

COORDINATING CONVERGENCE

OUTCOMES OF
THE ITU WORKSHOP
ON DIGITAL FINANCIAL SERVICES
AND FINANCIAL INCLUSION



Introduction

ITU is paying increasing attention to the role that digital financial services (DFS) are playing to increase access to formal financial services for billions of poor people worldwide. The recent creation of an ITU-T Focus Group on Digital Financial Services (FG DFS)¹ – which held its first meeting on 5 December 2014 – is the latest, most significant initiative that ITU has launched in this field with the support of more than 60 organizations from 30 countries².

The first meeting of FG DFS was preceded by a one-day workshop which saw the participation of almost 100 delegates representing the private sector, international standards-setting bodies, academia, development organizations, research centres and more. The workshop set the context for FG DFS, which provides an open, multi-partisan platform to develop and promote harmonized approaches, principles and tools to fast-track policies aimed at promoting financial inclusion in developing countries and emerging markets.

The workshop discussed some of the main technical requirements of DFS — such as interoperability and security — as well as numerous questions surrounding policy and regulation, sustainable business models and consumer protection.

The policy and regulatory aspects of DFS permeated nearly every session of the event, highlighting the challenges associated with the convergence of financial services and information and communication technologies (ICTs) and the need for enhanced coordination and dialogue between financial-services and telecommunications policy and decision makers, at both the international and national level.

1 <http://www.itu.int/en/ITU-T/focusgroups/dfs/Pages/default.aspx>

2 The first meeting of the ITU-T Focus Group on Digital Financial Services established its work plan and structure, creating four working groups:
DFS ecosystem
Technology, innovation and competition
Interoperability
Consumer experience and protection

Opening keynotes to the workshop

Keynote speakers representing Somalia and Kenya provided an overview of their countries' unique experiences in promoting DFS for financial inclusion, highlighting the important regulatory implications and challenges related to this fast-moving and innovative sector.

H.E. Mohamed Ibrahim, Minister of Posts & Telecommunications of the Federal Republic of Somalia³, spoke of his belief in the potential of DFS to promote greater financial access and prosperity in Somalia. Ibrahim matched his belief in the potential of DFS with wariness that Somalia's regulators have a central role to play in tempering the growth of the country's DFS market so as to promote greater market competition.

"At present the development of mobile money certainly lacks the necessary legitimacy for a nationally credible exchange system," said Ibrahim, noting that the legitimacy of Somalia's DFS has been hampered by narrow concentrations of market power in the ICT and financial-services sectors as well as the lack of appropriate legal and regulatory frameworks. To Ibrahim, *"[the] implementation of mobile payments in Somalia is built on shaky foundations affecting the level of confidence in the system and therefore reducing its usefulness for more advanced applications – such as making salary payments, paying utility bills, and international funds transfer or remittances."*

The development of Somalia's mobile money industry has been almost entirely industry-driven, and Ibrahim drew on this fact to highlight the importance of public-private cooperation: *"We are mindful that too few players in any market can tilt the level playing field necessary for markets to do one of their primary functions... to allocate resources efficiently and give consumers choices. The regulator has a key role to play in stimulating market diversification and fair competition."*

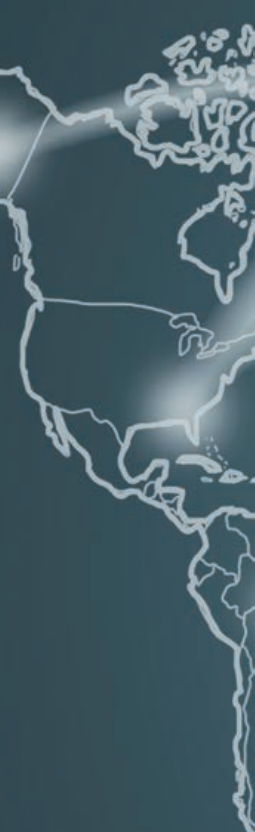
Francis Wangusi, Director General of the Communications Authority of Kenya⁴, offered insight into Kenya's success in rolling-out DFS, highlighting that the introduction of mobile payment services for domestic remittances saw the proportion of Kenyans with access to financial services increase from around just 15 per cent in 2007 to some 70 per cent today.

³ <http://www.mipt.gov.so/>

⁴ <http://ca.go.ke/>

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Speaking of some Kenyan mobile operators' ability to offer new value-added services in the DFS field, Wangusi said that, *"Mobile money transfer services have become a key value proposition in acquiring and retaining customers on mobile network platforms, resulting in significant reduction in churn, which is a key parameter for the evolution of market shares."*

Wangusi also pointed to the collaboration of Kenya's telecommunications regulator and central bank as one of the defining factors in the country's successes in DFS. In an assertion later echoed by other workshop participants, Wangusi emphasized that collaboration between the two regulatory bodies and other government agencies was essential in providing the harmonized regulation needed to create an enabling environment for DFS.

Recognizing the potential of cross-platform DFS, Wangusi went on to say that, *"The requirement for interoperability is essential in ensuring that the mobile payment ecosystem enhances competition by way of improving the quality of service provisioning and lowering of costs of transacting through this service."*

Dynamic assistance to dynamic markets

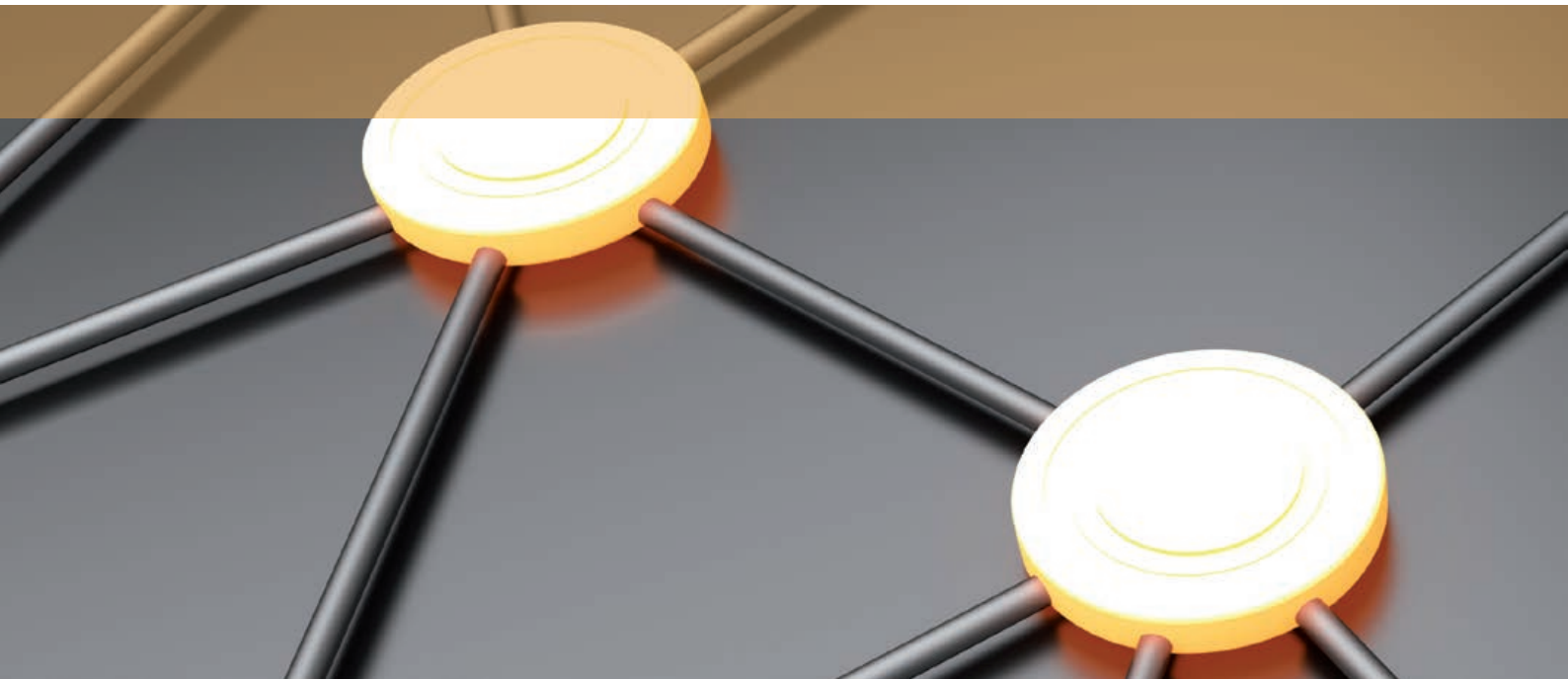
Common to all viewpoints presented at the workshop was the recognition that DFS, despite its progress and promise, remain on uncertain terrain without a proven playbook for success. Kenya and Tanzania are unique case studies of the enabling factors in the development of a DFS ecosystem, but their experience stands in contrast to the vast majority of countries that have introduced DFS, where their access and use have yet to achieve significant scale and impact.

Scaling-up the adoption and use of DFS will require more than providing access

In developing countries, DFS are competing for cash-based consumers, where the utility, convenience and anonymity of cash is the benchmark against which to judge the appeal of DFS. According to many of the workshop's participants, the first step to transitioning consumers to a digital system is to provide access to a transaction account from a regulated and supervised institution to the 50 per cent of the world's adult population which currently lacks any formal means to conduct transactions and store money.

However, providing access to a digital stored-value account is only one piece of the puzzle and does not ensure financial inclusion. Kenya – one of the world's healthiest DFS markets – is testament to this fact, with some 96 per cent of the country's payments still being made in cash.

David Lubinski of the Bill & Melinda Gates Foundation emphasized the importance of fostering an enabling regulatory environment for DFS, one that promotes the development of robust provider ecosystems built on fair access to infrastructure and other common platforms for competition and innovation.

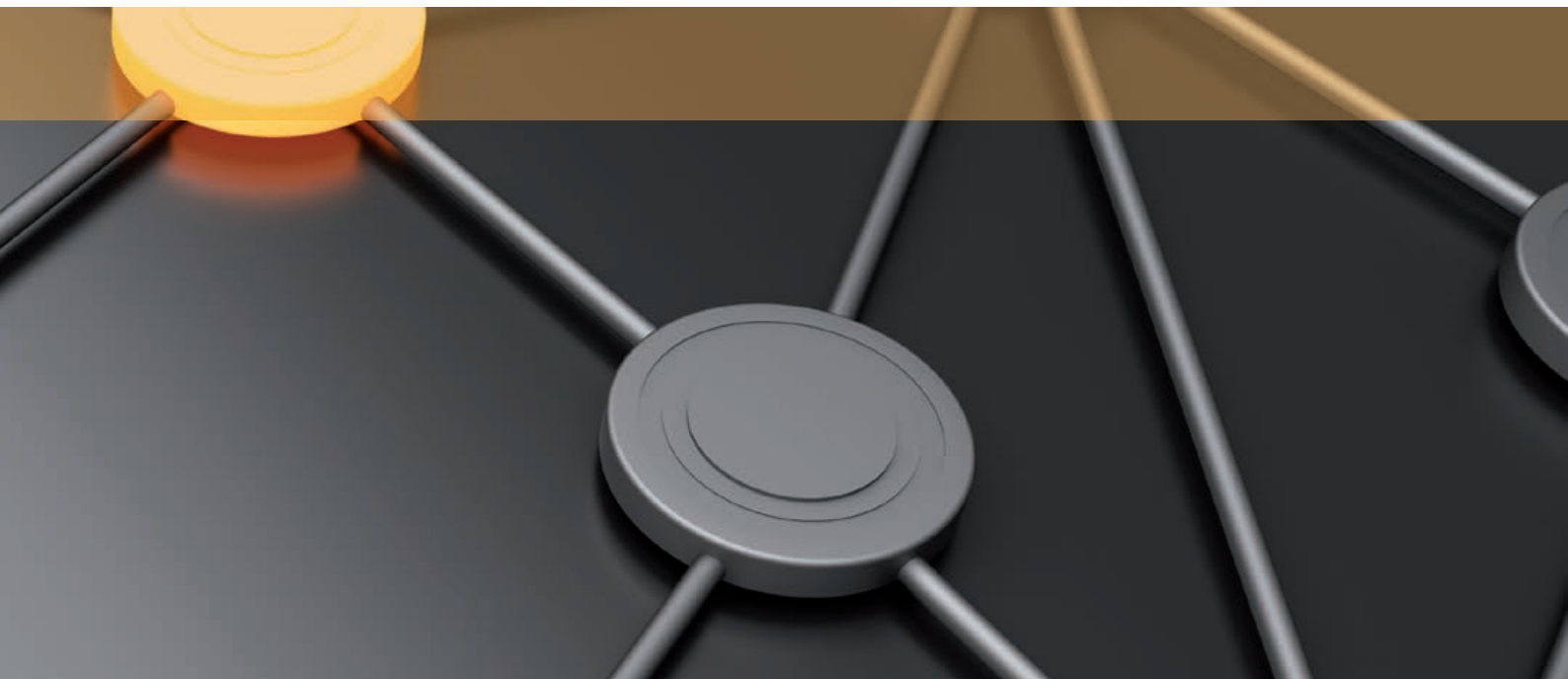


The merits of peer-learning

Innovations in DFS introduce new players into the financial services/payments value-chain, new distribution models and new products and services, with possible implications for the stability, security and integrity of the overall financial system.

Peer-learning as a means to build cooperation, and share knowledge, is an effective mechanism to promote financial inclusion – not only internationally and regionally, but also at the country level as it helps in building bridges between regulators overseeing converging industry sectors, as well as between the public and private sector and consumers.

John Owens of the Alliance for Financial Inclusion (AFI)⁵, a global network of financial policymakers from developing and emerging countries working together to increase access to appropriate financial services for the poor, drew participants' attention to *"The Maya Declaration [which] provides a unique set of targets for regulators intent on promoting financial inclusion, with many of the targets focused on DFS."* As an example of the efficacy of peer-learning, Owens noted that 71 tangible policy reforms have been enacted since the Declaration's agreement.⁶



5 <http://www.afi-global.org/>

6 <http://www.afi-global.org/maya-declaration-afi-member-commitment-financial-inclusion>

Questions asked of regulators

1. Central banks bear responsibility for DFS regulation but must consider interactions with the goals and rules established by other regulators

The use of new channels to deliver financial services poses a variety of questions and challenges to regulators, particularly with respect to the scope of financial and telecommunication regulators' responsibilities in creating an enabling legal and regulatory environment for the growth of the DFS ecosystem.

The workshop's participants agreed, however, that central banks bear chief responsibility for the regulation of DFS, recognizing in addition that digital finance also impacts telecommunications regulators and entities such as competition authorities, trade ministries and ministries of finance or economic development; a list which is expected to grow as DFS offerings gain in sophistication.

Improving the cooperation of a country's regulators is the essential first step towards the development of a coordinated national strategy to promote DFS. FG DFS will aim to increase dialogue and cooperation between various regulatory authorities.

2. The importance of risk-based, proportionate regulation

International standards-setting bodies responsible for guiding principles on the protection of the stability, security and integrity of the financial system are increasingly considering the specific needs and circumstances of the poor when adopting new guidelines and standards.

Many participants agreed on the importance of calibrating regulation in proportion to the various levels of risk associated with DFS. In particular, they highlighted the risks and possible unintended consequences related to overly stringent legislation which can lead to increased regulatory barriers, higher compliance costs, lower competition and the offer of products and services that are unaffordable to the poor.

The Bank for International Settlements (BIS)⁷, the World Bank⁸ and the Financial Action Task Force (FATF)⁹ – all represented at the workshop – have been advocating for risk-based, proportionate regulation of DFS, asserting that this approach can be instrumental in supporting financial inclusion while promoting consumer protection and the security of the financial system.

7 <https://www.bis.org/>

8 <http://www.worldbank.org/>

9 <http://www.fatf-gafi.org/>

Timothy Goodrick of FATF, the international standards body for the prevention of money laundering and terrorist financing, recalled the 2012 revision of the FATF mandate, which made mention of the importance of financial inclusion in its preamble – a significant step forward for the financial inclusion agenda given the body’s focus on law-enforcement. Answering to concerns that AML/CFT¹⁰ controls can hamper financial inclusion, Goodrick emphasized that, “The policy objectives of financial inclusion and financial stability can be consistent if sound risk assessment is carried out to inform the construction of proportionate regulation, on a case-by-case basis.”

3. Industry view of regulatory reform

The degree of success in communication between industry players and policymakers and regulators has significant influence over the success of DFS rollouts. Public-private cooperation will be crucial to answering questions around the sustainability of DFS business models and the nature of change in risks to financial stability and integrity. Building healthy relationships and constructive dialogue between regulators and regulated entities is crucial to the identification of the successes or shortfalls of regulatory reform.

GSMA¹¹ works to spur growth in the market for mobile financial services by building effective dialogue between the mobile industry and governments. Recognizing that the DFS regulatory agenda is broad, with many reforms needed in many areas, GSMA looks to distill commercial lessons of what policy priorities should be in efforts to create enabling regulatory environments.

According Simone Di Castri of GSMA, regulatory hurdles are the main barriers to the rollout of DFS. In support of this finding, he asserted that, *“2 billion people live in countries without an enabling regulatory framework, and without a solution to this problem, it is difficult to see mobile money scaling at the global level.”*

The GSMA ‘Code of Conduct for Mobile Money Providers’¹² is a consensus-derived set of best practices for mobile money operators to harmonize their DFS offerings with respect to eight fundamental principles. The further development of the Code of Conduct, which aims to have an accompanying certification scheme in place by 2016, is expected to bring greater clarity to industry’s requirements of regulation and the frameworks conducive to interoperability.

Industry representatives acknowledged the emergence of positive trends in regulatory reform, which were said to reflect the maturing regulatory landscape borne of stronger competition in the DFS market and improved international dialogue and technical assistance on regulatory reform.

10 AML (anti-money laundering)/CFT (counter-terrorist financing)

11 <http://www.gsma.com/>

12 <http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/code-of-conduct>

4. Regulatory barriers to be overcome en route to DFS

From the perspective of the telecommunications industry, voiced by Nathan Naidoo of Vodafone¹³, *“The main barrier to DFS remains the reluctance of central banks to embrace their role as the primary regulator for DFS and as regulating the service rather than the institution.”*

The so-called ‘bank-led’ model, although able to accommodate DFS, runs the risk of slowing DFS growth and innovation, in large part as a result of the lack of a relationship between regulators and providers of services. Despite the trend towards more open regulatory models, the entrance of non-bank entities into the fold is complicated by the need to coordinate the actions of regulatory authorities with formerly distinct areas of responsibility. Shortfalls in cooperation between regulators raises the risk of ‘regulatory arbitrage’, where uncoordinated regulatory reform produces conflicting regulations or loopholes open to the circumvention of regulation.

The workshop’s participants agreed that priority should be assigned to improving communication between the many interests active in promoting DFS and financial inclusion. Operators were asked to put more work into communicating the type of regulatory environment able to encourage investments in DFS, understanding that the DFS market has become a competitive investment environment internationally. Donor consortiums and knowledge centres were asked to do more to communicate their mandates to policymakers and regulators, clarifying which organization to turn to for which type of advice. And regulators, to accommodate the proliferation of DFS stakeholders, were asked to allot more time or rounds of discussion to efforts aimed at coordinating actors’ views.

Technical standards, security and interoperability

Enrico Nora of Kenya’s Equity Bank¹⁴, speaking of the bank’s motivations for establishing its own mobile operator to provide a channel for DFS, offered the view that, *“The open-loop systems provided by the international card schemes remain the most effective means of enabling interoperability and security in DFS to a degree comparable with traditional financial services.”*

Richard Smith of MasterCard¹⁵ attributed similar weight to the value of the open-loop architectures of international card schemes, and in particular the trust and security in payment systems resulting from many years of investment into franchise development.

13 <http://www.vodafone.com/>

14 <http://www.equitybank.co.ke/>

15 <http://www.mastercard.com/>

International card schemes are industry standards. All parties to a scheme have a common interpretation of terminology, and a card scheme's brand is an assurance that a service provider's offering will interoperate with those of other providers carrying the same brand.

The built-in interoperability of the traditional 4-party banking model, with card payment schemes a case in point, has yet to be achieved in the distributed 'n-party' DFS ecosystem. Achieving significant scale in the use of DFS will hinge on whether new channels of providing financial services can match the security and common interpretation that comes of the card schemes' EMV standards.

Interoperability is certainly the next frontier for DFS. Interoperability has taken its first tentative steps forward, but enabling DFS interoperability will not come without complexity. Setting a challenge for DFS players, Carol Benson of Glenbrook Partners¹⁶ highlighted that, *"the financial services and telecommunications sectors are two sectors that have achieved interoperability almost perfectly, and our goal should be to achieve that standard of interoperability in DFS."*

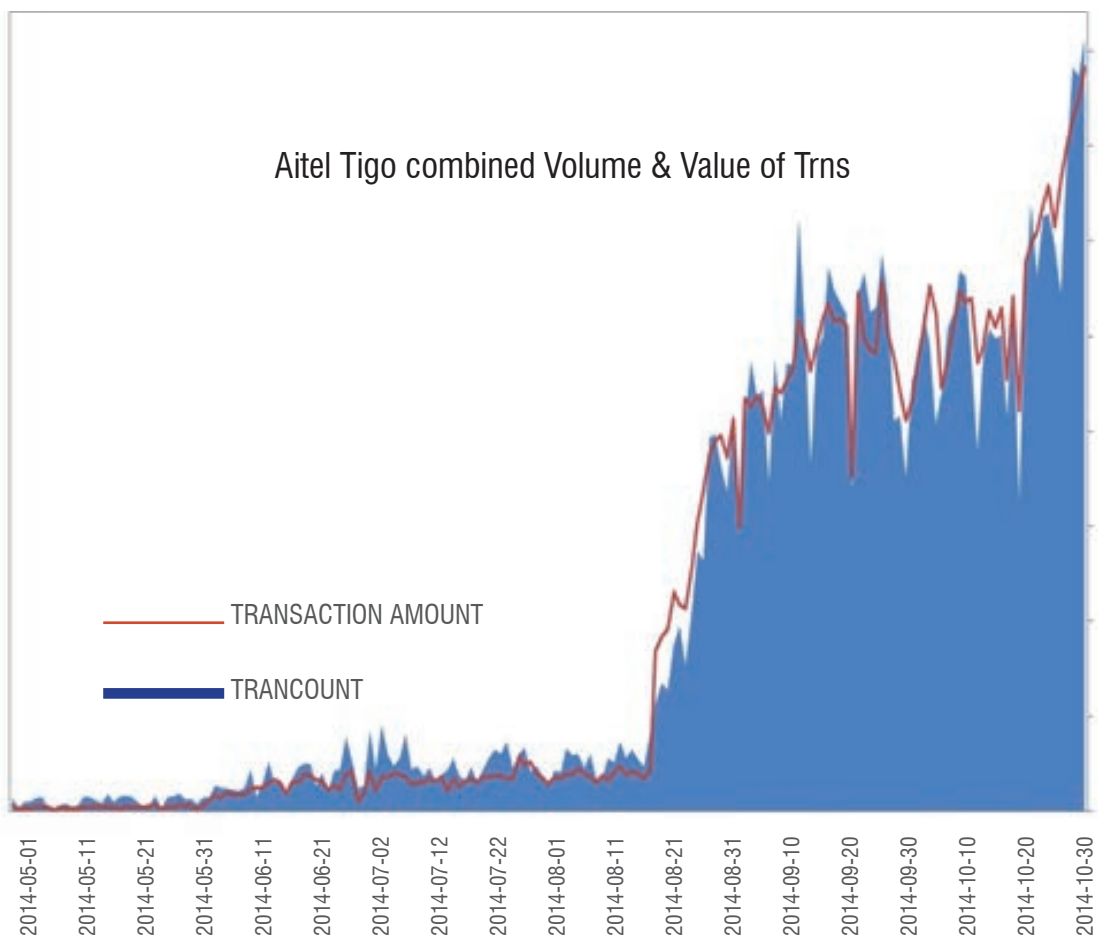


Figure 1

Success in introducing interoperability – in line with the need for risk-based, proportionate regulation – is another of the delicate balancing acts characterizing the development of DFS markets.

Gregory Reeve of Millicom¹⁷, an international telecommunications and media company which offers DFS primarily under its Tigo brand in Africa and Latin America, presented evidence of how interoperability can catapult digital finance transactions into more widespread use. The jump in the curve in August 2014 (see Figure 1) is the result of an announcement¹⁸ made by Airtel¹⁹ that Airtel, Tigo and Zantel²⁰ had begun offering wallet-to-wallet interoperability in Tanzania.

The timing and means of implementing interoperability play a central role in determining whether it achieves its objective of creating a level playing field for competition that can stimulate DFS market growth. Mandating interoperability can erode incentive for companies to invest in their DFS infrastructures and build customer trust. The mechanism enabling interoperability, whether bilateral architectures or a central switch, is another key factor affecting its appeal and impact. Bilateral interoperability between closed-loop systems cannot achieve the scale possible with open-loop systems, and industry players are wary of the introduction of a switch, which is said to give rise to issues around governance, ownership and cost structures able to distort market competition.

Industry representatives agreed that interoperability will be critical to the long-term evolution of the DFS ecosystem and underlying market competition, but cautioned that it is best introduced in relatively mature DFS markets. Where interoperability is mandated by regulation, the workshop's participants urged regulators to make interoperability an obligation without mandating the means, in addition stressing that for a switch to be successful it would have to be operated by a non-private-sector entity such as a central bank.

Common stakeholder objectives

Codify common terminologies

Establishing common definitions of terms is a fundamental exercise in any effort focused on harmonization, coordination or standardization. A recurrent point of emphasis throughout the workshop's discussions was the need for a common terminology for DFS, interpreted uniformly by all stakeholders. FG DFS will prioritize the codification of a common terminology for DFS, building on work being undertaken on the subject by organizations such as AFI, GSMA and ISO TC68/SC7 on Core Banking²¹.

17 <http://www.millicom.com/>

18 http://africa.airtel.com/wps/wcm/connect/africarevamp/tanzania/home/about/media_room/press_releases/june-4-2014

19 <http://www.airtel.com/>

20 <http://www.zantel.co.tz/>

21 http://www.iso.org/iso/standards_development/technical_committees/other_bodies/iso_technical_committee.htm?commid=365812

Build consensus on security architectures

Achieving end-to-end security in DFS is a significant challenge, considering the proliferation of actors in the increasingly complex DFS value-chain. The work of ISO TC68/SC7 to develop a multi-part International Standard on mobile financial services will provide a general framework for the security of mobile financial services. ITU-T Study Group 17 (Security)²² has also expressed interest in developing a security architecture for DFS if demand for such an architecture is identified by FG DFS.

Nurture stakeholder coordination

The coordination of stakeholder actions in promoting the use of DFS as part of strategies to advance financial inclusion will be the key determinant of the speed and efficacy of DFS rollouts. The international community, itself beholden to a commitment to cooperation, must work to encourage the cooperation of the various implicated regulatory authorities within countries, as well as within industry and between the public sector, industry and the public.

22 <http://www.itu.int/en/ITU-T/about/groups/Pages/sg17.aspx>

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