Pacific E-commerce Initiative

National E-commerce Assessment

November 2020

Federated States of Micronesia

PACIFIC ISLANDS FORUM

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The views and opinions presented in this report are those of the author(s) and should not be attributed to the institutions supporting the study. The institutions bear no responsibility for the accuracy of the facts represented in this report.

Foreword by Representative of Department of Resources and Development, Federated States of Micronesia

The FSM recognizes the value that e-commerce will provide towards the development of our domestic private sector as well as to the overall development of our young nation. Coupling this effort with other initiatives that the country is pursing in the area of Information and Communications Technology (ICT) will not only improve the infrastructure, but also guarantee accessibility to outside markets, improve the confidence of the private sector, trade capacity, and most importantly connect businesses and individuals in the most remote part of the country to the rest of the world.

It is in this context that we acknowledge the importance and the vital role that e-commerce play in our nation building effort and encourage the nation to support activities that will overcome the impediments and challenges in the development of an e-commerce enabling environment in order to maximize development opportunities.

I, therefore, on behalf of the FSM leadership extend appreciation to PIFS, European Union, TradeCom II Programme, International Economics and other development partners who assisted in the National E-commerce Assessment for the FSM.

Finally, I wish to also extend gratitude to my staff from the Division of Trade and Investment, FSM Department of Resources and Development, as well as the various departments, offices, agencies, private sector, NGOs, and partners who were involved and contributed to the in-country engagements. Our collective efforts today will no doubt have a positive impact on the future of our nation and its people.

Honourable Marion Henry
Secretary
Department of Resources and Development
Federated States of Micronesia (FSM)

Foreword by Dame Meg Taylor, Secretary General, Pacific Islands Forum Secretariat

E-Commerce features as a key regional priority in the Pacific Aid-for-Trade Strategy 2020-2025. As part of this mandate , the Pacific Islands Forum Secretariat has taken the lead in supporting Forum Islands Countries in their efforts to take an active part in the global digital revolution.

Indeed, E-Commerce presents an unprecedented opportunity to increase trade of the FICs, narrow distances and reduce trade costs among Forum Members, and between the Blue Pacific and the rest of the world. If conditions are right, E-Commerce can provide the impetus for Members to explore new ways of doing business and trading and to increase the diversification of their economies towards emerging sectors. Importantly, strengthening E-commerce readiness has become essential particularly as the world continues to grapple with what a post-COVID economy work look like and operate as.

Major investments in fiber-optic submarine cables across the region has made the internet faster, more reliable and affordable, but the extra capacity has not yet been fully utilised.

From its beginning in 2017, the Pacific E-commerce Initiative promoted by the Secretariat has progressively strengthened, thanks to the steadfast commitment of our Members and the support of like-minded technical agencies and donor partners. The direction provided by our Members, for all Forum Island Countries to benefit from national assessments as the first step towards developing a Regional E-Commerce Strategy, has been progressed significantly.

Following UNCTAD's methodology, the report focuses on seven key areas of critical importance for cross-border and domestic E-Commerce development:

E-Commerce policies and strategies;
Legal and regulatory frameworks;
ICT infrastructure and E-Commerce support services ecosystem;
Trade facilitation and logistics ecosystem;
Payment solutions for E-Commerce;
Access to financing initiatives in E-Commerce; and
E-Commerce skills development.

We trust that the report will guide the uptake of E-Commerce in the Federated States of Micronesia in the coming years. PIFS is bound to support its Members in prioritising the digitalisation of government and businesses in their national development and seek the needed resources to fully benefit from their participation in the internet revolution.

This E-Commerce Assessment for the Federated States of Micronesia was made possible through the financial assistance received from TradeCoM II - an OACPS Secretariat managed and European Union (EU) funded programme. I thank the OACPS Secretariat and the EU for their support.

Meg Taylor, DBE
Secretary General of the Pacific Islands Forum

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In the Federated States of Micronesia, the Assessment team wishes to express its sincere gratitude to Mr. Marion Henry, Secretary, FSM Department of Resources and Development, and staff of the Division of Trade and Investment.

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The Assessment benefitted from inputs by numerous institutions from both the public and private sectors. The Assessment team wishes to thank all individuals who responded to the survey questionnaires, and took part in the virtual bilateral and group consultations in March-September 2020. A list of the persons consulted is provided in Annex I.

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Abbreviations

ADB	Asian Development Bank
ADSL	Asymmetric Digital Subscriber Line
AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism
APG	Asia/Pacific Group
ATM	Automated Teller Machine
B2B	Business-to-Business
B2C	Business-to-Consumer
CFA	Compact of Free Association
CNMI	Commonwealth of the Northern Marianas Islands
COM-FSM	College of Micronesia
CTE	Career and Technical Education
CTEC	Career and Technical Education Centre
DAI	Digital Adoption Index
DCT	Division of Customs and Taxation
DFI	Development & Finance Training Institute
DoE	National Department of Education, FSM
DOFA	Department of Finance and Administration
EFTPOS	Electronic Funds Transfer at Point of Sale
EGDI	E-Government Development Index
EU	European Union
FDI	Foreign Direct Income
FDIC	US Federal Deposit Insurance Corporation
FSM	The Federated States of Micronesia
FSM R&D	FSM Department of Resources and Development
FSMDB	FSM Development Bank
FSMTC	FSM Telecommunications Corporation
FTA	Free Trade Agreement
FY	Financial Year
G2P	Government-to-Person
GB	Gigabyte
GDP	Gross Domestic Product
GSM	Global System for Mobile Communications
HCI	Human Capital Index
ICT	Information and Communications Technology
IDP	National Infrastructure Development Plan
ILO	International Labour Organisation
IMF	International Monetary Fund
IRU	Indefeasible Right of Use
ITC	International Trade Centre
ITU	International Telecommunication Union

LDC	Least Developing Countries
MB	Megabyte
MBPS	Megabyte Per Second
MDO	Microenterprise Development Organisations
MSG	Melanesian Spearhead Group
MSME	Micro Small and Medium-sized Enterprises
OECD	Organisation for Economic Co-operation and Development
OSI	Online Service Index
PACER	Pacific Agreement on Closer Economic Relations
PICs	Pacific Island Countries
PICTA	Pacific Island Countries Trade Agreement and Protocol on Trade in Services
PIF	Pacific Islands Forum
PIFS	Pacific Islands Forum Secretariat
PISBDCN	Pacific Islands Small Business Development Centre Network
PPD	Public-Private Dialogue
PPP	Public-Private Partnership
PRIF	Pacific Region Infrastructure Facility
PSBDC	Pohnpei Small Business Development Centre Building
SBDC	Small Business Development Centres
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
SME	Small and Medium-sized Enterprises
SONET	Synchronous Optical Networking
SPARTECA	South Pacific Regional Trade and Economic Co-operation Agreement
SSSP	Student Support Services Programme
T-3	National Trades, Training and Testing Programme
TII	Telecommunication Infrastructure Index
TRA	Telecommunication Regulations Authority
TSP	Talent Search Programme
TVET	Technical and Vocational Education Training
UB	Upward Bound Programmes
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNCTAD	United Nations Conference on Trade and Development
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UPU	Universal Postal Union
USA	United States of America
USD	United States Dollar
USDA	US Department of Agriculture
VSDL	Very high bit-rate Digital Line Subscriber
WB	World Bank
WDI	World Development Indicators
WIA	Workplace Investment Act
WTO	World Trade Organisation

Main Findings and Recommendations

Main Findings	Main Recommendations
E-commerce policies and strategies	
The FSM government recognises the critical need to improve access to ICT and the quality of ICT services throughout its strategies and policies. ICT was first addressed in 2006 in FSM's National Economic Development Plan. The Development Plan laid the stepping stones for a National ICT Policy which was later introduced in 2012. The government is also making efforts to increase the amount of e-government available, with its importance being mentioned in FSM's National ICT Policy.	Evaluate and review the implementation process of the action plans of the ICT Policy of 2012. Amend the existing ICT Policy in accordance with the recent developments in ICT. Formulate a National Broadband Policy for improving access and making broadband affordable and reliable. Consider formulating an E-commerce Strategy. Identify a champion and formulate a public-private dialogue (PPD) mechanism to ensure that E-commerce challenges are regularly and effectively addressed. Improve the systematic collection of E-commerce statistics.
ICT Infrastructure and E-commerce support services ecosystem	
FSM's ICT infrastructure is limited the main islands and to those islands surrounding them, with no facilities for remote islands and rural areas. FSM's main infrastructure includes satellite technology, submarine cables, microwave links and above ground cables. Mobile network infrastructure is based on cell towers throughout the country with most of them having 3G capabilities. The high cost of mobile data is one of the reasons explaining the low internet penetration rates in the country. The highest internet speed available in the country is 8 Mbps which is considered to be low according to international standards. The lack of sufficient infrastructure seriously hampers FSM's readiness for E-commerce.	For widespread internet adoption, reduce the tariffs on mobile internet. Introduce broadband packages and plans specifically designed for E-commerce businesses. Promote investment in broadband internet and mobile internet, also extend support to lower the costs of electricity. Encourage PPPs for building ICT Infrastructure. Map the existing coverage of the ICT-related industries and provide support and technical assistance where needed.
Trade facilitation and logistics ecosystem	
With trade-to-GDP rate at 51.5% between 2015-2017, the FSM economy is relatively dependent on international trade. FSM's overall ranking in the World Bank's Doing Business Indicators of 2020 was 65th out of 190 countries in 'trading across borders', which is better than the region's average. However, FSM's over 600 islands present extensive logistics difficulties. Road networks are mostly limited to main islands of the four states. The trade facilitation environment, despite being good, could be improved, as it lacks basic elements, such as Authorised Economic Operators or a *de minimis* customs value. Similarly, the customs agency has the opportunity to improve its appreciation of challenges faced by SMEs in terms of exporting, both in terms of tariffs and non-tariff barriers.	Create a national single window system for customs and other agencies operating at the border to expedite import/export procedures. Upgrade screening equipment at the border. Apply the risk management system and not a percentage of cargo inspection. Improve cargo storage facilities at air terminals and ports. Increase the capacity of existing warehousing facilities. Implement a de minimis customs value.

Payment solutions for E-commerce	
With only two banks, and limited services available, the population of FSM does not have access to a strong financial sector, leaving most of the population outside the formal payment channels. The extent of mobile money appears to be limited, a circumstance that might be due to the high cost of ICT services.	Establish full interoperability between banks and mobile payment operators. Implement national payment gateway and support rollout with merchants. Encourage online banking activities, especially important for those living in rural and remote islands. Establish new mobile payment methods (e.g. e-wallets) in association with the FSM Development Bank and FSM Telecommunications Corporation.
Legal and Regulatory Frameworks	
FSM lacks the key legal framework necessary to secure, enable and regulate online transactions. FSM has no legislation relating to Electronic Transactions, Consumer Protection, Cybercrime and Data Protection, all of which are crucial.	Upgrade existing laws and regulations to match the E-commerce related needs. Develop legislation relating to Electronic Transactions, Consumer Protection, Cybercrime and Data Protection in a phased manner. Increase resources for the Telecommunications Authority to implement legislation relating to E-commerce/online activity. Leverage regional technical assistance to support the development of a regulatory framework adhering to international best practices.
E-commerce Skills Development	
FSM suffers from both ICT skills and general skills shortages. ICT skill in FSM are at a low stage of development, and there exists a "digital divide" between male-female and urban-rural groups. Tertiary education and vocational training are mainly provided by the College of Micronesia (COM-FSM) and its campuses across the country. Other institutions, such as the four Small Business Development Centres (SBDC) and the FSM Development Bank's Development & Finance Training Institute (DFI), have also been involved in capacity building activities promoting private sector development.	Develop more capacity building programmes on ICT skills, E-commerce skills, business skills, trade skills, etc. for public and private sectors, with a focus on MSMEs. Promote gender-inclusive programmes by designing gender-specific incentives to learn and encourage digital adoption. Encourage rural skills development by setting up rural ICT academies. Establish business incubators and accelerators, and innovation hubs to serve as a forum for networking, creation of linkages between local MSMEs and big corporations (domestic and foreign) and transfer of knowledge. Extend support to the College of Micronesia to expand the Centre for Entrepreneurship.
Access to financing initiatives for E-commerce	
FSM was ranked 104th out of 190 countries in the 'Getting Credit' parameter by the World Bank's Doing Business indicators of 2020. The country shared its rank with three other Pacific Island Countries, namely Marshall Islands, Palau and Solomon Islands which all scored 50 out of 100. Although FSM's score was closer to the regional average score of 58, access to credit remains limited.	Provide training to MSMEs to build business proposals and access potential credit sources. Provide subsidised interest rates for MSMEs and expedite the acceptance process for loans. Organise business fairs to promote businesses locally and help them seek investors.

Methodology

A five-phased approach was used for the national E-commerce Assessment of the Federated States of Micronesia (FSM). The methodology has been based on the eTrade for All methodology developed and owned by UNCTAD, as well as valuable resources and approaches from other agencies engaged in E-commerce assessments, such as ITC, UNCDF, UNESCAP, the World Bank, and others. Nevertheless, while this Assessment draws on the methodologies of other agencies, these agencies have not been involved in conducting this report.

The phases were as follows:

✓ **Phase 1 | Stakeholder engagement and literature review, January – March 2020.**

This included official communications between TCII-OACPS, PIFS, FSM's Division of Trade and Investment (DT&I), and the Permanent Mission of the Pacific Islands Forum to the WTO in Geneva. Data analysis was made possible through access to up-to-date statistics provided by the International Telecommunications Union (ITU), Universal Postal Union (UPU), and the World Bank.

✓ **Phase 2 | Online survey customisation and dissemination and preparation of baseline indicators, February – May 2020.**

Two (2) customised questionnaires for the most relevant public and private sector stakeholders were distributed by DT&I to stakeholders in FSM. Due to limited responses, the results of the questionnaires were only used as a source of reference for qualitative information and not for quantitative purposes.

✓ **Phase 3 | Report writing of the draft national E-commerce assessment and stakeholder review, April – May 2020.**

This phase was performed remotely. When possible, some stakeholders were contacted for bilateral discussions. A draft assessment was provided to DT&I at the beginning of June for circulation to stakeholders.

✓ **Phase 4 | Virtual consultations and completion of the Assessment, August – September 2020.**

Due to restrictions caused by COVID-19, this phase was conducted remotely. Remote group consultations for the different areas of the Assessment were conducted, and the report revised and re-circulated for comments.

✓ **Phase 5 | Finalisation of the Assessment, September-November 2020.**

Final comments were received and incorporated. During this phase, the Consultant delivered a final draft of the complete national E-commerce assessment.

Seven policy areas used in UNCTAD's eTrade for all initiative were used as entry points for this work:

1. E-commerce policies and strategies
2. ICT infrastructure and E-commerce support services ecosystem
3. Trade facilitation and logistics ecosystem
4. Legal and regulatory frameworks
5. Payment solutions for E-commerce
6. E-commerce skills development
7. Access to financing initiatives in E-commerce

Note that the report is based in US dollars (USD), which is FSM's national currency.

1 E-COMMERCE POLICIES AND STRATEGIES

The FSM government recognises the critical need to improve access to ICT and the quality of ICT services through its strategies and policies. As such, it has been emphasising the need to promote ICT usage so as to use it as a catalyst for socio-economic development. However, the country lacks a comprehensive set of policies governing E-commerce. ICT was first addressed in 2006 with the country's National Economic Development Plan, and then in 2012 through the ICT Policy, although implementation has been slow. Despite their relevance, these documents do not take into consideration the E-commerce needs.

The government should review implementation of the ICT Policy of 2012, and seeking to update it and adapt it to the needs of the private sector in E-commerce. Adopting a National Broadband Policy and an E-commerce Strategy should also be on the government's radar to enhance access to affordable connectivity, and promote E-commerce as a driver of sustainable economic development.

1.1 National policies related to ICT, E-government, and E-commerce

With over 600 islands, **the Federated States of Micronesia (FSM) relies on digital technologies for connecting people across its vast geographical distances and wishes to use such technologies in order to foster economic diversification and create new income-generating opportunities.** However, not all Micronesians, especially those who live in the outer islands and rural areas, have access to those technologies, forcing them to use unreliable communications systems. Therefore, FSM needs to expand its digital technologies to facilitate further and more inclusive development.

Several policies state the significance of Information and Communication Technologies (ICT) as a pro-development tool. The country's **Strategic Development Plan 2004-2023,** whilst not tackling E-commerce, **recognises the role that electronic channels can have in attracting more tourists to the island.** It also recognises the need to strengthen the digital skills of women through *"training on media, information management and research."*[1]

The **National Infrastructure Development Plan (IDP) (2016-2025)** also foresees a series of ICT-related infrastructural projects, such as the implementation of Terrestrial Fibre Optic Extensions in Pohnpei, Terrestrial Fibre Optic in Yap, and Mobile Telecommunications Networks Improvements. The total budget required for these projects amounts to USD 13.35 million.[2]

In absence of a policy or strategy on electronic commerce, the **National ICT and Telecommunications Policy (2012)** remains the most relevant policy relevant to the digital trade. The policy was introduced with the vision of a *"Secure, Efficient and Affordable ICT to achieve equitable communication for the People of FSM"*.[3]

The National ICT Policy establishes the framework to harmonise national priorities through a participatory and inclusive approach. The main purposes of the National ICT Policy are to guide ICT and telecommunications development by:

1 Federated States of Micronesia Government (2004). Strategic Development Plan (2004-2023). The Next 20 Years: Achieving Economic Growth & Self-Reliance. Vol I: Policies and Strategies for Development. pp. 493-495. https://www.adb.org/sites/default/files/linked-documents/cobp-fsm-2015-2017-sd-02.pdf

2 Federated States of Micronesia Government (2016). National Infrastructure Development Plan 2016-2025. Available at https://dofa.gov.fm/wp-content/uploads/2018/12/FSM-Infrastructure-Development-Plan-2016-2025.pdf

3 Federated States of Micronesia Government (2012). National ICT and Telecommunications Policy 2012. Available at https://www.theprif.org/sites/default/files/2020-08/FSM%20National%20Information%20Communication%20%26%20Technology%20Policy%202012.pdf

- Specifying the key challenges and untapped opportunities, and
- Identifying the strategic priorities by building on successful approaches and initiatives and mobilising relevant resources and partnerships.

Stakeholders note that, whilst the policy was designed to be in place for a period of 4-5 years, the slow implementation rate means that the 2012 policy is still relevant in some aspects. However, they also note that some aspects of the policy are outdated and should therefore be updated.

Despite the slow implementation, the policy has already led to some positive developments. The most relevant one is the liberalisation of the ICT sector, ending the monopoly of the FSM Telecommunications Corporation. However, such liberalisation has still to bear fruits, as no other player has yet entered the market.

Box 1: FSM's National ICT Policy 2012: Goals

The policy has a total of five goals and each goal has several objectives	
Goal 1:	Achieve Accessible and Affordable Communications for All
Goal 2:	Strengthen ICT Human Resources and Increase Human Resource Development Opportunities through the Use of ICT
Goal 3:	Improve Economic Growth and Sustainable Development through ICT
Goal 4:	Utilise ICT for Good Governance
Goal 5:	Create an Enabling ICT Environment through Policy Reform and Improvement of Legal Frameworks

Source: FSM (2012). National ICT Policy 2012

The ICT Policy includes a firm government commitment to increase the level of E-government available. Under Goal 4, Utilise ICT for Good Governance, the ITC Policy states that:

"[every] effort will be made to ensure that ICT systems and processes are used to enhance government accountability, efficiency, effectiveness, and transparency of delivering public services to all and proactively combat corruption."

The key actions under this Goal include:

Conducting a feasibility study and an output proposal (technical and commercial) for an FSM E-government system.

Developing an e-government strategy outlining an implementation plan for improving government processes through the use of ICT and connecting citizens to government services, so that all sectors can improve the delivery of public services and achieve the goals of transparency and accountability.

Developing mechanisms to seek funding for implementing the E-government strategy.

Developing plans for the procurement of technology efficient network equipment to support the transmission of voice, data, and video for E-government applications.

Developing and implementing an eGovernment policy to mandate the sector implementation of the eGovernment Plan.[4]

A Digital Government Strategic Framework and Implementation Roadmap is currently being drafted, with funding from the World Bank.

4 Federated States of Micronesia Government (2012). National ICT and Telecommunications Policy 2012. Available at https://www.theprif.org/sites/default/files/2020-08/FSM%20National%20Information%20Communication%20%26%20Technology%20Policy%202012.pdf

1.2 National policies related to trade

E-commerce is not covered by the National Trade Policy adopted in 2011. The vision in the Trade Policy states:

'*The FSM Trade Policy shall promote and facilitate private sector development and foreign direct investment in priority sectors to achieve export-led economic growth and sustainable development, creating employment, improving services, alleviating poverty with the ultimate objective of raising the standards of living in the FSM.*'[5]

E-commerce is an important element that would directly contribute to the achievement of the objectives highlighted in the Trade Policy. Including E-commerce in the Trade Policy would add emphasis to the value of such a tool, and further explore ways to obtain all benefits arising from E-commerce.

To overcome the issues of poor coordination between government departments, the private sector and civil society, a comprehensive Trade Policy was put into place to strengthen the institutional capacity and promote trade for growth.

Box 2: FSM's National Trade Policy: Objectives

The main objectives of this policy include:
- Creating an environment which is conducive for investment and private sector development
- Addressing the supply-side constraints and non-tariff barriers (NTBs)
- Promoting import substitution and exports of value-added goods and services
- Guiding the nation in trade negotiations and in implementing trade agreements
- Using the Trade Policy to secure Aid for Trade from FSM's trading partners and donors
- Promoting export-led sustainable economic growth, with the ultimate objective of raising the standards of living in the FSM

Source: FSM (2011). National Trade Policy. Division of Trade and Investment, FSM Department of Resources and Development.

On the international front, FSM is signatory of the **Pacific Island Countries Trade Agreement and Protocol on Trade in Services (PICTA)**, a Free Trade Agreement (FTA) that aims to connect the country to developing country members of the Pacific Island Forum (PIF) by allowing duty-free quota-free access to its goods. However, the country has not ratified such FTA. On the other hand, the country has yet to sign the Pacific Agreement on Closer Economic Relations (PACER Plus), an FTA which cover Australia and New Zealand in addition to the developing members of the PIF. One of the key factors behind this situation is the Most-Favoured Nation clause included in the Compact of Free Association that FSM has with the United States. This entails that FSM would have to extend to the United States the same tariff preferences it grants to its regional peers through PACER Plus or PICTA. Extending tariff preferences to the United States would lead to a significant reduction in tariff revenue. However, the lack of FTAs hampers FSM's ability to benefit from international trade in goods and services, inlcuding digital trade.

1.3 National coordination

The government is undertaking meaningful steps towards ensuring that the private sector and its views are properly represented, for example by sponsoring multi-stakeholder events on this matter, such as the Digital ICT Conference.

However, there appears to be a lack of structured dialogue of the government with the private sector at various stages of defining problems, identifying practical solutions, and establishing priorities. There are informal modes of consultations that are mainly done once a policy or legislation has been passed. However, there does not appear to be a formal, structured mechanism for public-private dialogue on E-commerce, through which policymakers and the business community can work together. As a result, there is a gap in governance mechanisms that should be filled.

5 Federated States of Micronesia Government (2011). National Trade Policy. Division of Trade and Investment, FSM Department of Resources and Development. Available at http://www.fsmrd.fm//wp-content/uploads/2014/06/Full-Trade-A4-New.pdf

1.4 Access to relevant statistics

A key issue for FSM is the poor state of its statistical system. Whilst the FSM Statistics Office reports some indicators on ICT data,[6] provided by the FSM Telecommunications Corporation, stakeholders have reported concerns regarding their reliability. Thus, the only publicly available and reliable sources of information are international databases, such as the UN-ITU, World Bank, The Asian Development Bank (ADB) and the International Monetary Fund (IMF).

Clear and authoritative data on the ICT sector in general and E-commerce specifically will be critical for informing policy reforms. Robust data will support the planning, monitoring, and evaluation of various ICT and E-commerce initiatives.

6 See https://www.fsmstatistics.fm/other-statistics/communication-statistics/

2 ICT INFRASTRUCTURE AND E-COMMERCE SUPPORT SERVICES ECOSYSTEM

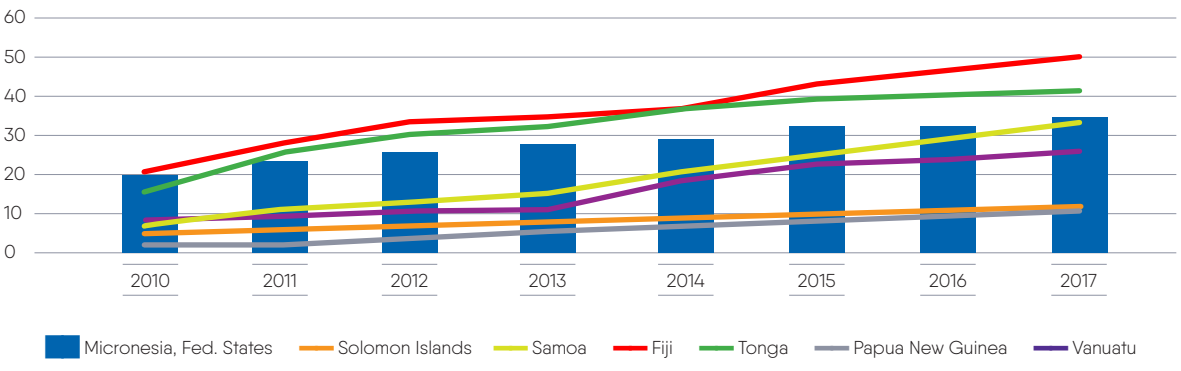
FSM's ICT infrastructure is limited to a number of main islands those islands surrounding them, with no facilities for remote islands and rural areas. This, in addition to the lack of competition – there is only one service provider despite the 2014 market liberalisation – has led to the high connectivity costs. The quality of the service is weak. The highest internet speed available in the country is 8 Mbps which is low according to international standards. All these elements have led to a situation where only 35% of the population has access to the internet.

For FSM to be able to adopt E-commerce, it must ensure that its citizens have access to the internet. Therefore, infrastructure investment is needed to expand the network coverage to those unserved areas, improve the quality of connectivity and reduce its cost.

2.1 Broadband, mobile, and smartphone penetration

FSM's topography and population dispersion pose challenges to the expansion of ICT services. Out of a total population of 114,000, 23% live in cities, with the rest living dispersed across the country's 600+ islands. In 2020, only 22% of the population – 25,000 – have mobile phone connections, which all are prepaid. In the same year, the total number of people using the internet is 40,000, representing a penetration rate of 35%,[7] and indicating that about 15,000 people use wireless and fixed-line services to connect. Fixed broadband penetration in FSM is higher than its regional peers, with 3.39 subscriptions per 100 people. By comparison, Tonga, the second country with more fixed broadband connections per 100 people, had 2.94 connections per 100 people. In 2018, there were almost 3,000 fixed broadband subscribers for residential purposes, 651 were for business purposes, and 165 government subscribers.

Figure 1: Individuals using the internet (% of the population) 2010-2017

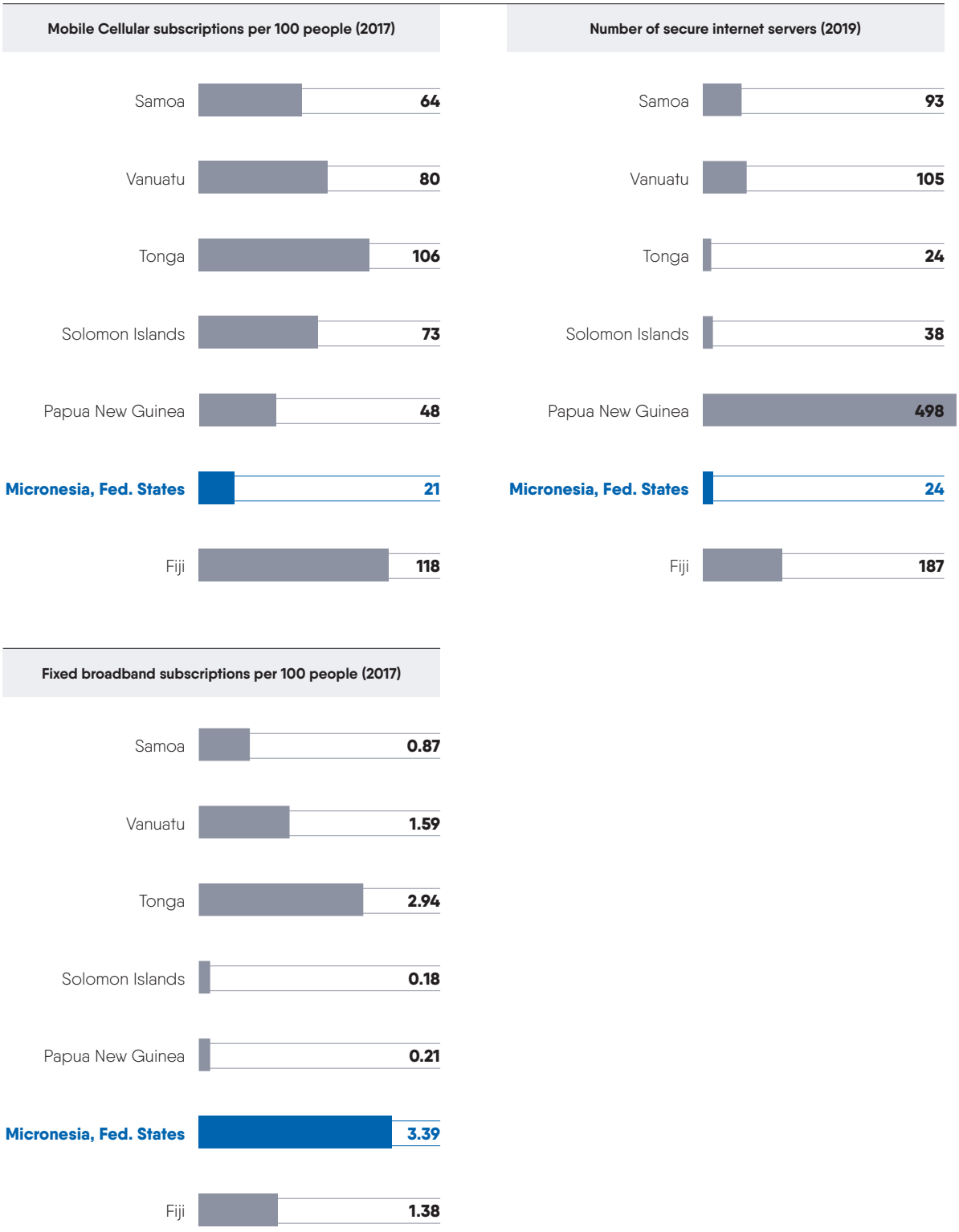


Source: World Bank WDI

7 Hootsuite (2020). Digital 2020: The Federated States of Micronesia. Available at https://datareportal.com/reports/digital-2020-federated-states-of-micronesia

According to the stakeholders consulted, the low rate of mobile phone connections is due to the existing weak infrastructure, with a lot of rural areas without network coverage. The high cost of mobile services, partly due to lack of competition, also plays a role. The FSM telecommunication monopoly has also led to a poor-quality service and inefficiency, as reported by stakeholders. Additionally, the limited presence of mobile phones also leads to limited demand, and ultimately supply, of app-based services, which are one of the key drivers of E-commerce.

Figure 2: ICT indicators



Source: World Bank WDI

2.2 Reliability, affordability, latency, speed and coverage

Overall, access to high-speed Internet is limited, which constrains the country's ability to unlock the full potential of a digital economy, with availability and prices changing depending on the state. On Pohnpei and Yap, which have submarine fibre optic connectivity, Asymmetric Digital Subscriber Line (ADSL) packages are available, at a cost of USD 26 per month for a 512 kbps of download capacity, and USD 39 per month for 1 Mbps. In Kosrae, the ADSL tariff is USD 33 per month for a 256 kbps and USD 65 per month for 512 kbps.

Access to high-speed Internet is beyond the means of most households. In the state of Chuuk, for example, packages offering higher speed internet, with a connection of up to 8 Mbps, cost USD 226 per month, whilst in the state of Kosrae, the very high-speed subscriber line (VDSL), which mainly targets business users, is available with prices ranging from USD 1,274 per month (1 Mbps) to USD 10,912 per month (8 Mbps). However, with an average monthly Gross National Income (GNI) of USD 303, this is extremely costly and beyond the reach of most households.[8]

The high cost of mobile data is one of the reasons explaining the low penetration rates of mobile data in the country. In 2020, the worldwide mobile data pricing rankings conducted by Cable UK revealed that FSM is one of the most expensive countries in the Pacific for mobile data, with an average cost of USD 7.2 per gigabyte. This place FSM as 184th in a ranking of 228 countries. Fiji is the cheapest country in the region, with a GB of data costing just USD 0.59. A similar situation is found in the analysis of fixed broadband prices, in which FSM ranks 168th out of 206.

Table 1: Worldwide mobile data pricing rankings, Oceania, 2020

Rank	Country	Average price of 1GB (USD)
11	Fiji	0.59
16	Australia	0.68
79	Guam	2.00
99	American Samoa	2.50
100	Palau	2.50
104	Northern Mariana Islands	2.65
125	Tonga	3.41
147	Vanuatu	4.25
151	Niue	4.50
161	New Caledonia	4.81
173	Papua New Guinea	5.40
180	New Zealand	6.06
184	**Micronesia (Federated States of)**	**7.20**
192	Solomon Islands	8.53
200	Kiribati	10.50
201	Samoa	10.86
226	Nauru	30.47

Source: Cable.co.uk

8 World Bank (2020). Project Information Document: Digital FSM (P170718). The World Bank Group. Available at http://documents1.worldbank.org/curated/en/383761560829100337/pdf/Concept-Project-Information-Document-PID-Digital-FSM-P170718.pdf

Table 2: Worldwide broadband price rankings, Oceania, 2020

Rank	Name	Average cost of a fixed-line broadband package (Per month in USD)	Average cost of fixed-line broadband (Per MB, per month in USD)
113	Australia	48.35	1.73
121	Papua New Guinea	51.06	25.95
125	New Zealand	54.00	0.47
128	Fiji	55.42	65.84
164	Guam	79.00	3.36
165	French Polynesia	80.14	12.49
168	**Micronesia (Federated States of)**	**81.00**	**35.32**
173	American Samoa	85.00	81.20
175	Marshall Islands	86.20	135.42
177	Palau	89.98	9.00
178	Cook Islands	92.12	19.05
181	Vanuatu	95.25	92.07

Source: Cable.co.uk

The country's mobile coverage is mostly basic voice services, concentrated on the four main state islands. In 2017/18, 3G services were rolled out across the main population centres, whilst in 2019 LTE was deployed in and around the areas of Kolonia and Palikir in Pohnpei and around Weno in Chuuk.

2.3 Major infrastructure projects

FSM's major infrastructure includes both a domestic and international network of submarine cables. The HANTRU1 cable system was built for the US military, connecting Guam with Kwajalein (RMI). FSM and RMI were given the opportunity to connect to the HANTRU1 cable via so-called spurs from Pohnpei in FSM and Majuro in RMI. The respective spurs are owned by the national Telcos, and they both have long term right of use agreements with HANTRU to get access to Guam from where access the world wide web is easily available, including via the SEA-US cable.

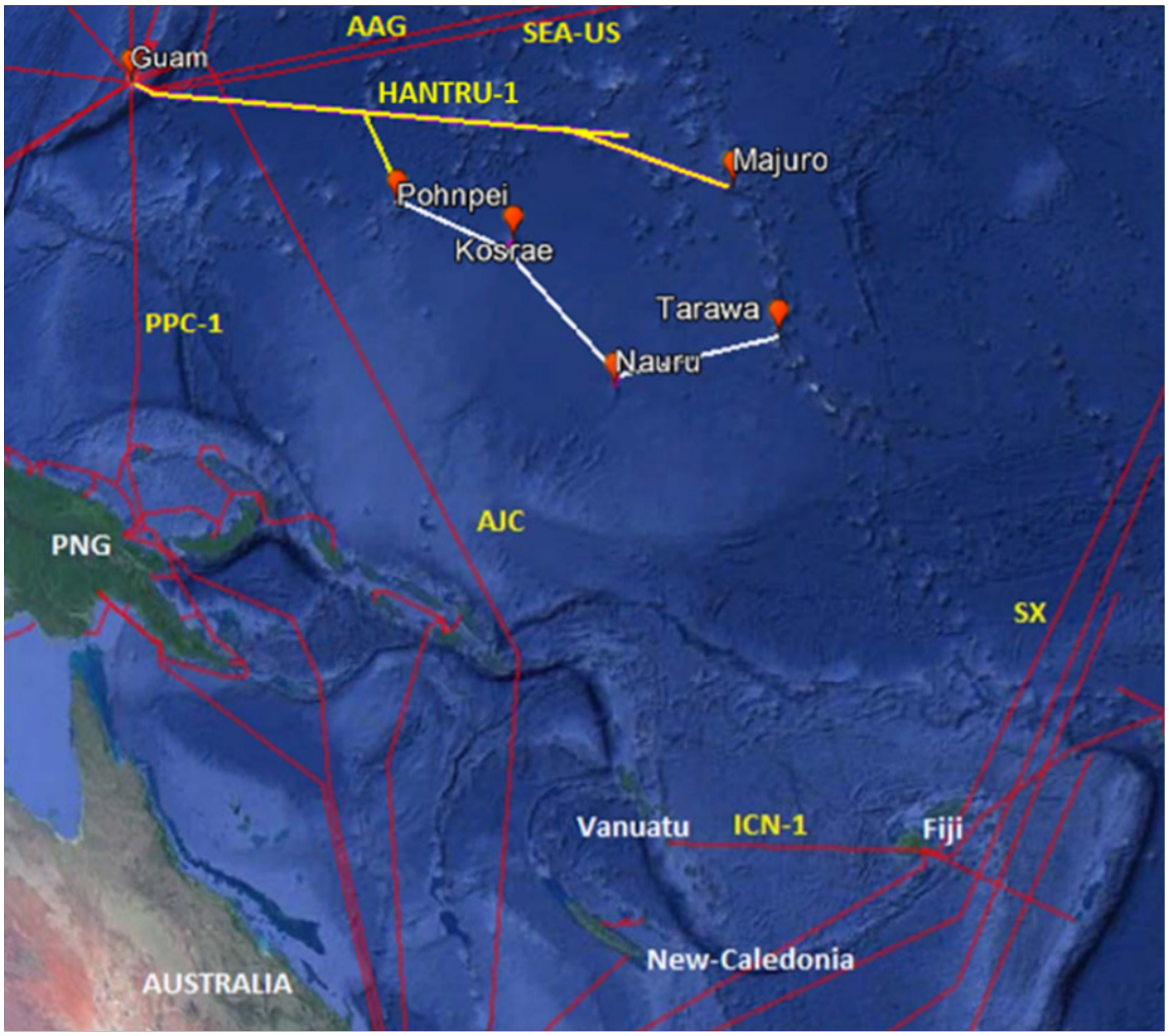
The World Bank is playing a critical role in developing the ICT infrastructure in the Pacific by extending the fibre-optic cable system to all Pacific Island states through the Pacific Regional Connectivity Programme.[9] Through this programme, the World Bank, together with the ADB, is grant-funding the construction of the East Micronesian Cable System (EMCS), which will link the FSM State of Kosrae and the independent Republics of Kiribati and Nauru via the HANTRU cable system in Pohnpei.[10] The construction of the EMCS will start in 2021 and will take approximately two years to complete.

Moreover, in the first phase of the Pacific Regional Connectivity Programme, the FSM received World Bank grant funding to build a 300 km spur to connect the State of Yap with the SEA-US cable. A long-term right of use of the SEA-US cable to Guam has been secured in a so-called Indefeasible Right of Use (IRU) agreement. The same programme also funded the Chuuk-Pohnpei Cable System.

9 The Australian Strategic Policy Institute (2020), ICT For Development In The Pacific Islands, An assessment of e-government capabilities in Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu, February 2020, Available at: https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2020-02/ICT%20for%20development%20in%20the%20Pacific%20islands.pdf?x_oS.r8OVVfT-lxxgNHI58k_VL45KC83H

10 World Bank (2020). New Digital Project to Connect Federated States of Micronesia to Global Economic Opportunities. Available at: https://www.worldbank.org/en/news/press-release/2020/03/29/new-digital-project-to-connect-federated-states-of-micronesia-to-global-economic-opportunities

Figure 3: Submarine Cables connecting FSM



Source: World Bank (2017).

Figure 4: SEA-US and HANTRU-1 Submarine Cables

Source: NEC

The developments highlighted above mean that from 2023 all 4 states of FSM will be connected with high-capacity underwater fibre optic cables, thus providing a boost to the digital economy, including trade.

As a follow up to the Pacific Regional Connectivity Programme, the World Bank has agreed to grant fund the **Digital FSM project**. The project provides funds to build fibre optic cables networks on the four main FSM State islands and Chuuk lagoon islands. It also includes funds to bring LTE-based internet services to the most populated FSM outer islands. Overall, the project aims to:

1. Develop the National Digital Connectivity Infrastructure,
2. Develop the Digital Government Platform, and
3. Create a conducive and enabling environment for the Digital Government and Digital Economy.[11]

2.4 ICT Services

Telecommunication services

Currently, all mobile and fixed-line telecommunication services are operated by the state-owned Federated States of Micronesia Telecommunications Corporation (FSMTC). The service provider, FSM Telecom, provides internet access to the four states of Pohnpei, Kosrae, Chuuk and Yap. Its main services include phone, internet (via landline, wireless hotspots, and mobile networks), and television.[12]

The telecommunications regulator is the **Telecommunications Regulatory Authority (TRA)**, which was set up through the Public Law No. 18-52 of 2014 following the Telecommunications Policy of 2012.[13] Capacity concerns were raised by the different stakeholders, highlighting the need to reinforce the TRA's capacity to implement its duties.

Box 3: FSM's TRA: Objectives

The main goals of the TRA as set out in the Public Law No. 18-52 of 2014 are:
- To provide clear rules for telecommunications services firms that focus on promoting the long-term interests of users
- To encourage new firms to provide telecommunications services
- To encourage competition between supplier firms to provide better services, better access and better prices
- To encourage firms to spend money on telecommunications networks
- To ensure there are appropriate user rights and complaint processes
- To make it easier for people in the FSM to access telecommunications services

Source: Public Law 18-052: To amend title 21 of the Code of the Federated States of Micronesia

Government Services

FSM was ranked 146th among 193 countries by the UN's E-Government Survey of 2016. It ranked eighth in the Oceania region with an E-Government Development Index EGDI (EGDI) score of 0.31 out of 1 and was further categorised as a Middle EGDI country. FSM's Online Service component was scored at 0.14, Human Capital component at 0.66, and Telecommunication Infrastructure component at 0.11,[14] indicating poorly established e-government in the region.[15]

11 World Bank (2020). Project Information Document: Digital FSM (P170718). The World Bank Group. Available at http://documents1.worldbank.org/curated/en/383761560829100337/pdf/Concept-Project-Information-Document-PID-Digital-FSM-P170718.pdf

12 See https://www.fsmtc.fm/services

13 Public Law 18-052: To amend title 21 of the Code of the Federated States of Micronesia. Available at http://www.paclii.org/cgi-bin/sinodisp/fm/legis/num_act/pl18052tat21otcotfsom589/index.html?stem=&synonyms=&query=Telecommunications%20Act

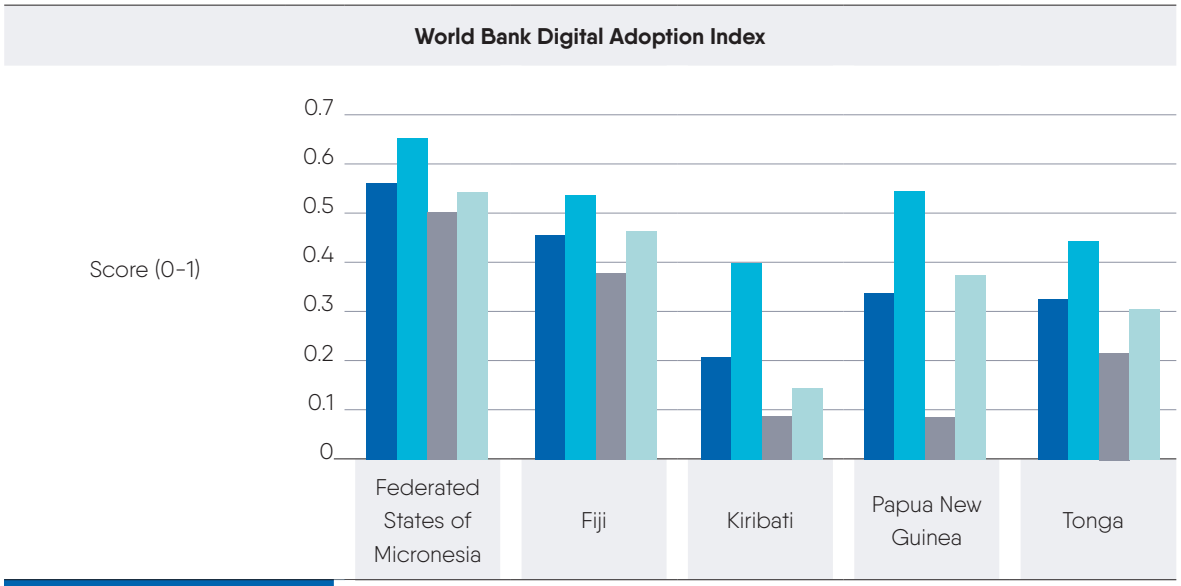
14 Out of 1. The E-Government Development Index presents the state of E-Government Development of the United Nations Member States. Along with an assessment of the website development patterns in a country, the E-Government Development index incorporates the access characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies to promote access and inclusion of its people. The EGDI is a composite measure of three important dimensions of e-government, namely: provision of online services, telecommunication connectivity and human capacity. See https://publicadministration.un.org/egovkb/en-us/About/Overview/-E-Government-Development-Index

15 R. Cullen, G. Hassall (2018), Achieving Sustainable E-Government in Pacific Island States, Springer.

The state of e-government services in FSM is relatively poor and limited to a select range of services. At present, the official government website of FSM provides downloadable forms, guidelines and fee requirement information. Most government departments of FSM have only limited access to IT resources and a website with limited content, which is often outdated and lacks a common standard.

Most government transactional services, such as obtaining birth, marriage and death certificates, registering a business, or paying taxes, are still manual and paper-based, and very little work has been undertaken to digitise internal government procedures.[16] There is no digital payments platform for government services.[17]

Figure 5: Digital Adoption Index in Pacific Countries, 2016



	Federated States of Micronesia	Fiji	Kiribati	Papua New Guinea	Tonga
Digital Adoption Index	0.57	0.46	0.21	0.34	0.33
Business subindex	0.66	0.54	0.4	0.55	0.45
People subindex	0.51	0.38	0.09	0.09	0.22
Government subindex	0.55	0.47	0.15	0.38	0.31

Source: adapted from World Bank data

These challenges are reflected in the World Bank's Digital Adoption Index (DAI), which assigns a value of 0.55 out of 1 to the government's digital readiness – low, although high when compared to the regional average.[18]

To address some of these challenges in 2020 the World Bank has launched the **Digital Federated States of Micronesia Project**. The project aims to *"expand access to the internet, promote private sector investment in digital services and establish the critical foundations for digital government services and the digital economy"*. The project aims to improve digital connectivity, develop e-government capabilities and strengthen the enabling environment for digital government and the digital economy.[19]

16 World Bank (2020). Project Information Document: Digital FSM (P170718). The World Bank Group. Available at http://documents1.worldbank.org/curated/en/383761560829100337/pdf/Concept-Project-Information-Document-PID-Digital-FSM-P170718.pdf

17 Ibid

18 The DAI is a worldwide index that measures countries' digital adoption across three dimensions of the economy: people, government, and business. The index covers 180 countries on a 0–1 scale, and emphasises the "supply-side" of digital adoption to maximise coverage and simplify theoretical linkages. The overall DAI is the simple average of three sub-indexes. Each sub-index comprises technologies necessary for the respective agent to promote development in the digital era: increasing productivity and accelerating broad-based growth for business, expanding opportunities and improving welfare for people, and increasing the efficiency and accountability of service delivery for government. See World Bank (2016), Digital Adoption Index, World Development Report 2016: Digital Dividends. Available at https://www.worldbank.org/en/publication/wdr2016 and also at http://pubdocs.worldbank.org/en/587221475074960682/WDR16-BP-DAI-methodology.pdf

19 World Bank (2020). Project Information Document: Digital FSM (P170718). The World Bank Group. Available at http://documents1.worldbank.org/curated/en/383761560829100337/pdf/Concept-Project-Information-Document-PID-Digital-FSM-P170718.pdf

3 TRADE LOGISTICS AND TRADE FACILITATION ECOSYSTEM

With a trade-to-GDP rate of 51.5% between 2015-2017, FSM's economy is relatively dependent on international trade, which requires the country to have a well-developed trade facilitation environment. FSM's overall ranking in the World Bank's Doing Business Indicators of 2020 was 65th out of 190 countries in 'trading across borders', which is better than the region's average. However, FSM's widespread geographic coverage of over 600 islands creates extensive difficulties in transport and logistics.

In this context, the trade facilitation environment could be further improved, for example by introducing Authorised Economic Operators or a de minimis customs value. Similarly, the customs agency has the opportunity to further appreciate the trade challenges faced by SMEs, so as to address tariffs and non-tariff barriers in a way which can benefit exporters.

3.1 Mode of delivery, last-mile delivery, traffic and regulations

With over 600 islands, FSM relies extensively on sea and air transport to connect its population. Due to its geographical complexity, FSM only has 388 km of roads, of which 184 are sealed, and 204 are unsealed. Roads are mainly located in the main islands of FSMs' states, whereas most remote islands and rural areas have raw/mud roads, which cannot be used for logistical purposes. The Department of Transport and Public Works in each state is responsible for the maintenance of roads. Poor roadways are a problem for all Pacific Island Countries (PICs) due to their impact on connectivity.[20]

FSM has four operational international seaports, one in each state of Pohnpei, Chuuk, Yap and Kosrae. In Pohnpei and Kosrae, the ports are managed by a Port Authority, while in Chuuk and Yap the Ports are operated through the Department of Transport and Public Works.[21]

FSM is still lagging behind in terms of shipping connectivity. Despite improvements during the past five years,[22] the FSM's Linear Shipping Connectivity Index was still 4.47 in 2019 (on a 0-100 scale), one of the lowest among FICs, and very low by international standards.[23]

20 Logistics Cluster (2018). Micronesia Logistics Infrastructure, FSM Country Profile, Logistics Capacity Assessment, May. Available at: https://dlca.logcluster.org/display/public/DLCA/Micronesia%2C+Federated+States+of

21 Ibid

22 The Liner Shipping Connectivity Index (LSCI) captures how well countries are connected to global shipping networks. It is computed by the United Nations Conference on Trade and Development (UNCTAD) based on five components of the maritime transport sector: number of ships, their container-carrying capacity, maximum vessel size, number of services, and number of companies that deploy container ships in a country's ports. For each component a country's value is divided by the maximum value of each component in 2004, the five components are averaged for each country, and the average is divided by the maximum average for the year and multiplied by 100. The index generates a value of 100 for the country with the highest average index in that year. See https://www.gica.global/activity/liner-shipping-connectivity-index-lsci

23 Linear Shipping Connectivity Index, Annual, UNCTAD Stat, Available at https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=92

Table 3: Linear Shipping Connectivity Index, 2015-19

Name	2015	2016	2017	2018	2019
Kiribati	4.73	5.58	5.83	5.78	2.01
Tuvalu	2.96	3.17	2.03	1.98	2.01
Nauru	2.45	2.12	1.88	2.20	2.20
FSM	**2.50**	**2.50**	**2.70**	**4.53**	**4.47**
Tonga	5.66	7.34	8.26	8.18	7.59
Vanuatu	8.75	8.59	8.54	8.24	7.91
Samoa	6.45	6.95	6.66	6.83	8.07
Solomon Islands	11.15	10.75	10.73	10.54	10.66
Fiji	12.74	12.47	13.27	13.33	11.20
Papua New Guinea	12.75	12.38	13.23	12.67	12.63

Source: UNCTAD STAT

FSM also has a limited number of warehousing and storage facilities at the main seaports in each of the four state capitals.[24]

Along with its ports and waterways, FSM also operates four international airports and nine outer island airfields. Each of the four states accommodates airports with international and domestic services: Kolonia in Phonpei, Weno in Chuuk, Colonia in Yap, and Okat in Kosrae.

Information about air freight is limited for FSM. Available information suggests a limited availability of air freight services due to high operating costs, with airports primarily serving the needs of passengers rather than as cargo.

Domestic connectivity mainly relies upon inter-island shipping, which is the primary link between the four main islands and their outer islands. The state-owned operator, FSM Department of Transport Communications and Infrastructure, is the only scheduled interstate shipping operator in FSM.

FSM is well served by express couriers, such as DHL and FedEx. Additionally, the country benefits form the United States Postal Service, which connects the island with the rest of the world at relatively affordable rates.[25] Notably, the United States Postal Service provides international air freight services for mails and parcels, whilst sea freight services are provided by Matson, an American transportation services company. Pre-COVID-19, air mail would arrive in the country on a daily basis, and twice a month for ship mail. Due to COVID-19, the frequency has been reduced, with air mail being lifted only twice a week for Pohnpei, Kosrae and Chuuk, and only once a week for Yap.

3.2 Trade Facilitation

All of FSM's customs policies, procedures, rules and regulations are the responsibility of the Division of Customs and Taxation (DCTA) of the FSM Department of Finance and Administration (DOFA).

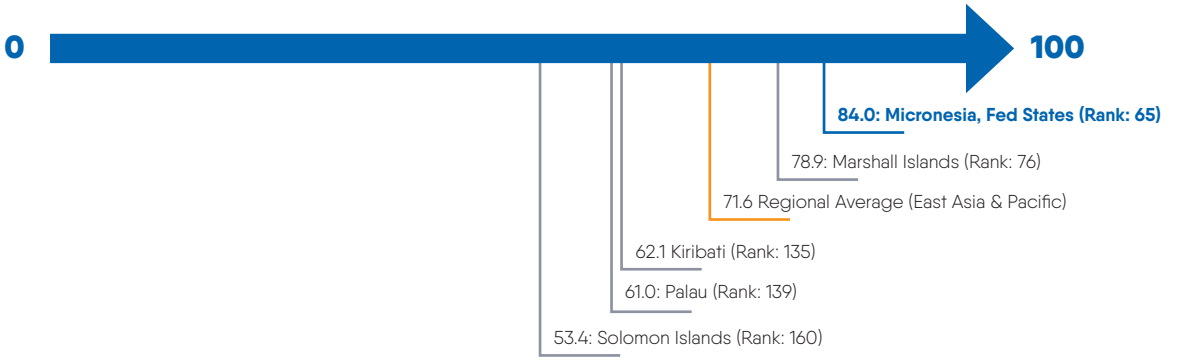
FSM is neither a member of the World Trade Organisation (WTO), nor of the World Customs Organisation (WCO), the organisations in charge of the key trade facilitation treaties - i.e. WTO Trade Facilitation Agreement and the Revised Kyoto Convention. Despite this, **FSM was ranked 65th out of 190 countries, with a score of 84 out of 100, in the 'Trading Across Borders' component of the 2020 World Bank's Doing Business Indicators**, a proxy of a country's trade facilitation performance. This is the best score among Forum Island Countries.[26]

24 Logistics Cluster (2018). Micronesia Logistics Infrastructure, FSM Country Profile, Logistics Capacity Assessment, May. Available at: https://dlca.logcluster.org/display/public/DLCA/Micronesia%2C+Federated+States+of

25 For USPS rates, see United States Postal Service (2020). Price List. Notice 123, October 18. Available at https://pe.usps.com/text/dmm300/notice123.htm#_c376. FSM is considered a domestic territory for mailing, with pricing subject to terms established in the Compact of Free Association, see https://pe.usps.com/text/dmm300/608.htm

26 Doing Business records the time and cost associated with the logistical process of exporting and importing goods. Doing Business measures the time and cost (excluding tariffs) associated with three sets of procedures—documentary compliance, border compliance and domestic transport—within the overall process of exporting or importing a shipment of goods. See World Bank (2019), Economy Profile: Micronesia, Fed. States, Doing Business 2020. Available at https://openknowledge.worldbank.org/bitstream/handle/10986/32906/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies-Economy-Profile-of-Micronesia-Federated-States-of.pdf?sequence=1&isAllowed=y

Figure 6: Trading Across Borders in FSM and comparator economies – Ranking and Score



Source: NEC

In terms of border compliance, importing a standard container of goods requires 56 hours and costs USD 180. Exporting the same container takes only 36 hours and costs USD 136.[27]

Table 4: Trading across borders

	FSM		East Asia and Pacific		OECD	
	Hours	**USD**	**Hours**	**USD**	**Hours**	**USD**
Export: Border compliance	36	168	57.5	381.1	12.7	136.8
Export: Documentary compliance	26	60	55.6	109.4	2.3	33.4
Import: Border compliance	56	180	68.4	422.8	8.5	98.1
Import: Documentary compliance	35	80	53.7	108.4	3.4	23.5

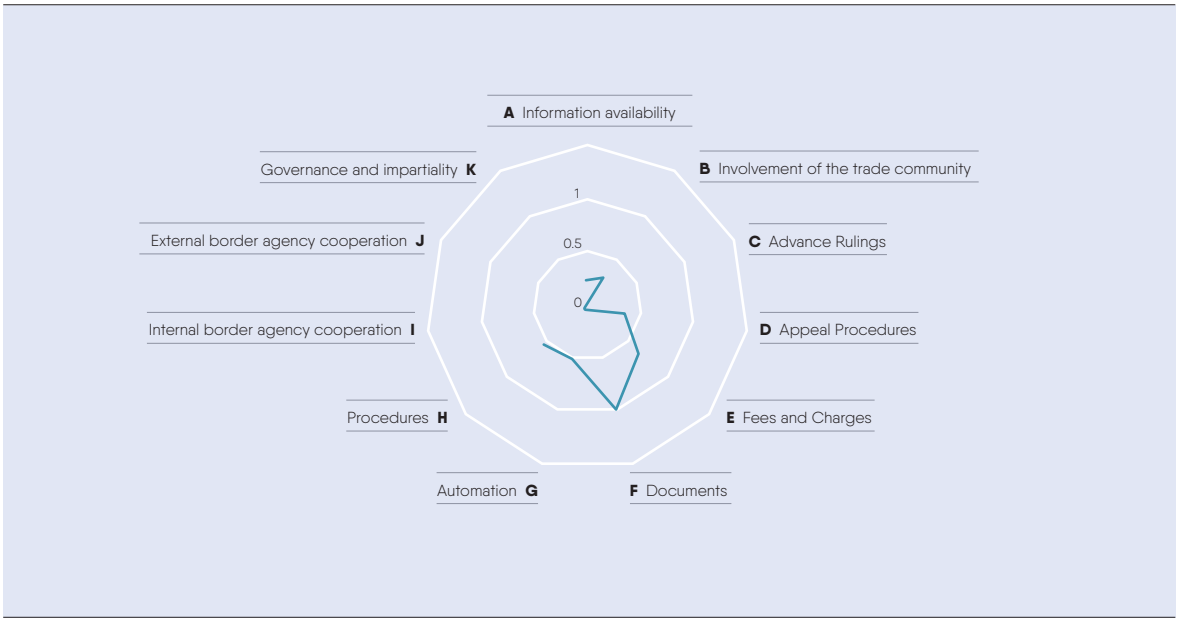
Source: World Bank Doing Business 2020

According to the OECD, FSM falls short of many of the key performance indicators relating to trade facilitation.[28] Major shortcomings are identified in the areas of information availability, involvement of the trade community, advance rulings, appeals, automation and procedures.

27 Border compliance captures the time and cost associated with compliance with the economy's customs regulations and with regulations relating to other inspections that are mandatory in order for the shipment to cross the economy's border, as well as the time and cost for handling that takes place at its port or border. Documentary compliance captures the time and cost associated with compliance with the documentary requirements of all government agencies of the origin economy, the destination economy and any transit economies.

28 The TFIs are composed of a set of variables measuring the actual extent to which countries have introduced and implemented trade facilitation measures in absolute terms, but also their performance relative to others. The TFIs take values from 0 to 2, where 2 designates the best performance that can be achieved. The TFIs mirror the substantive provisions of the TFA. The families of measures covered in the WTO TFA have been re-organised, in order to take into account similarities between measures, underlying shared components, as well as areas where further distinctions were warranted.

Figure 7: OECD Trade Facilitation Indicators 2019, FSM



Source: OECD. Note: the lack of lines and data points refers to lack of data.

Customs procedures for goods in FSM are mostly manual, and room for improvement exists. Upon the arrival of a vessel or an aircraft at any port in FSM, the master or pilot of such vessel or aircraft is required to deliver a number of documents to the Customs officer; these documents include copies of the manifest and all bills of lading and airway bills for cargo to be discharged at that particular port.[29] Each consignee of imported goods has to make a declaration of 'entry of goods imported' at the local Customs office within 15 days after the departure of the importing vessel or aircraft. By doing so, the consignee notifies the Customs officials of the arrival of goods and declaring compliance to all Customs requirements.[30]

In terms of cargo inspection, **the government has put in place a risk management system**. However, practice shows that despite the system, customs examines a minimum 30% of the cargo coming into the country – even when the risk management system might indicate that a lower percentage is appropriate.

One of the key challenges faced by the customs administration is the lack of an automated customs management system. FSM currently uses New Zealand's PC Trade, which is a software mainly focused on the collection of trade statistics. The country is expecting that, with funding from the 11th European Development Fund (EDF), it will be able to adopt UNCTAD's ASYCUDA World, which should improve customs processing of entries, clearing time, etc.

The country also lacks an Authorised Economic Operator (AEO) programme to expedite customs processes, nor is a **de minimis customs value** in place. The de minimis customs value is particularly relevant for E-commerce, as it enables parcels of low-value goods, which are ones mainly traded by SMEs in E-commerce, to come into the country without paying fees or taxes.

FSM does not possess a physical addressing system, making it extremely difficult for the postal services to deliver the parcels, particularly with regards to the last-mile delivery of goods. The situation is common across the Pacific. However, some countries have started adopting alternative geolocation systems. For example, Tuvalu Post has adopted What3Words addressing system as the national address standard, thus bridging the accessibility gap for postal service consumers (both citizens and businesses).

FSM's main partner is the United States. However, there is a lack of information as to whether the Compact Agreement's provisios are fully utilised by the private sector to facilitate trade. An analysis of the existing tariffs and non-tariff barriers that hamper the development of the country's export sector should be undertaken.

29 FSM Congress, Title 54. Taxation & Customs, Subchapter III: Customs Procedures and Offenses. Available at http://www.fsmlaw.org/fsm/code/title54/T54_Ch02.htm#231
30 Ibid

4 PAYMENT SOLUTIONS FOR E-COMMERCE

With only two commercial banks, and limited services available, the population of FSM does not have access to strong financial services – only 23% of population has a deposit account, leaving most of the population outside the electronic payment channels provided by banks. Alternative methods, such as mobile money solutions, are also limited, a circumstance that might be due to the high cost of ICT services.

To address such challenges, it will be important to establish full interoperability between banks and mobile payment operators and encourage online banking activities, especially important for those living on rural and/or remote islands.

4.1 Banking penetration

FSM's financial sector is limited to a development bank – the Federated States of Micronesia Development Bank, which services all states, and the two commercial banks – the Bank of the FSM, and the Bank of Guam, with branches in Kosrae, Chuuk, Pohnpei and Yap. The financial sector represents about 4.5% of FSM's nominal GDP. Private sector credit remains low, with the loan-to-deposit ratio at 15%.[31]

The FSM Development Bank has the specific mandate to finance the needs of the private sector in FSM, and has a specific focus on SMEs. Overall, the bank has a portfolio of USD 44 million in business loans, of which a significant portion are lent to SMEs. It controls more than 80% of the commercial loans in FSM. The FSM Development Bank is a key player supporting the Government in promoting sustainable economic development. The Bank has recently accessed international private capital, having tapped into funds from China's Exim Bank, the European Development Bank, etc. It also has stakes in other domestic banks, owning 24% of the Bank of the FSM.

FSM lags behind its regional peers in terms of banking penetration. Only 23% of the population have a deposit account, and less than 7% have a loan with a bank. In 2015, the commercial banks implemented a minimum balance requirement of USD 100 on savings accounts, which might partly explain the reduction in the number of savings accounts since then.[32] Access to banking facilities remains limited for Micronesians, with around one bank branch per 14,000 individuals, and one ATM per 11,000.

Table 5: Financial Access Indicators

Indicators	Number
Number of bank branches	8
Number of ATMs	10
Number of deposit accounts with commercial banks	27,789
Number of loan accounts with commercial banks	8,012

Source: ADB

31 International Monetary Fund (2019). 2019 Article IV Consultation, Federated States of Micronesia, Staff Report, No. 19/288, September. Available at https://www.imf.org/-/media/Files/Publications/CR/2019/1FSMEA2019001.ashx

32 Ibid

Electronic banking (internet, mobile, etc.) is nascent and still difficult to access for those living in the outer islands, who are already lacking access to more traditional facilities. The Bank of Guam has electronic banking facilities including online banking, mobile banking and online bill payment systems. Neither the Bank of the FSM or the FSM Development Bank have similar facilities, although they are exploring such initiatives.

4.2 Financial regulators

FSM's banks are regulated under Title 29 of the FSM Code, and both commercial banks operating in FSM are regulated by the US Federal Deposit Insurance Corporation (FDIC). This is because FSM comes under the Compact Agreement with the United States. Both banks are subject to existing and future US banking and banking-related laws. The only exceptions made are those that conflict with FSM constitutional provisions on land ownership by foreigners.[33]

The FSM Banking Board is the main supervisor of all banking activities. In addition to the FSM Banking Board, a regular review is done by the US FDIC. There is no central bank in FSM, which adopts the USD as its official currency.

As noted by the IMF in 2017, both government-supervised commercial banks were well-capitalised and had sufficient liquidity, yet there were small credit unions that were not subject to government oversight. The government has started taking steps to include credit unions under the FSM Banking Board's supervision.[34]

4.3 Main mobile, cashless payment solutions available

While traditional cashless payment methods linked to bank accounts such as card payment are in place, more recent methods such as e-wallets and mobile-money seem to be limited. This is confirmed by the survey with private sector stakeholders which mentions *cash on delivery* as being the most popular mode of payment in FSM, followed by credit and debit cards.

Modern types of cashless payments **can support both financial inclusion and E-commerce and it is therefore** important for FSM to promote their adoption.

Mobile money services are an effective and efficient way to deliver financial services to poor and isolated communities. As highlighted by Grice (2015), the key benefits of mobile money are:

- Increased access to basic financial services leading to enhanced economic activity;
- Reduced risk of money theft and increased personal control over financial resources;
- Increased speed of payments both to and from consumers, businesses, and government;
- Improved convenience and reducing cash in the economy;
- Lower transaction costs and improved transparency and audibility; and
- Improved competition through reduced barriers to entry for fee-for-service business models.[35]

FSM has no taskforces supporting financial inclusion, unlike other Forum Island Countries such as Fiji.

33 See US Department of Interior – Compacts of Free Association. Available at https://www.doi.gov/oia/compacts-of-free-association

34 International Monetary Fund (2019). 2019 Article IV Consultation, Federated States of Micronesia, Staff Report, No. 19/288, September. Available at https://www.imf.org/-/media/Files/Publications/CR/2019/1FSMEA2019001.ashx

35 Centre for Social Responsibility in Mining and International Mining for Development Centre (2015). Mobile Transparency? Financial Inclusion, Mobile Money and Papua New Guinea's Resources Sector. The University of Queensland (CSRM) and the International Mining for Development Centre (IM4DC). Available at https://www.csrm.uq.edu.au/media/docs/1227/mobile-money-financial-inclusion-and-pngs-resources-sector-june-2015.pdf

5
LEGAL AND REGULATORY FRAMEWORK

Overall, FSM lacks the key legal framework necessary to secure, enable and regulate online transactions. FSM has no legislation relating Electronic Transactions, Consumer Protection, Cybercrime and Data Protection, all of which are crucial for E-commerce to thrive. Against this background, the government should make efforts to upgrade the existing laws and regulations to match the E-commerce related needs, such as by developing and adopting the necessary legislation. Regional technical assistance programmes should be leveraged to support the development of a regulatory framework adhering to international best practices. In addition, as important as the adoption of laws, is their implementation. Thus, the entities in charge of implementing E-commerce related legislation should be properly resources.

FSM currently lacks the key legal and regulatory framework necessary for E-commerce to thrive. This situation is also recognised by the World Bank (2020), which states that *"[the] legal and regulatory enabling environment needs to be developed to support the rollout of digital government service and online transactions."*[36] One of the few relevant laws is the Federated States of Micronesia Telecommunications Corporation Act of 1981, which is still in force but is not adapted to the changing times and does not reflect the realities of E-commerce. The Consumer Protection Act of 1970 is the law governing commerce in the country, which also covers the areas related to unfair competition.[37]

Box 4: Core E-commerce Legislation

UNCTAD considers that four (4) different cyber laws are needed for E-commerce to develop harmoniously:

- **E-transactions:** E-transaction laws that recognise the legal equivalence between paper-based and electronic forms of exchange are considered a prerequisite for conducting commercial transactions on-line. Such laws have been adopted by 158 countries (81 percent), of which 68 are developing, or transition economies and 30 are Least Developing Countries (LDCs).
- **Data Protection and Privacy**: Data protection and privacy laws regulate the collection, use, and sharing of personal information with third parties without notice or consent of such individuals (Data Subjects). 132 out of 194 countries (68 percent) have put in place legislation to secure the protection of data and privacy.
- **Cybercrime:** This area of law aims to address all forms of illegal acts, violations, and infringements committed on-line or through the internet. 154 countries (79 percent) have enacted cybercrime legislation, with the highest adoption rate in Europe (93 percent) and the lowest in Asia and the Pacific (55 percent).
- **Online Consumer Protection:** This area of law protects and safeguards the economic interests of on-line consumers and empowers them with free and informed choice, while also bestowing rights should any problems arise. Out of 134 countries for which data is available, 110 have adopted legislation on consumer protection related to E-commerce. It is not possible to obtain data in 55 countries, suggesting that on-line consumer protection is not being fully addressed.

36 World Bank (2020). Project Information Document: Digital FSM (P170718). The World Bank Group. Available at http://documents1.worldbank.org/curated/en/383761560829100337/pdf/Concept-Project-Information-Document-PID-Digital-FSM-P170718.pdf

37 FSM Supreme Court Trial Division, Foods Pacific, Ltd. v. H.J. Heinz Co. Australia, 10 FSM Intrm. 409 (Pon. 2001). Available at http://www.fsmlaw.org/fsm/decisions/vol10/10fsm200-205.html

Besides these four main regulatory areas, UNCTAD's eCommerce and Law Reform Programme also helped policymakers and lawmakers at national and regional levels build capacity on underlying issues underpinning E-commerce, including Intellectual Property, Competition, and Taxation. As E-commerce expands to cover almost every aspect of trade and business, these areas of law will have increasing importance for countries to regulate cross-border transactions.

Source: UNCTAD Cyberlaw Tracker

According to UNCTAD's Global Cyberlaw Tracker, FSM has no legislation relating to Electronic Transactions, Consumer Protection, Cybercrime and Data Protection. A review and update of FSM's regulatory framework in these areas is crucial.

The lack of basic laws and regulations relevant to E-commerce puts into jeopardy the country's ability to build trust and confidence in the digital economy. The **National ICT and Telecommunications Policy in 2012 envisaged adoption of legislation to tackle cybercrime** including the Spam Act, Evidence Act, and Copyright and Piracy Act (e.g., for software, movies, etc.). The policy also foresaw implementation of a Right to Information Act. **A draft Cybercrime Bill was presented to Parliament in 2018** but has yet to be approved. The Division of Communication under the Department of Transportation, Communication and Infrastructure is the agency responsible for cybersecurity.

Beyond the essential cyber laws promoted by UNCTAD, other relevant pieces of legislation should be in place to support an enabling E-commerce environment.

In terms of Intellectual Property Rights legislation, Title 35 of the FSM Code covers Copyrights, Patents and Trademarks. However, there is currently no specific reference to online intellectual property and it is not clear the extent to which existing legislation may apply in the online environment.[38]

FSM enacted the Anti-money Laundering and Proceeds of Crime Act providing for Anti-Money Laundering/ Combating the Financing of Terrorism (AML/CFT) regulations in 2010. FSM is an active observer of the Asia/Pacific Group on Money Laundering (APG).

38 Oceania Cyber Security Centre (2020). National Cybersecurity Capacity Review – Federated States of Micronesia. Oceania Cyber Security Centre.

6 E-COMMERCE SKILLS DEVELOPMENT

Similar to many other FICs, FSM suffers from both ICT skills and general skills shortages. ICT skills in FSM are low, with a clear digital divide between male-female and urban-rural groups. Tertiary education and vocational training are provided by the College of Micronesia (COM-FSM) and its campuses across the states, with other institutions, such as the four Small Business Development Centres (SBDCs) and the FSMDB's Development and Finance Training Institute (DFI), also involved in building private sector capacity.

Additional capacity building programmes on ICT skills, E-commerce skills, business skills, and trade skills are needed, particularly for MSMEs and women entrepreneurs. The establishment of business incubators, accelerators, and innovation hubs should also be a prioritised, to serve as a forum for networking, creation of linkages between local MSMEs and big corporations and transfer of knowledge.

6.1 Skills gap identification

While technological innovations can bring significant socio-economic benefits, they can also pose challenges for countries that are lagging behind in terms of human resources. **The International Labour Organisation pointed out that many Pacific countries suffer from both ICT skills and general skills shortages.** Key challenges include lack of quality and relevance of Technical and Vocational Education Training (TVET), weak linkages between labour demand and supply of training opportunities, low workforce ICT skills, shortcomings in generic workplace entrepreneurial skills, and lack of tracer studies.[39]

Notwithstanding the recognition of the importance of general and ICT skills development by documents such as the Strategic Development Plan (SDP) 2004-2023[40] and the ICT Policy 2012,[41] significant gaps remains.

According to a recent study by Redeker and Strum (2019), **similar to other FICs, the level of ICT skills development in FSM is still low and there exists a digital divide between male-female and urban-rural groups**. The study, conducted on a group of 82 respondents from FSM, revealed a relatively low ICT skill proficiency of FSM respondents compared to neighbouring FICs. On average FSM scored 5.3 on a 3-12 scale, with large gaps between males and females and between urban and rural groups.[42] Only 64.6% of the respondents participated in at least one ICT capacity building measure during the 12 months prior to the survey, compared to 75.0%, 72.3%, and 71.8% for Tonga, Samoa, and Fiji, respectively. Colleges and University are the main venues for FSM respondents to obtain the necessary ICT skills.[43]

39 International Labour Organization (2017). A Study on the Future of Work in the Pacific. International Labour Organisation. Available at https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-suva/documents/publication/wcms_553880.pdf

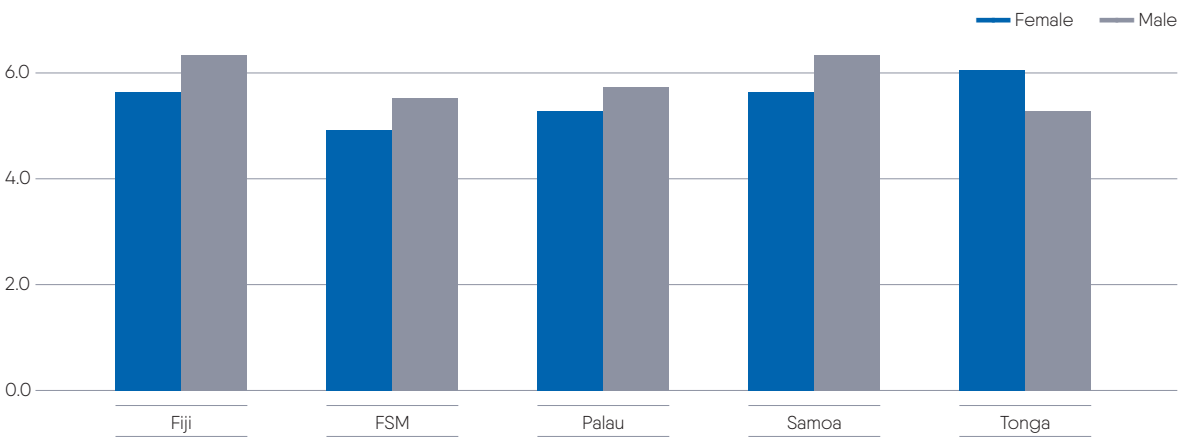
40 Federated States of Micronesia Government (2004). Strategic Development Plan (2004-2023). The Next 20 Years: Achieving Economic Growth & Self-Reliance. Vol I: Policies and Strategies for Development. pp. 493-495. https://www.adb.org/sites/default/files/linked-documents/cobp-fsm-2015-2017-sd-02.pdf

41 Federated States of Micronesia Government (2012). National ICT and Telecommunications Policy 2012. Available at https://www.theprif.org/sites/default/files/2020-08/FSM%20National%20Information%20Communication%20%26%20Technology%20Policy%202012.pdf

42 The study aims to assess ICT skills at advanced level. The authors of the assessment employed a four-point Likert scale to query respondents about three items considered as requiring, advanced skill levels, i.e. the ability to manage content of a website, design a website, and write a computer programme using a specialised programming language. This is a departure from the nine-item scale as adopted by the ITU's Manual for Measuring ICT Access and Use by Households and Individual – 2014 Editions, with the assumption that if someone self-reports a medium-high or high level of mastery in writing a computer programme, that person would also be able to engage in less complex tasks – such as finding, downloading, installing and configuring software.

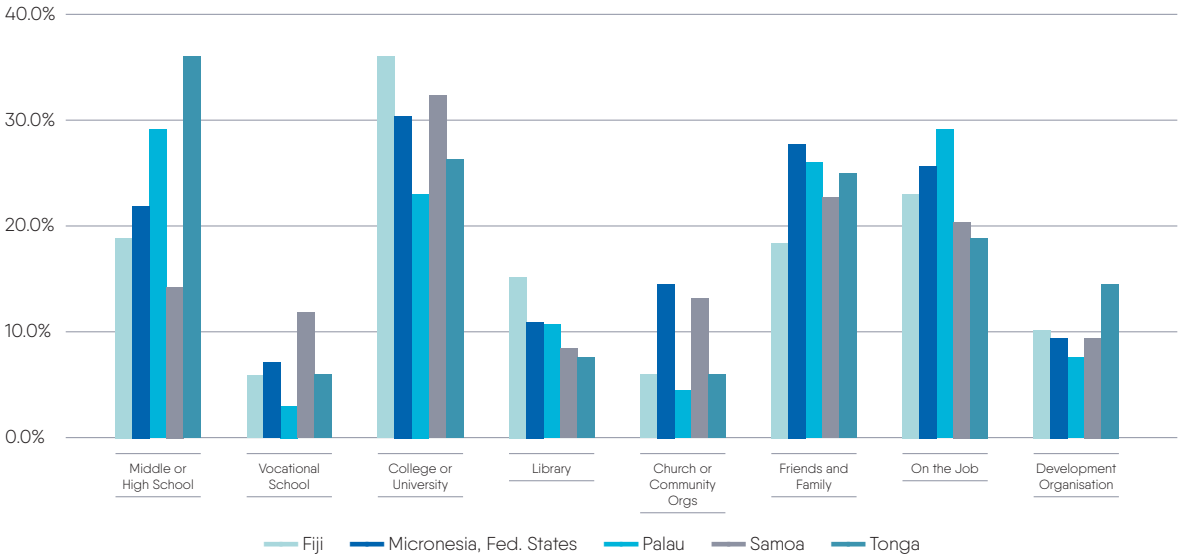
43 International Telecommunication Union (2019). ICT skills in Small Island Developing States: ICT Capacity Building, Economic Opportunities and Brain Drain. Published in Digital Skills Insights 2019, by the International Telecommunication Union (ITU). Available at https://academy.itu.int/sites/default/files/media2/file/Digital%20Skills%20Insights%202019%20ITU%20Academy.pdf

Figure 8: ICT Skills Indicator (ISI) in selected SIDS, by gender



Source: Redeker and Sturm (2019)

Figure 9: Participation in ICT capacity building in selected SIDS, by category



Source: Redeker and Sturm (2019)

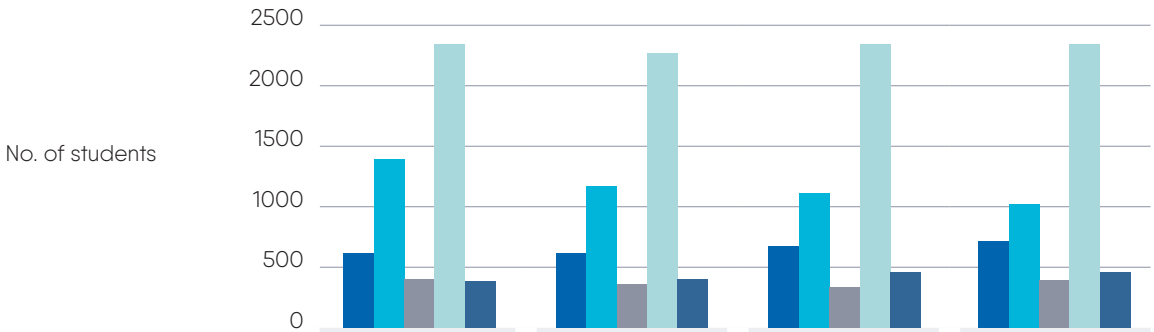
Ongoing high migration of workers, at 19% of the population[44] and especially to the United States, might affect the quantity and quality of local skills.

6.2 Availability of tertiary education, professional training

The College of Micronesia (COM-FSM) is the only tertiary education with six campuses in the island country. The college plays a key role in the provision of continuing education to local businesses, government, and the community at large. Besides art programmes, COM-FSM has been providing a number of courses in Science and Applied Science including, among others, Business Administration, Computer Information Systems, Electronic Technology, and Telecommunication Technology. On average of 4,700 students are enrolling in the college each year. A large number of students opt for pre-teacher education, liberal arts, and business administration (more than 100 students on each course each semester). On the contrary, **enrolment in ICT degree programmes is very low** (less than 30 students per semester).

44 International Labour Organization (2017). A Study on the Future of Work in the Pacific. International Labour Organisation. Available at https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-suva/documents/publication/wcms_553880.pdf

Figure 10: Enrolment by campus and year in COM-FSM



	2016	2017	2018	2019
Chuuk	559	568	625	712
CTEC	1288	1184	1081	984
Kosrae	423	375	382	345
National	2249	2185	2239	2250
Yap	415	401	412	391

Source: Author, based on COM-FSM data[45]

The National Policy on Vocational Development and Skill Trainings, adopted by the National Department of Education (NDoE) in 2010, is the current guiding document for the vocational enunciation and skills training of the FSM. It identifies career pathways in automotive technology, building construction, business accounting, electronics, family and consumer science, farming systems and products, small-scale fishing, science, technology, engineering and mathematics (STEM), and tourism.[46]

The COM-FSM Career and Technical Education Centre (CTEC) is the main entity involved in the vocational training area. Located in downtown Kolonia, the COM-FSM CTEC enrols over 550 students each semester in various degree and certificate programmes, including in ICT-related areas such as electronics technology, telecommunications, and computer skills. Distance learning is also available.[47]

The FSM Development Bank's Development and Finance Training Institute (DFI) also contributes to capacity building for businesses. Established in 2014, the purpose of the DFI is to offer annual courses on decision-making, good corporate governance, human capital management, competitive business strategy, risk management, financial accounting, etc.[48]

6.3 Business incubators and business accelerators

Information on business incubators and accelerators is limited. **The four Small Business Development Centres (SBDC), located in Yap, Chuuk, Kosrae, and Pohnpei** . These SBDCs are members of a larger network of the Pacific Islands Small Business Development Centre Network (PISBDCN) across FSM, the Republic of Palau, and the Commonwealth of the Northern Marianas Islands (CNMI). In FSM, the PISBDCN's centres provide one-to-one counselling to start, expand, and manage a business, as well as training courses, many of which are free of charge, covering topics such as business management, marketing, financial statements, analysing transactions, etc.[49] In November 2019, a first-ever Google Techstars Startup Weekend was held at the Pohnpei SBDC that aimed to teach people how to create a company.[50]

45 Data available at College of Micronesia. See http://www.comfsm.fm/?q=irpo-enrollment

46 National Department of Education (2010). National Policy on Vocational Development & Skills Training. Government of FSM. Available at http://national.doe.fm/index.php/ndoe-public/education-documents/education-policies/515-national-policy-on-vocational-development-skills-training

47 According to College of Micronesia. See http://www.comfsm.fm/?q=pohnpei

48 See http://www.fsmdb.fm/fsmdb-products/training-institute/

49 See https://www.pacificsbdc.com/locations/network-office

50 See https://www.facebook.com/sweekendmicronesia/

The College of Micronesia Centre for Entrepreneurship hosts a business incubator programme, conducts workshops and trainings relevant to E-commerce, and also associates with small businesses to help them grow.[51]

Despite these valuable initiatives, stakeholders expressed the need for additional courses on trade and E-commerce to supplement the existing offering.

Box 5: Case Study: Green Banana Paper

Green Banana Paper[52] is an example of a successful company leveraging digital technologies to reach out to foreign markets. It provides a good example of how through good digital, business, and trade skills it is possible to overcome the challenges posed by limited development in other E-commerce policy areas.

The company, located in the State of Kosrae, uses locally sourced banana trees, and convert them into durable and eco-friendly vegan wallets. The company works with 75 local farmers and employs 18 staff.

Green Banana Paper is a graduate of the Pacific Trade Invest (PTI) New Zealand multi-step Path to Market programme, which is designed to help build capacity in Pacific companies to export to New Zealand.

The company has also used alternative ways of access to financing to finance the development of its products. Green Banana Paper debuted its products in 2016 on the Kickstarter website and at the Festival of Pacific Arts held on Guam, collecting over USD 25,000 in crowdfunding. In 2017 the company raised USD 10,000 through a second Kickstarter campaign.

The company has a strong presence on the internet. As highlighted by its founder, Matt Simpson, "[it's] all about (web) traffic [...] If you have an idea, put together a video, see if people want it, and then they'll give you the money."

In terms of market reach, Green Banana Paper relies on the United States Postal Service, through which it is able to export its products worldwide. For example, shipping a wallet from FSM to countries like Switzerland and Mauritius has an additional cost of just USD 14.5. Additionally, the company also lists its products on Amazon, giving it global reach. Green Banana Paper is the only Micronesia-based company on the American marketplace.

51 See Center for Entrepreneurship – COM-FSM at https://www.facebook.com/entcentercomfsm/
52 See Green Banana Paper at https://greenbananapaper.com/

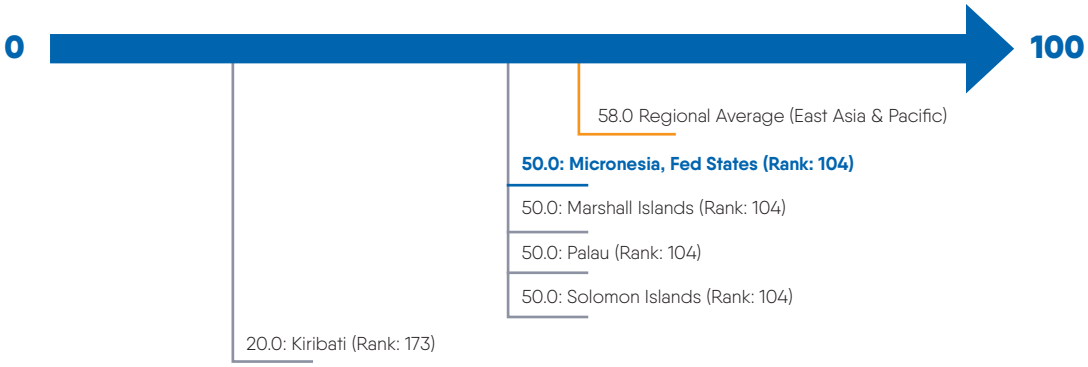
7 ACCESS TO FINANCING INITIATIVES FOR E-COMMERCE

The private sector in FSM faces significant challenges to access finance, as recognised by the World Bank's Getting Credit indicator, in which FSM ranked 104th out of 190 countries. The difficulties faced by the private sector in developing good quality business proposals and enforcing the commitments undertaken seem to play a role in limiting access to finance. In terms of development finance, the country is very much dependent on external aid, notably from the US.

Limited access to finance hampers the ability of SMEs to invest in E-commerce-related ventures and upgrades. Further training should be provided to improve the quality of SMEs' business proposals and their ability to access potential credit sources. Business fairs promoting local businesses and helping them attract investors should also be organised.

7.1 Financing by banks and MFIs

Figure 11: Getting Credit in FSM and comparator economies – Ranking and Score



Source: World Bank Doing Business 2020

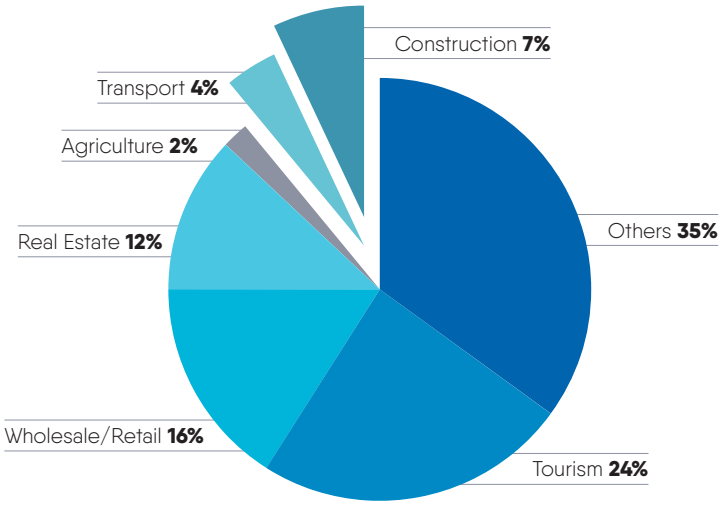
Private sector loans provided by the banking sector are limited in FSM. In 2018, private sector credit was only 19.8% of GDP.[53] This compares poorly with the average rate for Pacific Islands Small States,[54] at 75% in 2018. Non-performing loans are extremely low, at around 2% in 2015, indicating a low appetite for risk by the banking sector[55, 56]

A number of loan facilities are available from the FSMDB, including loans for businesses as well as personal/consumer loans. **In 2018, the FSMDB approved USD 23.15 million across 494 loans.** Of these, business loans were 86%, consumer loans accounted for 13% and the remaining 2% were directed towards residential loans. In 2018, around 89% of loans were approved in the commercial, tourism, and agriculture/fisheries sectors.[57]

53 Source: World Development Indicators
54 Source: World Development Indicators. Pacific Islands Small States is the group comprising Forum Islands Countries members of the World Bank, less PNG
55 Source: World Development Indicators
56 Source: World Development Indicators
57 Federated States of Micronesia Development Bank (2019). 2018 Annual Report. FSM Development Bank. Available at http://www.fsmdb.fm/wp-content/uploads/2019/05/2018-ANNUAL-REPORT.pdf

The FSM Development Bank provides not only financial assistance, but also technical assistance to those SMEs that require it. Recognising that the country's human resources are scare, the FSMDB helps SMEs to draft their business plan and obtain a better understanding of the target sector. The bank also holds workshops on business plans, basic bookkeeping, how to run a business, strategy for business, etc.. Such activities are run together with the College of Micronesia.

Figure 12: Sector-wise lending as of 2018



Source: FSM Development Bank

7.2 Business incubators, business accelerators, and venture capitalists

Business incubators and accelerators in FSM offer soft-skills services, but do not provide financial support. There is no presence of venture capital in FSM. Some of the soft-skills provided by incubators and accelerators can support access to finance. For example, the PISBDCN provides free, confidential, one-to-one counselling to businesses including on access to finance. According to the centre's website, during its 19 years of activity the centre has leveraged USD 54 million in loans and finances to its members – FSM, Palau, Guam, and Northern Mariana Islands.[58]

A number of loan or grant facilities from USDA, notably through USDA Rural Development, are available to support access to finance for business, but these are not targeted to support innovation, including E-commerce initiatives. For example, USDA Rural Development provides funds to the Pacific Islands Development Bank and the FSMDB under the **Intermediary Relending Programme**, to re-lend funds to recipients for business facilities or community development. There is also a **Business and Industry Guaranteed Loan Programme** available to eligible applicants.[59] The ultimate goal is to bolsters the availability of private credit by guaranteeing loans for rural businesses. Of relevance are also the USDA's **Rural Microentrepreneur Assistance Programme and Rural Business Development Grants.**[60]

The Rural Microentrepreneur Assistance programme provides loans and grants to Microenterprise Development Organisations (MDOs) that in turn provide technical services and microloans to rural small business owners in their states and local communities. Grants of up to USD 205,000 are available annually, to provide technical assistance to rural micro-entrepreneurs or micro-enterprises along with loans ranging from USD 50,000 to USD 500,000.

Rural Business Development Grants are a form of enterprise grant used on projects that benefit small and emerging businesses in rural areas. The main purpose of this grant includes training and technical assistance, business counselling and training, market research, feasibility studies and start-up funds. Currently, there is no capping of grant amounts under this initiative.[61]

58 America's Small Business Development Center Pacific Islands Network. See https://www.pacificsbdc.com

59 US Department of Agriculture, Rural Development, Business & Industry Loan Guarantees. See https://www.rd.usda.gov/programs-services/business-industry-loan-guarantees

60 Rural Microentrepreneur Assistance Programme. See https://www.rd.usda.gov/programs-services/rural-microentrepreneur-assistance-program. Rural Business Development Grants. See https://www.rd.usda.gov/programs-services/rural-business-development-grants

61 US Embassy in the Federated States of Micronesia, USDA Rural Development. See https://fm.usembassy.gov/embassy/kolonia/sections-offices/usda-rural-development/

7.3 Financing by development partners

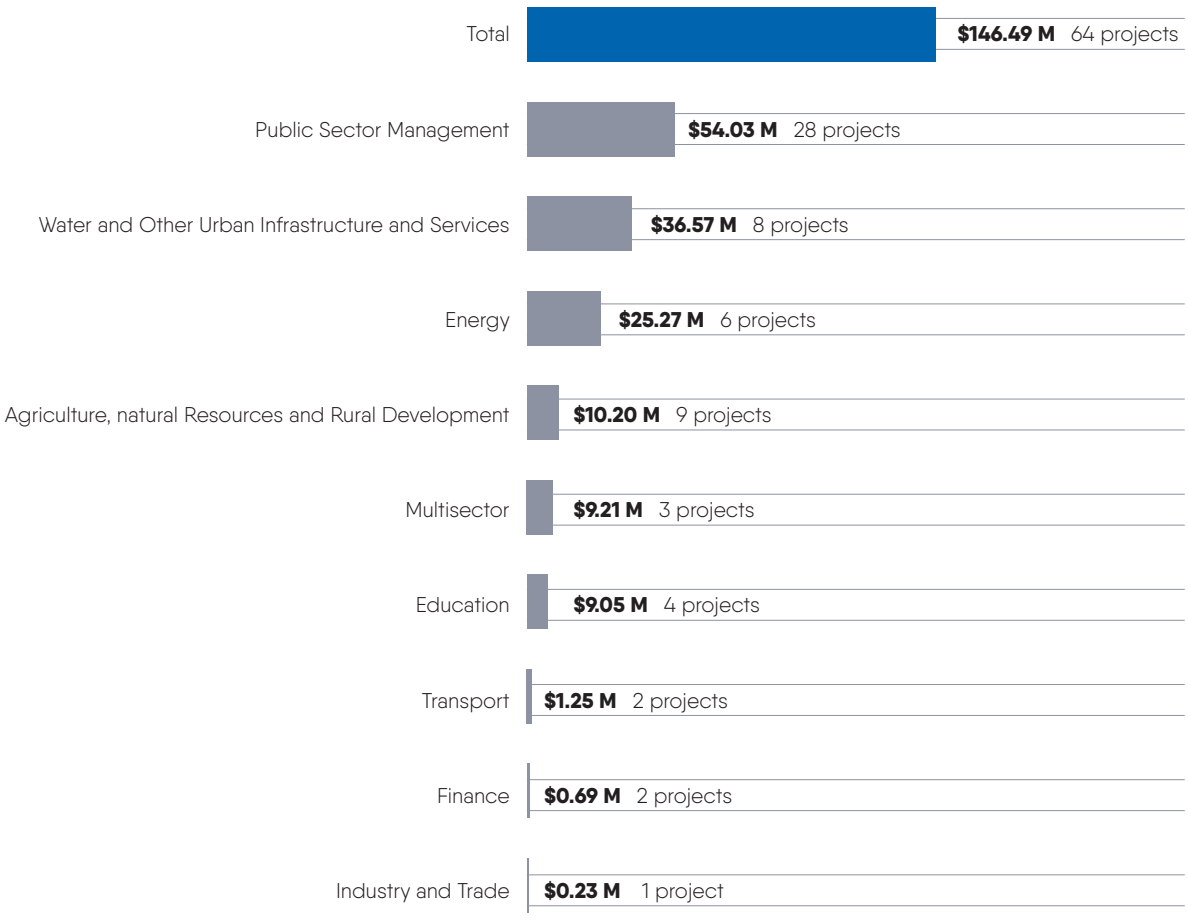
The United States is the principal development partner for FSM. The country is highly dependent on external aid which the US provides. At present FSM is under the second Compact of Free Association (CFA), through which funding is provided in the form of grants to finance major public services, including E-commerce enablers such as education and infrastructure. The US has also established a Compact Trust Fund in 2004 with the same objective.[62]

However, the incoming grants from the CFA are due to expire in 2023, meaning FSM will have to finance public expenses with its own revenues and the Compact Trust Fund. In 2017, the value of the trust fund was estimated to be around USD 565 million. The ADB estimates this amount is far below the minimum threshold needed to meet simple sustainability, which is estimated at USD 1.65 billion.[63]

Other funding for programmes come mainly from the ADB of which FSM is a party since 1990. The cumulative loan and grant disbursements to FSM amount to USD 74.3 million. The cumulative loan and grant commitments stand stands at USD 146.5 million.[64]

The World Bank is also a major contributor as it provides external grants for projects in the Energy, Fisheries, Public Finance and Telecommunications sectors. In 2017, total grants reached USD 55.8 million.[65]

Figure 13: Cumulative Lending, Grant, and Technical Assistance Commitments by the Asian Development Bank in FSM



Source: ADB

62 U.S. Department of Interior, Compact Trust Funds. See https://www.doi.gov/oia/compact-trust-funds

63 Asian Development Bank (2019), Federated States of Micronesia at a Glance, Pacific Finance Sector Briefs, ADB Pacific Liaison and Coordination Office, October. Available at https://www.adb.org/sites/default/files/publication/530236/pacific-finance-sector-federated-states-micronesia.pdf

64 Asian Development Bank (2020). Federated States of Micronesia. Asian Development Bank Member Fact Sheet. Available at https://www.adb.org/sites/default/files/publication/27761/fsm-2019.pdf

65 Federated States of Micronesia Government (2018). Economic & Fiscal Update 2018. FSM Office of Budget & Economic Management. Available at https://www.fsmstatistics.fm/wp-content/uploads/2019/02/FSM-Economic-and-Fiscal-Update-2018.pdf

Conclusions

E-commerce has the potential to promote greater international trade and contribute to the country's international development. E-commerce can be one of the tools that the country can adopt to improve access to markets and communities that would be otherwise inaccessible.

The government should ensure that all the relevant strategies and policies take into consideration E-commerce as a mechanism to achieve its objectives. In this context, it is recommended that an overarching E-commerce policy and strategy is drafted, adopted and implemented.

Overall, FSM faces significant challenges to establish the necessary ICT infrastructure to connect its over 600 islands. With less than one-quarter of the population living in urban centres, ensuring that ICT services are widely available across rural and remote areas is one of the country's main challenges. The difficult topography, linked to the weak international cable connectivity, is also one of the main reasons why ICT services are unaffordable for most of the country's population – according to the ITU, a 2GB package of mobile broadband data represents over 10% of the income of a citizen in FSM. In this context, the World Bank and the ADB are working together to improve the country's connectivity.

However, for E-commerce to expand in FSM, improved connectivity will not be sufficient. Promoting trust amongst the population in digital technology will be one of the keys to achieving it, and this should be done by ensuring that the right legal and regulatory framework is put in place: laws on data protection, data privacy, cybercrime, consumer protection, and competition are only some of the basics laws that should be adopted to ensure that Micronesians can benefit from all the properties of E-commerce in a safe environment.

E-commerce offers an opportunity for SMEs to access markets which would otherwise require significant start-up capital and the deployment of large investment to reach. To do so, adequate skills are necessary and these can be facilitated through the strengthening of the education and training system, as well as through the strengthening of the country's business incubators, business accelerators and Innovation hubs. The same incubators, accelerators, and hubs, could also be leveraged to establish facilities providing financial support to innovators.

The Way Forward: Action Matrix

E-commerce readiness assessments and strategy formulation			
Indicative action	Expected outputs	Priority Level	Potential support by
Review the implementation process of the action plans of the ICT Policy of 2012 and update it.	Guidance to expand ICT use by private and public sector in place.	High	Telecommunications Authority, Department of Communications, PIFS, MSG
Develop an E-commerce Strategy, and a detailed implementation roadmap	Clear and actionable strategies to boost E-commerce agreed.	High	Department of Communications, PIFS, Telecommunications Authority
Establish a public-private dialogue (PPD) mechanism for E-commerce.	Effective communication, engagement, and ownership of the E-commerce agenda.	High	Telecommunications Authority, Department of Communications, PIFS, MSG
Expand the capacity (human and technical) of the National Statistics Office to compile and measure data, with a focus on E-commerce, ICT and other relevant indicators (on-line transactions, trade in goods and services via E-commerce channels, sales values by model, etc).	Evidence-based policy on E-commerce promoted.	High	National Statistics Office, PIFS, UNCTAD

ICT Infrastructure and E-commerce Support Services Ecosystem			
Indicative action	Expected outputs	Priority Level	Potential support by
Undertake a campaign to attract additional telecommunications operators.	Decrease in internet prices and increased internet uptake.	High	Investment Promotion Agency, FSM R&D
Map the existing coverage of the ICT-related industry in the country .	Evidence-based policy on E-commerce promoted.	High	Telecommunications Authority, FSM Department of Communications, PIFS, MSG
Encourage PPPs for building ICT Infrastructure.	ICT infrastructure strenghtened.	Medium	Telecommunications Authority, FSM Department of Communications, PIFS, MSG
Introduce broadband packages and plans specifically designed for E-commerce firms and small businesses.	E-commerce facilitation and higher adoption.	Medium	Mobile network operators, Broadband operators, Department of Communications
Ensure higher segments of population outside urban areas have access to fast, reliable mobile broadband - 3G and then 4G.	More E-commerce transactions enabled.	High	Telecommunications Authority, FSM Department of Communications, PIFS, MSG

Trade Logistics and Trade Facilitation			
Indicative action	Expected outputs	Priority Level	Potential support by
Deploy ASYCUDA World system and provide necessary training.	Trade facilitated via automation and streamlined business processes	High	Department of Resources and Development, FSM Department of Transportation, Communication and Infrastructure, Department of Finance and Administration, MFAT
Improve cargo storage facilities at air terminals and ports.	Transport infrastructure improved	Medium	Department of Resources and Development, FSM Department of Transportation, Communication and Infrastructure
Introduce a de minimis thresholds for commercial imports.	Pruchasing via E-commerce platforms incentivised	Medium	Department of Resources and Development, FSM Department of Transportation, Communication and Infrastructure, Department of Finance and Administration,
Undertake a review of the utilisation rate of the Compact Agreement, analyse the existing barriers (tariffs and non-tariff barriers) that hamper the development of the country's export sector.	Enhanced exports	High	Department of Resources and Development, FSM Department of Transportation, Communication and Infrastructure

Payment Solutions			
Indicative action	Expected outputs	Priority Level	Potential support by
Encourage local banks to adopt e-banking solutions to be able increase financial inclusion.	Financial inclusion rate improved	Medium	FSM Banking Board
Encourage development and uptake of mobile money and electronic wallets.	A larger consumer base ready to undertake E-commerce transactions	High	FSM Development Bank, Commercial Banks, FSM Telecommunications corporation

Legal and Regulatory Framework			
Indicative action	Expected outputs	Priority Level	Potential support by
Carry out a comprehensive regulatory gap analysis on E-commerce.	Enhanced understanding of the regulatory gaps.	High	FSM Department of Communications, PIFS, UNCTAD, Telecommunications Regulatory Authority

Develop laws and regulations relating Electronic Transactions, Consumer Protection, Cybercrime and Data Protection in a phased manner or frame a holistic cybersecurity framework.	Improved E-commerce business environment and enhanced trust in E-commerce.	High	FSM Department of Communications, PIFS, Telecommunications Regulatory Authority
Leverage the regional technical assistance to support the development of a regulatory framework adhering to international best practices.	Strengthened E-commerce regulatory framework.	Medium	FSM Department of Communications, PIFS, MSG, Telecommunications Regulatory Authority

E-commerce Skills Development

Indicative action	Expected outputs	Priority Level	Potential support by
Establish business incubation schemes and strengthen existing incubators.	Innovative businesses nurtured which are able to reap the opportunities provided by E-commerce.	High	Private sector representatives, FSM Chambers of Commerce, PIFS, College of Micronesia
Mainstream ICT in all under-graduate subjects.	ICT literacy ehancned.	Medium	FSM Department of Education, College of Micronesia
Develop more capacity building programmes on ICT skills, E-commerce skills, business skills, and trade skill for the public and private sectors.	ICT skills enhanced for government and businesses.	High	Private sector representatives, College of Micronesia
Conduct an ICT skill gap analysis.	Improved understanding of the ICT skill gap to serve as a basis to revise school curriculum and develop training programs.	High	Department of Transport, Communication and Infrastructure, PIFS, Chambers of Commerce, MSG
Positively discriminate gender and rural population in ICT training programmes.	Overcome the digital divide.	High	FSM Department of Education, College of Micronesia

Access to Financing Initiatives

Indicative action	Expected outputs	Priority Level	Potential support by
Encourage digital solutions for financial inclusion.	Reduced share of the population and MSMEs currently excluded from banking system.	High	FSM Development Bank
Review existing lending schemes to assess their effectiveness and introduce reforms to make them more supportive of innovative businesses.	Private sector development encouraged in areas conducive to E-commerce	High	Government of FSM, FSM Development Bank

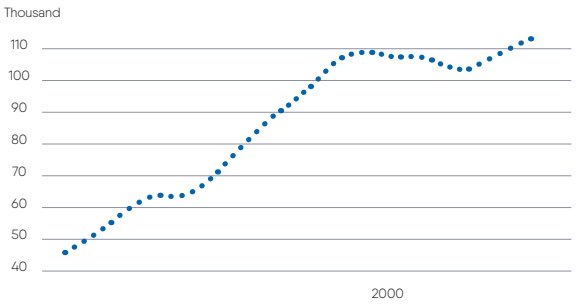
Establish business support schemes addressing financial and other capacity-building needs for innovative start-ups -grant schemes, incubators, accelerators, etc.	Private sector development encouraged in areas conducive to E-commerce	High	Government of FSM, FSM Development Bank
Extablish information campaign to attract venture capitalists to invest in FSM innovative businneses	Private sector development encouraged in areas conducive to E-commerce	Medium	Business associations, FSM Chambers of Commerce
Establish a National Financial Inclusion committee	Access to finance increased	Medium	Government of FSM, FSM Development Bank, Commercial Banks, Business associations, FSM Chambers of Commerce

Annex I: Stakeholders Consulted

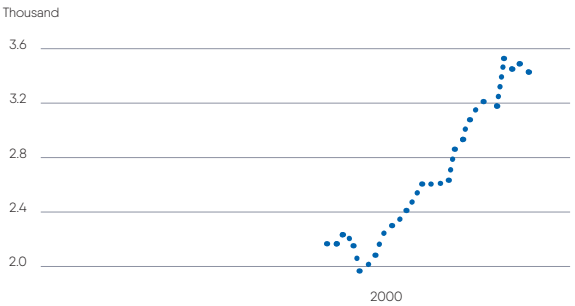
Name	Organisation	Position
Peter Anderson	FSM Department of Finance and Administration	Customs Operation Manager
Edward Albert	FSM Dept. of Transportation, Communications and Infrastructure	IT Manager
Jolden Johnyboy	FSM Dept. of Transportation, Communications and Infrastructure	Communications Advisor
Anna Mendiola	CEO/President	FSM Development Bank
Fabian Nimea	COO/SVP	FSM Development Bank
Pilika Palik	FSM Banking Board	Banking Examiner
Stanley Raffilman	Programme Manager	Division of Trade and Investment, FSM Department of Resources and Development
Christopher Schramn	SVP/Chief Lending Officer	Bank of the FSM
Lorina Seady	FSM Department of Finance and Administration	Customs Specialist
James A. Wilson Jr.	SVP/Chief Operations Officer	Bank of the FSM
Florian J. Yatilman	Assistant Secretary	Division of Trade and Investment, FSM Department of Resources and Development
Mary Lou Yatilman	Senior Loan Officer	FSM Development Bank

Annex II: FSM country profile

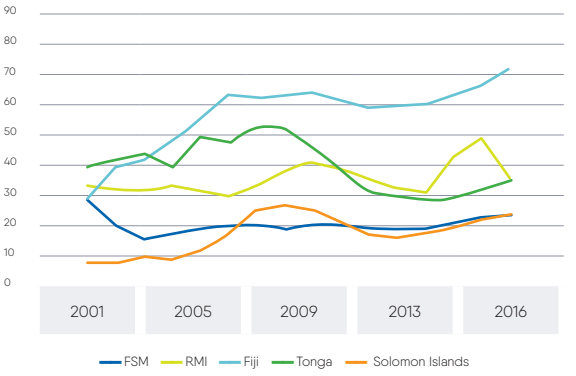
Population



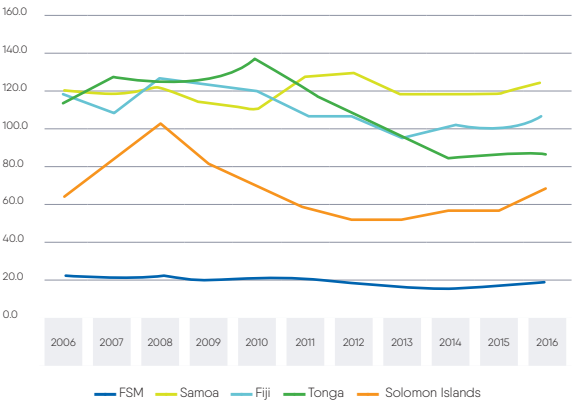
GNI Per Capita, Atlas Method (Current US$)



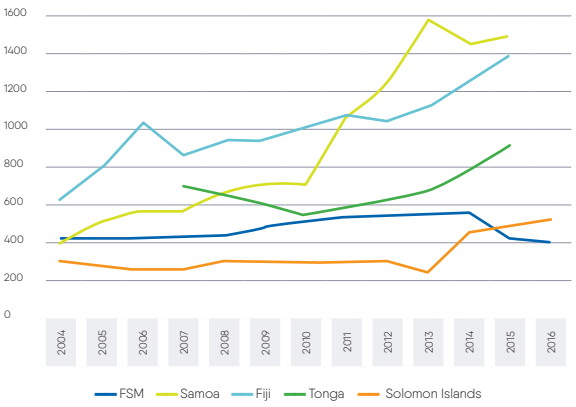
Credit to Private Sector
(in percent of GDP)



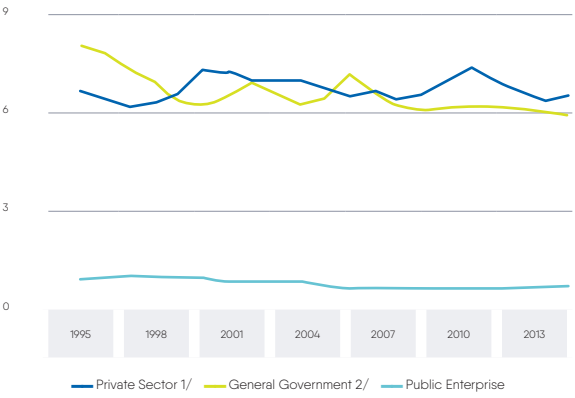
Loan-to-Deposit Ratio
((in percent)



Deposit accounts with commercial banks per 1,000 adults



Employment
(in thousands of workers)



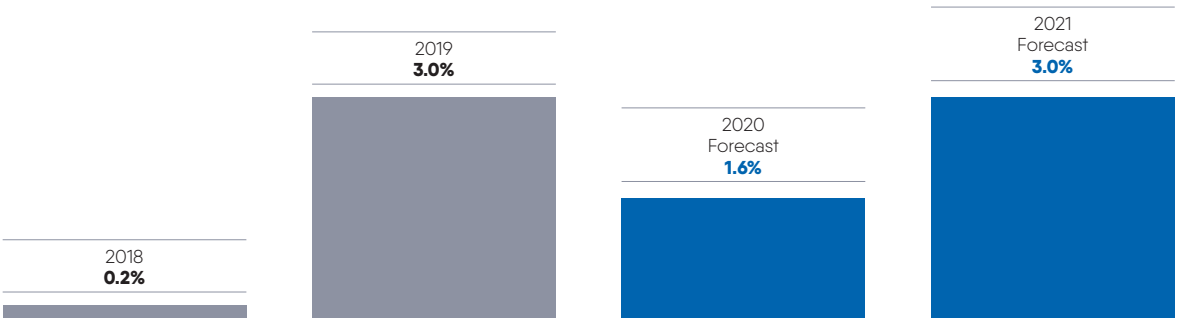
Source: IMF FAS Database

1/ Does not include subsistence sector employment.
2/ National, state and local governments.

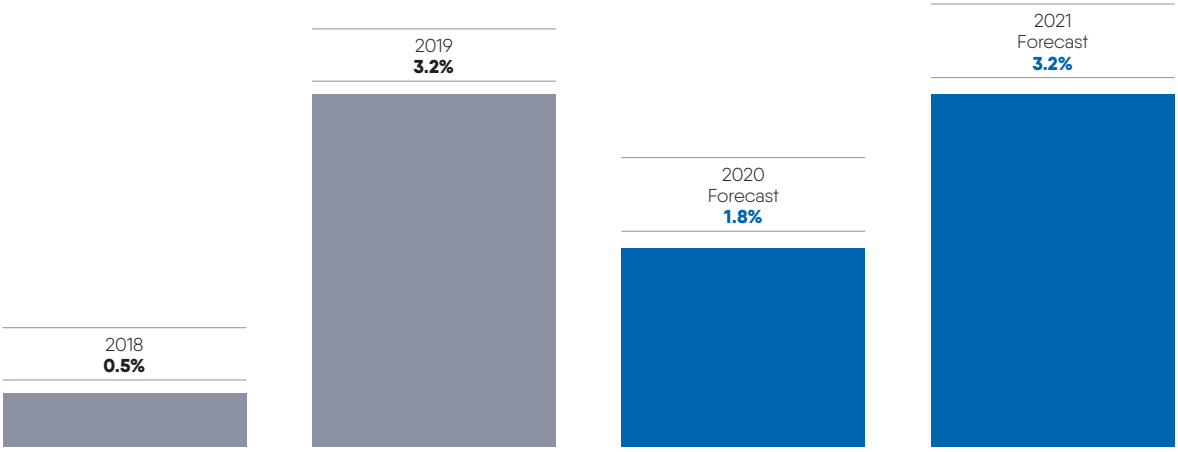
Source: WORLD BANK WDI

Growth and Balance of Payments

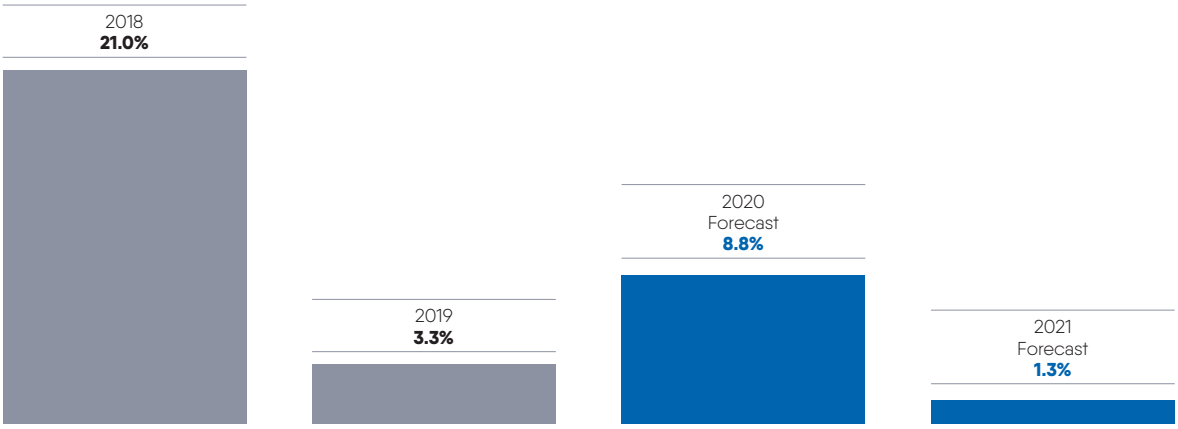
GDP Growth Rate: Federated States of Micronesia
(% per year)



Per Capita Growth Rate: Federated States of Micronesia
(% per year)

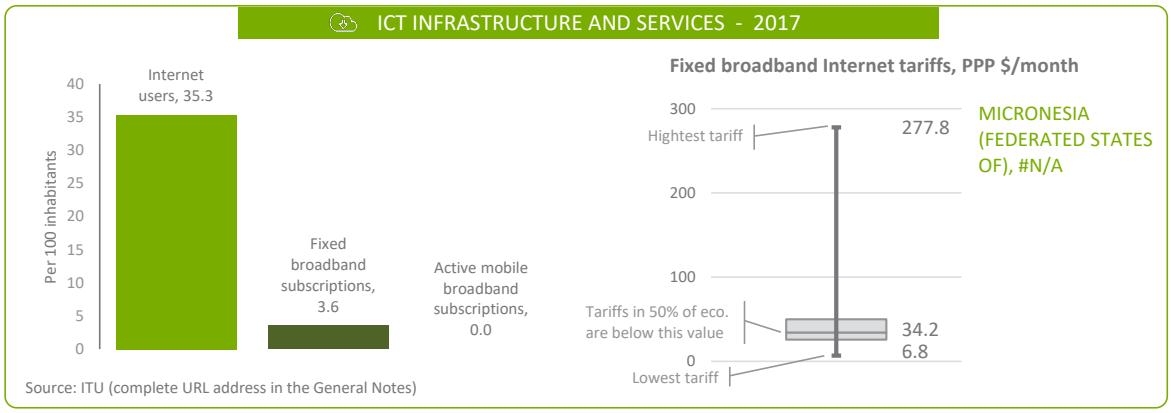


Current Account Balance: Federated States of Micronesia
(% of GDP)

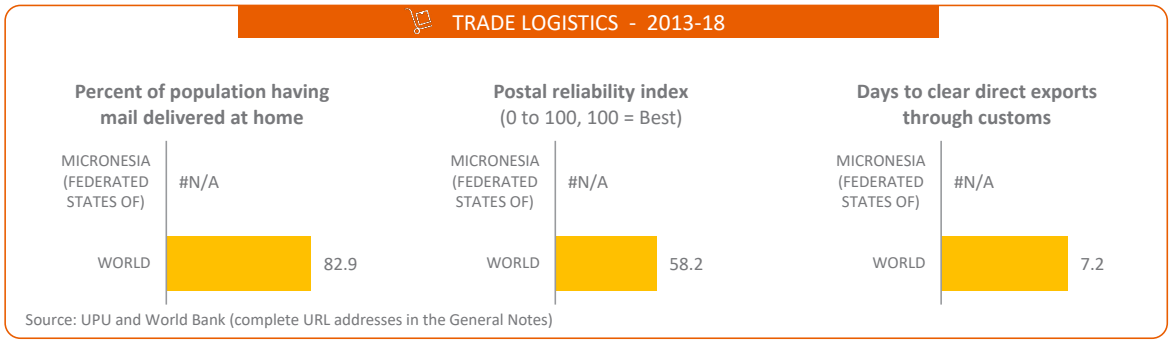


Source: Asian Development Bank. *Asian Development Outlook 2020* (April 2020)

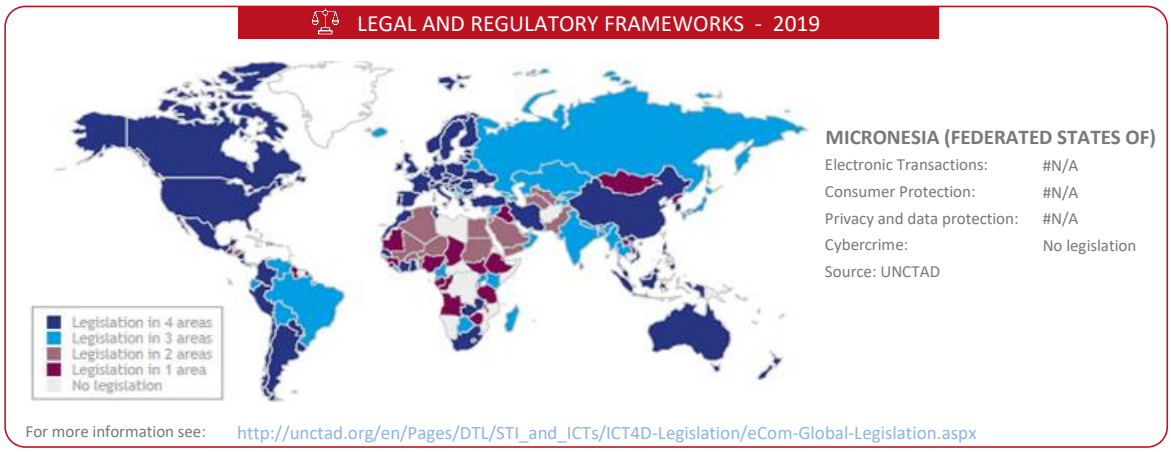
ICT Infrastructure and Services, 2017



Trade Logistics, 2013-18

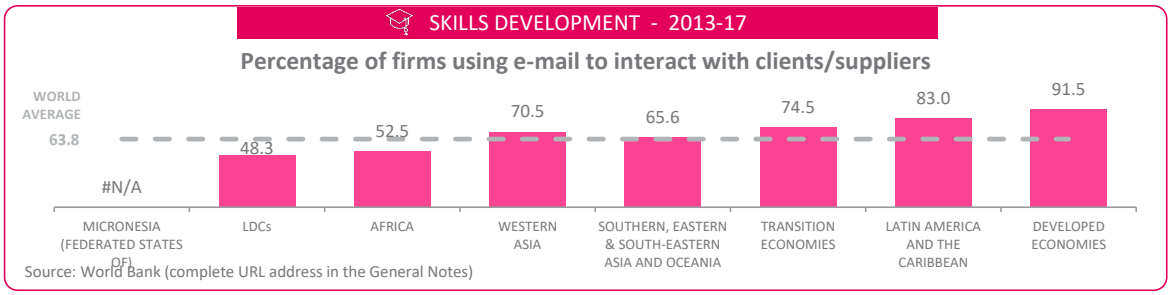


Legal and Regulatory Frameworks, 2019



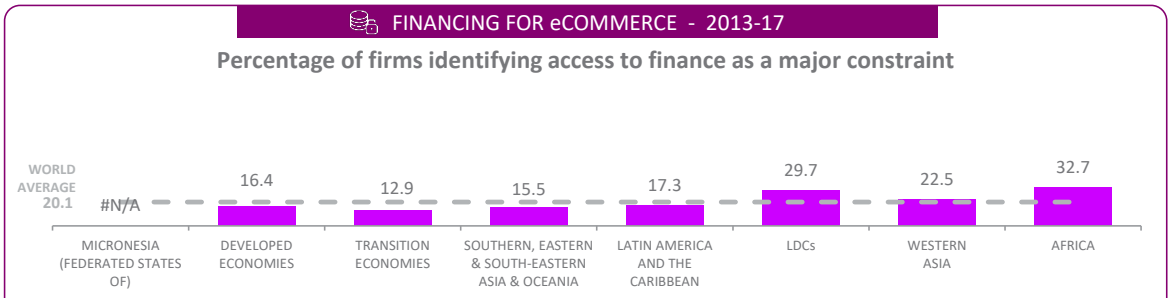
For more information see: http://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Global-Legislation.aspx

Skills Development, 2013-17



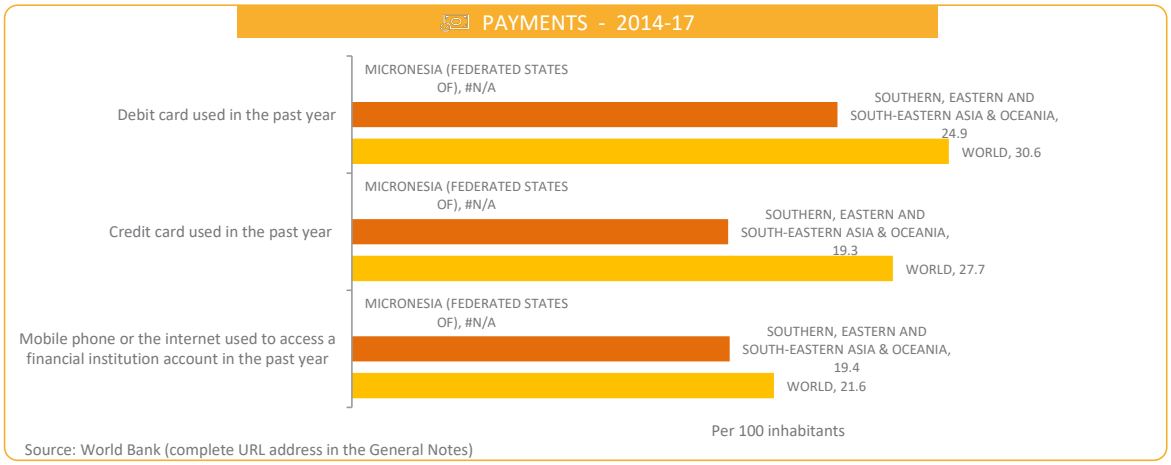
Source: World Bank (complete URL address in the General Notes)

Financing for E-commerce, 2013-17



Source: World Bank (complete URL address in the General Notes)

Payments, 2014-2017



Source: World Bank (complete URL address in the General Notes)

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