

A photograph of two women in a call center. The woman in the foreground is wearing a white shirt and a dark vest, with a headset and large hoop earrings. She is looking down at her work. The woman in the background is also wearing a headset and a dark shirt, looking towards the right. The background is blurred, showing office lights.

Chapter 3

Opportunities and challenges of e-commerce in Mauritius

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Abstract

This study explores the status, challenges and opportunities of e-commerce in Mauritius. The share of the population making online purchases was 14 per cent in 2017, the second-highest level (after Libya) in Africa, largely due to increases in internet use and penetration, coupled with increased credit card usage and the development of secure online payment systems. And Mauritius topped the United Nations Conference on Trade and Development (UNCTAD) B2C E-commerce Index (e-readiness) for Africa. A survey of customers revealed high levels of satisfaction with online shopping, due to wider choices, the ability to save time, accessibility and the relative ease of searching for products online. Major concerns included uneasiness over disclosure of personal information and limited ability to contact vendors. Respondents who have not shopped online cited concerns over navigating online, payment security and high costs. Online sellers expressed considerable optimism over future market growth, but also were concerned over a local bias towards international websites, technical limitations of internet service and the small market size. Interviews with policymakers cited the strong legal and regulatory framework supporting electronic payments, but described a need for stronger regulatory cooperation with other countries on e-commerce, and more work to collect statistics. Technical assistance would be useful in these efforts.

** The contents of this chapter are the sole responsibility of the authors and are not meant to represent the position or opinions of the WTO or its members.*

Introduction

Mauritius, a small island in the Indian Ocean, is well known for its beaches and is widely regarded as a tourist destination. Its economy is supported by three main pillars, namely the financial sector, the tourism sector and the information and communications sector. Since the early 2000s, the country has taken up the challenge of trying to transform itself into a cyber-island, given that at that time, only 6.8 per cent of the population was using the internet (Hamuth, 2017). However, internet penetration has risen substantially since then, with access to the internet being increasingly “democratized”. According to the latest Internet World Stats data (2019), 63.2 per cent of the population in Mauritius were internet users as of 31 December 2019, an increase in usage of over 899 per cent since 2000. The rise in internet penetration has greatly boosted the e-commerce industry on the island, and e-shopping for goods and services is gradually becoming a way of life. It is widely expected that such a trend will continue to rise in the future.

Other changes have contributed to the rise in e-shopping, particularly increased use of credit cards and the development of secure online payment solutions. For instance, the Juice MCB app by the Mauritius Commercial Bank (MCB) is widely used as a means to effect payment.

The one-time password used by MCB and the State Bank of Mauritius (SBM) e-secure platform for password-protected online transactions ensures greater payment security. Implementation of 3D

Secure by these banks also has helped to minimize fraud risks and maximize security when doing online purchases. The growth of e-commerce also has been supported by greater awareness through the media, increased information and communications technology (ICT) and financial literacy, higher technological penetration, higher interest in online shopping (especially among the young), relatively heavy advertising and the potential for saving time.

While there are numerous success stories of firms that adopted e-commerce, some firms are still lagging behind in establishing an online presence in the country. Mauritius faces several e-commerce challenges. For instance, many Mauritians prefer their conventional way of making purchases (that is, at retail locations) rather than purchasing online. Also, even if there are secure payment options, many Mauritians still do not fully trust online payment. Many e-commerce websites, such as Amazon, charge high fees to ship goods to Mauritius, and this acts as a barrier to e-commerce. Limited internet infrastructure and penetration, including low speeds and limited access to some areas, is another challenge.

Empirical research has highlighted the benefits of e-commerce. Reliance on the internet helps to remove time and space barriers facing businesses and consumers. It can also foster improvements in product variety, thus promoting quality and customer satisfaction, facilitating administrative processes, improving labour and management productivity and

reducing costs (Senarathna and Wickramasuriya, 2011). Rural businesses are adopting e-commerce to add value to their goods and also improve customer relationships (Stayner and McNeill, 2003). Finally, e-commerce can contribute to the reshaping of customer-supplier relationships and the streamlining of business processes (Lekhanya, 2016).

Another strand of the literature has looked at facilitating factors and challenges of e-commerce adoption. Mittal (2013) argues that trust, privacy and security concerns are the three major factors affecting e-commerce adoption. Studies have shown that the primary reason for consumers not adopting online shopping relates to the lack of trust between the consumer and the website (Liu et al., 2005). A positive interaction with e-commerce websites fosters greater trust with online consumers (Jarvenpaa et al., 2000). User satisfaction in relation to safety,

well-designed websites and ease of use are also identified as key elements influencing online purchases (Al-Kasasbeh, Dasgupta and Al-Faouri, 2011). Other factors, like age, income and education, are also determinants of e-commerce adoption (De Muylder, de Oliveira and Alves, 2013). Also, the local infrastructure is seen to be a key challenge and point of vulnerability in online transactions. If the infrastructure or network is not trustworthy, then hackers can access customers' information

(Hartono et al., 2014; Lee Jr. et al., 2016). These challenges are confirmed by studies conducted by Salisbury et al. (2001) and Cheng et al. (2006). Finally, another challenge identified in the literature is the level of readiness (that is, the extent of preparedness), which is classified at three levels, namely, organizational readiness, industry readiness and national readiness (Kurnia et al., 2015).

This chapter explores several issues related to the growth of online purchases in Mauritius. The study assesses the willingness and readiness of Mauritians to undertake online purchases. We discuss the perception of Mauritians towards

e-commerce and analyse the factors that encourage residents to make online purchases. We then analyse the opportunities and constraints faced by traders in online sales transactions. Finally, we discuss the challenges and opportunities from

a policymaker/regulatory perspective, based on a review of existing regulations and discussions and consultations with high-level experts and policymakers engaged in trade policies.

We analyse the opportunities for and challenges to e-commerce from both the customers' and online sellers' perspectives. Regarding online shoppers, the study investigates their perceptions of the benefits/advantages of buying online, their concerns and their satisfaction level

“Mauritius topped the UNCTAD B2C E-commerce Index (e-readiness) for Africa.”

on a number of dimensions. We also consider the major reasons for the non-adoption of e-commerce, using data from a sample of non-e-commerce users. The analysis of customers' perceptions is based on a survey of 250 respondents. The assessment of the sellers is based on a number of in-depth interviews of the top management of a sample of 12 local firms engaged in online shopping across different business sectors, including grocery, hotel and entertainment, electronic appliances, and fresh fruit and vegetables, among others.

This remainder of the chapter is organized as follows: the next section considers the current state of e-commerce in Mauritius; the following section briefly discusses the methodology and then analyses our findings; and the final section outlines our conclusions.

E-commerce in Mauritius

Online sales remain an important feature of e-commerce in Mauritius. International sales outlets such as Amazon, La Redoute, AliExpress, Alibaba and eBay have been quite successful in Mauritius over the last decade. Recently, Mauritian online sales outlets also have seen a rise in sales. These portals offer a wide range of products, from electrical appliances to gardening equipment, from mobile phones to clothing, from furniture to beauty products. Examples include cleverdodo.mu (for trendy clothing and accessories among others), mycart.mu (mobile phones and

tablets), <https://www.facebook.com/flower.mu> (for flowers, wreaths and floral decorations), marideal.mu (offering deals on hotel bookings), priceguru.mu or buynow.mu (electrical and electronic appliances) and theshop.mu (groceries, household items and many other goods). A few high street vendors have an online presence (for example, galaxy.mu and tfp.mu), allowing for the online purchase of furniture and electrical

goods. As regards the fashion industry, popular websites include, among others, tropicalmiss.com.¹

Two public institutions are heavily involved in the provision of e-services, the Mauritius Revenue Authority (MRA) and the Registrar of

Companies Division. A number of transactions with the MRA can now be done online, and the Companies Division allows for the online incorporation of companies and document filing, as well as payment of various fees. The Government recently launched a shopping portal in 2018, which offers tax-free purchases, in an effort to promote e-commerce.

In 2013, online purchases amounted to only 4 per cent of the total purchases done in Mauritius (UNCTAD 2018), about the same level as in South Africa, while in the United Kingdom, for instance, such purchases amounted to 70 per cent. Recent figures on Mauritius from the UNCTAD B2C E-commerce Index 2018 reveals that Mauritius ranked second in Africa for the proportion of individuals shopping online, after

“The rise in internet penetration has greatly boosted the e-commerce industry on Mauritius.”

Table 1: Top 10 African countries by proportion of individuals shopping online, 2017

Rank	Country	Online purchase (% age 15+) 2017	Online shoppers (000s)	Online shoppers (000s) rank in Africa	B2C Index rank in Africa	Internet use	Shoppers (% of Internet users)
1	Libya	14.6	629	10	13	20	67%
2	Mauritius	14.4	129	26	1	55	26%
3	Namibia	12.1	184	21	11	31	24%
4	Kenya	9.3	2,614	3	7	39	24%
5	South Africa	7.9	2,929	2	3	59	13%
6	Gabon	6.1	74	29	12	62	10%
7	Tanzania	5.3	1,593	4	16	25	21%
8	Zambia	5.1	459	11	26	24	21%
9	Tunisia	4.7	366	14	4	56	8%
10	Mozambique	4.3	665	9	32	23	19%

Source: UNCTAD B2C E-commerce Index 2018, available at: https://unctad.org/en/PublicationsLibrary/tt_unctad_ict4d12_en.pdf?user=46.

Libya (14 per cent) (see Table 1). However, Mauritius topped the UNCTAD B2C E-commerce index (e-readiness) for the African continent (with a World Ranking of 55). This index, in addition to registering the number of online shoppers, also assesses ease of delivery and payment. The index value for Mauritius (66.9, up from 51 in 2016) is 12 points higher

than the value for the country ranked second in Africa. It is also noteworthy that Mauritius scored relatively well in all four areas of assessment, namely, share of individuals using internet, share of individuals with an account, secure internet servers and UPU postal reliability score (see Table 2).

Tables 1 and 2 clearly highlight the significant progress made by Mauritius

Table 2: Top 10 African countries in the UNCTAD B2C E-commerce Index, 2018

	Economy	Share of individuals using the Internet (2017 or latest)	Share of individuals with an account (15+, 2017 or latest)	Secure Internet servers (normalized) (2017)	UPU postal reliability score (2017 data)	Index value (2017 data)	Index value change (2016-17 data)	World rank
1	Mauritius	55	90	56	66	66.9	-7.2	55
2	Nigeria	42	40	52	85	54.7	5.5	75
3	South Africa	59	69	83	0	52.9	-1.9	77
4	Tunisia	56	37	51	63	51.7	2.1	79
5	Morocco	62	29	54	59	50.9	NA	81
6	Ghana	39	58	45	53	48.8	7.6	85
7	Kenya	39	82	37	27	46.2	3.7	89
8	Uganda	17	59	31	58	41.5	-3.2	99
9	Botswana	47	51	41	26	41.4	0.1	100
10	Cameroon	23	35	25	78	40.3	3.6	101

Source: UNCTAD B2C E-commerce Index 2018, available at: https://unctad.org/en/PublicationsLibrary/tt_unctad_ict4d12_en.pdf?user=46.

in online trading and the use of e-commerce. With the recent introduction of secure payment options, the ongoing integration of fibre-broadband and the continued democratization of the internet, the launching of more online shops resulting in an increased volume of e-commerce is expected in the future.

Research methodology and analysis

We use both qualitative and quantitative techniques to assess the various opportunities and challenges facing the use of e-commerce in Mauritius from three perspectives: customers, online traders and policymakers/regulatory bodies. A survey of customers with experience in online shopping was administered. The questionnaire was designed to investigate e-commerce practices throughout the sales process and also to capture the reasons for non-online purchases. Thus, the questionnaire aims at assessing the willingness and readiness of Mauritians to undertake online purchases, determining the perception of Mauritians towards e-commerce, analysing the factors that stimulate Mauritian customers to make online purchases and identifying the main impediments to completing transactions online. It is noteworthy that most of the statements and scales in the questionnaire were borrowed from previous empirical work (Arendt, 2008; Sawmy et al., 2015). The questionnaire is structured around four key themes:

- Online shopping experience (section A). This section collects information from buyers about the websites they used to make online purchases, including the frequency of purchases,

and it assesses their level of satisfaction with their online purchases.

- Users' perceptions about e-commerce (section B). The questions are mainly 5-point Likert scale statements addressing security and privacy concerns, usefulness and convenience of websites, interaction and communication from online retailers, common frustrations, and consumer purchase intention in relation to online shopping.
- Reasons for not using e-commerce (section C). The questions mainly relate to investigating the reasons why consumers prefer not to complete transactions online.
- Demographic profile of the respondents (section D).

The researchers surveyed a sample of 256 of undergraduates and post-graduate students from publicly funded tertiary education institutions (TEIs). Given the geographic location of these TEIs and the small geographical area of Mauritius, the sample respondents are representative of the population who are adopters and non-adopters of e-commerce. The snowball sampling technique was used to reach out to a specific target group such that the sample also covers the self-employed and the general public. Care was taken to make the sample as representative as possible, taking into account that most of the online purchases were done by individuals with relatively high educational level (and thus relatively high income as well).

A pilot test was conducted among 10 respondents. A few questions and terminologies were amended to improve clarity. The survey was

mostly self-administered with clear instructions given on the questionnaire. The dataset consists of 236 respondents, of which 56 were non-users of online services. The data analysis was conducted using the Statistical Package for Social Science (SPSS) V20.0 software.

A qualitative assessment was conducted to analyse the constraints and opportunities faced by online merchants. A series of well-structured, in-depth interviews was administered to 15 of them. We also reviewed selected regulations and laws, and undertook thorough

discussions with policymakers to assess the policy and regulatory framework for e-commerce.

Analysis 1: Analysis of survey (customers' perspective)

Descriptive analysis

The respondents' demographic profile is summarized in Table 3. There is no marked difference between the online shoppers and non-online shoppers. The Mauritian women are the ones who embrace this mode of purchase (61.5 per cent) as compared to 38.5 per cent for men. Respondents from the age group 26 to 35 are more frequent online buyers; this makes sense as

Table 3: Demographic profile: online v. non-online shoppers

	Online shoppers		Non-online shoppers	
	F	%	F	%
Gender				
Male	69	38.5	16	31
Female	110	61.5	36	69
Age:				
16–25	36	20.1	9	17
26–35	76	42.5	20	33
36–50	61	34	7	13
>50	6	3.4	17	32
Income (MUR)				
None	14	8	9	17
<10,000	3	2	4	7.5
10,000–20,000	33	19	9	17
20,001–40,000	77	43	17	32
40,001–60,000	33	19	9	17
>60,000	17	10	5	9
Occupation				
Student	15	8.5	9	17
Self-employed	8	4.5	10	19
Professional	148	84	29	55
"Housewife"	-	-	3	6
Unemployed	5	7	2	3

Source: Survey results tabulated by the authors.

they are more likely to have experience with the world of work than do younger respondents and they are more likely to be tech savvy compared to older respondents. Income level is a direct determinant of the respondents' purchasing power: 72 per cent of the online shoppers earn an income above MUR 20,000 (EUR 500), and most are professionals.

It is worth noting that the non-online shoppers share the same demographic characteristics as the online shoppers. As such, measures geared towards increasing their trust should help foster greater e-commerce usage.

Online shoppers

On average, respondents purchased an item online about once a month, with clothing, jewellery and technological products the most commonly purchased items (see Table 4). The most commonly used websites by Mauritians for their purchases are eBay, AliExpress, Amazon and Alibaba (more than

75 per cent of respondents use these websites). The most frequent modes of payment are a credit or debit card and PayPal (more than 80 per cent of online shoppers). Additionally, nearly 70 per cent of respondents were satisfied with their online purchase experience (mean score of 3.74). Online shoppers typically use a laptop (53 per cent) or a smartphone (32 per cent) for their purchases, and mostly rely on a home Wi-Fi connection (88 per cent).

Underlying motivations for online purchases

The main reasons for this mode of purchase are wider choices, saving time, accessibility and the relative ease of searching for products online. This is further reinforced by perceptions about the online experience, where the statement "I feel shopping websites are very responsive to customers" and "E-commerce has changed the way I used to buy products and services" were highly rated using the 5-point Likert scale. The majority of

Table 4: Products purchased*

Which products do you buy the most	Responses		% of cases
	N	%	
Clothes	122	34.2	81.3
Technology products	68	19.0	45.3
Jewellery	65	18.2	43.3
Hotels/travel	35	9.8	23.3
Travel accessories	22	6.2	14.7
Automotive accessories	21	5.9	14.0
Others	13	3.6	8.7
Shapewear**	6	1.7	4.0
Food and beverage products	5	1.4	3.3
Total	357	100.0	

Source: Survey results tabulated by the authors.

* Dichotomy group tabulated at value 1.

** Undergarments worn to create a smooth silhouette.

Table 5: Most common frustration of e-commerce

Most common frustration of e-commerce	N	Minimum	Maximum	Mean
Difficulty reaching the organization	174	1.00	5.00	3.4713
Lack of fast chat/instant messaging	175	2.00	5.00	3.3600
Lack of information about the products/services	175	1.00	5.00	3.2343
Problems with account/logging in	174	1.00	5.00	2.8793
Trouble at check-out	176	1.00	5.00	2.8636

Source: Survey results tabulated by the authors.

respondents are of the view that shopping websites are flexible and easy to use, and that the information provided on the websites meets their needs. Online shoppers emphasize the importance of a website's attractiveness (mean score of 3.9) and its usability and navigation tools (3.8), among other issues such as prompt response to customer service queries and customer service in general. On the other hand, over half of respondents agreed with the statement "E-commerce does not allow me to inspect goods in advance of purchase".

The fear of sharing sensitive information with third parties without buyers' consent may act as a deterrent to transacting online. Respondents are of the view that websites use security controls to respect the confidentiality of users and have no problem on this front (mean score = 3.56). However, it is noteworthy that the respondents appear to be concerned about the unauthorized use of their personal information for other purposes.

The most common negative issues that Mauritian buyers faced while transacting online were the limited availability of fast chat/instant messaging and their inability to reach the e-shop by phone (see Table 5).

This is particularly of concern where the market covers a wide area, and this issue will have to be addressed.

Furthermore, the survey attempts to measure the extent to which online shopping may increase in popularity in the future. The results reveal that respondents are bound to increase their online shopping and in addition are prepared to assist other first-time buyers and also to encourage friends and relatives to shop online. However, to maintain the online shoppers' readiness to adopt this style of shopping, suppliers must guarantee the quality of the product, timely delivery and, above all, a secure mode of payment. Table 6 captures the mean score for these priority areas that merchants should address; concerns over security top the list, with a mean score of 4.66.

Shoppers who do not make purchases online

The survey instrument was also designed to capture the reasons that shoppers do not purchase items online; out of 236 respondents, 56 did not make any online purchases. Their demographic profile is not too different from that of the online shoppers, except that a smaller share are professionals and their incomes are somewhat lower. Nevertheless, the

Table 6: Rating of priority concerns according to their level of importance

Rating of criteria according to their level of importance	N	Minimum	Maximum	Mean
Payment security	178	1.00	5.00	4.6573
Quality	178	1.00	5.00	4.4944
Delivery	177	2.00	5.00	4.4802
Choice	178	2.00	5.00	4.3258
Possibility to get back in touch with the merchant	177	1.00	5.00	4.2712

Source: Survey results tabulated by the authors.

majority of the non-online shoppers are professionals or self-employed (see Table 3). Both occupations represent a non-negligible target for e-commerce (a substantial share earn a monthly income above MUR 20,000), and thus their security and privacy concerns should be addressed. It is worth noting that 69 per cent of respondents are female, and 32 per cent are over 50 years of age.

Of the 56 respondents who do not shop online, it is reassuring to note that 62 per cent may consider adopting this

mode of purchase. Inhibiting factors include uneasiness in navigating online, concern over payment security and a perception of high costs. Table 7 captures the most important reasons for not buying online, using 13 item statements. It includes, among others, not being acquainted with internet shopping, confusing procedures and pessimism about whether privacy is respected. The rotated solution using the Principle Component Analysis (PCA) data reduction techniques (refer to Table 8) groups the item statements into three dimensions,

Table 7: Reasons for not buying online

Reason for not conducting an online purchase	N	Minimum	Maximum	Mean
Unable to touch and analyse the items	55	2.00	5.00	4.2364
Apprehension about payment security	55	2.00	5.00	4.2000
Doubts the quality of the item	55	2.00	5.00	4.1636
No personal interaction with shop employees	56	1.00	5.00	3.9821
Shipping costs can be expensive	56	2.00	5.00	3.9643
Pessimistic about whether privacy is respected	56	2.00	5.00	3.9286
Delivery fees are high	56	2.00	5.00	3.6964
Not acquainted with internet shopping	56	1.00	5.00	3.3750
Confusing procedures	56	1.00	5.00	3.2321
The systems and the logistics are too complicated	56	1.00	5.00	3.1964
Less variety of items are available online	56	1.00	5.00	3.1964
Too complicated compared to traditional shopping	56	1.00	5.00	3.1607
I do not understand the online process	56	1.00	5.00	2.6429

Source: Survey results tabulated by the authors.

Table 8: Rotated component matrix*

Reason for not conducting an online purchase	Component		
	Payment	Navigation	Uneasy with Internet
I do not understand the online process			0.837
Not acquainted with internet shopping			0.736
The systems and the logistics are too complicated			0.696
Too complicated compared to traditional shopping		0.686	
Confusing procedures		0.645	
No personal interaction with shop employees		0.714	
Less variety of items available online		0.780	
Apprehension about payment security	0.690		
Shipping costs can be expensive	0.883		
Delivery fees are high	0.850		

Source: Survey results tabulated by the authors.
Extraction Method: Principal Component Analysis. **Rotation Method:** Varimax with Kaiser Normalization.

* Rotation converged in eight iterations.

namely, navigation, uneasiness with the internet and cost factor. The final list consists of 10 item statements because three items – pessimism about privacy, inability to touch and analyse the item and doubts about quality – did not load adequately into the three dimensions.

The main three areas of concern for non-adopters of e-commerce are not related to product and services quality *per se*, which indicate the usefulness of a shift of focus towards educating potential users on the internet and the navigation tools of the online platform. This may have some policy implications in terms of digital literacy and the regulation of this mode of commerce.

Analysis 2: Interviews with Mauritian service providers (sellers' perspective)

To gauge the opinions of sellers on the opportunities and challenges of making online transactions, we

conducted in-depth interviews with managers of 15 online merchants operating in different sectors, ranging from hotels/hospitality, fresh flowers and vegetables, groceries, furniture and other appliances. A discussion of their responses with respect to the perceived opportunities and constraints is synthesized below.

In terms of opportunities, the increased democratization of the internet as a national strategy is expected to further accelerate e-commerce. Moreover, government and business operators have medium- to long-term plans to further increase internet access and speed, while government is also pushing for price reduction by allowing increased competition and through policy measures. Moreover, as familiarity with information technology increases, the number of people purchasing online will further increase. Also, the increasing use of credit and debit cards as well as internet banking

on the island, fostered by aggressive marketing and awareness campaigns from banks, remains a key element in helping the development of e-commerce. With the introduction of new online payment solutions, customers can make use of their debit cards to make online purchases both in Mauritius and internationally, which was not the case prior to 2016. Security is very important in e-commerce, so investments by banks in new technologies to ensure greater security for online transactions and the introduction of e-secure platforms for password-protected online transactions can enhance customers' and online merchants' trust in the process. In Mauritius, online shopping is regulated under the Electronic Transactions Act (ETA), which was enacted in 2000. Online merchants are of the view that while this Act needs to be revisited to a certain extent, it still constitutes a relatively sound and encompassing legal framework governing e-commerce, and as such it instils confidence, which is a vital factor. Online traders also believe that e-commerce provides greater marketing opportunities, including through social media, in which a significant proportion of the population participates. Some respondents also argue that e-commerce facilitates reductions in inventory and distribution costs and time by providing just-in-time (JIT) services. In addition, they argue that the aforementioned services lead to better demand forecasts.

Online shoppers and merchants also face several challenges. For instance, online traders feel that Mauritians tend to favour international e-commerce websites (such as AliExpress, Amazon or eBay) over local websites, especially when acquiring luxury

products. Despite the considerable progress that has been made, consumers remain concerned over the use of debit and credit card information (and other personal information) by local websites, especially because e-commerce took off only quite recently. Customers are also reluctant to purchase from local service providers because they deem the local business's refund policies to be either lacking or unclear. A recent study by Shoraye and Gungea (2019) confirms the above bias in favour of the internet giants. Respondents also discussed technical limitations affecting local websites, which is linked to the absence of a standardized software (making navigation harder). They were particularly critical of the relatively low bandwidth of local sites, which makes the shopping experience slower and therefore less attractive. However, merchants argue that they are making a substantial investment to facilitate online purchases and to improve their software and websites. Greater investment in improving connectivity also is required to encourage e-commerce. Investments have been made to upgrade to fibre-broadband to increase speeds to between 10–30 MB. However, this remains a medium- to long-term project. Finally, small market size, with the Mauritian population currently standing at around 1.3 million people, remains a limiting factor for the growth of e-commerce. Some local merchants argue that the small size of the market may act as a deterrent for large foreign operators. In addition, given that Mauritius is relatively far from major online service providers, the resulting hefty customs fees and transport costs (particularly given that island is quite remote) may act as deterrents.

Analysis 3: E-commerce challenges and opportunities – A policy and regulatory perspective

Mauritius is actively participating in the e-commerce discussions at the World Trade Organization (WTO),² the objective being to elaborate on a multilateral framework to better regulate the sector. To that end, Mauritius has already adopted a number of laws to facilitate and promote e-commerce. First and foremost, the ETA gives legal security to documents in electronic form and provides legal recognition for the use of electronic records and signatures and their secure counterparts. The main goals of the ETA are as follows:

- Facilitate electronic communications by means of reliable electronic records;
- Facilitate e-commerce and promote the development of the legal and business infrastructure necessary to implement secure electronic commerce;
- Facilitate electronic filing of documents with government agencies and statutory corporations, and promote efficient delivery of government services by means of reliable electronic records;
- Minimize the incidence of forged electronic records, intentional and unintentional alteration of records, and fraud in electronic commerce and other electronic transactions;
- Help to establish uniformity of rules, regulations and standards regarding the authentication and other electronic transactions; and
- Promote public confidence in the integrity and reliability of electronic

records and e-commerce, and foster the development of e-commerce through the use of electronic signatures to provide authenticity and integrity to correspondence in any electronic medium.

In a similar vein, privacy protection and protection against unsolicited commercial electronic messages, which are vital components of e-commerce, are provided through the Data Protection Act of 2017, the Banking Act of 2004 and the National Payment Systems Act of 2018. These regulatory frameworks also provide for online payment solutions to enable cross-border e-commerce. For instance, the Data Protection Act regulates the cross-border transfer of information by electronic means and does not place any restrictions on data localization, save for the requirement to inform the Data Protection Office when data is to be transferred abroad.

Furthermore, paperless trading, another prerequisite for e-commerce, is already a reality. Indeed, all trade administration documents are electronically available, and electronic versions of trade documents are accepted by financial institutions and government. In addition to these regulatory frameworks, Mauritius does not impose any customs duty on electronic transmissions, and the underlying principle of National Treatment is applicable to local and foreign digital products. Finally, prior authorization by service providers from the relevant ministries is not required for the delivery of online services, boosting such trade in the country.

Another element promoting cross-border e-commerce is the implementation by Mauritius of the

WTO Trade Facilitation Agreement (TFA), which aims to reduce the time and costs involved in cross-border trade and also to enhance predictability and transparency. Indeed, traders are more aware of existing regulations and other costs of trade when placing their orders. Other provisions of the TFA, in particular the publication of release time of goods, assist traders in calculating the time their goods would be retained at the border. The single window system and risk management provisions also help to streamline the administrative procedures required to obtain necessary clearance online and to reduce the time for clearance of goods at the border.

The above highlights the readiness of the country to promote e-commerce, but policy challenges still exist. For instance, an online consumer protection law has yet to be enacted.³ As of now, there is no platform to promote regulatory cooperation on e-commerce between Mauritius and other jurisdictions. Furthermore, an official and functional e-commerce platform *per se* is yet to be established.⁴ In this regard, the provision of technical assistance by international institutions, as well as on a bilateral basis, to address these and other challenges may prove crucial for Mauritius in its endeavour to promote e-commerce.

Computation of trade data and statistics on e-commerce remains a challenge. Statistics Mauritius does not compile e-commerce statistics because it lacks a mechanism or legislative framework to do so. Moreover, staff have limited technical know-how for such an exercise. Technical assistance to develop mechanisms for the collection and

management of e-commerce data, building on practices in other countries, and to build staff capacity would be valuable. It is important to measure accurately the magnitude of e-commerce trade to inform development of policies and any further legislative framework needed to properly regulate e-commerce.

Finally, the regulatory framework in Mauritius may be further improved once a multilateral framework has been agreed.⁵ Once this is done, regulations in Mauritius could be revisited to incorporate international best practices.

Conclusion

This study has explored the current status of, and the challenges to and opportunities for, e-commerce in Mauritius. With increased internet penetration, the e-commerce industry has grown rapidly, and e-shopping and e-services are used prominently by the local population. Increased credit card usage and secure online payment solutions have also been crucial elements fostering the development of e-commerce.

An analysis of the opportunities and challenges of e-commerce has been undertaken using a three-pronged approach, including the online buyer/customer, the online merchant and regulatory agencies/policymakers. A survey of buyers indicates that the main reasons for adopting online purchases are wider choices, saving time, accessibility and the ease of searching for products online. The survey also showed consumers' high degree of satisfaction with respect to online experience. The survey indicated that respondents were likely to increase their online shopping in the future, and

that they were prepared to assist other first-time buyers and to encourage friends and relatives to shop online. In short, the survey results indicate considerable potential for online shopping in Mauritius, although a number of challenges remain. Major issues include concerns that websites will share sensitive information with third parties without buyers' consent, the lack of fast chat/instant messaging and the inability to contact the e-shop by phone (a particular concern in markets covering a wide area). A majority of respondents who had never conducted online transactions indicated that they would, or were considering doing so in future. Their main motivations for not making online transactions related to uneasiness over navigating online and payment security issues.

In-depth interviews of managers of 15 online merchants operating in different sectors (including hotels/hospitality, fresh flowers and vegetables, groceries, furniture and other appliances) indicate considerable optimism about the potential for online shopping in Mauritius. Interviewees cited the small size of the market with considerable scope for growth, anticipated increases in internet penetration, the use of ICT and financial literacy, the increasing use of credit and debit cards, the growth of internet banking and the establishment of secure online payment systems, and the establishment of a comprehensive regulatory framework for e-commerce. However, the low speed and bandwidth of internet connections and the lack of infrastructure in some remote areas were seen as major impediments to the growth of e-commerce in Mauritius.

The legal framework for e-commerce, consisting of the ETA, the Data

Protection Act of 2017, the Banking Act of 2004 and the National Payment Systems Act of 2018, has bolstered trust and confidence among both consumers and businesses. However, some aspects of the framework could be strengthened. For instance, an online consumer protection law is yet to be enacted, and there is no platform to promote regulatory cooperation between Mauritius and other jurisdictions on e-commerce. As such, Aid for Trade initiatives to foster e-commerce are yet to be implemented, while an e-commerce platform *per se* is yet to be established. Moreover, the compilation of trade data and statistics on e-commerce remains a challenge, as this data is not captured by the Statistics Mauritius office. Statistics Mauritius will have to develop appropriate methodologies based on best practices to collect and process data on e-commerce, since such data are crucial for the design of sound policies and the promulgation of a more comprehensive regulatory framework. Finally, there is a need to bring together all stakeholders to take stock of the e-commerce situation in Mauritius, identify further actions that may be required and develop a roadmap with clear timelines and designation of responsible implementing agencies.

Endnotes

¹ Other popular shopping sites are moodesign.mu and mycart.mu. Other sites operated by supermarkets allow online purchase of groceries, such as theshop.mu and winner.mu. Other websites, such as lacase.mu, are focused on home décor, while tantebazar.com sells fresh and good-quality vegetables, and thewinestore.mu deals in spirits and wines.

- ² Negotiations on the Trade in Services Agreement (TiSA) has been suspended following the 2016 presidential elections in the United States, with e-commerce being part of the negotiations.
- ³ Although Mauritius has enacted laws with regards to consumer protection, competition and data protection, they do not explicitly address consumer protection and other issues linked to e-commerce. This remains one area where technical assistance is required.
- ⁴ The International Trade Division of the parent ministry has recently undertaken a feasibility study with respect to the setting up an e-commerce platform to trade with the SADC region. The study concluded that while this is possible, the cost would be quite substantial. Aid for Trade support could be provided to establish the platform to boost trade from Mauritius to the region.
- ⁵ It is noteworthy that the FTA with China contains a section on e-commerce.

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Comments



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E-commerce does not yet feature prominently in the trade and integration strategy of most African countries. While Mauritius has not yet joined the plurilateral e-commerce initiative in the World Trade Organization (WTO), this small island economy has historically responded to changes in the global economy very astutely and tackled the process of structural transformation with strong commitment and ingenuity in policymaking in its development strategies. It is definitely gearing up to support e-commerce and digital trade more generally, and it is in this context that this chapter makes a useful contribution to gathering data on e-commerce developments in Mauritius.

The mainstay of this small island economy was, not too many decades ago, a single crop, cane sugar, which was exported almost exclusively to the European Union under preferences. An important step in the country's economic transformation was a policy decision to diversify and develop its industrial sector. The aim was to attract foreign direct investment and labour to establish a textile and garment sector. Mauritius very soon became a preferred location for the production of garments for a number of international clothing brands. To support this industrial development, trade liberalization, including tariff

reductions and improved customs and port management measures, enjoyed priority.

More recently, policy attention has shifted to the services sector, with a clearly stated ambition to become a hub for information and communications technology (ICT) related services, financial services and education services. The broad policy narrative now centres on supporting digitally enabled growth. It is in this context that the development of e-commerce in Mauritius is interesting and important. Mauritius has in recent years topped the rankings for Sub-Saharan Africa (SSA) in the United Nations Conference on Trade and Development's (UNCTAD) Business-to-Consumer (B2C) E-commerce Index (UNCTAD, 2019). For 2019, Mauritius is followed by South Africa, Nigeria and Kenya, putting this small island economy among those that are leading Africa's ICT sector growth. The tech hubs in Cape Town, Lagos and Nairobi are supporting vibrant ICT-enabled initiatives in e-commerce, finance and more. Africa already has its own "silicon valleys".

What about e-commerce developments in Africa?

In addition to the global e-commerce giants such as Amazon and Alibaba

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(and AliExpress for consumers), there are a growing number of emerging African e-commerce start-ups, including Jumia.com, MallforAfrica.com and its associate MarketPlaceAfrica.com. MarketPlaceAfrica.com, which provides a global platform for African sellers (Stuart, 2020), features goods predominantly produced in Africa. DHL couriers provide delivery services for the platform to 220 countries, mitigating the challenges of poor postal services in some African countries. These developments offer opportunities for small- and medium-sized enterprises (SMEs) that are still predominant in most African economies. However, the terms and conditions for access to these platforms will determine whether SMEs will be able to thrive and grow.

The main constraints to the development of Africa's e-commerce SMEs are connectivity and the cost of broadband products. If these can be overcome, then various opportunities in ICT services trade, including e-commerce, could also be opened up. The collection of tourism-related services – accommodation, travel and event-based services – could all be traded internationally over the internet. This includes Uber and Airbnb, which could also offer opportunities in rural areas.

Convenient and cost-effective online payment services are important for e-commerce. So far, 49 African countries are on the PayPal platform. This platform (and others) could well support participation by SMEs in e-commerce, because it does not require validation of business status and does not charge additional fees. Many African countries, however, still lack competitive mechanisms to repatriate PayPal funds (Stuart, 2020).

This presents a significant opportunity to the financial services sector in Africa.

African Union initiatives

Members of the Executive Council of the African Union (AU) endorsed a digital transformation strategy for the continent at its 36th Ordinary Session, 6–7 February 2020.¹ This strategy references and emphasizes several other AU initiatives,² including the AU's flagship projects and development partner-supported initiatives that are important for e-commerce development on the continent:

- The Programme for Infrastructure Development for Africa (PIDA), which includes ICT infrastructure and specifically extending fibre optic connectivity, in particular to landlocked countries;
- Electrification and connectivity of post offices in Africa, which is a collaborative project of the AU Commission and the Universal Postal Union being piloted in 13 countries. This could revitalize post offices in some countries, offering lower-cost alternatives for parcel deliveries;
- The Malabo Convention on cybersecurity, which was adopted by the AU in 2014 and aims to mitigate security-related obstacles to the development of e-commerce; and
- An EU-funded initiative – the policy and regulatory initiative for a digital Africa (PRIDA) – that works to facilitate broadband access through more efficient spectrum management and policy harmonization.

Review of national legislation to support e-commerce across the

continent reveals a mixed picture. E-transaction laws, cybersecurity and consumer protection laws, as well as privacy and data protection laws, still have to be developed in many countries. The north African region, followed by west and southern Africa, is making good progress, but much remains to be done, especially in parts of central and East Africa.³

E-commerce on Africa's trade agenda

While e-commerce has been formally on the WTO agenda since 1998, when members adopted a work programme on e-commerce, it was only in December 2017 at the 11th Ministerial Conference that 71 members agreed to work towards WTO negotiations on trade-related aspects of e-commerce. Confirmation of the intention to start WTO negotiations on trade-related aspects of e-commerce was put forward in January 2019. The work programme has four focus areas: i) facilitating electronic transactions; ii) non-discrimination and liability; iii) online consumer protection and unsolicited commercial electronic messages; and iv) transparency, domestic regulation and cooperation. In December 2019, WTO members agreed to extend the moratorium on customs duties on e-transactions until the 12th Ministerial Conference (MC12) in June 2020. With the postponement of MC12, and the suspension of all WTO meetings due to the COVID-19 pandemic, it is not yet clear what will happen to the moratorium and how the work programme will continue.

Very few African countries have been participating in the WTO e-commerce work programme. Aside from Kenya, the other participants – Benin, Côte

D'Ivoire, Nigeria, and, very recently, Cameroon – are from west and central Africa. Holding back many African countries are concerns about domestic policy space and their right to regulate, their capacity to undertake commitments and, for some, the fact that this is a plurilateral rather than multilateral initiative.

The two regional economic communities that have developed e-commerce strategies are the Common Market for East and Southern Africa (COMESA) and the Southern African Development Community (SADC). COMESA announced in late 2017 that its free trade area would be going digital. The COMESA Digital Free Trade Agreement (FTA), which is still to be operationalized, will function on three tracks: (i) e-regulation; (ii) e-logistics; and (iii) e-trade. The e-trade track will include an e-commerce platform.

SADC member states adopted an e-commerce strategy in 2012, but they have not yet implemented it. The SADC strategy has four pillars: i) an enabled e-commerce environment; ii) a capacity development programme; iii) the strengthening of an e-commerce subregional and national infrastructure; and iv) an institutionalized framework to implement, evolve and govern the current strategy at the regional level. UNCTAD's B2C readiness and internet penetration assessment (UNCTAD, 2019) puts South Africa, Mauritius, and Seychelles in a leading group ahead well ahead of the other member states. None of these is, however, participating in the WTO e-commerce work programme.

The inclusion of e-commerce on the agenda of the African Continental Free Trade Area (AfCFTA) has proved

to be a contentious matter. The latest indication is that trade-related aspects of e-commerce may be tackled in 2021. Meanwhile the AfCFTA agenda does include several Annexes to the Protocol on Trade in Goods that support e-commerce. Member states are also currently preparing to negotiate commitments for five priority services sectors – financial, transport, communication, business and tourism – all of which are important for e-commerce development. Indeed, generally, the AfCFTA holds potential, perhaps most specifically in the provisions on trade facilitation, customs and border management, the elimination of non-tariff barriers, services in regulatory cooperation and perhaps, even at a future time, harmonization. These provisions could contribute to improvements in trade governance that are much needed to boost infra-Africa trade, which was a key motivating factor to establish the continent-wide free trade area.

Endnotes

¹ Decisions of the 36th Ordinary Session of the Executive Council of the African Union,

available at: <https://au.int/en/decisions/council>.

² For details, see: <https://www.tralac.org/documents/resources/africanunion/3013-the-draft-digital-transformation-strategy-for-africa-2020-2030/file.html>.

³ Ibid.

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