

E-COMMERCE OF REPRODUCTIVE HEALTH SUPPLIES IN KENYA











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Organization Bio

iHub, Nairobi's innovation hub, catalyzes the growth of the Kenyan technology community by connecting people, supporting startups and surfacing information. iHub nurtures an African innovation and entrepreneurship ecosystem that challenges and influences technology, since we believe that African innovation will play a critical role in shaping the future of technology globally. iHub Research supports the iHub's overall mission through discovery of uses and approaches to technology in Africa, experimentation towards knowledge creation, and sharing insights for improved decision making by technology stakeholders. iHub Research conducts qualitative and quantitative studies, as well as monitoring and evaluation work on technology, innovation and entrepreneurship, and the intersection of governance and technology in Africa. Find out more about iHub Research at www.ihub.co.ke/research.

Authors Bios

Sandra Mudhune was previously the Senior Researcher at the WITS Reproductive Health and HIV Institute (Johannesburg) where she was involved in conceptualizing and implementing research activities in a user-initiated microbicide clinical trial. She has also previously held monitoring and evaluation positions at Columbia University's International Centre for AIDS Care and Treatment Programs (ICAP), Intrahealth International, and various research posts at the KEMRI/Wellcome Trust Research Program. Sandra has also led various multi-country consultancies in the reproductive health field and in maternal and child health. She holds an MSc in Epidemiology from the London School of Hygiene and Tropical Medicine.

Leonida Mutuku is co-founder of Intelipro, a data science and financial consulting firm. Previously, Leo led the research team at iHub. As research lead, Leo spearheaded a team of local researchers to conduct groundbreaking research on the uses and approaches to technology in Africa. An actuary by training, Leo has a background in academic and financial quantitative research. While at iHub, Leo also founded and led the data science team and is experienced in research design, data analysis, and the creative conceptualization of data visualizations. She has done extensive research, published, and traveled globally to speak on the opportunities and social impacts of the internet, the role of open data in increasing access to information, the potential for technologies and data to improve governance and urban resilience, and financing technology startups in Africa. Leo also works closely with startups and various organizations to realize the potential of data and technology innovations.



E-COMMERCE CASE STUDIES SERIES

This report is one of seven case studies, written to provide the reproductive health (RH) supplies community with a deeper understanding of the current landscape and future potential of obtaining RH supplies through e-commerce. Each case study focuses on either one specific country (India, Kenya, Mexico, and the United States) or one new and underused RH technologies (emergency contraception, female condoms, and the Standard Days Method®). These case studies are descriptive only, and do not advocate for or against e-commerce as a means to distribute RH supplies.



This case study examines the current Kenyan landscape for e-commerce of reproductive health (RH) supplies and considers the implications for its future. Half of Kenya's population is now online, with significant increases in internet users attributed to the reduction in data bundle prices and availability of affordable internet-enabled phones. The landscapes of online activity are therefore evolving. The estimated value of e-commerce is \$42.2 million. While data is limited and e-commerce is still relatively new, it is likely to expand rapidly, which could imply potential growth across other African nations.

Despite the availability of a wide range of family planning (FP) methods from public and private health facilities, pharmacies, and other outlets, Kenya has a contraceptive prevalence rate (CPR) of 65.4% for use of any method and 60.9% for use of modern FP methods, well below the target of 70% set by the Kenyan Ministry of Health for 2015. The internet has the potential to provide wider access to FP, but data on online access to RH supplies is very limited. There are only three online pharmacies, and only one sells FP products excluding male condoms. However, three other online sources of male condoms were found. Although e-commerce is relatively new and very small, the e-commerce market for RH supplies appears to have potential for expansion.

All currency amounts are in United States dollars, unless stated otherwise.

ENABLING factors

- Rising internet use, users and internet-enabled devices across Kenya may set the stage for e-commerce growth.
- E-commerce institutions such as online platforms and online marketplaces with some sales of RH supplies are emerging.
- Growing availability of non-cash payments such as M-PESAⁱⁱ could facilitate the growth of simple financial transactions.
- Potential for online educational information on RH supplies could increase access to product information and counseling.

HINDERING factors

- ✓ Lack of laws and regulations to protect customers purchasing via e-commerce channels reduces customer trust.
- ✓ Inadequate logistics and weak distribution systems for online sales deters both customers and sellers.
- ✓ Limited government resources allocated to both e-commerce and RH supplies.
- High costs for both RH supplies and delivery of products purchased online limits the growth of the sector.
- Persistent limited internet access, particularly in rural areas.

CONTEXT

Kenya's current population of 47 million is projected to more than double over the next 35 years. According to the United Nations, Kenya will be home to 66 million in 2030, and 97 million in 2050.² The current total fertility rate (a measure of average number of children per woman over her lifetime) is 3.9, which varies from 3.1 in urban areas to 4.5 in rural areas, where almost 25% of the population lives. The population is young; over 40% are under 15 years of age.³

The 2014 Kenyan Demographic and Health Survey found a contraceptive prevalence rate (CPR) of slightly over 65% among sexually active unmarried women ages 15-49 for use of any FP method, and 61% for use of modern methods.⁴

As shown in **Table 1**, a wide range of methods are currently being used with significant variation between married and unmarried women in rural and urban areas. Most of these methods are readily available in public health facilities while some can only be bought from private pharmaceutical outlets. The most commonly offered temporary modern methods of FP in health facilities are oral contraceptives (OCs) (available in 95% of facilities offering FP services), the 2- or 3-month progestin-only injectables (95% of facilities), and the male condom

(92% of facilities).⁵ Injectables are the most prevalent contraceptive method, but the use of implants is growing. Some stakeholders who were interviewed for this case study stated that method use and choice is driven by cost, since most of the FP products are provided for free by the government or are heavily subsidized by donors. Others believe that trends in use and choice are driven by age and reproductive needs of the woman, with older women using more long-term methods.

The percent of women using spacing methods, such as OCs or male and female condoms, is important because only such temporary and non-clinical methods of FP are likely to be offered via e-commerce. As shown above in **Table 1** and **Figure 1**, the majority of sexually active unmarried women living in urban areas rely on short-acing spacing methods. This trend could result in an increase in e-commerce provisioning of RH supplies because urban residents are far more likely to use the internet.

FP Challenges

Several studies conducted in the last decade have identified obstacles to full accessibility of FP methods, representing a wide range of factors. According to a 2007 study, costs associated with long-acting methods are a key hindrance to accessing those methods. Women regularly encountered formal and informal user fees at

ii An agent-assisted, mobile phone-based, person-to-person payment and money transfer system

Table 1. FP method use (percent of women, ages 15-49), with methods available online highlighted.

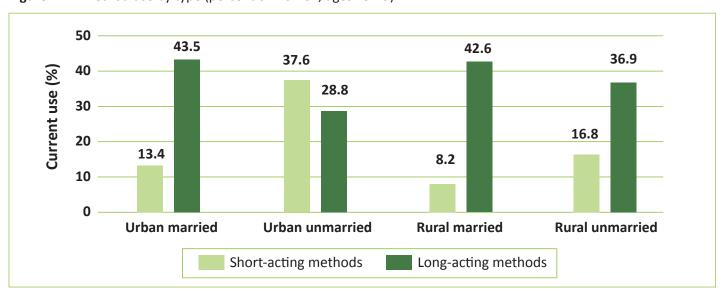
Contraceptive use	Married Urban	Sexually-active Unmarried Urban	Married Rural	Sexually-active Unmarried Rural
Any method	61.8	70.3	55.5	58.8
Female sterilization	2.1	0.5	3.9	3.9
Intrauterine device	4.7	1.4	2.6	0.9
Implant	12.0	8.6	8.6	4.4
Injectable	24.7	18.3	27.5	27.7
Oral contraceptives	10.7	7.0	6.2	6.2
Male condoms	2.6	29.6	1.9	10.6
Female condoms	0.0	1.0	0.0	0.0
Lactational Amenorrhea Method (LAM)	0.1	0.0	0.1	0.0
Any traditional	4.9	4.1	4.6	4.9
Not using	38.2	29.7	44.5	41.2
Total	100	100.2*	99.9*	99.8*

Source: Kenya DHS 2014. * Not 100 % due to rounding error.

both public and private facilities despite the policy that government-provided FP services and supplies must be offered free to clients. At that time, facilities charged about \$0.50 for OCs. It is not clear what websites would charge for the same product. A 2010 analysis⁸ revealed the top four reasons why women who say that they want

to avoid pregnancy are not using FP: 1) fear of side effects and health concerns (43%), 2) opposition from husbands/partners or perceived religious prohibition (16%), 3) having sex infrequently (14%), and 4) postpartum reasons (i.e., menses not returned) (12%). Some women (6%) stated that lack of access (distance or costs) was the reason for

Figure 1. FP method use by type (percent of women, ages 15-49).



Source: Table 3.9 in KNBS KDHS 2015 monograph on key indicators.

not using FP.⁹ Online availability of FP information and commodities could help address some of these concerns. Education, including online information and counseling, could increase women's understanding of pregnancy risk and the often-transient nature of side effects. Although women surveyed did not mention most of these issues, analysts attribute the high level of unmet need to inadequate service provision, FP commodity stock-outs due to weak distribution systems, cultural and knowledge barriers, and low levels of empowerment and decision-making among women.¹⁰ Poor services and stock-outs could motivate women with the requisite finances and technology to turn to e-commerce for efficient, reliable access.

In 2014, Kenya's Ministry of Health commissioned the National Survey on Male Involvement in Family Planning and Reproductive Health, 11 which sought to assess men's attitudes and beliefs, the extent to which men ages 15-54 are involved in decisions, and main barriers to men's involvement. The results demonstrated negative attitudes toward and low male involvement in FP and RH. The low involvement among men was attributed to perceptions that FP is a woman's responsibility. Negative attitudes were based on misperceptions, such as the belief that FP use causes excessive bleeding, swelling of legs, and weight gain among women. The majority of men opposed to FP believed that it causes infertility, cancer, and low libido in women. Some Christian teachings in Kenya oppose the use of permanent FP methods, but generally support birth spacing methods and natural methods. 12 Again, accurate information online could help shift their attitude and encourage male involvement.

As shown in **Figure 2**, in Kenya, one can obtain RH supplies from public health facilities that have FP clinics, or from private entities including retailers, health practitioners, and social franchisers (social marketing agencies).

The social franchisers, such as Population Services International (PSI) and Marie Stopes International (MSI), in addition to running their own self-sustaining clinics, provide FP products to some community-based organizations, wholesalers, retailers (including kiosks, lodges, pharmacies, bars), and commercial distributors.

They primarily serve the underserved areas in the country, such as informal settlements and rural areas.

E-commerce Market

E-commerce has the potential for rapid expansion in Kenya. Although in its infancy, it has been steadily growing over the past few years. For e-commerce to grow, not only for FP but in general, people must trust the technology. The population currently using e-commerce is young, busy, and "tech-savvy," and has disposable income to spend at their convenience. ¹³

In 2014, 26.2 million Kenyans used the internet, an increase of 23% over the previous year. More than half the population of Kenya is now online, and if the numbers only applied to adults of reproductive age, the percent would be even higher. The expansion was mainly due to the reduction in data bundle prices and availability of affordable internet-enabled phones. During the same one-year interval, the total wireless and fixed (wired) internet subscriptions also increased by 24.8% and 20.5%, respectively. Total wireless broadband subscriptions increased from 2.4 million to 4.2 million, and the increase was mainly attributed to the growth in the Global System for Mobile Communication (GSM), which almost doubled from 2013 to 3.4 million in 2014.14 Mobile telephone connections reached 33.6 million in 2014 with a mobile penetration rate of 78%. A growing portion of mobile users has smartphones. As of June of 2015, almost 60% of all phones sold in the country—an estimated 1.8 million devices - were smartphones.

The Communications Authority of Kenya estimates the value of e-commerce as \$42.2 million. E-commerce has spread over various platforms including online marketplaces, service delivery, taxi booking, and property and hotel listings. Other common e-commerce opportunities include social media platforms such as Facebook and Instagram, which are successfully used to advertise and sell products such as clothing, jewelry, and electronics. In Kenya, there are 4.5 million people active on Facebook every month, and 95% of them are on a mobile device. These figures are impressive and could lead to expanded e-commerce of RH supplies.

FINDINGS

E-commerce includes only limited sales of RH supplies and services but could have the potential to expand sales to new customers and increase the volumes sold to existing customers. A number of factors affect this potential; some enable expansion while others hinder it.

Enabling Factors

Rising Internet Use, Users, and Internet-Enabled Devices

The rapid expansion of internet connections, online users, and mobile phones enables vendors to reach wider markets and makes it possible for goods and services to be traded in a whole new way. Many companies are introducing innovative e-commerce services. These include Petty Errands, Yum, Hello Food, and Mama Mikes Online. Customers place orders via these companies' platforms, and their orders are then sourced and delivered. Whether such shopping services could eventually include RH supplies remains to be seen. Online marketplaces are popular across Kenya for buying and selling products; marketplaces like JUMIA, OLX, Cheki and Rupu are the largest. The expansion of these marketplaces is likely driven by the wider use of smartphones.

Emerging Online Platforms

Kenya's online platforms, including large marketplaces such as JUMIA and OLX, are generally available 24 hours a day, seven days a week, except in the case of delivery



"The prospect for e-commerce is very high. Stores are too expensive because the supply is low and the cost per square foot is too high compared to the cost of goods. Access to retail in certain areas is bad hence the need for e-commerce. So there is a huge case for consumables being brought online especially if they are all being sold in one area of the country." Peter Ndiang'ui, Country Manager OLX





Typically they are people ages 35 and younger. University students constitute the largest proportion of users of e-commerce platforms (like the online marketplaces OLX and JUMIA) and a strong correlation was identified between education and use of these platforms.

services that often have a cap on their operating hours.

Each has a slightly different role within the e-commerce system. JUMIA, for example, in addition to giving sellers an e-store, is responsible for processing payments and deliveries, advertising the site, interacting with customers, and providing warehouse facilities for those merchants who opt for it. This makes it possible for merchants to provide their products at a lower price. OLX, on the other hand, only provides a portal for merchants to sell their products and does not handle any transactions between the merchant and the customer.

This rapid growth of e-commerce in sub-Saharan Africa is driven by poor physical access to retail outlets. Since the RH supplies community faces similar challenges in traditional service and commodity provision, e-commerce may emerge as a way to avoid these on-the-ground problems.

Trends in Methods of Payment

Mobile money, especially Safaricom's M-PESA service, has become increasingly popular in Kenya. M-PESA allows users to store money on their mobile phones in an electronic account and deposit or withdraw money in the form of hard currency at any one of M-PESA's numerous agent locations. By March 2011, M-PESA reached over 13.8 million registered users (over one-third of Kenya's population) through 27,000 M-PESA agents throughout the country. In 2014, the total value of deposits for the mobile money through the agents grew by 22.8% to \$1.013 billion. The use of M-PESA has also facilitated the expansion of delivery services in Kenya and could

JUMIA PAYMENT METHOD

Approximately 90% of payments are cash-on-delivery, 2% are debit or credit cards, and 8% are by M-PESA. Since there is a heavy reliance on cash, most online transactions happen at the end or beginning of the month – closer to pay day. There are fewer transactions in the middle of the month.

become an important enabling factor for online sales of contraceptives.

Potential for Education, Access to Product Information and Counseling

A consistent message from stakeholders interviewed was that e-commerce of RH supplies should provide information and further counseling. However, while women may need face-to-face interaction when they first adopt a FP product, it is not usually necessary when they obtain re-supplies of the same method. Subsequent supplies could be ordered online without counseling. Some RH websites in other countries offer online interactions between clinicians and customers for first-time users and additional information for all users. Kenyan online sellers could explore this model in the future. In addition, e-commerce websites could serve as a source of information and guidance for FP.

Hindering Factors

Relatively High Costs for Product and Delivery

There are structural issues that would need to be addressed before e-commerce could serve as a viable alternative to traditional outlets. These challenges include logistics, payment platforms and delivery of products. On the customer side, incentive to purchase online is diminished by the fact that RH supplies are distributed for free by the government. In the context of wide availability of free or low cost government-supplied contraceptives,

the cost of buying contraceptives online is an issue for customers. However, it is not clear how big this constraint is. The characteristics of people who already go online to order products and services are different from those who go to public facilities. Convenience, therefore, may be a persuasive selling point.

A big hurdle lies in logistics and delivery of products by online sellers. The prohibitive cost of delivery can only be addressed if a reliable national system is put in place—for example, the postal service. The success of e-commerce requires the government to invest in technological infrastructure and to build good transport networks to ensure delivery of goods. ¹⁷ Initiatives such as OkHi are working to create a uniform address system (street names and house numbers) similar to those in countries where e-commerce thrives.

Remaining Problems with Payment Systems

In spite of the expansion of digital payments by debit and credit cards and mobile money such as M-PESA, there are still issues related to online purchases. In particular, there is significant concern about the security of the internet, especially among debit and credit card holders. Many strongly believe that the online marketplace is not safe from theft and could result in hidden fees or credit card fraud. To overcome this, most e-businesses offer the cash-on-delivery payment option, which gives the customer the opportunity to safeguard their money and confirm their satisfaction with the product before payment.

The Overall Landscape for E-commerce and FP Method Distribution

E-commerce is still a new phenomenon in Kenya and consequently, detailed information on this market is relatively sparse. There are currently only three online pharmacies in Kenya. As shown in **Table 2**, although many pharmacies have websites with details of their products and services, only three provide an opportunity for online purchases. Of these, only one sells FP products and none sell condoms. Aside from these, three online sources of condoms were found; see **Table 2**.

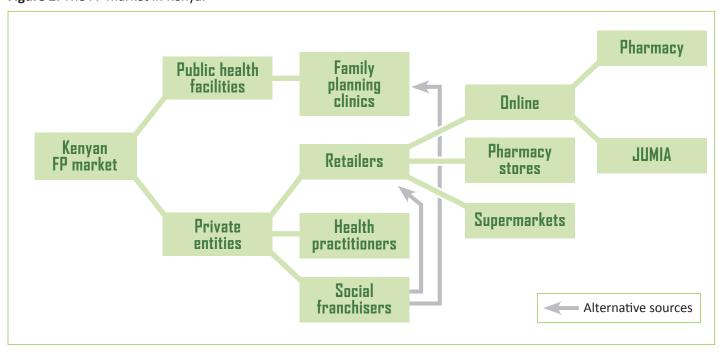
Table 2. Online sources of FP products in Kenya.

Site	Products	No. of brands	How it works
Haltons: www.haltons.co.ke	OCs, EC & injectables,	varies	Haltons' website displays all medical products registered in Kenya and provides some information on product and medication use. Customers can search for and select their medical product online and then will get a call from a pharmacist for information exchange. They can then pick up their medications in a store or request delivery.
Dial-a-condom delivery, Kenya: www.facebook.com/ dialacondomdeliveryKenya	Male condoms	varies	Customers can make contact through the Facebook page and specify the brand and quantity of male condoms they need. The order will be delivered the same day.
JUMIA: www.JUMIA.co.ke	Male condoms	one	JUMIA showcases male condoms online. The customer orders male condoms and JUMIA delivers them and processes payments, most frequently cash on delivery.
Condoms Kenya: http://condoms.co.ke; Facebook.com/pages/ Condoms-Kenya	Male condoms		Websites currently in development.

The most common RH supply found online was the male condom, which is sold in three of the four online sites in Kenya. However, while male condoms are the most common FP product online, sales remain low. Dialacondom currently makes only up to four deliveries a week, and customers are mostly people who want to be discrete

about their purchase. Similarly, despite a marketing arrangement with Durex, JUMIA, a company with 1,500 to 2,500 unique sales a day, sold only approximately 80 male condoms in 2014. It is important to note that approximately 70% of male condoms distributed are free, Government of Kenya condoms.¹⁹ At present, only one

Figure 2: The FP market in Kenya.



pharmacy, Haltons, distributes RH supplies online. Since they have introduced this e-commerce service recently, it is difficult to determine what tactics will be most successful.

CONCLUSIONS

This case study reveals some of the opportunities and obstacles to e-commerce as a way of expanding access to RH supplies in Kenya. Although it is relatively new and very small, the e-commerce market appears to have potential for expansion.

Based on the findings from this case study, three main issues should be considered for the FP and e-commerce field.

- First, free or low cost government-supplied contraceptives are widely available. However, given women's experiences of long waiting times at public facilities, those who can afford to are likely to look for RH supplies and services elsewhere, including online. These people have different priorities than those who obtain their RH supplies through public facilities, and may be attracted by the convenience of e-commerce.
- Second, a consistent message from the various stakeholders was that e-commerce should provide information and counseling on FP and other RH supplies. However, while women may benefit from face-to-face interaction when they first adopt a FP method, they may not need it for subsequent resupply

- of the same method. In addition, the internet presents opportunities to provide information and guidance.
- Third, there is a need for structures to be put in place for e-commerce to serve as a viable alternative to traditional sources of FP methods. These include logistics, payment platforms, and mobile networks with existing providers.

FUTURE RESEARCH

The findings from this case study suggest an opportunity —albeit limited—for the sale of RH supplies through e-commerce. However, results showed that e-commerce is still a new territory, and there is not much data available in this market. To better understand the scope and scale of this opportunity in Kenya, some critical follow-up areas recommended for future research include:

- An exploration of the online buying habits of Kenyan population, specifically women: Understanding the Kenyan customers' buying behavior is a necessary element for successful growth of e-commerce. An exploratory analysis should include information on pricing of products and the willingness of customers to buy RH supplies based on price.
- Further understanding of customer needs for information and online counseling: Looking at what kind of internet information and counseling women and men would want if they chose to purchase RH supplies online would elucidate the initial findings

ENABLING factors

- Growing internet use, users and internetenabled devices
- Emerging e-commerce institutions and online platforms
- ✓ Growing availability of non-cash payments, such as M-PESA
- Potential for education, access to product information and counselling

Higher Impact



Lower Impact

HINDERING factors

- Lack of laws and regulations to protect customers
- Inadequate logistics and problems with payment systems
- ✓ Limited government resource allocation to both e-commerce and RH services and commodities
- Relatively high costs for product and delivery
- ✓ Limited internet access

regarding the need for online interactions between clinicians and customers for first-time users. For example, would they like a phone call from a medical expert or just an interactive exchange of information online? Would they prefer to receive face-to-face counseling at first but then be able to buy the product online without counseling? Further research could look into currently available information, and identify gaps and opportunities.

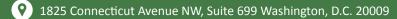
Assessment of the RH community in Kenya to understand the existing systems for FP product distribution: This study raised many unanswered questions around how the existing RH community can leverage e-commerce. Further research could, for instance, explore if and how the RH community in Kenya can capitalize on the existing e-commerce systems to get FP and RH supplies to women. This case study was only able to touch the surface, but a deeper dive into the Kenyan RH landscape at all levels, with a focus on the potential for reaching women via e-commerce, would be beneficial.



Endnotes

- For currently married women and unmarried women who are sexually active age15-49 See http://www.prb.org/DataFinder/Geography/Data. aspx?loc=279.
- 2. Family Planning 2020 (FP2020), 2012.
- 3. Ibid. http://www.prb.org/DataFinder/Geography/Data.aspx?loc=279
- Kenya National Bureau of Statistics et al. Kenya Demographic and Health Survey 2014 Key Indicators. Nairobi, Kenya March 2015.
- National Coordinating Agency for Population and Development (NCAPD) [Kenya], Ministry of Medical Services (MOMS) [Kenya], Ministry of Public Health and Sanitation (MOPHS) [Kenya], Kenya National Bureau of Statistics (KNBS) [Kenya], & ICF Macro, 2011.
- Kenya National Bureau of Statistics et al. Kenya Demographic and Health Survey 2014 Key Indicators. Nairobi, Kenya March 2015.
- Ogangah, C., Slattery, E., & Mehta, A. Failure to Deliver: Violations of Women's Human Rights in Kenyan Health Facilities. Center for Reproductive Rights and Federation of Women Lawyers–Kenya. 2007.
- Smith, R., and Mehta, S. Reproductive Transitions: Unmet Need for Family Planning, 2009, 2008–2009. Kenya. 2010.
- Smith, R., and Mehta, S. Reproductive Transitions: Unmet Need for Family Planning, 2009, 2008–2009. Kenya. 2010.
- Family Planning 2020 (FP2020), 2012; Kenya National Commission on Human Rights, 2012; Macro, 2010; Ministry of Health, 2012.

- Population, N. C. for, & Development, A. Male Involvement in Family Planning and Reproductive Health in Kenya. 2014.
- 12. Population & Development, 2014.
- 13. Stakeholder interviews with representatives from Jumia and OLX. 2015.
- 14. "Kenya National Bureau of Statistics Kenya Facts and Figures, 2014," n.d., "Kenya National Bureau of Statistics Kenya Facts and Figures, 2015," n.d., No Title, 2015.
- Wainainah, D. Firms look to e-commerce for growth. Business Daily Africa. Retrieved from http://www.businessdailyafrica.com/Firms-look-to-e-commerce-for-growth-in-2015/-/1248928/2588208/-/item/1/-/s7v7blz/-/index.html. 2015.
- 16. Facebook Africa. 2015.
- 17. Kimani, K. 2015 and stakeholder interview with Peter Ndiang'ui, OLX.
- Kimani, K. Ecommerce Penetration in Kenya: Contribution of Foreign Investment & Impact on the Kenyan Economy. Mobitrends. 2015, Retrieved from http://mobitrends.co.ke/ecommerce-penetration-in-kenya/
- 19. PSI Kenya, 2015.





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