

## **Zambian Data Prices fall by more than 70% but Internet use remains below 20%**

- ❖ **In anticipation of the entry of a new player in the market, mobile operators engaged in price war leading to a more than 70% decrease in data prices between the first quarter of 2018 and that of 2019.**
- ❖ **Despite data prices in Zambia being significantly lower than in other African countries, they remain unaffordable to the majority, with only 14% of the Zambian population using the Internet.**
- ❖ **The USD0.03 social media tax introduced by the Government of Zambia in 2018 will have a negative impact on consumers and affordability of data services in Zambia.**
- ❖ **The USD0.03 tax will increase the price of data in Zambia by 33% making it even more costly and inaccessible to the poor.**

### **Introduction**

The mobile market in Zambia is experiencing fierce competition between the mobile network operators in anticipation of the entry of a fourth market entrant. MTN Zambia, Airtel Zambia and Zamtel have engaged in intensive customer acquisition campaigns which have led to the overall mobile subscriber growth of 1.3% during the first quarter of 2019.

The fourth licensee, UZI Zambia Limited, is expected to launch its operation in October 2019. Despite some growth in mobile subscriptions, Internet penetration nevertheless remains low. A national representative demand side survey undertaken by the regulator, ZICTA, indicates that 86% of the population do not use the Internet in 2018<sup>1</sup>.

Despite these developments, Internet uptake in Zambia remains below the critical mass of 20% necessary for a country to benefit from the network effects associated with economic growth. This trend is similar to other African countries, such as Mozambique Rwanda, Uganda, Tanzania who all had less than 14% internet penetration in 2017-2018, with Rwanda's being the lowest at 9%. One of the main inhibitors to Internet use faced by lot of people living in African countries is lack of affordability of both services and devices. This has been compounded by the introduction of social media tax in Zambia.

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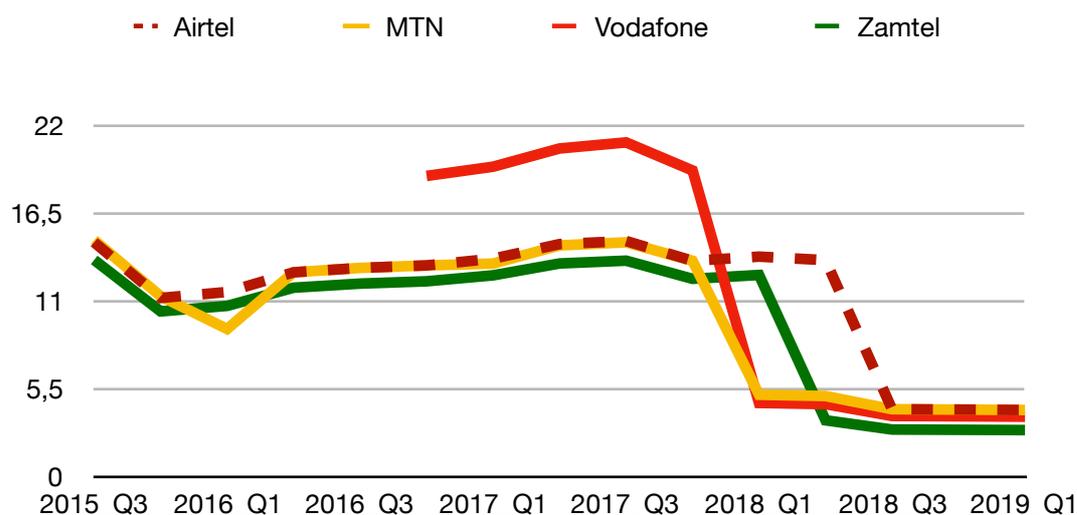
<sup>1</sup> An ICT survey conducted by Zambian Information and Communication Technology Authority found out that only 14% of the Zambian population use the Internet. A figure which is below the ITU and the ZICTA supply side estimate of 46% but more in line with similar size economies covered by the RIA After Access Survey e.g. Tanzania 13% in 2017..

## Intensive customer acquisition strategy lead to more than 70% reduction in data prices

MTN is the largest operator, controlling 45% of the mobile market, followed by Airtel (40%) and Zamtel (14%). The landing of submarine fibre optics cable from 2012 and the flood of competitively priced international bandwidth has resulted in a considerable reduction in fixed-line and mobile wholesale pricing. Retail pricing has also reduced in recent quarters as network operators battle to secure their customer base in anticipation of the launch of services by Uzi.

Uzi, whose major shareholder is Unitel International Holdings B.V registered in the Netherlands, secured a network licence in March 2018, valid for 15 years, to compete against the three incumbent operators. The scheduled launch of UZI for December 2018 was postponed to the end of 2019.

In June 2019, Vodacom Group, which operates in Zambia as Vodafone, announced the sale of its business unit operations in Zambia, Nigeria and Cote d'Ivoire to Synergy Communications. Synergy Communications, a subsidiary of the Convergence Partners Communications Infrastructure Fund, announced that it had acquired 100% of Vodacom Business Africa's operations in these markets<sup>2</sup>.



**Figure 1: Data price movement in the Zambian mobile market**

Source: Research ICT Africa (RAMP) Index, 2019

In anticipation of the new market entrant and in order to secure their market shares, mobile operators' pricing became fiercely competitive. Research ICT Africa Mobile Pricing (RAMP) Index, indicates that MTN and Vodafone initiated the price war during Q1-2018 and both operators reduced their 1 GB data prices simultaneously by more than half. MTN decreased its prices by 62% from USD 13.53 to USD 5.4.

Vodafone, who had launched its Internet services in 2016, further reduced its rates by 75% from USD 19.20 in Q4 2017 to USD 4.63 in Q1 2019, undercutting the largest operator, MTN. This reduction in data prices moved Zambia up the RAMP

<sup>2</sup> <https://www.lusakatimes.com/2019/06/26/vodafone-zambia-sold/>

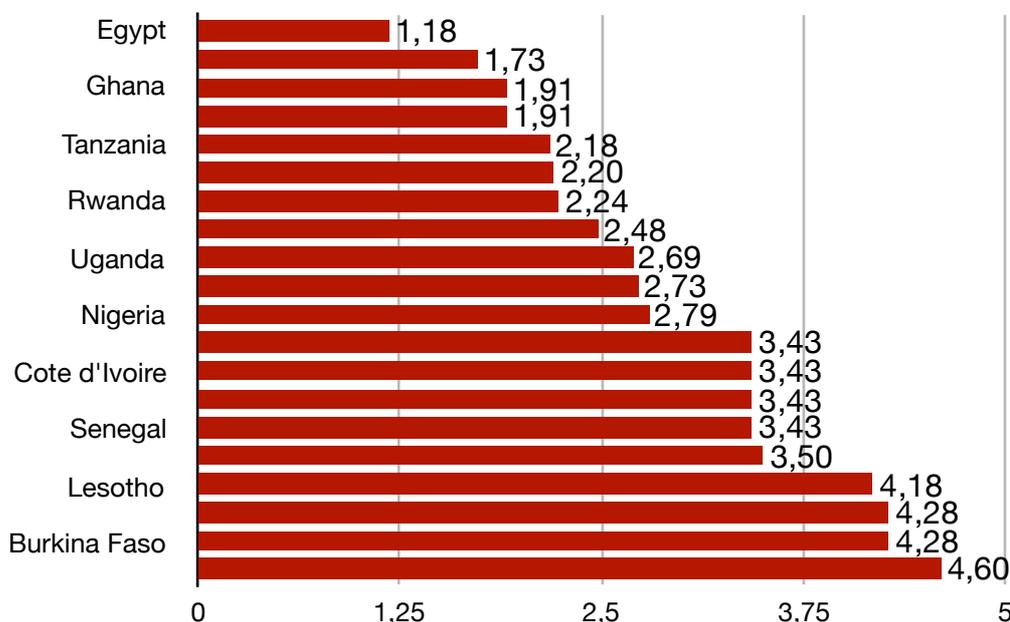
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Intensive customer acquisition strategy intensified in the subsequent quarters, with Zamtel setting its 1 GB prices below all operators, charging USD 3.54 in the second quarter of 2018, representing a 71% reduction in prices from USD 12.65.

index from number 31 in the fourth quarter of 2017 to the 13<sup>th</sup> place in the first quarter of 2018.

Intensive customer acquisition strategy intensified in the subsequent quarters, with Zamtel setting its 1 GB prices below all operators, charging USD 3.54 in the second quarter of 2018, representing a 71% reduction in prices from USD 12.65. Vodafone and MTN continued their battle, by further reducing their prices to USD 4.55 and USD 5.06, respectively in the same quarter.

To protect its market share, Airtel responded to the other operators pricing strategy during quarter 3 of 2018 by reducing its 1GB data price to USD 4.24 from USD 13.57 and, thus matching MTN’s price. Vodafone and Zamtel maintained their low-price strategy and further dropped their prices. Zamtel set its price at USD 2.96 for 1GB becoming the cheapest operator with Vodafone charging USD 3.81 for 1GB data.



**Figure 2: Zambia performance in the RAMP Index**

Source: Research ICT Africa (RAMP) Index, 2019

During quarter 2 of 2019, Zamtel prices fell further to USD 2.73, continuing to be the cheapest operator for a 1GB data. MTN, the largest operator, charged USD 3.82 for its cheapest 1GB data. Both Zamtel and MTN operators offered 1.5 GB of data, making the effective 1GB prices USD 1.82 for Zamtel and USD 2.54 for MTN.

Since 2018, subscribers have been able to buy 5 GB data at the cost of USD 7.67. This price is lower than the cost of 1GB in some African countries such as Botswana, DRC, Libya, South Africa, Swaziland and Zimbabwe. Among the SADC countries, Zambia offers the third cheapest 1GB of data after Mozambique (USD 1.91) and Tanzania (USD 2.18). The price of data in Zambia is almost three times cheaper than the cost of the cheapest 1GB of data in South Africa and Botswana and twice as cheap as the most economical 1 GB data in Angola.

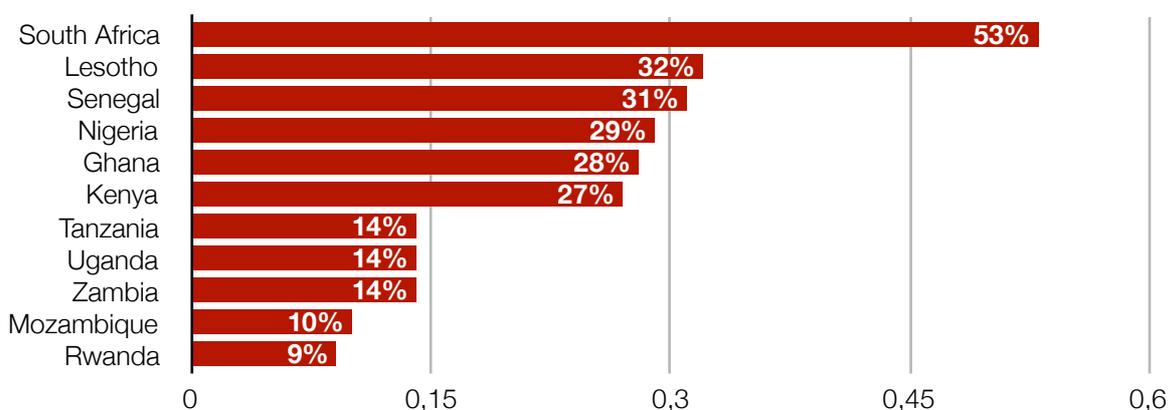
## Mobile Internet in Zambia

The 2018 ICT survey conducted by ZICTA indicated that only 14.3% of Zambians use the Internet. Despite Zambian 1 GB data prices being lower than prices in other countries, a significant proportion of Zambians stated that they still cannot afford data prices

Prior to conducting their own nationally representative demand side survey, the Zambian Information and Communications Technology Authority (ZICTA) used inflated figures from the International Telecommunication Union that suggested that there were 7.7 million Internet users in 2018, or 47% Internet penetration.<sup>3</sup> The ITU estimates are derived from mobile operator supply side data provided to the regulator for administrative purposes. These figures are not appropriate for policymaking as they reflect the total number of active SIMs in a market rather than the number of unique subscribers.

In a prepaid market such as the Zambian mobile market, mobile subscribers tend to use multiple SIM card to buffer against off-net charges or benefit from promotions. In such markets the only way to determine unique subscribers (or disaggregate users on the basis of sex or education or income or even rural and urban), is through nationally representative demand side surveys.

In contrast to the supply side data, the 2018 ICT survey conducted by ZICTA indicated that only 14.3% of Zambians use the Internet<sup>4</sup>. Despite Zambian 1 GB data prices being lower than prices in other countries, a significant proportion of Zambians stated that they still cannot afford data prices. Besides data affordability, respondents also noted that the lack of digital skills and inadequate telecommunications infrastructure are primary inhibitors of Internet use.



**Figure 2: Internet use in Zambia compared to other Africa countries**

Source: Research ICT Africa After Access, 2017 and ZICTA, 2018

The ZICTA findings are similar to the results obtained by RIA's 2017 - 2018 After Access survey which shows that the majority of African countries have not yet reached the 20% Internet penetration rates required to benefit from positive network effects such as improved information flows.

<sup>3</sup> <http://www.itwebafrica.com/mobilex/322-zambia/244271-zambia-fast-approaching-mobile-saturation-zicta>

<sup>4</sup> ZICTA (2018). "2018 National Survey of access and usage of information and communication technologies by household and individuals. A demand side assessment of access and usage of ICTs in Zambia". Available at: [https://www.zicta.zm/Downloads/publications/2018%20ICT%20Survey%20\\_%20Preliminary%20Report.pdf](https://www.zicta.zm/Downloads/publications/2018%20ICT%20Survey%20_%20Preliminary%20Report.pdf)

Most importantly, RIA's findings indicate that the digital inequalities tend to build on historical income and gender inequalities. In some cases, such as in Zambia, the disparity in access to the internet also widens the income inequality gap, including the skills and gender gap. Only those who are on the Internet are able to participate in the digital economy, apply for jobs online or enrol in online educational course to improve their skills; while the unconnected are left behind. Therefore, Governments should look beyond improving infrastructure and reducing data prices to find alternative policies that bring the unconnected people online.

## Social media tax

In Africa, the primary inhibitor of Internet access is the high price of devices and the lack of affordable data. Despite this evidence, several African countries have put in place regressive laws to tax the use of social media.

In 2018, the social media tax was first introduced in Uganda, followed swiftly by Benin and later by the Zambian government. In Benin popular protests resulted in the taxes being withdrawn within days after being launched. In Uganda despite the counterproductive outcomes caused by the introduction of these regressive taxes, they remain in place. The tax in Uganda operates as a daily tax of USD 0,05 (UGX 200) on specific social networking sites, such as WhatsApp, Facebook and Twitter. Ugandans are also expected to pay a 1% levy on total mobile money transactions. Although some digitally tech savvy users continue to find ways of circumventing payment with VPNs, large numbers of low-income users have been pushed offline or forced to limit their use.

These taxes represent the intersection between rent extraction by the State and efforts at social and political control. In both countries, the Internet and social media are seen as sites of dissent. This is exemplified by the use of Internet shutdowns for political control. For instance, the Ugandan government blocked access to the Internet during the 2018 election.

Currently, about 85% of the Zambian population is offline due to unaffordable data prices. Also, along with the social media tax, the Zambian Government introduced a tax on calls made over social media platforms, such as WhatsApp, Facebook Messenger and Viber. This measure was implemented to protect the licensed mobile telecommunication operators from unregulated competition.

Under the Zambian social media tax, mobile operators and Internet service providers must collect a tariff of USD 0.03 per day. This tax will increase the cost of data by USD 0.90 per month for subscribers using Over-the-Top services (OTTs). Although this appears to be a relatively small amount, the tax is regressive, having far greater negative impact on the poor.

The negative impact of the social media tax is likely to outweigh the USD 22 million that the Zambian government expects to raise on an annual basis. Based on the evidence from Uganda, the social media tax is likely to inhibit use, which would in turn reduce the anticipated tax revenue. The social media tax will also affect the tax revenue collected from operators. In Uganda tax revenue from OTT providers fell by USD 1.5 million.

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The tax is also likely to undermine government's efforts to get people online by providing affordable services to the poor. The Ugandan Communication Commission reported that in three months following the introduction of the levy, the number of Internet subscribers who use social networking sites fell by more than 2.5 million.

## Conclusion & recommendations

In 2018, the Zambian Information and Communications Technology Authority (ZICTA) granted a fourth mobile operator, Uzi Zambia, a 15-year licence to deploy its LTE technology network services nationally. In anticipation of the fourth entrant Airtel, MTN and Zamtel engaged in a fierce competition to sustain their market shares. MTN and Vodafone were the first to react, slashing their prices by more than half in the first quarter of 2018. Responding to MTN and Vodafone strategies, Airtel also reduced its 1GB data price. Zamtel reacted by undercutting all operators with a 1GB data price of USD 2.96 and further reduced its price to USD 2.73 in the second quarter of 2019.

Despite the huge reductions in the cost of mobile broadband in Zambia, a 2018 ICT survey shows that more than 85% of Zambians do not use the Internet. The evidence gathered in this policy brief shows that affordability is the main inhibitor to Internet access and use. This is in line with the 2017-2018 After Access survey conducted by Research ICT Africa in 10 African countries showed that the main inhibitors of Internet use in Africa are lack of Internet enabled devices, unaffordable data services and digital illiteracy. This demonstrates that policymakers need to look beyond the supply-side issues when addressing broadband access and usage in Africa.

With data prices having been driven so low and population coverage being much higher than Internet uptake figures, factors other than just access to signal or not are required to explain why many people in Zambia are still offline. It is therefore critical for policymakers to desist from implementing regressive social media taxes that are far more burdensome to the poor and instead focus on policies that improve affordability and digital literacy.

The barriers to use for many people are therefore not only that they are not covered by a signal, but that people do not have the resources to get online even where they are. The fact that there is wider coverage than the percentage of the population online suggest that there are challenges with the current technology and business models, exclusive spectrum licensing and universal service strategies.

To address this problem, complementary regulatory and delivery strategies will be required to enable different types of services to be offered by different kinds of operators. With evidence that even cost-based GSM prices are not affordable to most Africans, spectrum should be made available for secondary use. This could include strategies such as:

- nationally allocated spectrum not in use being made available through low-cost or licence-exempt spectrum for communities, non-profit providers or micro-networks;
- extending unlicensed spectrum to new frequency bands which can spur investment and innovation, lead to the introduction of technologies that can complement licensed networks, (for example via the hand-off from GSM to public Wi-Fi, which now also has backhaul applications), and expand broadband access in low-cost, last-mile access.
- enabling the deployment of dynamic spectrum optimise the use of spectrum, possibly through regional licences, is a critical aspect of developing alternative, more affordable business models to current business models and national spectrum licences.

- as more people can access even feature phones, connecting all public buildings with public Wi-Fi as a far more promising solution to the largely unsuccessful deployment of universal service funds, but perhaps more importantly by offering complementary free access to overcome challenges of inherently unaffordable GSM service for the majority of citizens.
- supporting the effective development institutional arrangements to enable capacitated regulators to regulate an increasing complex and adaptive globalised environment without state or industry capture - without succumbing to pressures from state to enforce retrogressive taxes that undermine their digital futures or by operators who act anti-competitively or place securing extractive rents above the national public policy objectives.

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