

What are the ethical implications of technological advancement in business? Answer the question with reference to a specific technological improvement of your choice in a company of your choice.

This essay will examine the ethical implications of the creation of M-PESA, a popular mobile money service in Kenya owned by Vodacom, a South African company, and Safaricom, a Kenyan company. I believe the ethical implications of M-PESA are positive, benefitting the lives of millions of Africans by giving accessibility to financial services which were not previously reachable.

In 2007, Vodaphone and Safaricom (the largest mobile phone operator in Kenya) launched a new mobile-phone based payment service called M-PESA [1], a revolutionary technological advancement. The service allows those who subscribe to transfer money to other M-PESA users by inputting their phone number and a unique code. Users can also withdraw the mobile money into cash and deposit cash into the mobile system, via a designated M-PESA agent. Customers have a virtual wallet much like a bank account.

M-PESA has been accredited as an African business success story, with approximately 7.7 million M-PESA accounts being registered by August 2009 [2], only 2 years after the service began. Since then, M-PESA has been growing and figures in 2015 suggested that 43% of Kenya's GDP was transacted via M-PESA [3]. Figure 1 shows how M-PESA underwent further rapid expansion between 2017-2022, increasing from 29.5 million subscribers in 2017 to 52.4 million subscribers in 2022 [4] from 7 African countries including Kenya, Ghana, and Egypt [5]. Between 2019 and 2020, Vodaphone sold their share of M-PESA to give Vodacom and Safaricom full ownership of M-PESA [6].

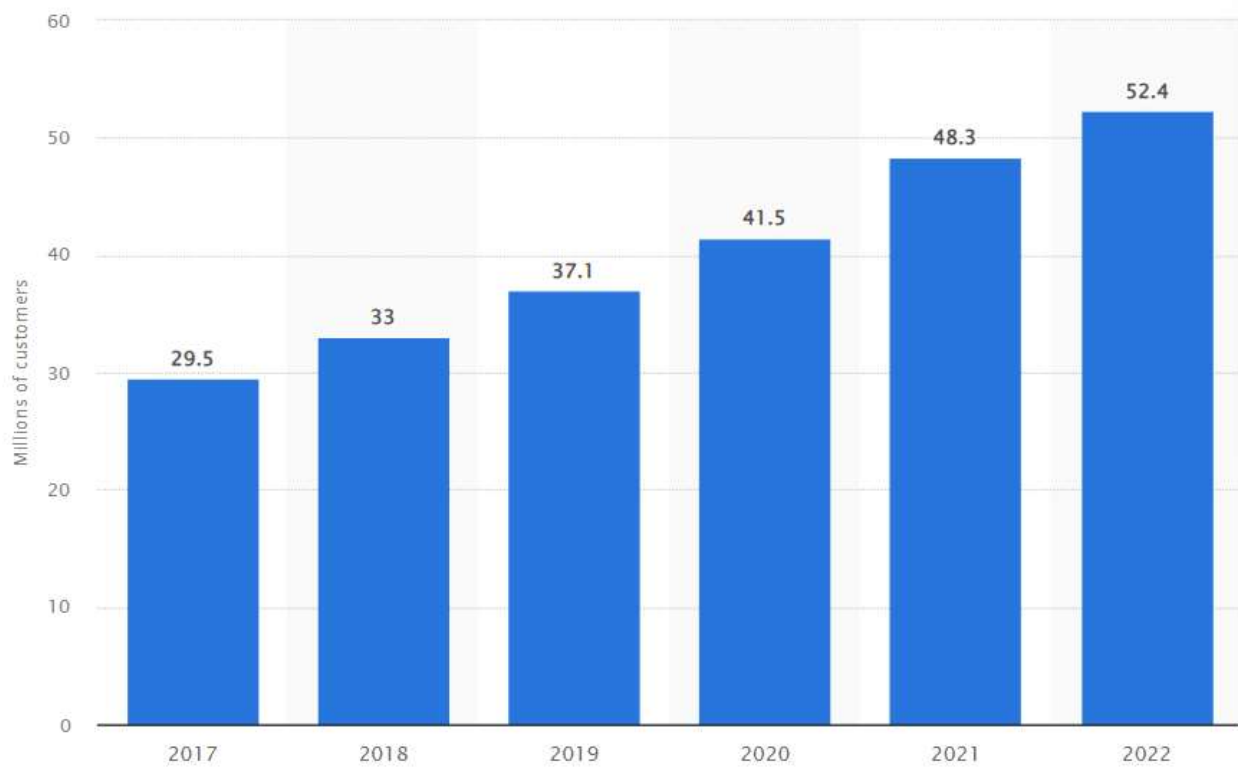


Figure 1 – Bar Graph showing increase in M-PESA subscriptions between 2017-2022 [4]

M-PESA has had ethical benefits by improving the lives of the general population. The service increased financial inclusion from 26% of the Kenyan adult population in 2006 to 75% in 2016 [7]. M-PESA has helped rural Kenya especially, where there is a lack of infrastructure and the “poorest lack forms of collateral – land or other assets – which many formal banks rely on to secure loans against” [8]. People cannot provide information of fixed addresses and hence cannot get bank accounts. Furthermore, many in rural areas often do not trust banks to keep their money safe and feel accessing bank accounts are too expensive [9]. This shows that without M-PESA, people would heavily rely on bank accounts for financial transactions and so a high proportion of people in Kenyan rural communities would struggle. The service has opened the rural economy because details such as a fixed address are not required, and transacting money is simple.

Seemingly, M-PESA’s impact has been overwhelmingly positive, with research suggesting that “access to M-PESA increased per capita consumption levels and lifted 194,000 households, or 2% of Kenyan households, out of poverty” [10]. M-PESA has clearly made a tangible difference to the lives of the general population. It has created a fairer and

level playing field by giving people increased financial freedom and the ability to pay for what they require. This is a positive ethical implication as it helps to exercise the autonomy of humans and the fact that we are rational beings who have free will. There are also many practical examples of the impact that M-PESA is having. For example, a farmer in rural Kenya can now pay a neighbouring farmer for fertiliser, simply via M-PESA. Previously, the farmer would have had to travel a long way to the nearest bank to receive cash, which would have been impractical. Hence, the farmer's ability to run their business has been greatly improved by M-PESA, leading to higher revenue, and creating financial and social freedom. M-PESA has affected all sectors, and its impact of transforming the way in which people send money is highlighted by Figure 2. Since 2007, M-PESA has grown vastly, and the proportion of money sent by M-PESA is now likely to be even larger.

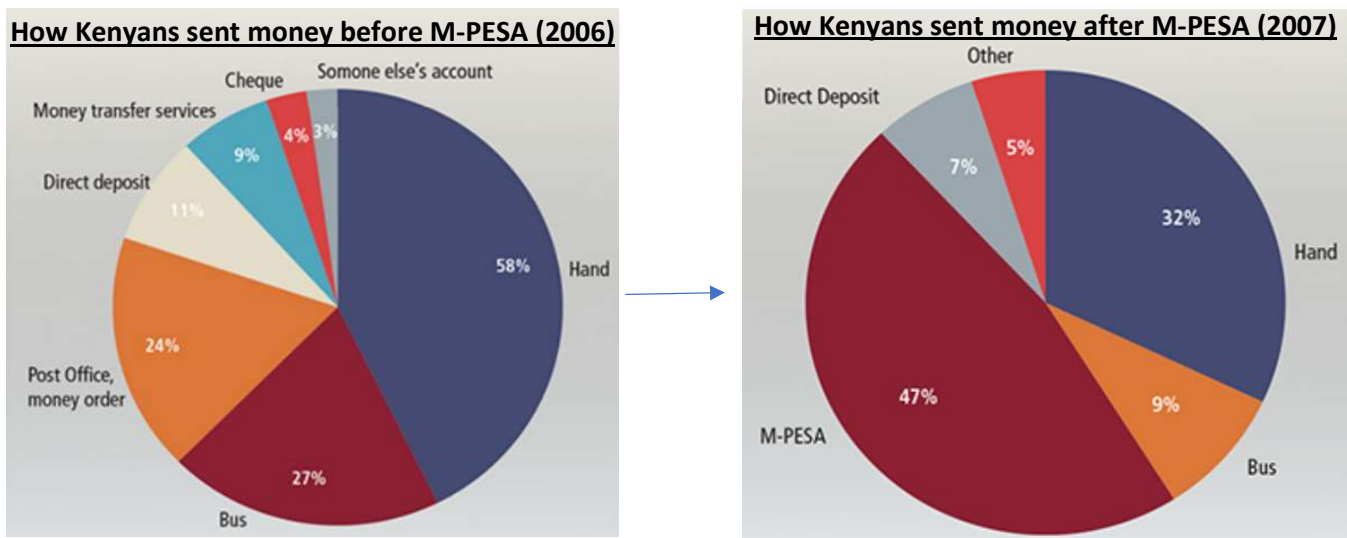


Figure 2 – how Kenyans sent money before and after M-PESA [11]

Although M-PESA has undoubtedly helped people, there are some negative ethical impacts. M-PESA has monopolised the mobile money industry with a majority share in the Kenyan market, giving them full control of prices. Therefore, M-PESA can raise fees without a fall in demand. A report in 2013 [12] found that in Kenya, M-PESA's transaction fees were much higher than those in neighbouring Tanzania (where they had many more competitors). The large fees have the greatest impact on the poor who often are reliant on M-PESA transfers for their income, or to buy essential goods. Furthermore, the poor in Kenya are usually financially illiterate and M-PESA exploited many vulnerable customers by pushing unnecessary services (e.g., special ringtones) onto the customers at

extortionate prices. These customers were then unable to see why the cash in their M-PESA accounts was depleting so quickly and were often unable to unsubscribe from services by themselves, due to complexed settings on the application [13]. Ethically, this is a negative implication of M-PESA because Safaricom is using their powers to exploit susceptible customers to make exorbitant profits, which is immoral. It is also worth noting that 35% of Safaricom (who partially own M-PESA) is owned by the Kenyan government [14]. This is a further ethical concern, because the Kenyan government should be acting in the interests of the people. The fees are set so that as you send more money, the transaction fees (as a proportion of money sent) decreases. This means the poorest are the most affected which violates the business ethic of integrity, [15] because the company's profits have been put before the welfare of society.

Furthermore, through "M-Shwari", a micro-loans lending service within M-PESA, reports suggest interest rates for loans can be as high as 500% [16]. This is unethical because often the poor take out micro-loans and receive little benefit from the small loans but are forced to pay excessive interest and can be trapped within a vicious cycle of taking out further loans. M-PESA uses artificial intelligence for this loaning system by analysing information like saving and spending patterns, which then determines how much of a maximum loan one is entitled to [17]. As well as high interest being unethical, AI accountability is a major techno-ethical consideration. If M-PESA's AI cannot be held accountable for encouraging loans for customers, then the service has a large ethical concern because customers are unable to enforce action when they are charged unfairly large interest.

These negative implications are compounded by the fact that some of the companies' profits from M-PESA are sent abroad to headquarters in high income countries. M-PESA can be seen as an "extractive" activity [18] which takes commissions from transactions which would have otherwise been free with normal cash. Therefore, although the service has increased financial inclusion, it perhaps reduces the spending power in local communities across Kenya due to the fees, and so the potential for growth of local businesses and enterprise is decreased, whilst foreign shareholders of Safaricom benefit from profits.

Moreover, M-PESA's monopoly of the market means Safaricom has full access to confidential data from customers, and allegations have been made against the company for selling data on the black market. Commoditisation of user data is another large techno-ethical concern [19], with 86% of people saying data privacy is very critical for the technology industry over the next few years [20]. Allegations which suggest M-PESA has been used to undermine

consumer privacy indicates the service has unethical aspects, especially since these forms of exploitation induce the most suffering on the poor.

The previous few paragraphs have focussed on the ethical limitations of M-PESA; however, it is worth noting that many of these disadvantages affect a small proportion of users, and some of the ways by which Safaricom had exploited users (for example, the data scandal) occurred rarely. As well as this, criticisms regarding M-PESA limiting the potential for growth of enterprise in local communities can be considered as quite weak, because M-PESA is partially owned by the Kenyan government and listed on the Nairobi Stock Exchange, so lots of the profits made are fed back into the Kenyan economy.

Also, in 2022, commission fees were approximately only 1-2% of the amount being transacted [21], contrary to the 2013 report. Therefore, the reduction in spending power due to M-PESA commission fees is negligible and does not affect local business. A further advantage is that Safaricom and Vodacom created an agent network and aligned it with their customer network, as well as spreading these agents out geographically so there is proximity to customers for convenience.

The service has also provided an easy form of remittance, a key method by which poor families escape poverty, as well as being a lifeline for many during the Covid-19 pandemic. Kenya and many other African countries were under lockdown and so physical bank branches were forced to shut. M-PESA therefore allowed transactions with no physical contact meaning many people could purchase necessary goods without having to withdraw cash from a bank. This is therefore a positive ethical implication because by making transactions significantly easier, M-PESA has maximised happiness across rural and urban communities, leading to not only a strong financial sector in Kenya but also better welfare for people.

In conclusion, M-PESA has undoubtedly had positive social implications on Kenyan society, by alleviating poverty and changing the financial landscape for millions of families across Kenya. There have also been many positive ethical impacts, such as increasing social freedoms and financial inclusivity which I believe, due to their large scale, slightly outweigh the unethical implications. This does not mean the negative ethical effects of M-PESA can be ignored, as the sale of consumer data and imposing large interest rates on vulnerable customers is a serious ethical concern. However, if Safaricom and Vodacom can appoint an ethical board who evaluate their actions, and work with other

telecommunications competitors to create common ethical practices, then M-PESA can become a completely ethical service in the future.

1648 words excluding references and titles

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