1	
	Between \$182 and \$363 per fortnight		2	
	Between \$364 and \$545 per fortnight		3	
	Between \$546 and \$727 per fortnight		4	
	Between \$728 and \$908 per fortnight		5	
	More than \$909 per fortnight		6	

Don't know=-97; Refused=-99

Thank you. I have a few more background questions.

## B9 General characteristics

Please could you tell me if any of the following statements apply to you? You can just say yes or no to each one.  
[Read each one in turn and record all responses]

Filter?	Statements	Variable label	Values	Note to interviewer
No	I enjoy learning new skills	B9_1	No=0; Yes=1	Record negative responses such as 'Not really' as No.
	I am comfortable doing sums in my head, such as calculating change	B9_2	No=0; Yes=1	
	I have a health condition or disability that limits my day-to-day activities	B9_3	No=0; Yes=1	Record positive responses such as <i>Sometimes</i> , or a <i>little bit</i> as Yes.
	I find it easy to memorise things like phone numbers, birthdays, or passwords	B9_4	No=0; Yes=1	
	I receive most of my income from family members <overseas>	B9_5	No=0; Yes=1	
Ask if B6 NOT= 4	I intend to start temporary or seasonal work <overseas>	B9_6	No=0; Yes=1	
No	I intend to move <overseas> permanently	B9_7	No=0; Yes=1	

Don't know=-97; Refused=-99

Thank you.

The next section of the questionnaire looks at various sorts of technology. There are no right and wrong answers, and it doesn't matter if you never use technology – the important thing is that your answers reflect your actual thoughts, experiences or behaviours. Remember that we want to know about you!

## Section 2 Digital integration

### D1 Digital devices

Do you have access to any of the following, **for personal use**, whether or not you currently use them [if B6=1,2,3 or 4 add This could be at home or at work] [Read each one in turn and record all responses].

Filter?	Options	Variable label	Values	Note to interviewer
No	A smartphone	D1_1	No=0; Yes=1;	'Access' should be interpreted broadly, to include living in a household where somebody else has such a device
	A mobile phone that is only for calls and text	D1_2	No=0; Yes=1;	
	A tablet, laptop or desktop computer	D1_3	No=0; Yes=1;	
	A router or modem that can be used to connect devices to the Internet by cable or WiFi	D1_4	No=0; Yes=1;	
	A smart watch or smart speaker	D1_5	No=0; Yes=1;	
	A smart TV, or device that connects your TV to the Internet	D1_6	No=0; Yes=1;	

Don't understand the question =-98; Refused=-99

- A mobile (cellular) telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN.
- A smart telephone (or smartphone) refers to a mobile handset with smart capabilities, including Internet-based services, and performs many of the functions of a computer, including having an operating system capable of downloading and running applications, also those created by third-party developers.
- Tablet (or similar handheld computer): a tablet is a computer that is integrated into a flat touch screen, operated by touching the screen rather than (or as well as) using a physical keyboard.
- Computer refers to either
  - » Laptop (portable) computer: a computer that is small enough to carry and usually enables the same tasks as a desktop computer; it includes notebooks and netbooks but does not include tablets and similar handheld computers. It may have a touchscreen.
  - » Desktop: a computer that usually remains fixed in one place, and typically has a separate screen and keyboard.
- A portable modem, (MiFi, mobile hotspot, dongle), connects devices to the Internet via a mobile network.
- A fixed router or modem provides cabled or wireless connection to the Internet in buildings such as homes or offices via a fixed-line cable.
- A smart watch is a wearable device with similar features to a smartphone, including access to the Internet.
- A smart speaker is a voice-controlled device that can access the Internet and may be used to connect and control other smart devices such as smart lightbulbs or robot cleaners.
- A smart TV (digital TV) is a TV with access to the Internet [a specific TV 'box' can be used for the same purpose].

## D1\_comp Frequency using computer

*Approximately how often have you used a tablet, laptop or desktop computer during the last three months? [Read each one in turn and record 1 response; use can be personal or work-related]*

Filter?	Options	Variable label	Values
Ask if D1_3=1	Not at all	D1_comp	0
	Less than once a week		1
	No more than twice a week		2
	Several times a week, but not every day		3
	Once a day		4
	Several times a day		5

Don't know=-97; Refused=-99

## D1\_phone Frequency using smartphone

*Approximately how often have you used a smartphone during the last three months? [Read each one in turn and record 1 response; use can be personal or work-related]*

Filter?	Options	Variable label	Values
Ask if D1_1=1	Not at all	D1_phone	0
	Less than once a week		1
	No more than twice a week		2
	Several times a week, but not every day		3
	Once a day		4
	Several times a day		5

Don't know=-97; Refused=-99

## D2 Digital activities

*Still thinking about technology, please can you tell me if you have personally used a digital device or electronic gadget to do any of the following in the last three months, whether for yourself or someone else?) ...[Read each one in turn and record all responses; can be personal or work-related. If necessary, specify that a digital device could be a computer, tablet, laptop, smartphone or some other tool]*

Filter?	Options	Variable label	Values	Note to interviewer
No	Set up an alarm, reminder or alert	D2_1	No=0; Yes=1	
	Created, edited or saved a document or image	D2_2	No=0; Yes=1	
	Used Bluetooth or Airdrop to send a document or image to a nearby device	D2_3	No=0; Yes=1	
	Used formulas in a spreadsheet to make a calculation	D2_4	No=0; Yes=1	
	Written programming language or code	D2_5	No=0; Yes=1	Any type of programming – e.g. Java, Python, C++

Don't know=-97; Don't understand the question=-98; Refused=-99

### D3\_internet Accessing the Internet

Can I just check, do you ever use the Internet? For example, do you check email or social media, stream radio or videos, look things up, use apps to send messages or make calls, or work remotely?

Filter?	Options	Variable label	Values	Note to agency
No	No	D3_internet	0	See notes below. Add examples if needed
	Yes		1	

Refused=-99

- The Internet is a worldwide public computer network. It provides access to communication services including the World Wide Web and carries e-mail, news, entertainment and data files, irrespective of the device used (not assumed to be only via a computer - it may also be by smartphone, tablet, games console, smart TV etc.).
- Access can be via a fixed or mobile network.

### D3\_limit Limits to personal connectivity

Do any of the following limit your Internet use or prevent you from using it? [Read each one in turn and record response]

Filter?	Options	Variable label	Values	Note to agency/ interviewer
No	The cost of connecting to the Internet or using mobile data services	D3_limit_1	No=0; Yes=1	
	The quality or availability of Internet and mobile data services in your area	D3_limit_2	No=0; Yes=1	
	Concerns about the security of the services available	D3_limit_3	No=0; Yes=1	

Don't understand the question =-98; Refused =-99

### D3\_time Frequency accessing the Internet

Approximately how often have you used the Internet or been online for any reason at all over the last three months. You may have been < checking email or social media, streaming radio or videos, looking things up, using apps or working remotely>? [Read each one in turn and record 1 response]

Filter?	Options	Variable label	Values	Note to agency
Ask if D3_internet=1	Less than once a week	D3_time	1	Provide alternative examples of Internet use if needed
	No more than twice a week		2	
	Several times a week, but not every day		3	
	Once a day		4	
	Several times a day		5	

Don't know=-97; Refused=-99

## D4 Online activities

I am now going to read out some more digital activities. Please could you tell me whether you have personally done any of these in the last 3 months? [Read each one in turn and record all responses]

Filter?	Options	Variable label	Values	Note to agency/ interviewer
Ask if D3_internet=1	Bought something online	D4_1	No=0; Yes=1	Examples can be provided
	Learned something from an online video or course	D4_2	No=0; Yes=1	
	Placed a bet online or played an online game with money prizes	D4_3	No=0; Yes=1	
	Completed or submitted a government form online, such as a tax return, benefit claim or application for national identification documents	D4_4	No=0; Yes=1	
	Searched online for information about money matters	D4_5	No=0; Yes=1	

Don't know=-97; Don't understand the question =-98; Refused=-99

## D5 Digital landscape

Please could you tell me if you agree or disagree with the following statements? [Read each one in turn and record all responses]

Filter?	Statements	Variable label	Values	Note to interviewer
No	I feel like technology is leaving me behind	D5_1	Disagree=0; Agree=1	
	I would trust an automated service, such as an app or robot-advisor to provide financial advice	D5_2	Disagree=0; Agree=1	
Ask if D3_internet=1	I take steps to keep my information safe when online	D5_3	Disagree=0; Agree=1	
	I use the same password across several online accounts or websites	D5_4	Disagree=0; Agree=1	
Ask if D1_1=1 or D1_3=1	My devices (e.g., smartphone, computer) are always locked when not in use	D5_5	Disagree=0; Agree=1	If respondent locks 'some' devices, mark as agree
	I have virus protection on my devices	D5_6	Disagree=0; Agree=1	If respondent has virus protection on 'some' devices, mark as agree
Ask if D1_1=1	I know how to block or deactivate my smartphone if it gets lost or stolen	D5_7	Disagree=0; Agree=1	

Don't know=-97; Don't understand the question=-98; Refused=-99

## Section 3 Financial literacy

*These questions are more focused on money matters, but some also discuss the role of technology*

### F1 Budgeting behaviour

*Do you do any of the following, either alone or with someone else?* [Read each one in turn and record all responses]

Filter	Options	Variable label	Values
No	Make a plan to manage your income and expenses	F1_1	No=0; Yes=1
	Keep receipts, or record your spending	F1_2	No=0; Yes=1
	Buy insurance to protect yourself from financial shocks	F1_3	No=0; Yes=1
Ask if B6=1 or 2	Keep records of your self-employed earnings and expenditure	F1_4	No=0; Yes=1
	Buy insurance to protect your business from financial shocks	F1_5	No=0; Yes=1

Not relevant -96; Refused=-99

### F1\_sav Savings behaviour

*And do you do any of the following, either alone or with someone else?* [Read each one in turn and record all responses]

Filter?	Options	Variable label	Values	Note to agency
No	Put money aside for emergencies	F1_sav_1	No=0; Yes=1	
	Use <loyalty cards> to reduce the cost of your shopping or earn <vouchers/ coupons/cash back>	F1_sav_2	No=0; Yes=1	Use local term
	Contribute to a <savings and loans> club	F1_sav_3	No=0; Yes=1	
	Save or invest for the longer-term	F1_sav_4	No=0; Yes=1	Any kind of savings or investment, it does not have to be through a financial service provider

Not relevant -96; Refused=-99

### F2 Financial circumstances

*Do you agree or disagree with the following statements?* [Read each one in turn and record all responses]

Filter?	Statements	Variable label	Values	Note to interviewer
No	I tend to live for today and let tomorrow take care of itself	F2_1	Disagree=0; Agree=1	
	I am often worried that my money won't last	F2_2	Disagree=0; Agree=1	
	I have some money to spend on myself from time to time	F2_3	Disagree=0; Agree=1	
	I am the kind of person who ignores the small print unless something goes wrong	F2_4	Disagree=0; Agree=1	'small print' refers to the Terms and Conditions (T&C).
	5 years from now I will be financially secure	F2_5	Disagree=0; Agree=1	
	If I have money left over, I prefer to save it than spend it	F2_6	Disagree=0; Agree=1	

Not relevant -96; Refused=-99

### F2\_change Recent changes

*And thinking about the last three months, do you agree or disagree with the following* [Read each one in turn and

record all responses]

Filter?	Options	Variable label	Values
No	I am managing my money better now than I was three months ago	F2_change_1	Disagree=0; Agree=1
	I worry more about scams and fraud than I did three months ago	F2_change_2	Disagree=0; Agree=1
	I borrow more money now than three months ago	F2_change_3	Disagree=0; Agree=1
	I trust financial service providers more than I did three months ago	F2_change_4	Disagree=0; Agree=1

Don't know=-97; Refused=-99

### F3 Financial knowledge

*Could you tell me if you think the following are typically true or false?* [Read each one in turn and record all responses. Each statement can be read twice if required. Do not elaborate or define any words]

Filter?	Statements	Variable label	Values
No	When people talk about inflation, they mean that prices have gone up	F3_1	False=0; True=1
	Banks pay more interest on savings than they charge on loans	F3_2	False=0; True=1
	If someone offers you the chance to make a lot of money it is likely that there is also a chance that you will lose a lot of money	F3_3	False=0; True=1
	If a shopkeeper borrows money to stock her shelves, she cannot make a profit	F3_4	False=0; True=1
	It is possible to earn the same income by selling many items at a low price or selling one item at a high price	F3_5	False=0; True=1

Don't know=-97; Don't understand the question=-98; Refused=-99

### F4\_sent Remittance sent

*The next question is about remittances. Have you, personally, sent money from one country to another in the last three months?*

Filter?	Options	Variable label	Values	Note to interviewer
No	No	F4_sent	0	Includes sending money home whilst working abroad
	Yes		1	

Refused=-99

### F4\_pay Remittance payment

*Did you consider any of the following the last time you sent money from one country to another? You can just say yes or no for each one.*

Filter?	Options	Variable label	Values
Ask if F4_sent=1	The speed of the transfer	F4_pay_1	No=0; Yes=1
	The exchange rate and fees	F4_pay_2	No=0; Yes=1
	The ease of making the transfer	F4_pay_3	No=0; Yes=1

Don't know=-97; Don't understand the question=-98; Refused=-99

### F4\_rec Remittance received

*Have you, personally, received money from abroad in the last three months?*



Filter	Options	Variable label	Values	Note to interviewer
	No	F4_rec	0	
	Yes		1	

Refused=-99

### F4\_exp Remittance experience

*Could you tell me whether you were happy with the following the last time you received money from abroad, please? You can just say yes or no for each one.*

Filter?	Options	Variable label	Values
Ask if F4_rec=1	The speed of the transfer	F4_exp_1	No=0; Yes=1
	The exchange rate and fees	F4_exp_2	No=0; Yes=1
	The ease of collecting the transfer	F4_exp_3	No=0; Yes=1

Don't know=-97; Don't understand the question=-98; Refused=-99

### F5 Current account

*And could you tell me, do you have a <current account>? This could be with a bank or credit union, for example, or with an online provider.*

Filter?	Options	Variable label	Values	Note to interviewer
No	No	F5	0	This question refers to an account with a financial institution. Do not include accounts such as Easy-Pay.
	Yes		1	

Refused=-99

### F5\_card Payment card

*Do you have a <payment card> with this account? That is a card that you can use instead of cash to make payments in person or remotely.*

Filter?	Options	Variable label	Values	Note to interviewer
Ask if F5=1	No	F5_card	0	Do not include a card that can only be used to withdraw cash, such as an ATM card
	Yes		1	

Don't know=-97; Refused=-99

## F5\_beh Current account behaviour

In the last 3 months, have you checked the balance of your <current> account, or made deposits or withdrawals in any of these ways: (mark all that apply).

Filter?	Options	Variable label	Values
Ask if F5=1	In a branch	F5_beh_1	No=0; Yes=1
	At an ATM	F5_beh_2	No=0; Yes=1
	Via an agent (e.g. post office, local shop providing access to your account)	F5_beh_3	No=0; Yes=1
	By SMS	F5_beh_4	No=0; Yes=1
	By phone	F5_beh_5	No=0; Yes=1
Ask if F5=1 and D3_internet=1	With an app	F5_beh_6	No=0; Yes=1
	Online (not using an app)	F5_beh_7	No=0; Yes=1

Refused=-99

## F6\_1 Paying for groceries

Thinking about the last time that you bought groceries, please could you tell me how you paid? [Listen carefully to response and prompt as required. Record one response]:

Filter?	Options	Variable label	Values
No	Cash or <voucher/coupon/meal ticket>	F6_1	1
	<Contactless> card (credit, debt, pre-paid)		2
	Card payment with <chip and pin or swipe and sign> (credit, debit, pre-paid)		3
Include if D3_internet=1	Online card payment (credit, debit, pre-paid, virtual card)		4
No	Payment from a <digital/mobile/electronic> wallet		5
	Store credit/arranged to pay later		6
Include if D1_1=1 or D1_2=1	Payment using <airtime/phone credit> from a mobile phone		7
No	Smartphone tap to pay (e.g. Samsung Pay, Apple Pay) or contactless sticker (e.g. Beep and Go).		8
	QR code payment		9
	Cryptocurrency		10
Include if F5=1	Automatic bill payment from your <bank> account (e.g. Direct Debit, Standing Order)		11
No	Paid in kind or by bartered food or goods		12
Include if D1_1=1 or D1_2=1	SMS payment		13
No	Sent money to a friend's phone or account for them to pay		14
	Something else		14

Not relevant/has never shopped for groceries -96; Refused=-99

## F6\_2 Paying utility bills

And how did you pay your last household utility bill such as water or electricity:

Filter?	Options	Variable label	Values
No	Cash	F6_2	1
	<Contactless> card (credit, debt, pre-paid)		2
	Card payment with <chip and pin or swipe and sign> (credit, debt, pre-paid)		3
Include if D3_internet=1	Online card payment (credit, debit, pre-paid)		4
No	Payment from a <digital/mobile/electronic> wallet		5
	Could not pay/requested a delayed payment		6
Include if D1_1=1 or D1_2=1	Payment using <airtime/phone credit> from a mobile phone		7
No	Smartphone tap-to-pay (e.g. Samsung Pay, Apple Pay) or contactless sticker (e.g. Beep and Go).		8
	QR code payment		9
	Cryptocurrency		10
Include if F5=1	Automatic bill payment from your <bank> account (e.g. Direct Debit, Standing Order)		11
Include if D1_1=1 or D1_2=1	SMS payment		13
No	Sent money to a friend's phone or account for them to pay		14
	Something else		111

Not relevant/has never paid a utility bill -96; Refused=-99

## F6\_3 Paying to eat out

And the last time you bought food or drink to eat in a restaurant or take-away - how did you pay?:

Filter?	Options	Variable label	Values
No	Cash or <voucher/coupon/meal ticket>	F6_3	1
	<Contactless> card (credit, debt, pre-paid)		2
	Card payment with <chip and pin or swipe and sign> (credit, debt, pre-paid)		3
Include if D3_internet=1	Online card payment (credit, debt, pre-paid)		4
No	Payment from a <digital/mobile/electronic> wallet		5
	Store credit/arranged to pay later		6
Include if D1_1=1 or D1_2=1	Payment using <airtime/phone credit> from a mobile phone		7
No	Smartphone tap to pay (e.g. Samsung Pay, Apple Pay) or contactless sticker (e.g. Beep and Go).		8
	QR code payment		9
	Cryptocurrency		10
Include if D1_1=1 or D1_2=1	SMS payment		13
No	Sent money to a friend's phone or account for them to pay		14
	Something else		111

Not relevant/has never bought food or drink to eat in or take away -96; Refused=-99

## Section 4 Digital finance

## DF1 DFS beliefs

This next question is about digital financial services, things like mobile payments, online banking or <digital/mobile/electronic> wallets. Please let me know your opinion, even if you don't use any of those services yourself.

Do you agree or disagree that digital financial services: [Read each one in turn and record all responses]

Filter?	Statements	Variable label	Values	Note to interviewer
No	Keep costs down for small businesses	DF1_1	Disagree=0; Agree=1	Costs here refers to the cost of financial services/banking
	Are risky for ordinary people	DF1_2	Disagree=0; Agree=1	
	Are designed for men more than women	DF1_3	Disagree=0; Agree=1	
	Will soon replace cash in this country	DF1_4	Disagree=0; Agree=1	
	Are all regulated like banks	DF1_5	Disagree=0; Agree=1	
	Make it easier to receive Government payments	DF1_6	Disagree=0; Agree=1	
	Are essential for people sending remittances	DF1_7	Disagree=0; Agree=1	

Don't know=-97; Don't understand the question=-98; Refused=-99

## DF2 Digital financial services

And do you, personally, have any of the following? [Read each one in turn and record all responses]

Filter?	Options	Variable label	Values	Note to agency
Ask unless F5_card=1 Or any F6_1; F6_2; F6_3=2,3,4	A payment card of any sort, including public transport card, cash card or debit card for example.	DF2_1	No=0; Yes=1	Add examples if needed
	A <parametric> insurance policy that makes automatic payments to people affected by cyclones or other climate disasters	DF2_2	No=0; Yes=1	
	Any other kind of insurance policy that you took out online or via an app	DF2_3	No=0; Yes=1	
Ask unless any F6_1; F6_2; F6_3=5	A <digital, mobile or electronic> wallet (e.g. Easy-Pay)	DF2_4	No=0; Yes=1	
Ask unless any F6_1; F6_2; F6_3=10	Any kind of cryptocurrency, such as Bitcoin or Chainlink	DF2_5	No=0; Yes=1	

Don't know=-97; Don't understand the question=-98; Refused=-99

- A **cryptocurrency** is a currency that only exists virtually, and uses innovative technology to provide secure transactions.

## DF3 DFS behaviours

Still thinking about digital financial services and money management, please could you tell me if you do any of the following? [Read each one in turn and record all responses] Do you..

Filter?	Options	Variable label	Values
Ask if F5=1 or any DF2=1	Keep a record of pin numbers or passwords for financial services	DF3_1	No=0; Yes=1
Ask if D3_internet=1	Use a banking app or online money management tool to monitor your spending and saving	DF3_2	No=0; Yes=1
Ask if D4_1=1	Check that a website is secure before entering payment details	DF3_3	No=0; Yes=1
	Buy things using a Buy Now, Pay Later option	DF3_4	No=0; Yes=1

Don't know=-97; not applicable=-98, refused=-99

## DF4 DFS outcomes

And since accessing a financial service online or using your phone to make payments have you: [Read each one in turn and record all responses]

Filter?	Statements	Variable label	Values
Ask if F5_beh_5=1 or F5_beh_6=1 or any F6_1; F6_2; F6_3=4,5,8,9, 10 or any DF2_2 to _5=1	Been locked out of your account for more than a day because you couldn't remember your access details (e.g., username, password, pin number)	DF4_1	No=0; Yes=1
	Lost money because of online scams, phishing attacks or similar	DF4_2	No=0; Yes=1
	Saved money on your financial transactions by reducing fees or other costs	DF4_3	No=0; Yes=1
	Found it easier to manage your money without help from others	DF4_4	No=0; Yes=1
	Found it easier to keep track of what you are spending	DF4_5	No=0; Yes=1

Don't know=-97; refused=-99

## DF4\_safety Email safety

In this next question I am going to describe a common scenario for bank customers. I would like to know your opinion at the end, please.

Sera has just received an email message from her bank. She didn't even know that the bank had her email address! She reads the message carefully. It tells her that her account has been frozen because of suspicious activity. It apologises for the inconvenience and then says she should follow the link in the email as soon as possible to reactivate the account. Sera isn't sure whether to reply to the message, delete it or follow the link.

Which of Sera's three ideas would be safest in this instance? [Read each option again if necessary and record response]

Filter?	Options	Variable label	Values
No	Reply to the email	DF4_safety	1
	Delete the email		2
	Follow the link		3

Don't know=-97; Don't understand the question=-98; Refused=-99

## DF5 Cash-based check

*If I understand correctly, you don't have a bank account or digital financial service that you can use to store money or make payments. Can I check please, does this mean that you only use cash?*

Filter?	Options	Variable label	Values
Ask if F5=0 and F6_1=1 and F6_2=1 and F6_3=1 and DF2_1; DF2_4 and DF2_5=0	No	DF5	0
	Yes, just cash		1
	No money use of any kind, including cash		2

Don't know=-97; refused=-99

## DF5\_other Other payments

*Could you tell me what other payment methods you use besides cash, please?*

Filter?	Options	Variable label	Values	Note to agency/ interviewer
Ask if DF5=0	Open ended (MAX 40 characters)	DF5_other	[TEXT]	Do not provide examples.

Don't know=-97; refused=-99

## DF5\_why Cash-based reason

*Do any of the following statements explain why you, personally, only use cash? Please choose the option that is most relevant to you. [Record or read each one in turn and record primary reason]*

Filter?	Options	Variable label	Values
Ask if DF5=1	You prefer to use cash	DF5_why	1
	You don't have ID or proof of address		2
	Someone else handles non-cash transactions in your household		3
	You don't know how to use other payment methods		4
	You don't trust financial service providers		5
	Another reason		6

Don't know=-97; refused=-99

### A3 Follow-up

*Would you be happy for us to contact you in 3 or 4 years to find out how things have changed?*

Filter?	Options	Variable label	Values
No	No	A3	0
	Yes		1

### A3\_contact Contact details

*Thank you. Please could you let me know the best way to contact you to invite you to take part in the next survey?*

Filter?	Options	Variable label	Values	Note to interviewer
Ask if yes at A3		A3_contact	<open text>	Please ask for a phone number or email address. Read these details back to the respondent

### A4 Timestamp at end

Automatic entry, or interviewer to record date and end-time of survey

Filter?	Options	Variable label	Values
No		A4	Day/Month/Year HH:MM

*This is the end of the survey. Thank you for your participation. Do you have any questions?*

## Appendix 2: Scoring Guide

Section	Subsection	Question	Points awarded
Digitalisation (0-18 points)	Access to Digital Devices (0-5)	QD1_1. Do you have access to any of the following, <u>for personal use</u> , whether or not you currently use them?	Awarded 1 point for every type of device owned: Smartphone/mobile phone Computer/laptop or tablet Router or modem to connect devices to the internet Smart watch or smart speaker Smart TV
	Digital Activities (0-5)	QD2. Still thinking about technology, please can you tell me if you have personally used a digital device or electronic gadget to do any of the following in the last three months, whether for yourself or someone else?	Awarded 1 point for every action taken: Set up an alarm, reminder or alert Created, edited or saved a document or image Used Bluetooth or Airdrop Used formulas in a spreadsheet to make calculations Written programming language or code
	Online Activities (0-3)	QD4. I am now going to read out some more digital activities. Please could you tell me whether you have personally done any of these in the last 3 months?	Awarded 1 point for every action taken: Bought something online by shopping or gaming Sought information or guidance online Completed a government form online
	Digital Safety (0-5)	QD5. Please could you tell me if you agree or disagree with the following statements?	Awarded 1 point for every action taken: I take steps to keep my information safe when online My devices are locked when not in use I have virus protection on my devices I know how to block/disactivate smartphone if lost/stolen I don't use the same password across several accounts
Financial competencies (0-13 points)	Financial safeguards (0-5)	QF1/QF1_sav. Do you do any of the following, either alone or with someone else?	Awarded 1 point for every action taken: Make a plan to manage income and expenses Keep receipts or records of spending Buy insurance as a protection from financial shocks Put money aside for emergencies or contribute to a savings club Save or invest for the longer-term
	Financial attitudes (0-3)	QF2. Do you agree or disagree with the following statements?	Awarded 1 point for every action taken: <u>Disagree</u> with I tend to live for today and let tomorrow take care of itself <u>Disagree</u> with I am the kind of person who ignores the small print unless something goes wrong Agree that if I have money left over, I prefer to save it than spend it
	Financial knowledge (0-5)	QF3. Could you tell me if you think the following are typically true or false?	Awarded 1 point for each of the following: <i>True</i> : when people talk about inflation, they mean that prices have gone up <i>True</i> : if there's a chance to make a lot of money, it is likely that you could also lose a lot of money <i>True</i> : it is possible to earn the same income by selling many items at a low price or selling one at a high price <i>False</i> : banks pay more interest on savings than they charge on loans <i>False</i> : if a shopkeeper borrows money to stock shelves, they cannot make a profit



Section	Subsection	Question	Points awarded
Digital financial competencies (0-9 points)	DFS behaviour (0-3)	DF3. Still thinking about digital financial services and money management, please could you tell me if you do any of the following?	Awarded 1 point for every action taken: <u>Don't</u> keep records of pin numbers/passwords for financial services Use a banking app/online money management tool to monitor spending and saving Check that a website is secure before entering payment details
	DFS attitudes (0-4)	DF1. Please let me know your opinion, even if you don't use any of those services yourself. Do you agree or disagree that digital financial services:	Awarded 1 point for each of the following: Agree that DFS keep costs down for small businesses Agree that DFS make it easier to receive government payments Disagree that DFS are risky for ordinary people Disagree that DFS are designed for men more than women
	DFS knowledge (0-2)	DF1. Do you agree or disagree that digital financial services:  DF4. Which of <Sera's> three ideas would be safest in this instance?	Awarded 1 point for each of the following: Disagree that DFS are all regulated like banks Agree that Sera deleting the email would be the safest option
Desired outcomes (0-12 points)	Financial wellbeing (0-3)	QF2. Do you agree or disagree with the following statements?	Awarded 1 point for each of the following: <u>Not</u> often worried that my money won't last Has some money to spend on myself from time to time Agree that in 5 years I will be financially stable
	Improved outcomes (0-4)	QF2_change. And thinking about the last three months, do you agree or disagree with the following?	Awarded 1 point for each of the following: Managing money better now than three months ago Trust financial service providers more than three months ago <u>Don't</u> worry more about scams and fraud than three months ago <u>Don't</u> borrow more money now than three months ago
	DFS contribution to wellbeing (0-5)	QDF4. And since accessing a financial service online or using your phone to make payments have you:	Awarded 1 point for every action taken: Saved money on financial transactions by reducing fees/ costs Found it easier to manage your money without help from others Found it easier to keep track of spending <u>Haven't</u> been locked out of account for more than a day due to forgetting access details <u>Haven't</u> lost money because of online scams

