

DISCUSSION PAPER AUGUST 2017

E-COMMERCE COUNTRY CASE STUDY

SOUTH AFRICA

Adheesh Budree





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The second phase of the programme started in March 2016 and will be implemented over a period of three years until March 2019.

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GEGAFRICA is funded by the UK Department for International Development and managed by a consortium consisting of DNA Economics, the South African Institute of International Affairs and Tutwa Consulting.

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ABSTRACT

South African small and medium-sized enterprises (SMEs) and larger organisations can benefit significantly from the enhanced exposure, both local and international, that e-commerce affords them. In order to fully exploit the opportunities that e-commerce offers, there is a need for collaborative support between the government and industry to bolster the growing field. E-commerce could also be key in addressing issues around economic inclusion in South Africa, in particular the empowerment of women and the poor. However, it is not without its limitations. E-commerce policy and interventions in terms of regulation, education and infrastructure are needed. In order to do so, data analysis of the current e-commerce market in South Africa using both public and private data sources is imperative. Policy interventions will go a long way to shape regulation around digital cross-border trade, increase digital inclusion through education and training, and provide better infrastructure that supports the e-commerce industry and its role in developing the South African economy. This discussion paper breaks down these areas, looks at a number of policy considerations and offers some possible solutions.

AUTHORS

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INTRODUCTION

Online businesses have become prevalent in developed and developing economies alike, allowing for an increasing variety of online business options. Services such as floristry and hobbies such as knitting generate incomes online, while online marketplaces such as Etsy and many individual businesses are run from websites. This enables business owners to operate a business with little to no overheads. Not only small businesses but also larger retailers are choosing e-commerce as a platform from which to expand into new markets.¹ The e-commerce industry has created scores of new and exciting entrepreneurial ventures, such as Amazon and Alibaba.² These companies use a very different strategic logic to compete in the market and show a high dependence on information technology (IT).

With the rapid growth in online businesses globally, South African small and medium-sized enterprises (SMEs) could benefit substantially from the opportunities that e-commerce affords them. By making use of e-commerce, SMEs can penetrate markets that were previously inaccessible, and can advertise and sell their products globally. According to the UN Conference on Trade and Development, the ability

¹ Kearney AT, Beauty and The E-commerce Beast. New York: AT Kearney, 2014.

² Rouse M, 'e-commerce (electronic commerce or EC)', June 2016, <u>http://searchcio.</u> techtarget.com/definition/e-commerce, accessed 17 July 2017.

to access a global market via e-commerce creates the potential for new businesses and jobs, as both the export and import markets of that country expand, thereby impacting positively on employment and productivity.

However, the growth of e-commerce also raises a number of challenges for policymakers. This includes the need to protect the privacy and security of national data, and the need to regulate and tax transactions taking place across new and virtual channels. Countries are also exploring ways in which to promote the domestic IT industry in the face of rising trade and competition from abroad. Many of these issues are already being addressed in global forums such as the G20. To fully

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participate in these discussions, South Africa first needs to identify and understand its own interests and, ideally, ensure that these interests are accurately reflected in appropriate domestic policies and regulations.

This paper identifies three major areas that have an impact on South Africa in terms of e-commerce. The first key issue is an all-encompassing definition of e-commerce specific to South Africa that accounts for the local environment but also reflects international trends and debates. The second is the South African e-commerce environment, including the industry's size, imports and exports, trade barriers and growth areas. There is insufficient understanding of these factors, owing largely to data on the e-commerce industry being generally scarce or not available.

The third key issue is current regulations' impact on e-commerce in the country. Policymakers are in the process of developing new legislation and reviewing existing regulations to deal with e-commerce and the digital economy, and need to understand the costs and benefits of different options. These key points culminate in policy recommendations around South Africa's position on e-commerce at a global level.

SCALE AND NATURE OF E-COMMERCE IN SOUTH AFRICA

In order to understand the scale and nature of e-commerce in South Africa, it is useful to first look at global trends and developments in e-commerce. This includes current debates around the definition of e-commerce and how this may be applied to a South African context.

INTERNATIONAL E-COMMERCE TRENDS

A 2013 survey showed that approximately 92% of 400 companies interviewed globally already marketed their products online. The remaining 8% planned to follow suit. On average, online sales in the business-to-business (B2B) sector accounted for 35% of total revenue, which clearly indicates the importance of online businesses.³

A major portion of online sales is still B2B. According to the survey, B2B and merchant wholesalers were more widespread than retailers or selected service businesses, and accounted for 91% of all online transactions. Manufacturers were the most involved in B2B activities online (accounting for 42% of total shipments, or \$1,862 billion), followed by merchant wholesalers (manufacturing sales branches and offices), whose e-commerce activities constituted 23.4% (\$1,211 billion) of total sales.⁴

The global e-commerce industry saw significant growth in 2014, with goods and services valued at \$1.5 trillion bought by consumers via electronic devices such as desktop computers, tablets and smartphones. Advertising and marketing companies are now spending an increasing amount of their budgets on Internet advertising and presence. This increase in spending was forecast to exceed \$160 billion in 2015, of which more than \$58 billion was to be spent on advertising. The huge growth curve in spending online globally has affected not only the economy of individual countries but also the global economy, as well as change rates and international trade.⁵

In addition, in 2014 many more companies began offering free global shipping, an investment that transforms free delivery from a competitive advantage to 'business as usual'.⁶ This means that the transition to e-commerce will start to impact Africa and South Africa as more and more products and services are made available.

According to the Ecommerce Foundation's 'Global B2C [business to customer] E-commerce Report 2016',⁷ in 2015 the global population amounted to around 7.3 billion people, of whom 1.4 billion had purchased goods and/or services online at least once. In total, they had spent \$2.3 trillion online, with an average spend

3 Intershop, 'Intershop E-commerce Report 2013', <u>http://www.intershop.com/e-commerce-report-2013</u>, accessed 3 July 2017.

- 4 Sila I, 'Factors affecting the adoption of B2B e-commerce technologies', *Electronic Commerce Research*, 13, 2, 2013, pp. 199–236.
- 5 Criteo, Criteo E-commerce Industry Outlook 2015', <u>http://www.criteo.com/resources/criteo</u> <u>-ecommerce-industry-outlook-2015/</u>, accessed 3 July 2017.
- 6 Rabkina V, 'E-Commerce Trends for 2014', Amasty, <u>https://amasty.com/media/downl_oads/e-book-e-commerce-trends-for-2014.pdf</u>, accessed 3 July 2017.
- 7 Ecommerce Foundation, 'Global B2C E-commerce Report 2016', <u>https://www.ecommercewiki.org/wikis/www.ecommercewiki.org/images/5/56/Global_B2C_Ecommerce_Report_2016.pdf</u>, accessed 3 July 2017.

per e-shopper of \$1,582 per year. Asia-Pacific is still the strongest B2C e-commerce region in the world, as it was in 2014. With a B2C e-commerce turnover of \$1,056.8 billion, it ranked ahead of North America (\$664 billion) and Europe (\$505.1 billion). Latin America, and the Middle East and North Africa were the two smallest B2C e-commerce markets in 2015, achieving B2C e-commerce sales of \$33 billion and \$25.8 billion respectively.⁸

KPMG reports that across sub-Saharan countries, e-commerce makes up 1-3% of gross domestic product (GDP) and is predicted to make up 10% of total retail sales in key African markets by 2025, with 40% annual growth over the next decade. The total retail economy is projected to continue to grow rapidly, along with the population as a whole and its spending power per capita.⁹

DEFINING E-COMMERCE IN SOUTH AFRICA

It is key that South Africa develops a clear definition of e-commerce that is aligned with global norms to ensure that there is no misinterpretation at any level in the policies that guide the regulation and management of its operations.

The definition of electronic commerce or e-commerce has evolved over the years. Andam's definition for the UN Development Programme in 2003 was widely accepted at the time as the definitive description of e-commerce:¹⁰

E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals.

The Organisation for Economic Co-operation and Development (OECD), together with its member countries, has since been instrumental in developing a global and all-encompassing e-commerce definition. In 2009 it settled on the definition of e-commerce as follows:¹¹

An e-commerce transaction is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have

- 10 Andam ZRB, *E-commerce and E-business*. Vancouver: UN Development Programme & Asia-Pacific Development Information Programme, 2003.
- 11 OECD (Organisation for Economic Co-operation and Development), 'OECD science, technology and industry scoreboard 2011', <u>http://www.oecd-ilibrary.org/sites/sti_score_board-2011-en/06/10/index.html?contentType=&itemId=/content/chapter/sti_score_board-2011-64-en&containerItemId=/content/serial/20725345&accessItemIds=/content/ book/sti_scoreboard-2011-en&mimeType=text/html, 7 August 2017.</u>

⁸ Ibid.

⁹ KPMG, 'Africa's Consumer Story', blog post, 2013, <u>http://www.blog.kpmgafrica.com/</u> <u>africas-consumer-story-demographics/</u>, accessed 3 July 2017.

to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations. To be included are orders made over the web, extranet or electronic data interchange. The type is defined by the method of placing the order. To be excluded are orders made by telephone calls, facsimile or manually typed e-mail.

The OECD's definition of e-commerce incorporates not only the traditional business model of B2C but also B2B interactions, as well as consumer-to-consumer (C2C) websites such as Amazon.com that provide a platform where users can deal directly with each other.¹²

Similarly, the World Trade Organization (WTO) defines e-commerce as activities involving goods and services crossing borders electronically, specifically the sale or purchase of goods or services conducted over the Internet or other computer networks. It goes on to stipulate that an e-commerce transaction can be between enterprises, households, individuals, governments and other public or private organisations, which is in line with the OECD definition.¹³

The definition of e-commerce in South Africa is broadly aligned with international discussions. Specifically, the definition given by the Department of Communications' 2000 Green Paper on E-commerce in South Africa states that e-commerce is¹⁴

the use of electronic networks to exchange information, products, services and payments for commercial and communication purposes between individuals (consumers) and businesses, between businesses themselves, between individuals themselves, within government or between the public and government and, last, between business and government.

Contextually, this is also aligned to the OECD's definition of an e-commerce transaction being the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders.

The South African National Integrated Information and Communications Technology (ICT) Policy White Paper of September 2016 defines e-commerce as 'transactions that take place online, where the buyer and seller are remote from each other. In the context of the white paper, it also includes the use of any ICTs,

¹² Ibid.

¹³ WTO (World Trade Organization), 'Briefing note: Electronic commerce', 9th WTO Ministerial Conference, Bali, 2013, <u>https://www.wto.org/english/thewto_e/minist_e/mc9_e/brief_ecom_e.htm</u>, accessed 3 July 2017.

¹⁴ South Africa, Department of Communications, 'A Green Paper on Electronic Commerce in South Africa', November 2000, <u>http://www.gov.za/sites/www.gov.za/files/electronic_</u> <u>commerce_1.pdf</u>, accessed 3 July 2017.

including mobile phones, to buy or sell goods and services.' This definition forms part of e-services, which are defined in the white paper as¹⁵

services delivered via the Internet, and over mobile technology (m-services) and other ICT platforms, including not only e-commerce but also a wide spectrum of personal and government services based on the provision of knowledge, information, applications ('apps'), access to markets, entertainment, education, health care, social networks, banking, surveillance, remote control, early warning, etc.

According to Statistics South Africa, e-commerce is the¹⁶

electronic means whereby business units receive orders and transact the sale of goods and services produced (ownership transfers), eg, by telephone, fax, email, TV, electronic data communication networks, cellular networks, Internet, etc. (excluding if only used for normal transactions falling under any of the classification sectors), which includes three stages, viz. the placement of the order, payment, and the delivery of the goods or services.

The definition of electronic services, however, can get complicated. The EU defines it 'as services which are delivered over the Internet or an electronic network and the nature of which renders their supply essentially automated and involving minimal human intervention, and impossible to ensure in the absence of information technology',¹⁷ while the South African Revenue Service (SARS) defines it as¹⁸

the services listed in regulation 3 (educational services), regulation 4 (games and games of chance), regulation 5 (internet-based auction services); regulation 6 (miscellaneous services) and regulation 7 (subscription services) ... where such services are supplied by means of any electronic agent, electronic communication or the internet for any consideration.

SARS's detailed and granular definition of electronic services does seem to cover the current possible extent of such services. However, as the OECD mentions regulatory certainty and international harmonisation, such definitions are better addressed via guiding principles in order to maintain standardisation.¹⁹

- 15 South Africa, Department of Telecommunications and Postal Services, 'National Integrated ICT Policy White Paper', 28 September 2016, <u>https://www.dtps.gov.za/</u> images/phocagallery/Popular_Topic_Pictures/National_Integrated_ICT_Policy_White.pdf, accessed 3 July 2017.
- 16 SARB (South African Reserve Bank), Bank Supervision Department, 'Annual Report 2001', 2002, pp. 39–40, <u>https://www.resbank.co.za/AnalyticsReports/Annual+Report+2001[1]</u>. <u>pdf</u>, accessed 3 July 2017.
- 17 European Commission, Taxation and Customs Union, 'Electronically supplied services', http://ec.europa.eu/taxation_customs/individuals/buying-goods-services-online-personal_ use/buying-services/electronically-supplied-services_en, accessed 3 October 2016.
- 18 Krogman H & N Khumalo, 'E-commerce in Africa: Definitions, Issues and the Evolving, International Regulatory Landscape', Global Economic Governance (GEG) Africa Discussion Paper, 2016.
- 19 *Ibid*.

The South African Electronic Communications and Transactions Act 2002,²⁰ as part of the legislative mandate of the Department of Telecommunications and Postal Services (DTPS), refers to automated transactions, defined as an electronic transaction conducted or performed, in whole or in part, by means of data messages in which the conduct or data messages of one or both parties are not reviewed by a natural person in the ordinary course of such a natural person's business or employment. This again aligns with the OECD definition.²¹

Another definition of e-commerce in South Africa, proposed by the Ecommerce Forum Africa, is 'a subset of e-business which refers to any B2C or B2B contract on the sale of products or services fully or partly concluded by a technique for distance communication'.²²

Common threads can be gleaned across all of these definitions, both national and global. The two key points are that the medium of the transaction must be electronically over a computer network, and that the transaction must take the form of a sale or purchase of a good or service. It is also important to note that the delivery of the good is not of consequence for the definition – it is the ordering or sale that is the defining factor.²³

While the definition of e-commerce has not changed since inception, it has been better defined and expanded. E-commerce continues to advance and become more accessible as the Internet grows. As technology advances the limits of e-commerce also expand, and, as such, so too does the definition. However, while the current definition from the OECD, adopted by the DTPS and others in South Africa, is valid and all encompassing, it must be noted that a BRICS framework on e-commerce cooperation is being developed that will include a new definition.²⁴

THE NATIONAL INTEGRATED ICT POLICY WHITE PAPER

The 2016 South African National Integrated ICT Policy White Paper²⁵ is a key document speaking to the South African government's perspective on e-commerce. It states that the digital transformation of the public sector and the promotion of digital services' uptake will create further opportunities for digital entrepreneurship and the introduction of new innovative digital goods and services. E-commerce and

- 24 Ibid.
- 25 Department of Telecommunications and Postal Services, op. cit.

²⁰ South Africa, Electronic Communications and Transactions Act 2005 (Act 36 of 2005).

²¹ Ibid.

²² EFA (Ecommerce Forum Africa), 'Ecommerce Forum Africa Introductory Remarks to the Davis Commission on Tax', 24 August 2015, <u>https://ecomafrica.org/2017/wp-content/uploads/2015/08/Ecommerce-Forum-of-SA-Introductory-Remarks-to-the-Davis-Commission-on-Tax.pdf</u>, accessed 17 July 2017.

²³ Krogman H & N Khumalo, op. cit.

digital services that are responsive to communities' needs also have the potential to promote the uptake of ICTs.

The white paper highlights three key pillars informing the approach adopted for transforming South Africa into a digital society: ensuring the digital transformation of government; providing all citizens with digital access to improve their quality of life; and using digital inclusion to ensure that all South African citizens benefit from the digital economy and knowledge society. It is envisaged that these steps will drive up demand for Internet access and boost e-commerce growth.

According to the white paper, the digitisation of government services is aimed at reducing the red tape involved in setting up and running electronic businesses, and will contribute towards the digital transformation of the economy. It is also envisaged that the digitisation of public services will prompt digital take-up and therefore grow the market for e-commerce products and services. The white paper states that the government will 'facilitate growth in opportunities' across the Internet and in digital value chains through creating 'enabling frameworks to encourage innovation and enterprise – and therefore to address inequality in opportunity'.²⁶

The focus of the government's ICT intervention is on using ICTs to facilitate growth in the SME sector. This will be done by extending reliable access to communications networks (and facilitating the broadband targets set in the National Broadband Plan), boosting the adoption of new technologies through e-government services, and promoting digital awareness and literacy, while putting in place robust frameworks to protect users from cybercrime. The government also aims to develop simplified online compliance tools and systems for business registration, to make it easier for entrepreneurs to operate. Policy interventions to boost small and micro enterprises will focus on reducing costs, making it easier to reach customers and limiting geographic barriers. The government will also initiate programmes to address digital capacity challenges in this sector, including IT skills.

The white paper also highlights the impact that the digital economy has had on the business model of the postal sector and the South African Post Office. An example of this is the way in which the growing use of email has caused a drop in the volume of letter mail. At the same time, e-commerce has introduced new opportunities for courier and parcel delivery services. Extending the reach and efficiency of delivery systems through transforming the postal sector will further facilitate growth in the e-commerce sector and assist in promoting small and micro enterprises. A full discussion of this can be found in Appendix A.

ICT POLICY PAPER				
E-SERVICES				
E-POST SERVICES	E-FINANCE SERVICES	SECURE E-GOVERNMENT SERVICES	E-COMMERCE SERVICES	
Public Internet access points in post offices	Electronic invoicing	Secure e-government gateway	Online shop for philatelic products	
Web information on services and tariffs	Electronic account management	Authentication of digital signatures	Online shop for postal goods	
Postal electronic mailbox	Electronic remittances	Verification of addresses	Online shop for non-postal goods	
Online direct mail	Online bill payments		E-commerce web-based customer service and contact	
Postal registered electronic mail	Bills management		Subscription for periodicals and physical delivery	
Electronic stamp	E-payment of utilities (water, electricity, etc.)			
Electronic signature	E-payment of phone bills			
E-cards	Electronic money transfers			
Hybrid mail (physical to electronic and electronic to physical)	Mobile money services and transactions			
Postcode lockup				
Track and trace				
Public Internet access				

TABLE 1 E-SERVICES HIGHLIGHTED IN THE NATIONAL INTEGRATED ICT POLICY PAPER

Source: South Africa, Department of Telecommunications and Postal Service, National Integrated ICT Policy White Paper, 28 September 2016

South African e-commerce environment

Statistical analysis of the South African e-commerce market is in its infancy, with little up-to-date information available from official sources such as Statistics South Africa (StatsSA) and the South African Reserve Bank (SARB). A key study on the global e-commerce market is the Global B2C E-commerce Report 2016,²⁷ which is a collaborative initiative spearheaded by the Ecommerce Foundation. The report consults a wide variety of sources, including public domain publications, blogs, websites, industry and financial specialist publications, regional and local media, annual reports and press releases. The South African Ecommerce Report 2016,²⁸ published by the Interactive Advertising Bureau South Africa, Visa and research company Effective Measure, interviewed approximately 12 000 South African consumers to learn about the South African e-commerce market.

Based on the findings of the Global B2C E-commerce Report 2016,²⁹ South Africa is a prime market for e-commerce growth with an estimated 39.3 million citizens aged 15 and over, 50% (19.9 million) of whom are Internet users and only 20% (8.3 million) of whom are e-shoppers. As shown in Figure 1, total global B2C online sales increased from \$0.6 billion in 2012 to an estimated \$1.7 billion in 2016. However, since 2014 the growth rate has been slowing, similar to the trend seen in the Middle East–North Africa region, while still remaining remarkably high. According to the report, revenue is expected to show an annual growth rate (compound annual growth rate from 2016–2021) of 15%, resulting in a market volume of \$4,697 million in 2021.

According to research done as part of the National Integrated ICT Policy by StatsSA, there was a drop in the percentage of sales conducted electronically from 2010 to 2013, from 12.6% to 6.8%.³⁰ While online sales in South Africa are increasing, growth is reportedly slow. In research commissioned to inform the DTPS's ICT policy review, Detecon Consulting said that it expected continued slow growth in online retail sales in the short term, and that it projected slower growth in South Africa compared to its peers in BRICS owing possibly to the lack of infrastructure and insufficient public knowledge of e-commerce.³¹

27 Ecommerce Foundation, op. cit.

- 28 IAB (Interactive Advertising Bureau), Effective Measure & Visa, 'South Africa Ecommerce Report 2016', June 2016, <u>http://blog.effectivemeasure.com/south-africaecommerce-2016</u>, accessed 3 July 2017.
- 29 Ecommerce Foundation, op. cit.
- 30 South Africa, Department of Telecommunications and Postal Services, 'National Integrated ICT Policy White Paper', 28 September 2016,
- 31 South Africa, Department of Telecommunications and Postal Services, op. cit.



FIGURE 1 TOTAL ONLINE GLOBAL SALES OF GOODS AND SERVICES, 2012–2016

Source: Ecommerce Foundation, 'Global B2C E-commerce Report 2016', <u>https://www.ecommerce wiki.org/wikis/www.</u> <u>ecommercewiki.org/images/5/56/Global_B2C_Ecommerce_Report_2016.pdf</u>, accessed 7 August 2017

FIGURE 2 ONLINE RETAIL MARKET SIZE AS A PERCENTAGE OF TOTAL RETAIL MARKET IN 2010 AND PROJECTIONS FOR 2016



Source: South Africa, Department of Telecommunications and Postal Services, 'National Integrated ICT Policy White Paper', 28 September 2016,

South African Online shoppers

By 2010 the African middle class constituted approximately 34% of the continent's population. The continuously growing middle class in sub-Saharan Africa seeks more convenient shopping methods and better quality products, driving local and international Internet retailers to meet market needs. With growing Internet penetration, improvements in mobile technology, and the development of payment and delivery infrastructure, there are opportunities to enhance the adoption of e-commerce in South Africa.³²

Deloitte South Africa's survey of South African shoppers revealed that customer experience was evolving into a true blend of digital and physical purchasing behaviour, with 30% of South African respondents likely to engage in 'showrooming', where they visit a store to pick out an item but then search for the best price and make the purchase online. Another trend referred to as 'webrooming', whereby shoppers first look at items online, visit a store to see them and finally make the purchase in-store, has also become popular with South African consumers.³³

The Global B2C E-commerce Report 2016 put South African overall online user penetration at 44.5% in 2016, and expected it to hit 60.1% in 2021³⁴. According to the South African Ecommerce Industry Report 2016³⁵, between 48% and 55% of online shoppers were in the 25–44 age group, with a relatively equal split between male and female shoppers. The majority of online shoppers lived in the key economic areas of Gauteng (44–48%), Western Cape (11–19%) and KwaZulu-Natal (13–15%), while more than half had an average monthly household income of over ZAR³⁶ 20,000 (USD 1500) and a tertiary qualification. Between 50% and 60% of online shoppers were either full-time employees or self-employed.

As seen in Figure 3, the most commonly used online services among the respondents queried were sending and receiving emails, Internet searches and banking. Online travel booking only ranked ninth and in general very few online activities were related directly to e-commerce transactions.

- 32 Ecommerce Foundation, op. cit.; Effective Measure, 'Insights: South Africa Ecommerce Report 2016', 1 August 2016, <u>http://blog.effectivemeasure.com/south-africaecommerce-2016</u>, accessed 7 August 2017; Steyn LJ & T Mawela, 'A Trust-based e-Commerce Decision-making Model for South African Citizens', SAICSIT '16: Proceedings of the Annual Conference of the South African Institute of Computer Scientists and Information Technologists, 2016.
- 33 Deloitte Consulting, 'Deloitte South Africa Survey', 2016.
- 34 Ecommerce Foundation, 'Global B2C E-commerce Report 2016', <u>https://www.ecommercewiki.org/wikis/www.ecommercewiki.org/images/5/56/Global_B2C_Ecommerce_Report_2016.pdf</u>, accessed 3 July 2017.
- 35 Effective Measure, 'Insights: South Africa Ecommerce 2016 Report', 1 August 2016, <u>http://blog.effectivemeasure.com/south-africa-ecommerce-2016</u>, accessed 7 August 2017

15

36 Currency code for the South African rand.

FIGURE 3 ONLINE SERVICES USAGE



Source: Effective Measure, 'Insights: South Africa Ecommerce 2016 Report', 1 August 2016, http://blog.effectivemeasure. com/south-africa-ecommerce-2016, accessed 7 August 2017 According to the South Africa Ecommerce Report 2016, the country has seen significant growth in e-commerce activity. The number of e-shoppers increased by 2.3 million between 2013 and 2015, and the average amount spent per e-shopper increased by \$32 in the same period.³⁷





Source: Ecommerce Foundation, 'Global B2C E-commerce Report 2016', <u>https://www.ecommerce.wiki.org/wikis/www.ecommercewiki.org/images/5/56/Global_B2C_Ecommerce_Report_2016.pdf</u>, accessed 7 August 2017

In terms of online shopping habits, the report found that 56% of respondents shopped online on a weekly or monthly basis, while 45% did so annually. A total of 48% of respondents preferred to use a debit or credit card for purchases and 59% stated that they would prefer an 'on-delivery payment method'.

Figure 5 shows the most popular product groups purchased online in South Africa in 2015. IT purchases (both hardware and software) top the list with an annual value of \$123 million and a growth rate of 17.5%. This is followed by media and entertainment (from ebooks to gaming products) with a value of \$96 million and a growth rate of 16.2%.³⁸

38 Ibid.

³⁷ IAB, Effective Measure & Visa, op. cit.



FIGURE 5 OVERVIEW OF POPULAR PRODUCT GROUPS, 2015 (GROWTH VERSUS 2014), MILLION \$

Source: Ecommerce Foundation, 'Global B2C E-commerce Report 2016', <u>https://www.ecommerce</u> <u>wiki.org/wikis/www.ecommercewiki.org/images/5/56/Global_B2C_Ecommerce_Report_2016.pdf</u>, accessed 7 August 2017

From a services perspective, the items most commonly paid for online were flight tickets and hotel bookings, to the value of \$635 million and with a growth rate of 24.4% versus the same period the previous year (2014). While other services such as travel packages, private transport, insurance and event tickets saw growth rates of between 30% and 43.1% versus the same period the previous year (2014), they were of significantly smaller value, ranging between \$8 million and \$36 million.



FIGURE 6 OVERVIEW OF POPULAR SERVICES GROUPS, 2015 (GROWTH VERSUS 2014), MILLION \$

Source: Ecommerce Foundation, 'Global B2C E-commerce Report 2016', <u>https://www.ecommerce</u> wiki.org/wikis/www.ecommercewiki.org/images/5/56/Global_B2C_Ecommerce_Report_2016.pdf, accessed 7 August 2017

From the above data it can also be assumed that e-commerce is currently a middleclass instrument in South Africa, while in other African countries the advent of tools such as mobile money points to e-commerce and m-commerce being used by the working class as well. In an attempt to fully understand the South African e-commerce industry, and in particular the recent increased interest in e-trade from the WTO and BRICS partner countries, it is necessary to analyse all existing data and put in place methods to capture new data on the e-commerce industry. A number of sources can be tapped into immediately, such as the SARB's e-trade statistics, value added tax (VAT) statistics from SARS, and South African banks' credit card usage statistics for electronic trading.

MAJOR E-COMMERCE PLAYERS IN SOUTH AFRICA

While there is no single clear information source on the structure of the e-commerce industry in South Africa, Deloitte SA has identified key South African e-commerce companies such as Spree, Zando, Takealot, Superbalist and Yuppiechef as being in a strong position to take advantage of increased online engagement by South African consumers. Hyperli, a new online marketplace that has formed strategic partnerships with some of the country's most recognisable brands such as Ster-Kinekor, Unilever and Jimmy's Killer Prawns, was recently launched in South Africa, enabling local businesses to connect with consumers and grow their sales.³⁹

³⁹ Deloitte Consulting, op. cit.

Large established South African companies such as Pick n Pay now offer home and office deliveries through the re-branded Mr Delivery service in a bid to convince consumers that shopping online is more cost effective than in-store. Mr Delivery also handles the majority of deliveries for takealot. The delivery costs are thus carried by the online retailer, which is a key advantage in attracting online customers and gaining market share.

Large-scale retailer Makro's strategy is to bring the in-store and online experience closer together with a shopping experience that spans all channels. Users can browse online and pick up the ready-packaged items in store at their own convenience. Makro is also investigating a click and collect model, which has proven to be very popular overseas. Other established brick and mortar brands such as Woolworths and Mr Price are also attempting to migrate their in-store consumers to online.⁴⁰

In the 2015 South African eCommerce Awards, Yuppiechef, a kitchen and home e-commerce website that defines itself as a 'food community offering you the tools, ingredients and the inspiration to cook real food at home',⁴¹ was selected as the best e-commerce website in South Africa. The runners-up were takealot, a local e-commerce retailer, and Zando, one of the most successful South African online fashion retail stores.

bidorbuy, a popular online auction website, was selected as the best services platform, followed by SafariNow and TravelGround, both service providers in the online travel market in South Africa. The best mobile e-commerce website award went to takealot, followed by bidorbuy and the now defunct Groupon South Africa. The favourite South African website was takealot, with SafariNow and bidorbuy as the runners-up.⁴²

South Africa hosts some of the largest e-merchants on the African continent. The South African e-commerce landscape is partly dominated by a few local online retailers that are competing with larger international e-commerce sites. According to Statista.com, in terms of brand value South African mass-media company Naspers is ranked third (with a value of \$52 billion) behind Google (first) and China's Alibaba (second).⁴³

In the second year of the African Corporate Excellence Awards, the winner of the 'Best Strategic E-commerce Company 2016 – South Africa' award was Traderoot, a global payment technology firm based in South Africa. Traderoot has over 10

⁴⁰ Ibid.

⁴¹ Yuppiechef, 'We are Yuppiechef', <u>https://www.yuppiechef.com/about-us.htm</u>, accessed 7 August 2017.

⁴² eCommerce Awards 2015, 'Winners', <u>http://www.ecommerceawards.co.za/2015-winners/</u>, accessed 2 December 2016.

⁴³ Ecommerce Foundation, op. cit.

world-first products, including the world's first Internet payment provider with compliance approved by Visa in 2000.⁴⁴

In 2015 two of South Africa's largest e-commerce retailer sites, Kalahari.net and takealot, announced their merger. The reason given for this move was that online retailers were perceived as being unable to successfully compete with local brick and mortar retailers or foreign companies such as Amazon and Alibaba. The merger of these two e-commerce heavyweights may indicate that the South African e-commerce market is not growing fast enough to sustain competitiveness.⁴⁵ While this does not bode well for smaller brands, results from companies such as Yuppiechef and Spree have shown that they are in fact succeeding in servicing their niche markets effectively. However, from a national policy perspective, an intervention to support developing e-commerce businesses is required.

CONCLUSIONS

E-commerce is a growing concern across the globe, with Asia-Pacific still the largest e-commerce region. Areas such as the Middle East and Africa are much smaller but have seen significant growth, which is expected to continue into the foreseeable future. While statistical analysis of e-commerce in South Africa is still in its infancy, data from a number of sources suggests that e-commerce is growing rapidly in the country and a number of key players and success stories have already emerged. Current South African definitions are broadly in line with discussions internationally, but the country will need to keep engaging in these debates and continue to assess the implications of changes in terms and definitions for the application of policy. In addition, further analysis is needed to understand the scale and structure of the industry in South Africa. This will require new information and access to a wider set of data.

THE REGULATION OF E-COMMERCE IN SOUTH AFRICA

In 2001 the SARB Annual Report stated that while global regulators tended to issue e-commerce guidelines rather than regulations to avoid stifling innovation in a dynamic field, there were increasing signs that the time had come to formulate and expound a policy position and to research and develop a comprehensive regulatory approach.⁴⁶ Issues arising from the growing e-commerce environment requiring resolution included legal jurisdiction, cross-border solicitation, cross-sector demarcations, service fees and codes of conduct.

⁴⁴ CV Magazine, 'African Corporate Excellence Awards 2016', <u>http://www.corp-vis.</u> <u>com/2015 -african-excellence-awards</u>, accessed 3 July 2017.

⁴⁵ Steyn LJ & T Mawela, op. cit.

⁴⁶ SARB, 'South African Reserve Bank Annual Report 2001'.

The SARB's Bank Supervision Department participated in an e-commerce project of the Policy Board for Financial Services and Regulation. The objective of the project was to examine the implications of e-commerce on the regulatory environment and to determine, in coordination with other key players, the initiatives that had to be taken by the various parties. The working group established for this purpose, and on which the department was represented, was tasked with investigating and formulating a policy and approach on the regulation of e-commerce activities and Internet banking. The working group had taken as inputs the vast research already done in this field, including the green paper. It placed particular emphasis on maintaining a balance between over- and under-regulation, and issues that either impede or encourage e-commerce. Issues identified for possible regulation included taxation, e-cash, foreign exchange transactions, royalties, consumer protection, privacy and legal issues.

South Africa's e-commerce policy was developed in the 1999 discussion paper ⁴⁷ and in 2000 the Department of Communications released the green paper ⁴⁸ on e-commerce. The purpose of the green paper was, among others, to raise key questions on issues arising from e-commerce and to promote discussion on what was perceived to be an important new business development. The issues considered in an evaluation of e-commerce options were wide-ranging and often fairly complicated to resolve, as e-commerce brings with it a dimension of intangibility.

South African legislation

The green paper identified the following underlying principles as being central to the development of an e-commerce policy for South Africa:⁴⁹

- quality of life;
- international benchmarking;
- consultative process;
- flexibility;
- technology neutrality;
- support for private sector-led and technology-based solutions and initiatives;
- public-private partnerships; and
- support for small, medium and micro enterprises (SMMEs) and the informal sector.

49 OpenUCT, 'e-Transactions Law: South Africa's e-commerce policy', <u>http://www.etransactionslaw.uct.ac.za/elaw/lectures/intro/sa_e-commerce</u>, accessed 28 November 2016.

⁴⁷ South Africa, Department of Communications, 'Discussion Paper on Electronic Commerce Possibility', July 1999, <u>http://www.dpsa.gov.za/dpsa2g/documents/ acts®ulations/frameworks/e-commerce/ecomm-paper.pdf</u>, accessed 3 July 2017.

⁴⁸ South Africa, Department of Communications, 'A Green Paper on Electronic Commerce for South Africa', November 2000, <u>http://www.gov.za/sites/www.gov.za/files/electronic_commerce_1.pdf</u>, accessed 3 July 2017.

The green paper identified the main focus areas as the need

- for confidence in the security and privacy of transactions performed electronically;
- to enhance the information infrastructure for electronic commerce;
- to establish rules that will govern electronic commerce; and
- to bring the opportunities of e-commerce to the entire population.

Based on this, it suggested the following policy themes:

- legal and regulatory issues;
- building trust in the digital economy;
- access, infrastructure and enabling digital inclusion;
- technologies; and
- maximising the benefits: economic and social impacts.

The green paper envisaged the following process in the further development of policy and eventual legislation:

- discussion paper (July 1999);
- green paper (October 2000);
- white paper (2nd quarter 2001); and
- specific legislation (3rd or 4th quarter 2001).

However, matters did not progress as planned and the white paper was not published. A number of disparate pieces of legislation, many of which have undergone subsequent amendment, currently govern the ICT sector in South Africa. These include the Broadcasting Act 1999, the Independent Communications Authority of South Africa Act 2000 (ICASA Act) and the Interception and Monitoring Act 2002.

The Electronic Communications and Transactions (ECT) Act 2002 has emerged as the legislation regulating e-commerce. It seeks to promote convergence in the broadcasting, broadcasting signal distribution and telecommunications sectors, and to provide a legal framework for the convergence of all technological sectors. It sets the stage for new provisions for the regulation of electronic communications services, electronic communications network services and broadcasting services.

The government also enacted the ICASA Amendment Act, which added postal regulation to the mandate of ICASA. As a result, a number of institutions were established to regulate or provide policy intervention in the ICT sector. However, ICASA is the overall sector regulator, created to unify the formerly separate regulation of broadcasting and telecommunications. It is tasked with regulating electronic communications in the public interest and ensuring fairness and a diversity of views.⁵⁰

⁵⁰ Jobodwana ZN, 'E-commerce and mobile commerce in South Africa: Regulatory challenges', Journal of International Commercial Law and Technology, 4, 4, 2009.

In addition, several other policy documents and developments have a bearing on electronic transactions:

- National Information Society and Development Plan 2007 (the e-strategy required by Section 5(1) of the ECT Act);
- National Integrated ICT Policy Colloquium, held on 19 April 2012 (e-commerce and digitising government commission), which sought to spearhead the development of a national ICT policy; and ⁵¹
- National Cyber Security Policy Framework for South Africa, approved by cabinet in 2012.

However, there is still no single overarching law that prescribes the regulation of e-commerce in South Africa.

CONSUMER PROTECTION

Local and foreign e-commerce business owners, as well as consumers, need to familiarise themselves with the ECT Act sections pertaining to consumer protection. The providers of goods and services are obligated to make certain information available to consumers on their websites. This includes the merchant's full name and legal status, physical address and contact number, security procedures, policies and any code/s of conduct to which that merchant subscribes, as well as the manner of payment and the full price of goods or services, including transport costs, taxes and any other fees or costs.

Exempted from this requirement are financial services; insurance and reinsurance operations; banking services and operations relating to dealings in securities; auctions; the suppliers of foodstuffs, beverages or other goods intended for daily consumption; and transactions where the price of the goods or services is dependent upon fluctuations in the financial markets.

The commercial providers are also expected to provide consumers with an opportunity to review the entire electronic transaction, correct any mistakes and withdraw from the transaction before placing a final order. In cases where a merchant fails to comply with this obligation, the consumer can cancel the transaction within 14 days of receiving the goods or services under the transaction. There are also important provisions in the ECT Act affecting merchants, including foreign merchants offering goods or services online.⁵²

The Protection of Personal Information (POPI) Act 2013 places the obligation on all businesses, big or small, that handle personal information to put measures in place to protect that information. This calls for businesses to rethink how they collect, use, share, store and destroy personal information. Failure to do so exposes these

⁵¹ Jobodwana ZN, op. cit.

⁵² Jobodwana ZN, op. cit.

businesses to risk of legal action, investigation, fines, reputational damage and, ultimately, the loss of customers.

TAXATION

The Declaration on Global Electronic Commerce adopted by the Second (Geneva) Ministerial Conference in May 1998 urged the WTO General Council to establish a comprehensive work programme to examine all trade-related issues arising from global e-commerce. The WTO General Council adopted the plan for this work programme in September 1998, initiating discussions on issues of e-commerce and trade by the Council for Trade in Goods, the Council for Trade in Services, the Agreement on Trade-Related Aspects of Intellectual Property Rights Council, and the Committee on Trade and Development. In 2011, at the WTO's Eighth Ministerial Conference, WTO members agreed to continue their current practice of not imposing customs duties on electronic transmissions until the Ninth Ministerial Conference. Ministers then extended this moratorium at the 2013 conference in Bali.

Advances in technology have seen a significant increase in e-commerce transactions where goods and services are supplied to South African consumers over the Internet.⁵³ The VAT Act 1991 requires VAT to be charged on these transactions at the standard rate of 14%. A South African supplier of e-commerce services is therefore required to be registered as a VAT vendor, submit tax returns, and pay over the tax collected to SARS.⁵⁴

However, while local suppliers were obliged to include VAT on their sales, their foreign counterparts were not. This allowed foreign competitors to sell to South African consumers at lower prices. The responsibility was placed on the consumer to pay the VAT on imported e-commerce goods and services from abroad, but enforcing compliance with this system was impossible.

The VAT Act was then amended in 2014 to compel suppliers of 'electronic services' to South African residents, where payment for such services originates from a South African bank, to register as VAT vendors. The act defines 'electronic services' as:

- Internet-based auction services;
- games and games of chance, including electronic betting or wagering;
- · e-books, music, audio visual content, still images;
- subscription services, such as magazines, newspapers, journals, social networking services, websites and blogs; and

⁵³ Palmer G, 'VAT and e-Commerce', SAIT (South African Institute of Tax Professionals), 30 April 2014, <u>http://www.thesait.org.za/news/170960/VAT-and-e-Commerce.htm</u>, accessed 28 November 2016.

⁵⁴ Ibid.

 educational services, such as Internet-based courses or education programmes (this excludes educational services where the service provider is registered with an educational authority in the 'export' country).

On 28 March 2014 the minister of finance published the final regulations to give effect to these amendments. The regulations were implemented on 1 June 2014, to give foreign-based suppliers of electronic services time to get their systems ready and register with SARS.

The new regulations are not without issues. It still has not been clearly established how SARS enforces the regulations against non-compliant foreign suppliers of electronic services. Furthermore, foreign suppliers are obliged to register for VAT where the total value of taxable supplies exceeds ZAR 50,000 (\$3,800). This is a low registration threshold that will draw many smaller foreign suppliers into the net, many of whom will not be aware of the changes to the South African legislation. Moreover, this threshold is lower than that which applies to local venders, and this could be considered as unfair or discriminatory by foreign suppliers. The reason for this differentiation needs to be better understood. According to law firm Edward Nathan Sonnenbergs (ENSafrica), the minister of finance announced that the amendments proposed in the February 2015 budget speech would change the rules for the digital economy in line with the latest suggestions from the OECD in its report on base erosion and profit shifting.⁵⁵

These changes are based on an interim report by the Davis Committee, which suggests that while there is limited scope for South African residents to shift profits to offshore tax haven jurisdictions via e-commerce transactions, the reverse holds true with respect to e-commerce transactions conducted by non-residents with South African customers. As specified earlier, non-residents are only subject to tax in South Africa on income derived from a source in South Africa, while the legislation does not deal specifically with e-commerce transactions. As a result, non-residents can avoid paying tax in South Africa because the source of their income is not based locally.

According to ENSafrica, the Davis Committee report makes the following recommendations with regard to the proposed design of the new direct tax legislation on e-commerce transactions:

- New source rules that deal with e-commerce transactions should be enacted to
 ensure that digital goods or services are sourced where consumption takes place.
 However, these rules could only tax a portion of the profits, as the country of
 residence of the supplier would also have a legitimate claim to tax such profits.
- SARS should isolate and focus on foreign multi-nationals and compel them to submit tax returns.

⁵⁵ *Tax ENsight*, 'New tax rules proposed for e-commerce transactions', 22 April 2015, <u>http://www.ensafrica.com/news/new-tax-rules-proposed-for-e-commerce-transactions?ld=1773&STitle=tax%20ENSight</u>, accessed 28 November 2016.



- Rules should be implemented that require non-residents with South Africansourced income to submit income tax returns even if they do not have a permanent establishment in South Africa.
- To ensure that such non-residents register for tax, a withholding tax system should be implemented where a resident who enters into an e-commerce transaction with a non-resident should withhold tax on payments made to the non-resident.
- The legislation should allow for the provisions of the ECT Act to be utilised to identify taxpayers, since the main challenge that e-commerce poses relates to identifying the location of taxpayers and their transactions.
- A level playing field should be created to ensure that South African companies dealing with digital goods and services are able to compete with big multinationals.

The report also makes a number of recommendations with regard to the design of the indirect tax (ie, VAT) legislation on e-commerce transactions. Based on these recommendations, all non-residents who are involved in e-commerce transactions with South African customers should be liable for taxation in South Africa for these transactions in future.

Table 2 summarises and highlights the main regulatory areas that may have an impact on trade and investment in e-commerce, and the current South African legislation. While the majority of these areas are covered, there are a number of areas where South African policy remains relatively open. For example, there is no discriminatory treatment of digital products or any specific requirements for data localisation and access to source code. Any new regulations in these areas may affect trade in e-commerce and South Africa's international competitiveness in this industry, and the economic costs and benefits of any proposed changes will need to be carefully analysed prior to implementation.

E-COMMERCE LAW/REGULATION		
LEGISLATION/REGULATIONS	SOUTH AFRICA	
Law on electronic communications	Yes. ECT Act provides a legal framework for electronic transactions (cryptography), cybercrime and protection of privacy, with amendments from the Consumer Protection Act 2008. ^a In addition, the POPI Act ^b speaks to the communication of personal information across different media	
Law on online consumer protection	Yes. Chapter 7 of the ECT Act allows for the protection of South African online consumers	
Law on non-discriminatory treatment of digital products	No clear regulation specifically targeted to the non-discriminatory treatment of digital products	

TABLE 2 CURRENT SOUTH AFRICAN POSITION IN TERMS OF E-COMMERCE LAW/REGULATION

Law on electronic authentication and electronic signatures	Yes. ECT Act, Chapter 3, Part 1, Section 13 specifies the use of electronic signatures as legally binding
Law on protection of personal information	Yes. Chapter 8 of the ECT Act, together with the POPI Act
Free flow of cross-border transfer of information by electronic means	Yes. Chapter 9, Section 72 of the POPI Act speaks to the rights of the citizen with regard to trans-border data transfers
Data localisation requirements proscribed	No. South Africa does not currently have any data localisation laws
Access to source code as pre-condition for doing business proscribed	No references to access to source code were found
Laws on unsolicited commercial electronic messages	Yes. Chapter 7, Section 45 of the ECT Act and Chapter 8 of the POPI Act deal with the sending of unsolicited commercial electronic messages
Law against cybercrime	Yes. Chapter 13 of the ECT Act speaks to cyber-crime in South Africa
Laws on cross-border cooperation on cyber-security	Yes. Chapter 13 of the ECT Act speaks to cyber-crime in South Africa, but it does not specify cross-border specifically

- a Promotion of Access to Information Act 2002 (Act 2 of 2002).
- b Protection of Personal Information Act 2013 (Act 4 of 2013).

Source: Promotion of Access to Information Act 2013 (Act 2 of 2000); Protection of Personal Information Act 2013 (Act 4 of 2013); Electronic Communications and Transactions Act 2002 (Act 25 of 2002)

NATIONAL POLICY CONSIDERATIONS

In order to address the issues faced by the e-commerce industry in South Africa it is important to understand the areas in which policy can have a positive impact. The key adoption factors for e-commerce are:⁵⁶

- providing a user-friendly web interface;
- providing top management support (within the e-commerce organisation);
- maintaining strong links with customers;
- ensuring customer acceptance;

⁵⁶ Warden SC & IM Motjolopane, 'e-Commerce adoption factors: Supporting cases from South Africa', presentation at Information Resource Management Association Conference, Vancouver, 2007.

- providing up-to-date information, including prices;
- launching continuous promotions;
- allowing customers to track bookings via booking identification numbers at any time;
- providing support services via websites;
- putting in place good technical infrastructure for fast processing; and
- ensuring an open system, which anyone may access to conduct business.

While not all of these issues can be tackled by national policy, e-commerce policy in South Africa can address some key considerations. However, these issues need to be handled from both the supply and demand sides in order for e-commerce to be successful.

SUPPLY SIDE

The supply side of e-commerce refers to those factors that affect the ability of a business to produce goods or services and deliver these to its client or consumer. As depicted in Figure 7, South Africa is rated 34th in the world in quality of logistics available, 73rd globally in ease of doing business and 58th in GDP or e-commerce contribution to overall GDP.

FIGURE 7 SOUTH AFRICA'S GLOBAL RANKING IN E-COMMERCE



Source: Ecommerce Foundation, 'Global B2C E-commerce Report 2016', <u>https://www.ecommerce</u> wiki.org/wikis/www.ecommercewiki.org/images/5/56/Global_B2C_Ecommerce_Report_2016.pdf, accessed 7 August 2017

In order to support e-commerce businesses, infrastructure and services need to be in place and adequately supplied by both the public sector and local business. South Africa faces a number of obstacles, including an unreliable power supply, the lack of skilled personnel, insufficient usage of ICT on the part of the government, inadequate transport and basic affordable telecommunication infrastructure, and poverty. A few key areas that can be addressed via national policy are:⁵⁷

Logistics infrastructure: Organisations such as Amazon.com and eBay have been very successful in countries with robust postal and courier services. Africa in general is more complicated when it comes to delivery, owing to issues experienced in streamlining postal systems. Many online businesses resort to using their own delivery vehicles, private courier companies or pick-up locations at the cost of the consumer, which increases the overall cost of doing business. In addition, physical warehousing and stockholding need to be accounted and catered for.

Technological infrastructure: South Africa continues to enjoy tremendous growth in mobile Internet, which is the most popular means for people to access the web. With the country's having one of the most sophisticated telecommunications infrastructures in emerging markets, many had hoped that it could skip straight into a wide-scale adoption of m-commerce, or e-commerce via mobile. However,

In order to support e-commerce businesses, infrastructure and services need to be in place and adequately supplied by both the public sector and local business

data costs in South Africa are among the highest globally, and this market has been significantly stifled.⁵⁸

Fragmented markets: In South Africa, a company has to cater for a wide range of consumers because of language, cultural and economic barriers, among others. This affects economies of scale and impacts the efficient allocation of capital, with the duplication of resources across the region.

High consumer exclusion rates: Poor or illiterate citizens may be unable to use e-commerce sites that require both reading and writing skills and purchasing power. Without investment in education, the pool of potential customers and of future web entrepreneurs is greatly reduced.

Demand side

⁵⁷ Jobodwana ZN, op. cit.

⁵⁸ Joubert J & JP van Belle, 'The role of trust and risk in mobile commerce adoption within South Africa', International Journal of Business, Humanities and Technology, 3, 2, February 2013.

A 2016 study found that South African consumers would prefer to buy online, owing to the extrinsic motivators of convenience and variety, provided that the protection of personal data could be proven or guaranteed.⁵⁹ In addition, consumers need the following to trust online purchasing:⁶⁰

- the presence of third-party seals;
- high-quality product information;
- familiar processes;
- reputable e-commerce vendors;
- product guarantees;

South African consumers would prefer to buy online, owing to the extrinsic motivators of convenience and variety, provided that the protection of personal data could be proven or guaranteed

- public consumer feedback portals; and
- effective and accurate product delivery.

In short, the key barrier from the demand side for e-commerce is the question of trust. This holds true in three different areas, namely trust in online payments, trust in the supply chain of the e-commerce vendor, and trust in the product's quality without being able to see or handle it. A consumer survey carried out for the European Commission found that concerns regarding delivery and returns, as well as doubts about the misuse of payment cards and personal data, might deter consumers from shopping online in another country.⁶¹

While secure online payment gateways such as PayU, PayGate and PayFast are available, South Africans still do not fully trust online payments. A 2014 survey by auditing firm Price Waterhouse Coopers of 15 000 consumers from 15 areas looked at the lack of trust in online payments and found that 38% of South Africans do not want to transact online.⁶² This is owing to worries about online fraud, which prevents them from buying high-value items and inputting their financial details on websites. Without attracting the best spenders, the sector will continue to serve primarily a younger population in the short to medium term, which is a hindrance

60 *Ibid*.

62 Krogman H & N Khumalo, 'E-commerce in Africa: Definitions, Issues and the Evolving, International Regulatory Landscape', Global Economic Governance (GEG) Africa Discussion Paper, 2016.

⁵⁹ Steyn LJ & T Mawela, op. cit.

⁶¹ Cardona M & B Martens, 'Supply-side Barriers to Cross-border eCommerce in the EU Digital Single Market', EU JRC Technical Report, 2014.

to market growth. Among South African early adopters, the benefits of e-commerce outstripped the issues around trust and perceived risk.⁶³

The Indian e-commerce market functions largely through cash on delivery (COD), and some South African e-commerce companies are starting to use this payment method to solve the problem. But COD causes massive problems for sellers, including theft, costly returns and delays in cash handling.

One of the emerging solutions is mobile-based e-commerce third-party payments. In general, there is a huge opportunity for start-ups that can act as a trusted third party between buyer and seller to handle money. However, such start-ups need to be registered as financial services providers in South Africa.

Further subjective obstacles to e-commerce on the consumer side are a lack of trust or familiarity with e-commerce. Studies point to an inherent preference for local suppliers and suppliers from within the consumer's own cultural and linguistic realm, a market that is largely untapped in South Africa.⁶⁴

Another study conducted in 2013 looked at the EU e-commerce market and found that online shoppers regarded delivery times as too long and delivery costs as too high.⁶⁵ Based on these findings, the European Commission formulated actions to build trust in online markets, and improve consumer protection and operator information, dispute resolution, and reliable payment and delivery systems. A similar situation is faced in South Africa and comparable interventions are required.⁶⁶

POLICY RECOMMENDATIONS

Based on the findings above, a few policy considerations can be derived to take e-commerce forward in South Africa.⁶⁷

• **Providing financial services support for e-commerce/m-commerce:** The banking and financial sectors should encourage and assist in the implementation of changes to policies, practices and services in order to accommodate the growth of e-commerce and m-commerce in the South African economy. This

63 Joubert J & JP van Belle, op. cit.

- 64 Gomez E, Martens B & G Turlea, The Drivers and Impediments to Online Cross-Border Trade in the EU', JRC/IPTS (Joint Research Centre/Institute for Prospective Technological Studies) Working Paper, 2013, 27.
- 65 Copenhagen Economics, 'E-Commerce and Delivery: A Study of the State of Play of EU Parcel Markets with Particular Emphasis on E-commerce', 2013, <u>http://ec.europa.eu/</u> internal_market/post/doc/studies/20130715_ce_e-commerce-and-delivery-final-report_ en.pdf, accessed 3 July 2017.
- 66 Cardona M & B Martens, 'Supply-side Barriers to Cross-border eCommerce in the EU Digital Single Market', EU JRC Technical Report, 2014, <u>https://ec.europa.eu/jrc/sites/jrcsh/files/ JRC92294_Supply%20side%20barriers%20to%20ecommerce.pdf</u>, accessed 3 July 2017.
- 67 Jobodwana ZN, op. cit.

includes the involvement of the SARB to address fiscal and monetary factors that arise owing to the emergence of e-commerce, including the review of foreign exchange control rules and procedures based on e-commerce practices.

- **Ensuring trust and safety:** This can be encouraged by introducing governmentratified accreditation agencies to increase the safety and trustworthiness of on-line business transactions, which should have a reliable capacity to certify the validity of electronic signatures and electronic contracts. One such initiative has been implemented by the Ecommerce Foundation across the EU and, based on its success, a global roll-out is now being investigated.
- **Reforming relevant ICT-related laws:** It is necessary to review South African legislation to incorporate e-commerce aspects, including:
 - » copyright laws (laws on intellectual property, which should be brought into line with the World Intellectual Property Organization's copyright treaties)
 - » laws on the protection of databases, privacy protection, trademarks and domain names
 - » laws on competition
 - » laws on the use of cryptography
 - » laws on new forms of cyber-crime
 - » additions to the current ECT Act dealing with pre-contractual requirements governing B2B and B2C environments. The amendment should include clarification on the legal consequences of electronic messages, specifying technical steps that have to be taken in order to conclude a contract from both a B2B and a B2C perspective.
- **Creating a positive investment climate for e-commerce:** Government policymakers need to create an investment climate in which investors have confidence and in which the risks and benefits of e-commerce/m-commerce are known and understood. This includes the encouragement of new e-commerce business start-ups, possibly via incubators, in which venture capital firms can participate.
- Making e-commerce vibrant in South Africa and resonating this into the continent: The government, in partnership with the private business sector, can play a key role to boost African goods and services on the Internet as alternatives to products and services from other parts of the world. The government can collaborate with business associations, investor associations and international agencies to provide affordable access to ICT. It can also support resource training to deliver IT support to SMEs to enable them to participate in e-commerce/m-commerce.
- Filling the gaps in the education and training systems: E-commerce/ m-commerce and the new knowledge-based economy in South Africa drive the need to both improve the teaching of IT-related subjects in the existing formal education system and to put in place new learning opportunities for people already in the workforce. This includes:
 - » training public sector employees, who play a major role in enabling e-commerce in the country;

- » encouraging entrepreneurial skills, to boost the emergence of new start-ups;
- » skilling up IT professionals;
- » providing certified training programmes in areas relevant to e-commerce; and
- » skilling up the South African legal profession and policymakers.
- **Putting in place collaborative efforts:** The public and private sector need to formulate national e-commerce policies and strategies together to ensure that these are all-encompassing. Policy-related research in e-commerce/m-commerce can only flourish where there are enough trained researchers, adequate flows of information, and openness among decision-makers, in both the public and private sectors, to integrate the results of policy research into their decision-making processes.

The white paper suggests that sector-specific strategies should be put in place to

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promote the uptake and usage of ICTs in different industries. These should be linked to strategies to promote local e-commerce.⁶⁸ This should be done while addressing the high cost of communication, which prevents the dissemination of ICT.

TRADE IN E-COMMERCE

According to the Department of Trade and Industry, there is currently no formal evidence of exporting or importing by South African e-commerce suppliers or by South African consumers. There are also currently no formal agreements in place to facilitate such trade, but it has been highlighted as a necessity in the white paper. A workgroup representing both public and private sector interests has been formed to investigate e-commerce in South Africa from an economic and technical perspective. Members of this workgroup include the Department of Telecommunications and Postal Services, the Department of Trade and Industry, the State Security Agency, the South African Treasury, the Financial Services Board Security, ICASA, the Government Communication and Information System, and a conglomerate of e-commerce private sector representatives.

⁶⁸ Department of Telecommunications and Postal Services, op. cit.

While there is still a lack of formal data on e-commerce trade in the country, considerable value can be derived by looking at whether there is any informal e-commerce trade, which is not being captured by the Department of Trade and Industry. This can be done by comparing South African e-commerce trade with that of other countries or regions such as the EU that have a more established e-commerce market. Such a study can be used to predict the direction of the market in South Africa. A key question that also arises is whether the lack of data on e-commerce trade may be due to an actual lack of trade, rather than being a measurement issue. These points should be taken into consideration when assessing e-commerce trade from a South African perspective.

IMPACT ON WOMEN AND POVERTY

A 2003 study demonstrated that the integration of ICT and marketing in the e-commerce environment could enhance trading activities and hence improve the economic well-being of rural women.⁶⁹ It was also suggested that an e-commerce model could assist in the transition from B2C to B2B for many smaller businesses and improve market access by providing a formal structure with the processing power to capture, manipulate and disseminate the information needed to increase market access.

However, information is only one resource among many required for successful development, as e-commerce alone is not a sufficient condition for creating rural markets for economic upliftment. Other business strategies must be put in place as well.⁷⁰

In a 2014 study, the impact of e-commerce on the livelihoods of rural women was investigated through a rigorous review of women empowerment programmes in Bangladesh. The results showed that ICT could significantly contribute to the development of women through policy interventions, with developing countries in Africa and Asia already embarking on this journey and deriving the benefits.⁷¹

An example is SasaAfrica (now Soko), which is an e-commerce platform that connects craftswomen in developing countries to the global marketplace via mobile phones. Its mobile technology allows vendors to sell their goods directly to global consumers.⁷²

A total of 84% of women in sub-Saharan Africa work in the informal economy, which excludes them from financial rights and representation. Most of these women end

⁶⁹ Rhodes J, 'Can e-commerce enable marketing in an African rural women's community based development organisation?', *Informing Science Journal*, Special Series on Community Informatics, 6, 2003.

⁷⁰ *Ibid*.

⁷¹ Sabrina A, 'Role of E-commerce in Women Empowerment', 2014, <u>http://www.academia.</u> edu/6586964/Role_of_e_commerce_in_women_empowerment, accessed 3 July 2017.

⁷² Demo Africa, 'SasaAfrica', <u>http://www.demo-africa.com/launch/alumni/sasa-africa</u>, accessed 30 November 2016.

up self-employed, earning subsistence incomes with little or no growth opportunity. Many turn to craft production, which provides an entry point into the economy for under-resourced groups. For the tens of millions of women in the craft sector, a simple tool that would multiply their income with little to no upfront investment would be welcomed.⁷³

SasaAfrica⁷⁴ seeks to recruit these millions of women as customers of its SMSbased business tools, granting them access to the international marketplace and increasing their earnings on average by a factor of 20. Moreover, its tools empower women to grow their businesses as formal entrepreneurs, gaining access to financial rights and representation. Becoming a SasaAfrica vendor begins the process of formal registration, which, as the vendor earns traceable income on the SasaAfrica platform, can be leveraged to access loans, open a bank account and even register as an independent entity.⁷⁵

Women in South Africa use e-commerce in various ways to earn money, with many operating small online stores selling homeware, decor, jewellery, shoes, furniture, art or wedding accessories. A recent study found that many South African women are utilising the Internet to empower themselves, and that there are a number of opportunities for job creation. This showed that e-commerce in South Africa is more accessible to women than previously perceived. In order to accelerate e-commerce adoption for income generation among South African women, the study recommended, among others, using internships to nurture skills development and creating mentorship networks and working hubs within rural communities.⁷⁶

A 2016 study looking into e-commerce as a means to uplift communities out of poverty found that a community e-centre was effective in increasing access to e-commerce in rural areas. However, all developing countries have to overcome various social, economic and infrastructural issues for e-commerce to successfully drive economic growth, and Islam, Kazal and Rahman suggest that governments should take more effective strategy decisions to deal with these issues.⁷⁷

E-commerce initiatives to tackle poverty are already being put in place. China is pushing forward with the use of e-commerce platforms in more than 60 000 impoverished villages. The initiative started in 2014 and will run until 2019. According to the head of the State Council Leading Group Office of Poverty Alleviation and Development for China, residents in poor rural areas are encouraged to open stores on major e-commerce platforms to sell their agricultural produce.

- 74 Demo Africa, op. cit.
- 75 Ibid.
- 76 Stander AM, 'Investigating the Use of E-commerce to Empower South African Women', MBA dissertation, North-West University, 2015.
- 77 Islam F, Kazal MMH & MH Rahman, 'Potentiality of e-commerce in the rural community of Bangladesh', *Progressive Agriculture*, 27, 2, 2016, pp. 207–215.

⁷³ Sabrina A, op. cit.

The e-commerce programme is part of the authority's effort to help those with the most pressing needs and make the most efficient use of poverty reduction funds.⁷⁸

Farmers are also being trained in the use of the platforms, and the authorities are signing agreements with e-commerce platforms to encourage more of them to join the rural poverty relief effort. To date, several leading e-commerce companies in China have announced plans to boost their infrastructure and facilities in rural areas to further explore the untapped market, including Alibaba and JD.com.⁷⁹

There are a number of examples of e-commerce being used for poverty alleviation and the inclusion of women. These examples highlight the need for greater literacy and technical skills, access to the Internet, and government and private sector intervention to establish online trust. Both established large businesses as well as SMMEs would reap the benefits through the development of new opportunities, including B2B interactions. From the research available it is clear that e-commerce can play a significant role in the upliftment of women and poverty alleviation in South Africa. This is a key area that needs to be supported by appropriate e-commerce policy interventions, both from an individual project perspective and on a countrywide scale.

CONCLUSION

Recent reports forecast that e-commerce transactions will make up over 1% of total South African GDP in 2017. Online consumer user penetration is currently at 44.5% and is expected to hit 60.1% in 2021, highlighting the growth of the South African e-commerce market. Despite the absence of official information on the structure of the e-commerce industry in South Africa, there is clear evidence that it is growing, and major players such as Spree, Zando, takealot, Superbalist and Yuppiechef have emerged as recognisable South African brands.

With advances in technology, e-commerce is not only becoming more secure but is also more cost effective and convenient for both residential users and businesses. This is because of rising petrol prices, parking fees and tolls, the risk of theft, and the time expended on travelling to and from the shop, browsing for the necessary items, and queuing to pay.

This paper identified four key areas that influence e-commerce in South Africa, namely the definition of e-commerce from a South African standpoint, and the need to understand the current South African e-commerce, to understand the availability and accessibility of data on e-commerce in South Africa, and to understand the current regulations affecting e-commerce in the country.

79 Ibid.

⁷⁸ China Daily USA, 'E-commerce to play key role in poverty relief', 25 December 2014, <u>http://usa.chinadaily.com.cn/epaper/2014-12/25/content_19167552.htm</u>, accessed 30 November 2016.

In terms of defining e-commerce for South Africa, common threads were gleaned across all the local and international definitions reviewed. These were that the medium of the transaction must be electronically over a computer network, and that the transaction that occurs must take the form of a sale or purchase of a good. It was also noted that the delivery of the good is not of consequence for the definition, with the ordering or sale being the defining factor instead. While the current OECD definition adopted by the DTPS and others in South Africa is valid and all encompassing, a BRICS framework on e-commerce cooperation is being developed that will include a new definition of e-commerce.

From a statistical analysis perspective, the South African e-commerce market is in its infancy, with little up-to-date information available from official sources. While high-level reports such as the Global B2C E-commerce Report 2016 and the South African Ecommerce Report 2016 are available, more is required when it comes to a granular understanding of the market. It is recommended that, with the current international focus on e-commerce, sources such as the SARB's e-trade statistics, SARS's VAT statistics and banks' credit card usage statistics for electronic trading be accessed to create a wider understanding of the market.

From a legislative perspective, the ECT Act is the main legislation for regulating e-commerce in South Africa. The Consumer Protection Act and the POPI Act also play a key role in governing e-commerce transactions. The South African legislative framework is currently relatively open to trade and investment. For example, there is no discriminatory treatment of digital products or any specific requirements for data localisation and access to source code. Any new regulations in these areas may affect e-commerce and South Africa's international competitiveness, and the economic costs and benefits of proposed changes must be carefully analysed prior to implementation.

Supply-side constraints include a lack of e-commerce-supporting logistics and technological infrastructure; a fragmented market; and high consumer exclusion rates, owing in part to a lack of financial and capacity support for potential e-commerce companies. Demand-side constraints include concerns over product information, processes, vendor and product guarantees; public consumer feedback portals; effective and accurate product delivery; and payment security.

There is currently no formal evidence of exporting or importing by South African e-commerce suppliers or South African consumers, nor are there any formal agreements in place to facilitate such trade. However, the white paper has identified such arrangements as a necessity. In addition, a workgroup representing both public and private sector interests has been formed to investigate e-commerce in South Africa from an economic and technical perspective. More should be done to incorporate industry's perspective into the decision-making process, in order to ensure that the policy considerations are in line with the industry's growth objectives.

APPENDIX A

In November 2016 the Department of Telecommunications and Postal Services met the Universal Postal Union (UPU) to discuss ways to modernise the postal network to benefit from e-commerce. The meeting between Director-General Robert Nkuna and UPU Director-General Ambassador Bishar Hussein was aimed at building a clear roadmap for South Africa on working with the UPU to extract the maximum value from the increasing global trade driven by e-commerce activity. One of the envisaged outcomes of the UPU's visit was an investigation into the implementation of a postal network hub for Southern Africa based in South Africa, following the approval of a UPU strategy that focuses on e-commerce, financial inclusion and postal reform.

Nkuna was quoted as saying, 'The postal services sector is very important in the successful implementation of the National Integrated ICT Policy White Paper. It is not a stand-alone policy. It is part of the comprehensive policy overhaul to modernise the Information and Communication Technologies (ICT) sector for the inclusion of all citizens. We are aligned to what the UPU is doing and have referred to it in finalising the White Paper.'

The UPU postal strategy for South Africa was presented and accepted by all seven regions of the UPU and is now in the process of finalising delivery mechanisms. South Africa is regarded as an ideal location for a regional hub owing to its good telecommunications infrastructure and sea and air entry points, and will serve as a starting point for the region.

According to the ICT white paper, evidence from countries such as Estonia, Finland and Kenya confirms that postal operators that have embraced ICTs are beginning to reap the benefits, with a significant increase in revenues generated from new services. In 2015, for example, the Estonian postal operator reported that the volume of parcels that it handled was up 10% on the 2014 figure, driven by e-commerce. In 2013, Estonian Post acquired a 51% stake in a start-up company offering online payment solutions. This acquisition gave the company's logistics business the chance to offer e-commerce merchants a payment solution for all the Baltic states. Similar trends have been observed in other jurisdictions.

The South African Post Office (SAPO) recorded a ZAR 1.1 billion (\$82.7 million) loss for the year ended 31 March 2016, with a 9% drop in revenues (from ZAR 5.12 billion to ZAR 4.68 billion (\$385 million to \$352 million). A total of 221 post offices around the country closed. The SAPO is seen as an ideal partner for e-commerce owing to its extensive infrastructure and large database of clients, and the UPU proposal is aligned to the turn-around of the post office. However, without the appropriate infrastructure and consumer trust being in place it will be difficult to successfully transform South Africa into an e-commerce hub.

