

# DIGITAL FINANCIAL SERVICES IN THE PACIFIC

EXPERIENCES AND REGULATORY ISSUES



ASIAN DEVELOPMENT BANK

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# **ABBREVIATIONS**

ADB	Asian Development Bank
AML/CFT	Anti-Money Laundering and Countering Financing of Terrorism
ANZ	Australian and New Zealand Banking Group
BNCTL	Banco Nacional de Comercio de Timor-Leste
BNU	Banco Nacional Ultramarino
BSP	Bank South Pacific
CGAP	Consultative Group to Assist the Poor
CIFR	Centre for International Finance and Regulation
DFS	digital financial services
EFTPOS	electronic funds transfer at point of sale
FATF	Financial Action Task Force
IT	information technology
KYC	know your customer
MNO	mobile network operators
NBS	National Bank of Samoa
NFC	near field communication
PFIP	United Nations Development Programme's Pacific Financial Inclusion Programme
PNG	Papua New Guinea
PSDI	Pacific Private Sector Development Initiative
SMS	short message service
UNSW	University of New South Wales

# **INTRODUCTION**

Digital financial services (DFS) are widely regarded as an effective means to provide opportunities to promote financial inclusion through lowering the costs of providing these services. In addition to having financial inclusion benefits, they can lower transaction costs for businesses. DFS generally refers to the extensive technologies available to deliver financial services from a broad range of providers to a wide range of recipients using digital remote means (including e-money, mobile money, card payments, and electronic funds transfers).<sup>1</sup> In addition to facilitating financial transfers, DFS provides a safe place to store money electronically (known as mobile money or e-money). In addition to basic payment and savings products, DFS allows the user to access a wide range of financial services such as credit and insurance plans.

DFS is particularly beneficial in the Pacific region, which is one of the least banked regions in the world.<sup>2</sup> In many Pacific island countries, difficult terrain and poor infrastructure mean that banks are physically inaccessible for much of the population.<sup>3</sup> DFS provides the means to overcome such obstacles, and can contribute to national economic growth. Digital technology already plays a critical role in the daily lives of many, particularly poor people in developing nations. Poor people experience far fewer barriers to accessing digital technology than formal financial services, so delivering financial services digitally should make these services more accessible. Poor people already use a number of informal mechanisms to manage their finances, so the aim of DFS is not to introduce them to the concept of financial management, but to provide them with a more reliable, affordable, and accessible way of managing their finances.

#### **REGULATORY FRAMEWORK**

While DFS has enormous potential for improving financial inclusion, a number of concerns need to be addressed to ensure that the people in the Pacific region benefit from this promising tool. First, it is important that a sensible system of regulation is developed to ensure that consumers' funds are not misappropriated. Introducing DFS in the region has raised issues with security, fraud prevention, appropriate technology, competition, and consumer protection. An appropriate regulatory framework is needed to address these problems while

<sup>3</sup> Footnote 2.

<sup>&</sup>lt;sup>1</sup> DFS refers to a range of financial services (including credit, savings, loans, insurance, and payments services) accessible via digital remote means (including e-money, mobile money, card payments, and electronic funds transfers). This is in contrast to cash payments or traditional financial services accessed through physical means, such as visiting a bank branch. For more terminology definitions, see Alliance for Financial Inclusion Mobile Financial Services Working Group. 2013. *Mobile Financial Services: Basic Terminology*. Guideline Note No. 1, March 2013. http://www.afiglobal.org/sites/default/files/publications/mfswg\_gl\_1\_basic\_terminology\_finalnewnew\_pdf.pdf

<sup>&</sup>lt;sup>2</sup> It is estimated that in some Pacific island countries, less than 10% of the population have access to basic financial services. United Nations Development Programme's (UNDP) Pacific Financial Inclusion Programme (PFIP). Deepening Access. http://www.pfip.org/about/what-we-do/ deepening-access/

simultaneously ensuring that unnecessary or overly burdensome regulation does not exclude people from the system.

#### INFRASTRUCTURE

DFS requires reliable and widely available telecommunications infrastructure to be effective. It is also important to create a widely distributed agent network so that people are able to deposit and withdraw money from the DFS system when needed.<sup>4</sup>

#### **TECHNOLOGY**

Additionally, financial education and marketing play a crucial role in the adoption of such technology by local communities. While DFS offers a solution to the physical inaccessibility of the financial system, low levels of financial competency and experience can hinder adoption of DFS.<sup>5</sup> Participants at the Pacific Branchless Banking Seminar in November 2013 estimated that only 10% of mobile money accounts in the Pacific were used regularly. Access to technology or owning a bank account is not sufficient to ensure usage, with research showing limited consumer awareness of potential uses.<sup>6</sup> In order to increase the penetration of DFS in the Pacific region, communities need to know how to use the products and be informed about the security features so as to build trust in the system.

This paper seeks to examine how DFS can be used to improve financial inclusion in the Pacific. Following this introduction, the paper has four sections. The first outlines how DFS can be implemented, and examines the current use of DFS in seven Pacific island countries.<sup>7</sup> The second section explores the regulation and supervision of DFS. The third section provides recommendations for the expansion of DFS in the Pacific, and the fourth section concludes.

- <sup>5</sup> PFIP. Deepening Access. http://www.pfip.org/about/what-we-do/deepening-access/
- <sup>6</sup> M. Cohen. 2014. From Insights to Action: Building Client Trust in Branchless Banking. Washington, DC: Microfinance Opportunities.
- <sup>7</sup> The countries examined in this report are Fiji, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, and Vanuatu.

<sup>&</sup>lt;sup>4</sup> M. Flaming, A. Mitha, M. Hanouch, P. Zetterli, and G. Bull. 2013. Partnerships in Mobile Financial Services: Factors for Success. Washington, DC: International Finance Corporation. http://www.ifc.org/wps/wcm/connect/88486280414940acb54ab79e78015671/Partnerships+in+Mobile+Financial+Services.pdf?MOD=AJPERES

## IMPLEMENTING DIGITAL FINANCIAL SERVICES IN THE PACIFIC

Digital Financial Services (DFS) can be implemented in several ways. In the Pacific, the most widely used method is bank-led branchless banking. This typically involves banks taking responsibility for the storage of funds, marketing, branding, and managing customer relations, as well as compliance and engagement with financial regulators.<sup>8</sup> Under this model, banks leverage telecommunications services and agents to enlarge their customer base and increase their market share. A model like this not only provides the benefit of advancing nationwide financial inclusion, but also reduces transaction costs for businesses and their suppliers in rural and remote areas. Bankled branchless banking in the Pacific was pioneered by Nationwide Microbank (now trading as MiBank) in Papua New Guinea (PNG).9 MiBank's MiCash mobile wallet and bank account product use the Digicel mobile phone network to bring banking services to rural and remote communities.<sup>10</sup> Four out of five MiCash clients in PNG were

previously unbanked.<sup>11</sup> Other examples in the Pacific include the Australian and New Zealand Banking Group's (ANZ) goMoney,<sup>12</sup> Bank South Pacific's (BSP) mobile-enabled accounts, and Westpac's Instore service.

DFS can also be led by mobile network operators (MNOs). Under this model, the MNO acts as the business owner, contracting with one or more banks to provide services such as float holding and regulatory engagement and compliance.<sup>13</sup> Unlike in the bank-led model, the MNO does not provide financial services as a way of acquiring new customers.<sup>14</sup> Instead, the services are seen as a new, distinct income-earning product that can be crosssold to existing mobile network customers. MNOs are able to use their existing agent networks as cash-in/cash-out points for mobile money services. Examples of the MNO-led DFS model in the Pacific include Vodafone's M-PAiSA and Digicel's Mobile Money.<sup>15</sup>

A. Banthia. 2013. Mobile banking: an answer to the unfriendly geography for women's financial inclusion in the Pacific. Women's World Banking Blog.
5 August. http://www.womensworldbanking.org/news/blog/mobile-banking-answer-geography-womens-financial-inclusion-pacific/

<sup>11</sup> Footnote 10.

- <sup>13</sup> N. Davidson. 2012. Mapping and Effectively Structuring Operator-Bank Relationships to Offer Mobile Money for the Unbanked. London: GSMA.
- <sup>14</sup> However, MNOs' mobile phone businesses can benefit from providing DFS, as it can increase airtime distribution savings and reduce churn rates. See P. Leishman. 2010. How Significant are Airtime Distribution Savings to Profitability? GSMA Mobile Money Blog. 6 October. http://www.gsma. com/mobilefordevelopment/how-significant-are-airtime-distribution-savings-to-profitability
- <sup>15</sup> In some implementations, Digicel's mobile wallet has been linked to a bank account. In Vanuatu, Digicel's IsiMani wallet can be linked to a National Bank of Vanuatu bank account using a mobile phone to move funds between the wallet and bank account.

<sup>&</sup>lt;sup>8</sup> Alliance for Financial Inclusion Mobile Financial Services Working Group. 2013. *Mobile Financial Services: Basic Terminology*. Guideline Note No. 1, March 2013. http://www.afi-global.org/sites/default/files/publications/mfswg\_gl\_1\_basic\_terminology\_finalnewnew\_pdf.pdf

<sup>&</sup>lt;sup>9</sup> MiBank is a "microbank" in PNG. In 2008, Bank of Papua New Guinea issued MiBank a "full banking [license] to operate as a microbank under the Banks and Finance Companies Act 2000." L. Bakani. 2014. Speech on the Opening of the Nationwide Micro Bank Limited (NMB) New Branch at Waigani Central and 10 Years Anniversary Celebration. 9 December. http://www.bankpng.gov.pg/wp-content/uploads/2014/12/20141209\_ Speech\_-\_Opening\_of\_NBM\_Branch\_Waigani\_Central.pdf

<sup>&</sup>lt;sup>12</sup> ANZ launched goMoney Pacific in 2013 and by July 2014, customers using the product in PNG, Samoa, Solomon Islands, and Vanuatu had made over 1.4 million transactions. See Solomon Star. 2014. ANZ wins global award for Pacific mobile app. 17 July. http://www.solomonstarnews.com/ news/business/2935-anz-wins-global-award-for-pacific-mobile-app

Regardless of the model used, DFS is predominantly delivered through partnerships. Neither banks nor MNOs alone tend to be competent in all areas required for the successful implementation of DFS. Partnerships allow parties to contribute their needed expertise in banking, technology, telecommunications, marketing, and payments distribution. There are four core elements to the DFS business model: banking, telecommunications, the payment service business, and the agent network.<sup>16</sup> All four elements need to generate revenue in order to sustain a successful partnership.<sup>17</sup>

The various partnerships and models that have been used to implement DFS in seven Pacific island countries are examined below.

#### FIJ

Fiji was the first Pacific country to implement DFS. In 2009, the Reserve Bank of Fiji issued a decree requiring all commercial banks to establish microfinance portfolios from January 2010.<sup>18</sup> In response, commercial banks in Fiji established bank products that had less complex account opening procedures, reduced account-keeping fees, and reduced minimum account balances. These simplified accounts gave banks valuable insight into account usage and the viability of DFS in the Pacific. Many of the products have since developed into DFS products that use agents, mobile telephony, and point of sale (POS) technology.

In July 2010, Digicel launched Digicel Mobile Money in Fiji.<sup>19</sup> The mobile phone company partnered with Fiji Post and Westpac to create electronic wallets, offering its customers the ability to transfer funds, pay bills, and deposit or withdraw cash using their mobile phones.<sup>20</sup> Early implementation focused on domestic remittance services and followed a mass registration approach. Within 2 hours of the launch, 2,000 customers had registered for the service, showing a strong demand for DFS in Fiji.<sup>21</sup> Approximately 360,000 people subscribed to the service during its first year of operation, of which 42,000 were previously unbanked clients.<sup>22</sup>

Since launching the product, Digicel has worked with other organizations to expand its services. In early 2011, Digicel Fiji formed a partnership with the Fiji Electrical Authority, enabling customers to pay their electricity bills using their mobile phones.<sup>23</sup> In October 2011, Digicel partnered with the New Zealand online currency exchange platform KlickEx Pacific to launch its mobile money remittance

- <sup>19</sup> Digicel's mobile money service was introduced with support from the Reserve Bank of Fiji, PFIP, the GSM Association (GSMA), and AusAID.
- <sup>20</sup> Digicel Asia Pacific. 2010. Digicel Fiji Launches Ground Breaking Mobile Money Service in Partnership with Fiji Post. 15 July. http://www.digicelpacific. com/en/media-center/press-releases/achievements/digicel-fiji-launches-ground-breaking-mobile-money-service-in-partnership-with-fiji-post
- <sup>21</sup> T. Vula. 2010. Digicel launches mobile money service. *Fiji Times*. 16 July. http://www.pfip.org/media-centre/in-news/2010-1/digicel-launchesmobile-money-service.html
- <sup>22</sup> AusAID. 2011. Fiji Development Cooperation Report 2010. Canberra. p. 6.

<sup>23</sup> PFIP. 2011. Digicel Mobile Money enables customers to pay their electricity bills anytime, 24/7. 20 May. http://www.pfip.org/media-centre/innews/2011-1/digicel-mobile-money-enables-customers-to-pay-their-electricity-bills-anytime24-7.html

<sup>&</sup>lt;sup>16</sup> Footnote 4.

<sup>&</sup>lt;sup>17</sup> Footnote 4.

<sup>&</sup>lt;sup>18</sup> Reserve Bank of Fiji. 2010. 2009 Annual Report. Suva. http://www.rbf.gov.fj/docs/Reserve%20Bank%20of%20Fiji%20Annual%20Report%20 (resized).pdf

service.<sup>24</sup> KlickEx Pacific runs a foreign currency exchange that allows users to bid on the rate at which they wish to exchange currency, based on the speed of transfer.<sup>25</sup> There are no minimum transfer amounts or transfer fees.<sup>26</sup> The partnership between Digicel and KlickEx Pacific created the first mobile remittance service, allowing customers to transfer money almost instantaneously from a New Zealand bank account to a Digicel mobile phone in Fiji. The money is stored on the phone until it is used, protected by a confidential access code.<sup>27</sup> Recipients can use the remittance to pay a bill or make a purchase using their phones, or withdraw money through one of the 150 Digicel Mobile Money agencies operating in Fiji.<sup>28</sup>

In October 2013, Digicel transferred its remittance services to KlickEx Pacific.<sup>29</sup> Remitters in Australia, New Zealand, the United Kingdom, and the United States can send money directly to the Digicel mobile phone of family members in Fiji using the KlickEx Pacific website.<sup>30</sup>

Vodafone's mobile money service, M-PAiSA, was also introduced in 2010.<sup>31</sup> It operates similarly to Digicel's Mobile Money, and has also been widely

used in many ways. In addition to being used for making payments for electricity, water, and telecom bills, M-PAiSA can also be used to make loan repayments to a variety of institutions including the Housing Authority, Fiji Development Bank, and Home Finance Company Bank.<sup>32</sup> Government payments, such as child maintenance support, court fines, and salaries for civil servants, can also be carried out through M-PAiSA.<sup>33</sup> In December 2014, Vodafone's M-PAiSA announced a partnership with the Australian SMS mobile money service mHITs to launch an international mobile remittance corridor between Australia and Fiji.<sup>34</sup> The service provides instantaneous mobile-to-mobile money transfers between Australia and Fiji for the first time.35

#### **PAPUA NEW GUINEA**

People in Papua New Guinea (PNG) are among the most isolated and least banked in the world. However, the introduction of mobile competition in 2007 paved the way for mobile banking in PNG. Increased competition among telecommunication operators resulted in a sharp decrease in cost for

<sup>24</sup> A. Walls. 2011. KlickEx, Digicel Pacific offer web-to-mobile wallet money transfers. NBR. 7 October. http://www.nbr.co.nz/article/klickex-digicelpacific-offer-web-mobile-wallet-money-transfers-aw-102056

- <sup>25</sup> Footnote 24.
- <sup>26</sup> Footnote 24.
- <sup>27</sup> KlickEx Pacific. How it works for receivers. http://www.klickexpacific.com/help/forthem.aspx
- <sup>28</sup> Footnote 27.

<sup>29</sup> Digicel Asia Pacific. 2013. Digicel Money Transfer services handover to KlickEx Pacific. 7 October. http://www.digicelpacific.com/en/moneytransfer

- <sup>30</sup> Footnote 29.
- <sup>31</sup> It is claimed that M-PAiSA is, in fact, Fiji's first mobile phone-based money transfer service. See Vodafone. *M-PAiSA Celebrates First Birthday*. https://www.vodafone.com.fj/PersonalMaster/Product-Services/M-PAiSA\_Vodafone\_Money-Transfer/\_M-PAiSA-Celebrates-First-Birthday
- <sup>32</sup> PFIP. 2012. *M-PAiSA Now a Salary Option for Civil Servants*. 19 October. http://www.pfip.org/media-centre/in-news/2012-1/m-paisa-now-salary-option-for-civil-servants.html
- <sup>33</sup> See Reserve Bank of Fiji. Public Awareness Article. http://www.rbf.gov.fj/docs2/Mobile%20Money.pdf; See also Footnote 32.
- <sup>34</sup> Send Money Pacific. 2014. New mobile remittance corridor between mHITs Remit Australia and Vodafone M-PAiSA Fiji. 5 December. http://www. sendmoneypacific.org/news/fiji/article/628/new-mobile-remittance-corridor-between-mhits-remit-australia-and-vodafone-m-paisa-fiji.html

<sup>&</sup>lt;sup>35</sup> Footnote 34.

users, with the price of calls dropping by 60%.<sup>36</sup> It also helped more than two million people acquire mobile phones for the first time. DFS now offers huge potential for financial inclusion in PNG.

PNG was an early adopter of DFS and the country has a number of providers offering mobile banking services. In 2011, MiBank partnered with Digicel to launch the first bank-led mobile wallet in the Pacific, MiCash, which is essentially a bank account operated using a mobile phone. It differs from other MNO-led products mainly in its ability to provide the users with bank account-equivalent security and services.<sup>37</sup> Seventy-five percent of MiCash accounts were opened in rural areas and 75% of the accounts were opened for new MiBank customers.<sup>38</sup> According to MiBank's Managing Director, MiCash processes more than 80,000 transactions a month and the amount is in excess of K14 million (\$4.7 million).<sup>39</sup>

In 2009, BSP introduced SMS banking to PNG.<sup>40</sup> By the year's end, over 50,000 mobile phones were registered for the service. BSP now offers a fullrange mobile banking service that allows customers to check their account balances, view mini bank statements, receive salary alerts, transfer funds (to BSP or other bank accounts), and purchase mobile phone credit for their Digicel accounts.<sup>41</sup> As a major effort to promote branchless banking channels in PNG, BSP established a network of agents in 2011 that relies on tablets and electronic funds transfer at point of sale (EFTPOS) terminals to facilitate account opening and debit card issuance.<sup>42</sup> This tablet-based model of branchless banking was very successful, and BSP later introduced it in Solomon Islands.<sup>43</sup>

Westpac also operates a mobile banking system in PNG. The service currently uses the Our Telekom network, with plans to expand to the BeMobile network in the future.<sup>44</sup> In addition to its mobile banking product, Westpac offers its in-store banking service in eight locations around PNG, allowing customers to conduct basic banking services such as deposits, withdrawals, and cash transfers using EFTPOS machines in participating stores.<sup>45</sup> Customers registered with Westpac Bill Pay can also pay bills, print a ministatement, or make a balance inquiry. In addition to these initiatives, Westpac also partners with the Australian government to improve access in finance in the Pacific, with a specific focus on Fiji and PNG.<sup>46</sup>

<sup>36</sup> World Bank. 2012. Papua New Guinea: Connecting People in One of the Most Isolated Places on Earth. 11 September. http://www.worldbank.org/en/ news/feature/2012/09/11/papua-new-guinea-connecting-people-in-one-of-the-most-isolated-places-on-earth

<sup>37</sup> For instance, there can be no ceiling on the wallet balance. PFIP. 2011. MiCash. 30 September. http://www.pfip.org/media-centre/in-news/2011-1/ micash.html

<sup>38</sup> Oceanic. 2012. Nationwide Microbank recognised for innovation. http://www.oclgroup.co.nz/about-us/our-news-and-events/nationwide-microbank-recognised-for-innovation/

- <sup>39</sup> PFIP. 2014. MiCash wins grassroots. 30 January. http://www.pfip.org/media-centre/in-news/2014-1/micash-wins-grassroots.html
- <sup>40</sup> Bank South Pacific. 2014. Bank Where you are, Where you want with BSP Mobile Banking. http://www.bsp.com.pg/About-Us/Promotions/2014/ Mobile-Banking/Bank-Where-you-are,-Where-you-want-with-BSP-Mobile-Banking.aspx
- <sup>41</sup> Footnote 40.
- <sup>42</sup> Bank South Pacific. BSP Agent Network. http://www.bsp.com.pg/Personal/BSP-Agent-network/
- <sup>43</sup> BSP. 2013. 2013 BSP Annual Report. http://www.bsp.com.pg/Investor-Relations/Investor-Resources--Stock-Information/annual-report/BSPeAnnual-Report\_2013.pdf. p. 37.
- 44 Westpac Papua New Guinea. Mobile Banking. http://www.westpac.com.pg/pacific/personal-services/personal-services/mobile-banking-lp/
- <sup>45</sup> Westpac Papua New Guinea. In-store Banking. http://www.westpac.com.pg/pacific/instore-banking-lp/
- <sup>46</sup> Westpac. 2014. Westpac and DFAT partner to improve access to finance in the Pacific. 8 September. http://www.westpac.com.au/about-westpac/ media/media-releases/2014/8-september

Other mobile banking services that operate in PNG are ANZ's goMoney, launched in mid-2013,<sup>47</sup> and Digicel's Cellmoni, launched in 2011 after MiBank's MiCash service.48 Both goMoney and Cellmoni allow customers to make deposits and withdrawals, transfer funds, pay bills, and check account balances from their mobile phones. Post PNG's Mobile Salim Moni Kwik was one of the area's pioneers in mobile banking, but the service was suspended in March 2015 as it was struggling to compete with banks and required technological improvements.<sup>49</sup> New providers continue to enter the PNG market. For instance, in April 2015, the People's Micro Bank announced the launch of its new mobile banking system, which will enable customers to transfer cash and get balance statements using their mobile phones.<sup>50</sup>

#### SAMOA

In 2006, ANZ launched two mobile banking trailers in an effort to service the banking needs of people who were unable to reach the bank's main branches. The trailers travelled 6 days a week, primarily visiting remote villages, as well as two tuna canneries where more than 5,000 employees cashed cheques weekly.<sup>51</sup> Available for individual customers only, the trailers handled deposits, cheque cashing, wire transfers, foreign currency exchanges, and loan repayments. In 2012, ANZ discontinued the mobile banking branches following a study of its customers' branch use, and their product and service needs.<sup>52</sup> However, ANZ launched its goMoney mobile phone banking service in Samoa the following year.<sup>53</sup> This product won the global award for Best Digital Channels Strategy in the 2014 Retail Banker International Awards.<sup>54</sup>

In 2009, the National Bank of Samoa (NBS) launched the first mobile phone banking service in Samoa, a product called 627.<sup>55</sup> The 627 product allowed customers to use a mobile phone company of their choice to access the current balance and latest transactions of their NBS account.<sup>56</sup>

The success of the 627 product drove NBS to develop Ezibank, the first mobile phone payments system in Samoa.<sup>57</sup> Ezibank's first product, CASH-POWER TOP-UP, was launched in 2012 as a joint project between NBS and the Electric Power Corporation of Samoa.<sup>58</sup> The product allows

- <sup>53</sup> Samoa Observer. 2013. ANZ goMoney goes mobile in Samoa and PNG.
- <sup>54</sup> Samoa Observer. 2014. ANZ wins global award. 17 July.
- <sup>55</sup> Prime Minister of Samoa. 2012. Statement Made at the Official Launch of the National Bank of Samoa NBS Ezibank Mobile Banking Service. 30 March. http://www.nbs.ws/EZIBANK/images/Speech%20by%20the%20Hon%20PM.pdf
- <sup>56</sup> Footnote 55.
- <sup>57</sup> Footnote 55.
- 58 Footnote 55.

<sup>&</sup>lt;sup>47</sup> Samoa Observer. 2013. ANZ goMoney goes mobile in Samoa and PNG. 26 June.

<sup>&</sup>lt;sup>48</sup> Ottawa Business Journal. 2011. Telepin to power Papua New Guinea financial services. 28 October. http://www.obj.ca/Technology/2011-10-28/ article-2790729/Telepin-to-power-Papua-New-Guinea-financial-services/1. For more information about the product see Digicel Papua New Guinea. Digicel Cellmoni. http://www.digicelpng.com/en/services/digicel-cellmoni

<sup>&</sup>lt;sup>49</sup> The National. 2015. Firm suspends service. 24 March. http://www.thenational.com.pg/?q=node/84864

<sup>&</sup>lt;sup>50</sup> PNG Today. 2015. PNG Micro Bank Launches Mobile Banking. 16 April. http://news.pngfacts.com/2015/04/png-micro-bank-launches-mobilebanking.html

<sup>&</sup>lt;sup>51</sup> ANZ. Mobile Banking. http://www.anz.com/americansamoa/en/personal/ways-bank/mobile-banking/. It is noted that the use of vehicles to implement mobile banking does not only exist in Samoa. ANZ, for example, used to deliver banking services in Solomon Islands with a truck and a four-wheel drive vehicle. The service has been suspended, unfortunately, due to high costs. See M. McCaffrey. 2010. In Search of Sustainability: The Provision of Rural Financial Services in Solomon Islands. Suva: PFIP. http://www.uncdf.org/sites/default/files/Documents/sustainability\_1.pdf

<sup>&</sup>lt;sup>52</sup> Samoa News. 2012. ANZ to discontinue mobile banking branch. 7 August. http://www.samoanews.com/node/6642

customers to purchase prepaid electricity using their mobile phones, reducing the risks associated with cash payments, and eliminating the time and financial costs that many people in rural communities previously incurred by travelling to cash power outlets to pay for power.<sup>59</sup> In November 2012, NBS partnered with Digicel Samoa to launch the second Ezibank product, Ezibank Prepaid Mobile Top Up.<sup>60</sup> This product allows customers to use their NBS account to top up their Digicel mobile wallet.<sup>61</sup>

The Digicel mobile wallet is part of the Digicel Mobile Money service, which was introduced to Samoa in March 2011 after successful launches of the product in Fiji and Tonga. There are at least 35 Digicel Mobile Money agencies currently operating in Samoa from which Digicel customers can withdraw cash from their mobile accounts.<sup>62</sup> As in Fiji, Digicel customers in Samoa can also receive remittances on their mobile phones through KlickEx Pacific.<sup>63</sup>

## SOLOMON ISLANDS

DFS was introduced to Solomon Islands, relatively late compared to other Pacific island countries. Until 2012, banking services were mainly restricted to the capital city, Honiara, and the three commercial banks (ANZ, BSP, and Westpac) together had only 13 branches in the country.<sup>64</sup> More than 80% of Solomon Islanders were unbanked.<sup>65</sup>

In August 2012, Westpac introduced an instore banking service allowing customers to conduct basic banking services such as deposits, withdrawals, and cash transfers using EFTPOS machines in participating stores.<sup>66</sup> The service also allowed customers registered with Westpac Bill Pay to pay bills, print a ministatement, or make a balance inquiry.<sup>67</sup> The introduction of these services resulted in a sharp increase in Westpac's customer base in Solomon Islands, doubling from 9,000 to 18,000 in only 16 months, to November 2013.<sup>68</sup>

<sup>62</sup> Footnote 27.

<sup>66</sup> PFIP. 2013. Westpac opens over 50 in-store banking outlets. 28 March. http://www.pfip.org/media-centre/in-news/2013-1/westpac-opens-over-50in-store-banking-outlets.html and Solomon Star. 2014. Westpac launches 19th in-store bank. 21 August. http://www.solomonstarnews.com/news/ business/3585-westpac-launches-19th-in-store-bank

<sup>&</sup>lt;sup>59</sup> Footnote 55.

<sup>&</sup>lt;sup>60</sup> Samoa Observer. 2012. Now you can top up with National Bank ezibank. 12 November and Association of Development Financing Institutions in Asia and the Pacific. 2013. NBS launches prepaid mobile phone service. 14 March. http://www.adfiap.org/news/members-news/nbs-launches-prepaidmobile-phone-service/

<sup>&</sup>lt;sup>61</sup> Footnote 60.

<sup>&</sup>lt;sup>63</sup> Digicel Asia Pacific. Digicel Money Transfer services handover to KlickEx Pacific.

<sup>&</sup>lt;sup>64</sup> J. Hallberg. 2013. Branchless Banking in the Solomon Islands. Ericsson M-Commerce: The Call for Change Blog, 19 November. http://www.ericsson. com/m-commerce/blog/branchless-banking-solomon-islands

<sup>&</sup>lt;sup>65</sup> Footnote 64.

<sup>&</sup>lt;sup>67</sup> Footnote 66.

<sup>&</sup>lt;sup>68</sup> Hallberg. Branchless Banking in the Solomon Islands. It is noted that, despite its earlier success in Solomon Islands, Westpac has completed the sale of its banking operations in Solomon Islands to BSP in October 2015, after completing the sale of its Samoa, Cook Islands, and Tonga operations in July 2015. The announced sale of operations in Vanuatu is pending regulatory approvals. This strategic move may profoundly impact the DFS landscape in the Pacific region. See Westpac. 2015. Westpac to sell its operations in five Pacific Island Nations. 29 January. https://www.westpac. com.au/docs/pdf/aw/ic/Pacific\_Media\_Release\_FINAL\_28012015.pdf; Bank South Pacific. 2015. Bank South Pacific (BSP) completes sale of Westpac Operations in 3 Pacific Island Nations. 14 July. http://www.bsp.com.ws/Media-Centre/News--Announcements/2015/Bank-South-Pacific-%28BSP%29-completes-sale-of-Westpac-Operations-in-3-Pacific-Island-Nations.aspx; Westpac. Westpac's operations in the Solomon Islands are now owned and operated by Bank of South Pacific Limited. http://www.westpac.com.au/about-westpac/global-locations/westpac-in-the-pacific/ solomon-islands/

Mobile banking was introduced to Solomon Islands in September 2013 with the launch of ANZ goMoney.<sup>69</sup> The product allows customers to access a wide range of money services through their mobile phones.<sup>70</sup> Up to February 2015, the service had attracted 24,500 customers, 15,500 of whom had never previously held a bank account.<sup>71</sup>

In August 2014, the Australian government signed an agreement with ANZ to expand mobile banking and financial literacy programs in Solomon Islands.<sup>72</sup> Under the agreement, the Australian government will provide additional funding to support ANZ to improve access to mobile banking in remote areas. The aim of the partnership is to provide banking services to an additional 65,000 people within 3 years, with a particular emphasis on women in rural communities.<sup>73</sup>

As previously mentioned, in 2013, BSP introduced its tablet-based model of branchless banking to Solomon Islands.<sup>74</sup> The service allowed customers to open a basic savings account through an agent, who would enter all relevant information into a tablet, take the customer's photograph, and obtain his or her signature on the tablet.<sup>75</sup> The system automatically generates the date of the account opening, and the customer would then be issued an EFTPOS card immediately.<sup>76</sup>

BSP now offers customers mobile banking services similar to the ANZ goMoney product. Since September 2014, the product has allowed Solomon Telekom users to top up their Solomon Islands Electricity Authority cash power credit using their mobile phones.<sup>77</sup> The service is still developing, and BSP recently announced that it plans to engage with the other mobile network operator in the country, Bemobile, to deliver its mobile banking services.<sup>78</sup>

BSP also offers a product called KunduCard, a debit card that enables customers to access their BSP accounts from any ATM or EFTPOS machine in Solomon Islands. The service can be used to check account balances, transfer or withdraw funds, request a ministatement, or pay for goods and services.<sup>79</sup>

#### **TIMOR-LESTE**

DFS is a relatively recent concept in Timor-Leste. In December 2014, Banco Nacional Ultramarino (BNU) partnered with Timor Telecom to launch

<sup>69</sup> Solomon Star. 2014. ANZ-Australian Govt team up in mobile banking. 6 August. http://www.solomonstarnews.com/news/business/3328-anzaustralian-govt-team-up-in-mobile-banking

<sup>70</sup> ANZ. ANZ goMoney Pacific Frequently Asked Questions. http://www.anz.com/promo/gomoney-pacific/faqs.asp

- <sup>72</sup> Australian High Commission Solomon Islands. 2014. ANZ partners with Australian Government to expand mobile banking in Solomon Islands. http:// www.solomonislands.embassy.gov.au/honi/040814.html
- <sup>73</sup> Footnote 72.
- <sup>74</sup> Hallberg. Branchless Banking in the Solomon Islands.
- <sup>75</sup> Footnote 74.
- <sup>76</sup> Footnote 74.
- <sup>77</sup> BSP. 2014. BSP Mobile Banking now has Cashpower TopUp. 8 September. http://www.bsp.com.sb/Media-Centre/News--Announcements/2014/BSP-Mobile-Banking-now-has-Cashpower-TopUp.aspx
- <sup>78</sup> B. Theonomi. 2015. BSP plans to use both networks. Solomon Star. 14 February. http://www.solomonstarnews.com/news/national/6007-bsp-plansto-use-both-networks
- 79 BSP. KunduCard. http://www.bsp.com.pg/Personal/Retail-Banking/Cards/Kundu-Card/KunduCard.aspx

<sup>&</sup>lt;sup>71</sup> Solomon Star. 2015. ANZ launches mobile banking financial literacy training. 4 February. http://www.solomonstarnews.com/news/business/5845anz-launches-mobile-banking-financial-literacy-training

a pilot of BNU Mobile, the country's first mobile wallet product. BNU Mobile does not require users to have a bank account if they are only receiving funds. This offers huge potential for promoting financial inclusion in Timor-Leste, where nearly 60% of the population do not have a bank account.<sup>80</sup>

The BNU Mobile product allows customers with a BNU bank account to withdraw cash, transfer money, top up their mobile accounts, make payments, and buy goods through a mobile wallet linked to their bank accounts.<sup>81</sup> Customers can also send money to anyone with a Timor Telecom phone number, regardless of whether the recipient has a bank account or not.<sup>82</sup> Timor Telecom customers who do not have a BNU bank account can use the service to receive money from a BNU customer, which can then be cashed out at a designated mobile money agent.<sup>83</sup> Non-BNU customers can also use the service to make person-to-person fund transfers.<sup>84</sup>

The other three banks operating in Timor-Leste—ANZ, Bank Mandiri, and Banco National de Commercio de Timor-Leste (BNCTL)—are all also considering various types of DFS for their customers.

## TONGA

In January 2011, Tonga became the second Pacific country to launch the Digicel Mobile Money service.<sup>85</sup> By March 2011, the service had 15,000–16,000 active users, out of a population of just 105,000.<sup>86</sup> The rapid take-up of the product is likely reflective of the lower telecommunication costs in Tonga.<sup>87</sup> As with the services in Fiji and Samoa, Digicel customers can use their phones to pay bills or make purchases, or withdraw money through one of 50 Digicel Mobile Money agents operating in Tonga.<sup>88</sup>

In May 2012, Digicel partnered with VeriFone to launch Beep and Go in Tonga. Beep and Go is the world's first fully inclusive mobile payments system that does not require the use of a bank account, credit card, or smart phone.<sup>89</sup> The service links near field communication (NFC) POS terminals to mobile money wallets, allowing users to complete transactions by tapping their mobile phone on an

- <sup>82</sup> Footnote 80.
- <sup>83</sup> Footnote 80.
- <sup>84</sup> Footnote 80.
- <sup>85</sup> PFIP. 2011. Digicel Continues Pacific Rollout of Mobile Money Service with Tonga Launch. 13 January. http://pfip.org/media-centre/in-news/2011-1/ digicel-continues-pacific-rollout-of-mobile-money-service-with-tonga-launch.html
- <sup>86</sup> ADB. 2013. Tonga: Economic Update and Outlook 2012. Manila and Digicel Asia Pacific. 2012. Digicel Wins Best Near Field Communication (NFC) Deployment at the Connected World Forum. 29 November. http://www.digicelpacific.com/en/media-center/press-releases/achievements/digicelwins-best-near-field-communication-nfc-deployment-at-the-connected-world-forum
- <sup>87</sup> Footnote 86.
- <sup>88</sup> Footnote 27.
- <sup>89</sup> PR Newswire. 2012. Digicel Launches World's First Fully Inclusive NFC Capable Mobile Wallet Payments Service with VeriFone. 14 May. http://www.prnewswire.co.uk/news-releases/digicel-launches-worlds-first-fully-inclusive-nfc-capable-mobile-wallet-payments-servicewith-verifone-151334635.html; S. Clark. 2012. Tonga gets commercial NFC payments service. NFC World. 14 May. http://www.nfcworld. com/2012/05/14/315674/tonga-gets-commercial-nfc-payments-service/

<sup>&</sup>lt;sup>80</sup> R. Summerlin. 2014. *Timor Leste's First Mobile Money Pilot Launched to Expand Access to Financial Services*. 4 December. http://www.uncdf.org/en/content/timor-leste's-first-mobile-money-pilot-launched-expand-access-financial-services

<sup>&</sup>lt;sup>81</sup> Footnote 80.

NFC-enabled POS terminal and entering a secure PIN.<sup>90</sup> Very few people in Tonga have smart phones, but unlike NFC technology in advanced economies, Beep and Go customers do not need smart phones to use the product. Beep and Go uses contactless stickers that can be placed inside any mobile phone device.<sup>91</sup> The money is transferred directly from the customer's mobile phone credit without the need for an intermediary, such as a bank.<sup>92</sup>

Since October 2011, Digicel customers in Tonga have been able to receive mobile remittances through Digicel's partnership with KlickEx Pacific.<sup>93</sup> The Beep and Go service means that Digicel customers in Tonga can receive remittances on their mobile phones and use the funds straight away to purchase goods and services. Tonga Development Bank is one of Digicel's mobile money agents providing deposit and withdrawal services.

#### VANUATU

The availability of DFS is not as widespread in Vanuatu as in other Pacific island countries. The main provider of DFS in Vanuatu is Digicel, which introduced its isi Mani e-wallet product in 2011. Digicel isi Mani is linked to all National Bank of Vanuatu accounts and allows customers to use their Digicel mobile to move money between their bank and mobile phone accounts.<sup>94</sup>

Mobile banking is now also offered by ANZ, which made Vanuatu the fourth Pacific country to receive its goMoney mobile banking service in April 2014.<sup>95</sup>

90 Footnote 89.

- <sup>92</sup> Pacific Periscope. 2012. Beep & Go in Tonga. 1 June. http://www.pacifictradeinvest.com/wp/?p=3256
- <sup>93</sup> Walls. KlickEx, Digicel Pacific offer web-to-mobile wallet money transfers.

<sup>&</sup>lt;sup>91</sup> Footnote 89.

<sup>&</sup>lt;sup>94</sup> PFIP. Support to Digicel Mobile Money, Fiji, Samoa, Tonga and Vanuatu. http://www.pfip.org/about/where-we-work-1/fiji/support-to-flexpacificmobile-money-fiji-samoa-vanuatu.html

<sup>&</sup>lt;sup>95</sup> Solomon Star. 2014. ANZ launches ANZ goMoney in Vanuatu. 16 April. http://solomonstarnews.com/news/business/580-anz-launches-anzgomoney-in-vanuatu

## FINANCIAL REGULATION OF DIGITAL FINANCIAL SERVICES

Promoting financial inclusion is now a key policy objective of the central banks of seven Pacific economies.<sup>96</sup> This objective has led the central banks of these Pacific island nations to shift focus from implementing compliance-based regulatory frameworks to developing a broadly enabling environment that supports the use of DFS for financial inclusion.<sup>97</sup> However, guestions remain about the extent to which to regulate DFS. While DFS typically represents a very small percentage of the banking system's total assets, it potentially serves a larger percentage of the population, and especially those who are not familiar with formal financial services. Regulators, therefore, need to articulate a clear policy position on DFS regulation. With resources already stretched in some jurisdictions, the regulatory frameworks, and the necessary supervisory resources that should accompany any new regulations, should be consistent with regulatory capacity.

The Consultative Group to Assist the Poor (CGAP)'s guidelines on the regulation and supervision of microfinance state that a regulatory framework for DFS should include: "(i) conditions for banks' and nonbanks' use of agents or other third parties as a customer interface; (ii) a flexible, risk-based Anti-Money Laundering and Counter Financing of Terrorism (AML/CFT) regime; (iii) a clear regulatory regime for nonbanks to issue electronically stored value; (iv) consumer protection tailored to the branchless context; and (v) payments system regulation that allows (at least in the long term) broad interoperability and interconnection."<sup>98</sup> These five priorities for the regulation of DFS are examined below.

## REGULATING THE USE OF AGENTS

Liability issues are central to the principal-agent structure of DFS. Under DFS guidelines, the financial regulator can stipulate when the principal or agent will be liable. Without specific guidelines for DFS, agents may be held contractually liable for operational risks arising from loss of cash in transit, fraud, or theft. This vulnerability of agents is concerning given the critical role they play in providing the cash-in/cash-out service that DFS customers rely upon heavily.

Regulators should provide guidance on an agency agreement's acceptable parameters. An emerging view among central bank regulators in Pacific island countries is that the provider should be liable for

<sup>&</sup>lt;sup>96</sup> Fiji, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, and Vanuatu.

<sup>&</sup>lt;sup>97</sup> An "enabling" regulatory environment is described in Gutierrez, E. and S. Singh. 2013. What Regulatory Frameworks are More Conducive to Mobile Banking? Empirical Evidence from Findex Data. World Bank Policy Research Working Paper No. 6652. http://www-wds.worldbank.org/external/ default/WDSContentServer/WDSP/IB/2013/10/10/000158349\_20131010135452/Rendered/PDF/WPS6652.pdf

<sup>&</sup>lt;sup>98</sup> CGAP. 2012. A Guide to Regulation and Supervision of Microfinance: Consensus Guidelines. https://www.cgap.org/sites/default/files/Consensus-Guideline-A-Guide-to-Regulation-and-Supervision-of-Microfinance-Oct-2012\_0.pdf It should be noted that the Pacific Branchless Banking Seminar did not discuss the regulation of e-money (or protection of float) in detail, and this is not covered in this report. See Greenacre, J. and R. Buckley. 2014. E-Money Knowledge Product: Trust Law Protections for E-Money Customers. Centre for International Finance and Regulation Working Paper No. 09/2014. http://www.cifr.edu.au/assets/document/E226%20Buckley%20E-Money%20Knowledge%20Product%202014%20 09.pdf

risk, rather than the agent. At a minimum, regulators should require banks to specify the following:

- (i) eligibility to become an agent;
- the extent of the bank's liability for the agent's actions;
- (iii) the services to be provided;
- (iv) fees to be paid to the agent;
- (v) cash holding limits;
- (vi) minimum training of agents;
- (vii) liquidity management procedures;
- (viii) confidentiality of customer information;
- (ix) information technology (IT) requirements for the agent;
- (x) documentation;
- (xi) reporting requirements; and
- (xii) corrective measures that the bank may take if an agent fails to comply with applicable regulation or bank policy.<sup>99</sup>

Regulators can choose to adopt a broad definition of an agent, which can go further than what is commonly accepted in law. The legal definition is used to make it clear that the principal is responsible for the actions of its agents, so long as the agent is acting within the authority given to it by the principal. Regulations can, however, also preclude attempts by principals to exclude their liability to customers for any acts, omissions, or defaults of their agent<sup>100.</sup> Fiji is an example of a jurisdiction using regulations in this way.<sup>101</sup>

Central banks can also decrease the risks associated with DFS agents by requiring regulated entities using agents to conform with clear standards when engaging agents. A well-functioning regulatory regime should require the following information from entities using agents:

- (i) the agency agreement;
- the proposed number of agents, locations, and (if applicable) details on agent network manager roles and functions;
- (iii) the details of proposed agent activities;
- (iv) agency policies, including draft standard agency agreements and operating requirements;
- (v) risk management policies, including liquidity management, procedures, and staffing to monitor agents;
- (vi) IT policies and infrastructure related to agents;
- (vii) policies for how agents handle customer complaints; and
- (viii) policies for the compliance management function.102

<sup>102</sup> Footnote 99.

<sup>&</sup>lt;sup>99</sup> K. Lauer, D. Dias, and M. Tarazi. 2011. Bank Agents: Risk Management, Mitigation, and Supervision. CGAP Focus Note No. 75. http://www.cgap.org/ sites/default/files/Focus-Note-Bank-Agents-Risk-Management-Mitigation-and-Supervision-Dec-2011.pdf

<sup>&</sup>lt;sup>100</sup> M-Pesa is often cited as an example where a principal has claimed no liability for its agents, both because no regulations existed for nonbank principals such as Safaricom, and because the company specifically excluded itself from liability for the actions of its agents in the terms and conditions of its agreements with customers. In practice, however, Safaricom has assumed liability for the actions of its agents, and regulators have assumed that Kenyan common law principles of agent liability apply to Safaricom. If the issue went to court, Safaricom would likely be deemed liable. See M. Tarazi and P. Breloff. 2011. Regulating Banking Agents. CGAP Focus Note No. 68. https://www.cgap.org/sites/default/files/CGAP-Focus-Note-Regulating-Banking-Agents-Mar-2011.pdf

<sup>&</sup>lt;sup>101</sup> Reserve Bank of Fiji. 2013. Banking Supervisory Policy Statement No. 18 Agent Banking Guideline. http://www.rbf.gov.fj/docs2/Banking%20 Supervision%20Policy%20Statement%20No%2018-Agent%20Banking%20Guidelines%201.pdf. p. 4.

These reporting requirements, applied proportionally, can be adequate to monitor the risk of agent transactions (type, amount, location, and volume); incidents of theft or fraud (type and location); and customer complaints (number, type, location, and outcome).

There needs to be an assessment of regulatory burden when devising guidelines and reporting requirements on the use of agents. If financial inclusion is to be improved through the use of DFS agents, it is imperative that this is done in a way that does not create unnecessary or overly burdensome regulations for industry players.

## IMPLEMENTING A FLEXIBLE, RISK-BASED ANTI-MONEY LAUNDERING AND COUNTER FINANCING OF TERRORISM REGIME

Pacific island countries have adopted varying degrees of simplified know your customer (KYC) and customer due diligence regimes. Recent moves toward a risk-based approach have largely responded to the practical challenges of opening bank accounts.<sup>103</sup> In many rural or remote parts of Pacific island countries, people do not have formal identification documents (ID). In some Pacific jurisdictions, the regulator has sanctioned ID

substitutes, including letters of reference from an employer or village chief.

National regulatory bodies are often guided by international standards for implementing a riskbased approach to Anti-Money Laundering and Counter Financing of Terrorism (AML/CFT), such as the Financial Action Task Force (FATF) *Guidance on Anti-Money Laundering and Terrorist Financing Measures and Financial Inclusion*<sup>104</sup> prepared in response to the G20 Principles for Innovative Financial Inclusion issued in 2010.<sup>105</sup> This guidance note was updated in February 2013 to incorporate the 2012 updated FATF Recommendations, emphasizing a risk-based approach as the underlying principle for all AML/CFT regulations.

Recent work by the University of New South Wales Australia DFS research team, designed to assist regulators to use and understand FATF's risk-based approach for new payment methods, concludes that this approach will be helpful in discouraging unnecessary or overly burdensome regulations that create barriers to the development of new payment products and services ecosystems.<sup>106</sup> The report suggests that an industry consultative approach (as exists in the Pacific region) is much more efficient than retrospectively mitigating risk through reactive regulation. It also suggests that developing a low risk product for the unbanked is better than driving them to use informal channels, which present far larger AML/ CFT risks.<sup>107</sup>

<sup>&</sup>lt;sup>103</sup> For example, see Money Pacific. Pacific Projects—Solomon Islands. http://www.moneypacific.org/pacific-project-category/solomon-islands/

<sup>&</sup>lt;sup>104</sup> Financial Action Task Force. 2013. FATF Guidance: Anti-Money Laundering and Terrorist Financing Measures and Financial Inclusion. Paris. p. 49. The Conclusion discusses FTAF's encouragement for AML/CTF regimes to support the dual goals of financial integrity and financial inclusion.

<sup>&</sup>lt;sup>105</sup> See G20 Financial Inclusion Experts Group Access through Innovation Subgroup. 2010. Innovative Financial Inclusion: Principles and Report on Innovative Financial Inclusion from the Access through Innovation Sub-Group of the G20 Financial Inclusion Experts Group.

<sup>&</sup>lt;sup>106</sup> L. Malady. 2013. FATF's June 2013 Guidance. A Risk-Based Approach to Implementing AML/CTF Measures for New Payments Products and Services. Unpublished.

<sup>&</sup>lt;sup>107</sup> See E. Kobor. 2013. The Role of Anti-Money Laundering Law in Mobile Money Systems in Developing Countries. *Washington Journal of Law, Technology and Arts* 8(3) quoted in Malady. FATF's June 2013 Guidance.

#### PROTECTING CUSTOMERS' FUNDS

Traditional bank regulation protects customer funds that are stored in a bank account in the customer's name, irrespective of whether they are accessed through digital or physical means. However, funds that are held as stored value with a DFS provider are not generally considered to be a bank deposit, and are usually not covered by any depositor protection scheme. Given that "stored value" is a key feature of DFS, financial regulators need to adjust the current regulatory frameworks to ensure customer funds are protected. Regulation should focus on fund isolation, fund safekeeping, and operational risk management.

In some jurisdictions, service providers are required to hold liquid assets equivalent in value to the customer funds being stored to ensure adequate liquidity to readily meet customer demands. Developing countries in Asia that use such liquidity requirements include Indonesia, Malaysia, the Philippines, and Sri Lanka.<sup>108</sup>

Another method of protecting customer funds is through the use of trusts. In common law jurisdictions, which is the case for most Pacific countries, trusts can be used to provide three main protections: fund isolation, fund protection, and reduced operational risk by providing the regulator with active regulatory powers so it can enforce the terms of a trust on behalf of customers.<sup>109</sup> In the Pacific, Fiji is an example of a country that uses trust law in this way to protect customer funds.<sup>110</sup>

#### **CONSUMER PROTECTION**

There are a number of risks and challenges associated with consumer protection and using digital channels for financial services. First, consumers of DFS often have less confidence or experience dealing with formal technology-based financial services, which increases their vulnerability. Second, the technology-dependent nature of DFS poses a security risk to customer funds. Reliable mobile telecommunications infrastructure and network coverage is crucial to ensure transactions are conducted safely and efficiently. Customers also need to ensure they keep their PINs and mobile phones safe and secure.<sup>111</sup>

The broad range of operators associated with DFS means that services may appear less transparent to consumers with respect to whom they should consider as the product or service provider and who should be held accountable when things go wrong with their transactions. Additionally, the use of agents to provide the essential role of cash-in and cash-out for consumers gives rise to new concerns with respect to principal and agent management behavior. Lastly, a range of regulators may be involved in regulating DFS because of its interoperability. This has two effects: it can complicate accountability in the minds of the consumer; and it can create variability in regulatory and protection regimes.

Financial regulators can develop frameworks to guide service providers and their agents toward behavior and actions that contribute to the best

<sup>110</sup> Footnote 109.

<sup>&</sup>lt;sup>108</sup> Bank Indonesia. 2009. Circular Letter Concerning Electronic Money. No. 11/11/DASP. 13 April; Bank Indonesia. 2009. Regulation Concerning Electronic Money. No. 11/12/PBI/2009. 13 April; Bangko Sentral ng Pilipinas. 2009. Circular No. 649 Series of 2009. 9 March, Section 5(D); Central Bank of Sri Lanka. 2011. Mobile Payments Guidelines No. 2 of 2011 for Custodian Account Based Mobile Payment Services, Art. 1.3; Bank Nagara Malaysia. 2008. Guideline on Electronic Money BNM/RH/GL 016-3, July.

<sup>&</sup>lt;sup>109</sup> Greenacre and Buckley. E-Money Knowledge Product.

<sup>111</sup> Alliance for Financial Inclusion Mobile Financial Services Working Group. 2013. Mobile Financial Services: Basic Terminology. Guideline Note No. 1.

outcomes for consumers, including target groups in the financial inclusion agenda. Regulators in the Pacific must assess consumer risks, and decide whether general trade practice law is sufficient to mitigate those risks, or whether specific financial consumer protection legislation is warranted.

Competition among providers may provide sufficient incentives to ensure effective consumer protection. In Kenya, for example, the lack of a specific consumer protection framework for branchless banking did not prevent M-PESA from safely scaling rapidly.<sup>112</sup> However, the significantly smaller market size of the Pacific may prevent the self-regulation of DFS service providers through competition—from adequately protecting consumers.

A Pacific Islands Financial Inclusion Working Group (PIWG) member survey identified five consumer protection regulatory issues in the Pacific. First, while there is some consumer protection regulation of banks, there is less regulation of insurance, and almost no regulation for MNO/ nonbank financial institutions. Second, there is some regulation of cost disclosure (such as interest, fees, and premiums), but none on penalties. There is also little to no advertising and marketing regulation to ensure that misleading or fraudulent information is not used to attract customers, and little to no regulation of debt collection and contract enforcement policies and practices. Lastly, there has been some regulation of insurance agents, but little regulation of conflict resolution, commissions, and responsibility. There has also been little analysis

of how this should be done. This topic needs to be addressed.  $^{\mbox{\tiny 113}}$ 

The customer service interface of DFS lies with the agent. As DFS agents have simpler internal controls and regulatory compliance systems, this increases the risk of the agent exposing consumers to poor practices. Customers can be protected from such practices through education and building consumers' financial capability. Liability of providers would also create an incentive for the principal to ensure the agent engenders trust and confidence.

Providers, or their agents, need to build deeper product awareness and more financially capable clients. In turn, this creates confident and trusting clients who are more likely to regularly use providers' services. By building clients' product usage confidence, Nationwide Microbank in Papua New Guinea has achieved one of the highest mobile money account usage rates globally.<sup>114</sup>

## INTEROPERABILITY AND INTERCONNECTIONS

The payment systems underlying DFS are often built as proprietary stand-alone systems (also known as closed-loop systems). However, DFS would be more sustainable and successful if the payments system infrastructure was developed in a manner that enabled interoperability, particularly in the Pacific, where clients are widely dispersed. Interoperability enables more customers to be served, encourages competition among providers, and results in greater product choice for consumers.

<sup>&</sup>lt;sup>112</sup> D. Dias and K. McKee. 2010. Protecting Branchless Banking Consumers: Policy Objectives and Regulatory Options. CGAP Focus Note No. 64.

<sup>&</sup>lt;sup>113</sup> E. Boletawa. 2013. Market Conduct and Self-Regulation. Paper Presented at Pacific Microfinance Week. Nadi. 21–25 October.

T. Westaway. 2013. Nationwide Microbank Experience in Driving Usage. Paper Presented at the Pacific Branchless Banking Seminar. Sydney.
19–20 November.

Theoretically and ideally, there can be three levels of interoperability in the DFS space:

- platform-interoperability that enables users to send funds across different DFS providers;
- (ii) agent-interoperability that allows agents to act on behalf of different DFS providers at the same time; and
- (iii) mobile network-interoperability that allows customers to access DFS regardless of which MNO the customer uses.

Despite the seemingly obvious benefits it could offer, interoperability remains in its infancy. Establishing pricing and interchange agreements between organizations can be difficult, and the use of agents creates additional administrative and operational costs. Furthermore, market participants are often concerned that interoperability may dilute their market share without adequately compensating them for the investments made in research and development, agent training, and consumer education. As a result, many systems remain closed-loop, with low impact and usage. However, mandating interoperability through regulation also presents difficulties. Innovation may be hindered as potential new participants would hold off from developing a new product due to uncertainty over how they will be compensated if they are required to share product platforms.<sup>115</sup>

Regulators can, and do, seek to encourage industry collective efforts on interoperability. In 2011, the Bank of Papua New Guinea issued e-money guidelines that encouraged interoperability, but stopped short of mandating it. Providing the right incentives is challenging, and industry cooperation is also often slow. It remains a balancing act for industry and regulators to navigate.

<sup>&</sup>lt;sup>115</sup> The challenges with interoperability are explored in USAID. 2013. Building Consensus Towards Enabling an Efficient and Inclusive National Payments System in the Philippines: A Significant Step. 24 April; BizTech Afrika. 2014. Airtel wins case to open up M-Pesa. 28 July. http://www.biztechafrica.com/ article/airtel-wins-case-open-m-pesa/8514/#.U9nGzYCSw00. For further background see A. Nduku. 2014. Airtel seeks extension in talks over M-Pesa fees. Humanipo. 8 May.

## RECOMMENDATIONS

Over the last few years, digital financial services (DFS) in the Pacific have experienced remarkable investment and growth, and are well placed to increase their trajectory and product diversification to meet client needs. Nevertheless, there are a number of ways to ensure that DFS continues to improve financial inclusion. These include building consumer trust; improving access by strengthening agent networks; promoting enabling regulatory environments to support DFS; and encouraging clear cross-regulatory coordination.

#### **BUILDING CONSUMER TRUST**

While new technology has brought new opportunities for promoting financial inclusion, it has also decreased the level of human contact between consumers and service providers.<sup>116</sup> Such contact has traditionally been critical for building trust, particularly when consumers are unfamiliar with a product.

In order to build consumer trust in DFS, there needs to be clear and transparent product disclosure; the products need to be kept simple and relevant to users' needs; and there must be consumer education on how to use new products and when it is appropriate for consumers to use the products. Research has shown that insufficient instruction on account uses and limited understanding of security features are the main barriers to customers adopting DFS.<sup>117</sup> The resulting confusion and lack of confidence in electronic transactions have two key consequences: frustration stops clients from using the service, or clients turn to their children or to agents to transact on their behalf.<sup>118</sup> Greater emphasis on building trust and client relationships through education or awareness programs will result in greater account usage.

A number of initiatives already exist to promote financial literacy in the Pacific. Westpac has been running financial education workshops for both individuals and businesses in the Pacific since late 2007. In the 2013 financial year, the bank provided financial training to 20,575 people across seven Pacific island countries.<sup>119</sup> In 2010, ANZ launched a financial literacy course called MoneyMinded in Fiji, which was adapted from a program that had been running successfully in Australia since 2003. MoneyMinded has since expanded its reach to 18 markets in Asia and the Pacific, and was delivered to more than 7,800 people outside of Australia in the 2014 financial year.<sup>120</sup> In October 2014, ANZ expanded the program to include a dedicated mobile banking module in Solomon Islands, following an agreement between ANZ and the Australian government to expand mobile banking and financial education in that country.<sup>121</sup>

<sup>&</sup>lt;sup>116</sup> M. Hutak. 2013. Banks go branchless to reach the unbanked. *Islands Business*. 16 December. http://www.islandsbusiness.com/2014/item/955-banks-go-branchless-to-reach-the-unbanked

<sup>&</sup>lt;sup>117</sup> Footnote 6.

<sup>&</sup>lt;sup>118</sup> Footnote 6.

<sup>&</sup>lt;sup>119</sup> These countries are Cook Islands, Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga, and Vanuatu. E. Nadakuitavuki. 2013. Making a difference through financial education—the Westpac Approach. Paper Presented at Pacific Microfinance Week. Nadi. 21–25 October, 3–4.

<sup>&</sup>lt;sup>120</sup> ANZ. MoneyMinded. http://www.anz.com/about-us/corporate-responsibility/framework/financial-capability/moneyminded/

<sup>&</sup>lt;sup>121</sup> Solomon Star. ANZ launches mobile banking financial literacy training.

Similar efforts have also been made by multilateral organizations. The Asian Development Bank, for instance, launched the Microfinance Expansion Project in Papua New Guinea, in 2010, which also undertakes an extensive financial literacy training program that targets around 120,000 people.<sup>122</sup> The continued expansion of programs such as these will help boost financial literacy and confidence in the Pacific, which will in turn lead to the expansion of DFS to promote financial inclusion.

#### IMPROVING ACCESS BY STRENGTHENING AGENT NETWORKS

The success of DFS depends on the creation of a widely distributed agent network so that people are able to deposit and withdraw money when needed. However, agents face a number of risks in the provision of services to customers. In particular, agents are sometimes held responsible by providers, through contractual agreements, for the loss of funds occurring through transit, fraud, or theft. Protecting agents through regulation that shifts liability to the principal will help to encourage people to become agents. Given the key role that agents play in facilitating DFS transactions in remote locations, such encouragement is of critical importance.

#### PROMOTING ENABLING REGULATORY ENVIRONMENTS

Central banks in the Pacific actively support increased financial inclusion, and recognize the important role of DFS in achieving this goal. They are committed to providing an enabling environment. By clearly articulating expectations and boundaries (with respect to agent liability, simplified KYC, and consumer protection, for example), regulators will create an environment of certainty. Consumers will also be better protected.

#### ENCOURAGING CROSS-REGULATORY COOPERATION

DFS can create overlapping responsibilities and competing priorities, particularly for financial and telecommunication sector regulators. A lack of interagency coordination leads to conflicting regulations, weak enforcement, or both.

Collaborative efforts among regulators are essential to ensure consistent and coordinated policy approaches. As there may be more than one regulator with responsibility for DFS market participants, it is important for a country to have clear lines of accountability within government, and for mechanisms to be in place, which facilitate effective cooperation between the regulators.<sup>123</sup> Consumers need clarity on which regulator they should approach when their complaints are not addressed by the service provider.<sup>124</sup>

<sup>&</sup>lt;sup>122</sup> Asian Development Bank. 2010. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grant Microfinance Expansion Project in Papua New Guinea. Manila. p. 3.

<sup>&</sup>lt;sup>123</sup> World Bank. 2014. The Opportunities of Digitizing Payments: How digitization of payments, transfers, and remittances contributes to the G20 goals of broad-based economic growth, financial inclusion, and women's economic empowerment. Washington, DC. p. 17.

<sup>&</sup>lt;sup>124</sup> Alliance for Financial Inclusion Mobile Financial Services Working Group. 2014. Mobile Financial Services: Consumer Protection in Mobile Financial Services Guideline Note No. 13. http://asbaweb.org/E-News/enews-37/incfin/06incfin.pdf. p. 5.

Specific regulatory approaches will have implications for how cooperation among regulators proceeds. For example, if regulations are entityfocused, there may be a tendency for regulators to operate with a silo approach to developing regulations, reflecting their own areas of expertise rather than reflecting a holistic risk-based approach to developing regulations. This can lead to an unlevel playing field for the different entity types being regulated, creating problems such as disproportionate regulation or regulatory arbitrage. In contrast, an activity-focused, risk-based regulatory approach will encourage cooperation among regulators to develop a level playing field for the different entities providing mobile money products and services.

For DFS, there is generally a need for the financial regulator to coordinate closely with the telecommunications regulator, particularly as the mobile phone SIM card is increasingly used for mobile payments. Telecommunications regulators usually impose strict SIM card registration requirements that can be used in financial regulations to provide confidence in using SIM cards to verify consumer identity. This occurred in Fiji, where the financial regulator's KYC requirements for mobile money services were reduced since mobile operators already collect customer information from SIM registration processes.<sup>125</sup> On the other hand, the Papua New Guinea telecommunications regulator has outlined its intention to tighten SIM card registration requirements to restrict illegal activities conducted over mobile phones.<sup>126</sup> However, the proposed SIM card registration requirements are stricter than customer due diligence requirements on "no frills" bank accounts, and this telecommunications regulation could reduce recent financial inclusion gains in Papua New Guinea.

As these examples show, regulator coordination can ensure policy and regulatory alignment and ultimately improve the success of DFS, while poorly designed or conflicting rules can have negative, albeit unintended consequences.

<sup>&</sup>lt;sup>125</sup> A. Zerzan. 2010. Is SIM Registration a backtrack on tiered KYC? GSMA Mobile Money for the Unbanked Blog. 10 November. http://www.gsma.com/ mobilefordevelopment/is-sim-registration-a-backtrack-on-tiered-kyc

<sup>&</sup>lt;sup>126</sup> National Information and Communications Technology Authority. 2013. A Public Consultation Document on the Draft Regulation for the Registration of Subscriber Identity Module (SIM) Cards in Papua New Guinea.

# CONCLUSION

Promoting financial inclusion in the Pacific has been flagged as an important policy goal at both the international level by the G20 and by central banks in the region. Increasing access to the formal financial system will help foster economic development, reduce poverty, and increase financial and political stability in the Pacific.

Pacific island countries are geographically isolated and have some of the most challenging physical environments in the world. As such, large proportions of the Pacific population have remained unbanked for many years. However, mobile technology is increasingly helping to address this problem.

Implementation of DFS is at varying stages in the Pacific and differs in form from country to country. While countries such as Fiji and Papua New Guinea have had mobile banking services since 2010 and 2011, respectively, the first pilot mobile banking program was only introduced in Timor-Leste at the end of 2014. Some countries have DFS offered by a range of providers, while in others, there is currently relatively little competition. Mobile banking services offered by mobile network operators are the most common model in some countries, while in others, the DFS market is predominantly led by banks.

Despite these differences, a number of common issues need to be addressed to continue the progress of DFS in promoting financial inclusion in the Pacific. Firstly, a system of regulation needs to be developed that balances financial inclusion with the need to ensure that consumers' funds are not misappropriated. Taking a risk-based approach to AML/CFT is helpful to avoid unnecessary or overly burdensome regulations from preventing the development of new payment products and services that could benefit the poor. It is particularly important to develop low-risk products to discourage informal banking methods which themselves pose a higher AML/CFT risk.

It is encouraging that central banks in the Pacific are committed to creating an enabling regulatory environment. However, it is important to develop regulation to foster certainty in the system and protect those who use it. Going forward, regulation of DFS needs to focus on four things: building consumer trust through improving consumer protection, implementing simplified know your customer (KYC) processes, regulating the use of agents, and cross-regulatory cooperation.

Secondly, it is also important to focus on building consumer confidence through financial education. DFS has enormous potential to include people in the formal financial system, but its success depends on the understanding and trust of its consumers. A number of financial literacy programs already exist in the Pacific, such as those run by ANZ and Westpac. It is important that such programs continue, and that products are designed to be simple and are marketed effectively.

Lastly, the continued improvement of infrastructure will support the expansion of DFS and promote financial inclusion. To be effective, DFS require reliable telecommunications infrastructure and a widely distributed agent network. Agents need to be protected from liability for losses not due to their own fault or negligence so that agent networks continue to grow. Encouraging interoperability would also enable more customers to be served and result in greater product choice for consumers.

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#### **Digital Financial Services in the Pacific**

#### Experiences and Regulatory Issues

The challenging geography and poor infrastructure of many Pacific nations mean digital financial services (DFS) are a particularly effective means of enhancing financial inclusion in the region. However, a number of major challenges confront DFS in the Pacific, including the establishment of reliable agent networks and the building of sufficient consumer trust in DFS for it to become a viable payments channel. This report examines the current use of DFS in the Pacific, analyzes the issues that need to be addressed, and provides recommendations for increasing financial inclusion in the region.

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#### About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to the majority of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.







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