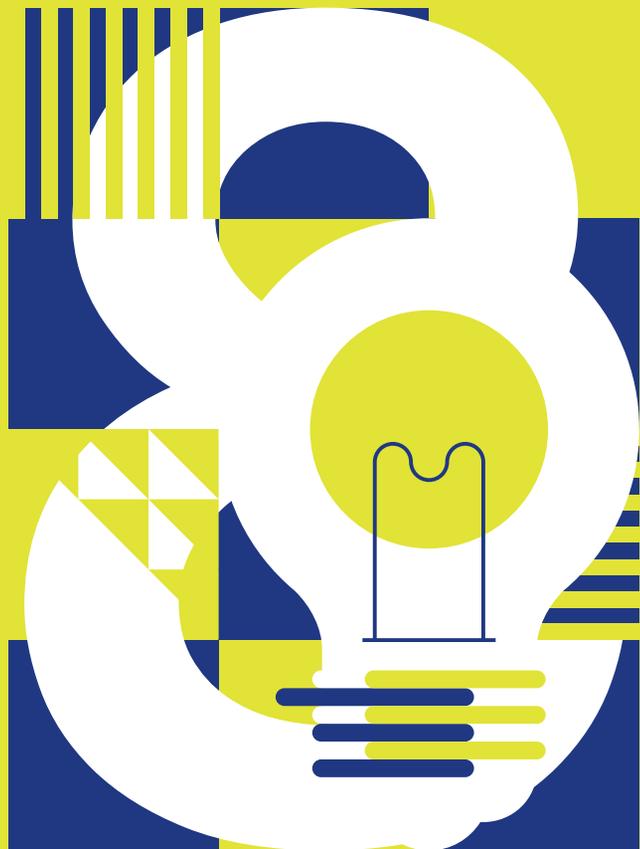


Chapter 8

Considerations



Considerations

Key points

- Commonwealth member countries are diverse in terms of population size.
- **Small states** benefit from agility in that they are able to make decisions swiftly and hence several Commonwealth countries have already embraced fintech. While smaller developing economies have historically been limited by resource constraints, a new paradigm suggests that population size may not be a constraint to digital transformation—as evidenced by the actions of countries including Bermuda, Dubai and Mauritius. Imagination, agility and aspiration all may allow small states to leapfrog others and become leaders in a new digital economic order.
- Larger and wealthier countries may benefit from more resources and/or larger populations across which to amortise the costs of investment in new technologies, but larger nations are typically slower to make decisions and to implement solutions. Indeed, wealthier nations are more likely to have 'legacy' systems—that is, older technology that will need to be upgraded or replaced if the nation is to take advantage of fintech.
- In addition, the needs of countries that neighbour one another may be shared, while they may differ from the needs of countries in other regions.

8.1 Introduction

In any effort to develop policy interventions for Commonwealth nations, it is necessary to evaluate their diverse needs. While there are small nations with abundant resources (e.g., Singapore) and there are larger countries that are yet developing economically (e.g., Nigeria), it is generally helpful to understand the constraints and opportunities offered by countries segmented by size. Indeed, among Commonwealth states, island nations have been particularly progressive in experimenting with and adopting fintech and fintech-related policies, and this may be because of their small size, whereby a handful of decision-makers can rapidly reach consensus.

8.2 Diversity among Commonwealth Nations

The Commonwealth countries have a combined population of 2.4 billion—almost

a third of the world's people. Population sizes are diverse within the Commonwealth, however, ranging from India at more than 1 billion, Pakistan, Nigeria and Bangladesh with more than 100 million, 33 countries with fewer than 10 million and 26 at fewer than 1 million. Economic development is also uneven in Commonwealth economies, with financial inclusion remaining a major problem in many countries.

Developed economies in the Commonwealth feature large, well-established, traditional enterprises filling business and consumer needs in markets with sound infrastructure and well-developed regulatory regimes. In Commonwealth emerging markets, by contrast, growth is often fast, but needs may be unmet, infrastructure poor and compliance patchy—to the benefit of innovation enabled by digital technologies. Characterised by a lack of legacy systems, emerging markets are more likely to embrace

new technologies. In emerging markets, digital technologies enable entrepreneurial businesses to overcome long-standing barriers and reach new potential customers. Fintech and the digital economy can enable small businesses, women and other disadvantaged groups to take part in trade and connect around the world. For some Commonwealth economies, then, disruptive change may deliver a unique opportunity to 'leapfrog' the legacy issues that advanced economies confront—and the rewards can be transformative.

8.3 Small States: Opportunity and Challenge

Thirty-three of the Commonwealth member countries have populations of fewer than 10 million and have traditionally been hampered economically by size, talent and geography. Digital technologies provide these small states with a transformative opportunity.

Artificial intelligence (AI) and blockchain allow small states to overcome the barriers of distance, talent and isolation. They are more agile and can be more responsive; they are often less inhibited by legacy systems and, in many, the pressure to meet people's needs is more acute. While larger states are still debating the promise of new technologies, many smaller jurisdictions are already embracing them.

Small states are moving quickly:

- Bermuda announced its new regulations on initial coin offerings (ICOs) on 13 July 2018, describing minimum required information for ICO projects and establishing compliance measures for companies to conduct an ICO;
- Jersey's Financial Services Commission launched Jersey's ICO guidelines on 12 July 2018;

- Estonia has already established itself as a world leader in digitisation;
- Switzerland and Singapore are early adopters and leaders in blockchain;
- Dubai is implementing a mandate for government services to go paperless on blockchain;
- in February 2018, the Government of Gibraltar announced its intention to proceed with token regulation;
- on 4 July 2018, the Maltese Parliament officially passed three bills into law—reportedly, the first regulatory framework for blockchain, cryptocurrency and distributed ledger technology (DLT); and
- the East African island nation of Mauritius is seeking to brand itself as a regional haven for blockchain innovation.

While not a comprehensive list, this clearly points towards a new paradigm whereby small populations are not a constraining factor for digital transformation; rather, imagination, agility and aspiration may enable small states to leapfrog others and take the lead in a new digital economic order.

Small states will nonetheless also face a number of challenges—notably, costs and access to talent—and may need to collaborate with other countries to access the resources and capital that they require. Regional collaboration can help countries to address regulation and standards, examine the regulatory fitness of legislation for a digital economy, and support the sharing of best practices in areas such as change management.

To build capacity, regional platforms could support the sharing of experiences,

“Artificial intelligence (AI) and blockchain allow small states to overcome the barriers of distance, talent and isolation.”

trigger collaboration and joint investments with relevant partners, explore common approaches to regulatory problems, and facilitate workforce reskilling and recruitment to allow small states to meet the needs of the digital age.

8.4 Advanced Economies and Legacy Systems

There is evidence that integrating digital technology into the design and delivery of public services yields efficiency and productivity gains for both government and industry, increasing public value and driving broad public sector modernisation, as well as promoting greater openness, transparency, public engagement and trust in government.¹ In 2016, the UK government estimated that introducing digital tools into government service delivery could save between £1.3 billion and £2 billion annually as quickly as by 2020.² Similarly, in a 2015 report commissioned by Adobe, Deloitte found that the cost savings for the Australian government of digitising consumer transactions could be as much as AU\$17.9 billion per annum by 2025.³ Despite this evidence, many advanced economies are

moving slowly to implement new technology systems because changing legacy systems at the institutional and structural levels is a massive undertaking that can take years—or even decades.

8.5 Developing Economies

In developing economies,⁴ the lack of trusted and effective infrastructure means that new technologies are a welcome arrival: they do not demand change to the status quo, but signal the arrival of a functional resolution to a long-standing problem. Developing economies are almost exclusively cash-based: nearly 90 per cent of economic activity is conducted traditionally, because trust in local financial institutions is poor, and because an average of 40 per cent of people do not have bank accounts.⁵ Few people and small businesses in developing economies fully participate in the formal financial system; some 2 billion individuals and 200 million small businesses lack access to formal savings and credit.⁶ Thus emerging markets are constantly innovating in the field of payments, promoting an increasing shift to digital services.⁷ The lack of trust in local financial institutions means, however, that preference for cash prevails and indeed continues to increase.

By 2016, the amount of cash in circulation had increased to 9 per cent of gross domestic product (GDP) compared with 7 per cent in 2000, yet digital payments were expected to reach a record 726 billion by 2020, with emerging markets leading this trend at a rate three times that of developed economies.⁸ Digital payments in developing markets were expected to have a compound annual growth rate of 23.5 per cent between 2017 and 2022, compared to an expected 7.1 per cent rise in mature markets over the same time period.⁹ In 2017, non-cash payments in Asian emerging markets were projected to grow by almost a third

(30.9 per cent) over the coming decade, led by China and India.¹⁰ Accordingly, there is likely to be rapid change in the payments landscape, building on accelerating growth in electronic payments and the advent of new and disruptive markets.

Developing economies will be at the forefront of this transformation, for they are currently the locus where demand meets the ability to supply: millennials respond well to digital-first service delivery and desire financial inclusion, and the legislative environment supports the introduction of a wider array of financial services. Concerted efforts are being directed towards introducing and promoting innovative retail e-payment instruments and systems including e-wallets, mobile payments and one-click payments. For example, in Nigeria, the use of mobile-based payment systems has increased as access to mobile phones has become more widespread, both for customer and merchant processes. In India, the central automatic teller machine (ATM) switch that processes all retail ATM transactions has been revamped in preparation for expected demand increase.

One of the most commonly cited examples of leapfrogging is the Safaricom M-Pesa mobile payment system in Kenya and Tanzania, launched by Vodafone in 2007, which enabled phone-based banking in the national currency, abandoning traditional banking methods to create a mobile banking revolution. It is now used by more than 17 million Kenyans, with approximately 25 per cent of the country's gross national product (GNP) flowing through it.¹¹ M-Pesa has boosted economic development by enabling relatively poor farmers to send and receive payments reliably and affordably, fostering economic growth by lowering transaction costs (see Case Study 10.2).

The global mobile industry connected more than 5 billion people in 2017.¹² The Global System for Mobile Communications (GSMA), the industry's non-profit trade association, predicts that the number of unique mobile subscribers will reach 5.9 billion by 2025—equivalent to 71 per cent of the world's population.¹³ Developing countries will drive that growth—particularly India, Pakistan and Bangladesh, as well as sub-Saharan Africa.

To overcome the preference for traditional cash-based transacting while supporting rapid growth, it is especially important for economic structures in emerging markets to integrate with local culture. The large financial services institutions that are common in mature markets are incongruous here and therefore likely to be ineffective. Small—sometimes homegrown—collectives achieve social traction because they adopt systems of operation that are locally trusted. For example, CrowdForce Solution is an Africa-based start-up that uses Ethereum to incentivise trusted local and community retailers to act as banks and offer financial services.¹⁴ It offers utility payments, cash deposit and withdrawal accounts, cryptocurrency exchange, and crypto-fiat exchanges on a PayForceMobileApp. This means there is no need for a banking structure; the only start-up capital required is for agent retailers to fund their wallet, with agents earning commission on transactions.¹⁵

We noted in Chapter 7 that shallow banking infrastructure accelerates the adoption of blockchain in developing economies. Not only does the lack of financial infrastructure mean reduced social and institutional resistance and lower transition costs, but it also means that regulators and existing financial institutions in emerging markets are more open to blockchain-based new entrants.¹⁶ In fact, international payments

and trade finance frontrunners have high transaction and verification costs that blockchain can reduce by improving the speed, transparency and process. In 2018, well-established multinational Western Union partnered with newcomer Ripple to test the speed and economy of blockchain-based cross-border payments.¹⁷

8.6 Regional Considerations

In addition to considering the factors distinguishing large and small nations, as well as advanced and developing economies, it is also important to understand how regional variations across the Commonwealth can affect the development and adoption of fintech. We have divided the countries into four basic regions: Africa; the Americas; Asia Pacific; and Europe.

8.6.1 Africa

Africa is in the midst of a technology transformation on a continental scale. In 2016, more than 700 million smartphone connections were expected on the continent by 2020, with 20 per cent of the continent's population already able to access a mobile broadband connection—a figure expected to triple by the end of 2021.¹⁸ Low-cost devices, such as low-end Android models, have accelerated this trend towards digital inclusion at a large scale.

The costs of mobile services remain a rate-limiting factor in the ability of poorer African peoples to take advantage of digital financial services. A number of developing economies in Africa, however, have sought to leapfrog legacy-laden advanced economies by deploying next-generation systems and solutions that are less readily available in the latter.

8.6.2 The Americas

The Commonwealth countries in the Americas range from the wealthy and

established Canada to an array of Caribbean islands that are working on financial inclusion. Canada has been progressive in embracing pilots of fintech, from AI to digital identity. In the smaller island nations, the Caribbean Community (CARICOM) has served as a forum for the exchange of ideas that has been helpful in fostering progressive policies and opportunities. The Inter-American



Developing economies will be at the forefront of this transformation, for they are currently the locus where demand meets the ability to supply: millennials respond well to digital-first service delivery and desire financial inclusion, and the legislative environment supports the introduction of a wider array of financial services.

Development Bank (IDB) has also been exploring thought leadership and idea exchange around progressive solutions to regional issues such as inclusion.

Unfortunately, identity theft remains a key issue in developing economies in the Americas and, as a result, rates of 'false declines' (legitimate credit card transactions that are not allowed to process) remain high, which inhibits financial inclusion.

8.6.3 Asia Pacific

While inclusion rates vary considerably within the Asia Pacific region, connectivity has been quite good in a number of Commonwealth countries. This, in turn, has facilitated critical policy goals such as financial inclusion, which then enable other more advanced fintech offerings to be provided to the market, such as alternative lending.

Just under two-thirds of the populations of Singapore and Malaysia, for example, are fully banked, while in each country another 20–30 per cent are underbanked (i.e., able to access some services, if not to the same degree as the fully banked).¹⁹

In India, the Aadhaar project has driven a massive increase in the number of bank accounts held, with ever-more government subsidies being paid into those accounts (driving utilisation). Between 2014 and 2017, India increased its banked population from 53 per cent to almost 80 per cent, and the World Bank has found that the growth is continuing.²⁰ Financial literacy remains an opportunity area, however, and the financial services offered to the newly banked remain modest: loans are still difficult to get, for example.

Other Asia Pacific nations, such as Papua New Guinea and Samoa, are at an early stage of their inclusion journey and—with

the support of the Asian Development Bank (ADB) and other bodies—are aiming to leapfrog, with new technologies that empower their population with access to financial services.

Looming over all of the countries in the region are three powerful platforms originating in the People's Republic of China (PRC): Baidu, Ali Baba and Tencent (known as the BATs). These companies have integrated communications data with financial data, which provides them with powerful predictive insights into individuals.

8.6.4 Europe

The three European members of the Commonwealth (the UK, Cyprus and Malta) have been experimenting with and adopting regulation around an array of fintech activities. Malta and Cyprus continue to develop solutions within the context of European Union (EU) regulation, while the UK has been developing parallel and analogous, but different, regulations (e.g., open banking versus the EU revised Payment Services Directive, or PSD2²¹). The UK's multitier licensing of and engagement with new financial institutions (with e-money, 'halfway' banking and a full banking licence, in addition to a regulatory sandbox) remains a gold standard for supporting fintech innovation.

8.7 Conclusion

It is essential that all Commonwealth governments learn how to engage with the new digital issues that cannot be regulated universally across member countries. Digital literacy will prove to be a key skill for citizens, politicians and industry leaders alike. Likewise, both small and large states need information on fintech policy, regulatory approaches and applications, such as digital identity and anti-money-laundering (AML) and know your customer (KYC) rules, the digital issuance of bonds

and treasury notes, the resilience of digital payment systems, digital cash supply and trade finance, etc.

Meeting these needs is challenging territory because there is a shortage of world-class digital experts globally. Commonwealth nations may therefore consider collaboratively investing to develop an elite task force of digital experts who can help multiple governments to develop fintech.

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