

Title: The synchronization of the mobile money system into banking systems in Uganda

Question: To what extent has the synchronization of the mobile money system into banking systems improved the ease of business transactions hence improving business welfare in Uganda?

Subject: Business Management

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INTRODUCTION

In 2009, the Mobile Money System was introduced in Uganda with one primary purpose, to provide the rapidly increasing number of people with mobile phones an alternative faster and easier way to send and receive money. Customers were quickly drawn to the simple and convenient services being provided at the time. At this time, it was quite early to assess and extrapolate the impact this new service was going to have on the telecommunications sector in particular, the general business and the economy of the country. This was majorly because the service started with one service provider, and seemed cautious of the public reception to the service. Additionally services and functions on the mobile money platforms provided then were limited. Fast forward to today, the mobile money system has evolved over the past decade, growing from 9 million users countrywide in 2012 to 22.7 million registered users in June 2018 and is still growing. This growth has been made possible by the increasing synchronization between the mobile money system and banking systems to provide seamless customer services. (Bank of Uganda)

This essay seeks to explore how the synchronization of the mobile money system with banking capabilities has improved the ease of business transaction, which has led to a more effective and efficient business environment and improved performance. In order to meet the purpose of this research, this essay will create a well-researched and balanced answer by separately exploring the three key factors of the question, which are; How the mobile money system has been integrated into banking systems, How this integration has improved the ease of business transactions and How this, in turn, has improved the welfare of businesses in Uganda. This research question is worthy of investigation

because of the way it has affected business transactions in Uganda and the economy as a whole. Its primary functions have changed moved from simple tasks of sending and receiving money to being the main platform for paying services and utilities like water bills, entertainment, electricity, taxes etc. which were normally done at a bank or at the offices of the respective service providers. This rapid evolution affected the banking sector and naturally, the sector had to act fast and build partnerships with telecom companies to integrate mobile money services with the traditional banking systems to stay in business. The mobile money system in Uganda has increased the efficiency of several businesses such as telecom companies, banks and online purchasing platforms.

The role of banks in increasing the usage of mobile money over the past decade is of critical significance to this context because it not only increased the ease of transactions but, has also improved the welfare of many businesses that were able to synchronize the capabilities of the mobile money system into their businesses, which has led to an increase of mobile money transaction values to 73.1 trillion Uganda shillings as of June 2018. My hypothesis going into this essay is that the ongoing synchronization between the mobile money system and the banking systems has greatly improved the ease of business transactions, which in turn, has pushed the welfare of businesses to a higher level. (Bank of Uganda)

SECTION 1: *How the mobile money system has been integrated in to banking systems*

The ongoing synchronization between the mobile money system and the banking systems is a great factor that has led to the growth of businesses in Uganda. Since 2009, telecommunication companies have been integrating banking services into mobile money services to enhance financial inclusion. Financial Inclusion (FI) is the process of ensuring access to appropriate financial products and services at an affordable cost to the underprivileged and low income groups. This goal to enhance FI has pushed companies to keep synchronizing mobile money services with banking services.

Mobile money services have grown from simple tasks such as sending, withdrawing and depositing money to paying taxes, school fees, utilities (see table 1). Merchant payments have been revolutionized by the integration of mobile money systems into banking systems to allow lower class citizens that don't have credit/debit cards to make trade payments without any physical cash. The most recognizable case study is MTN's MoMo service that allows a customer to pay for their goods simply by putting in the business' merchant code and then approving the transfer the money from their account to the business' account. Another noticeable achievement of this synchronization is the mobile banking system. This service allows customers to link their mobile money account to their bank account allowing them to deposit mobile money onto their bank account.

According to Ivan Ssettimba's statistical data (see table 2), the value of mobile money transactions increases throughout the years together with the number of mobile money customers. This means that with increasing customer awareness of the synchronization between mobile money systems into banking systems, the volumes of sales increase

which, in turn, increases sales revenue. According to graph 2, (see appendix) this has led to an increase in mobile money values (Ssettimba)

Clearly the data from table 1 and table 2 highlights an increase in the value of mobile money transactions due to the increasing mobile services that are integrated into banking systems. This supports my earlier thesis going into the essay that the synchronization between mobile money systems into banking systems has been a major factor in improving the welfare of businesses in Uganda. However, with the growing customer base of the mobile money system, there are still a few noticeable drawbacks of the mobile money system in the improvement of business growth. The major drawback is the introduction of the new taxes (as a government tactic on meeting 16.2 trillion Uganda shillings in the 2018/2019 fiscal year) such as the mobile money tax on deposits, withdrawals, transfers and payments and the Over the Top tax (OTT).

This raises the argument whether the mobile money system is really benefiting the welfare of businesses in Uganda. Though the data from both tables is true and accurate, it may not be a holistic measure of overall welfare because using sales revenue as a measure of success because it doesn't account for expenses which include taxes. Considering the different sides of this argument, I formed a SWOT analysis of the mobile money system of one of Uganda's telecommunication giants, MTN. This business analytical tool will help me to have a general understanding of whether benefits of the synchronization of mobile money systems outweigh the drawbacks.

SWOT analysis of MTN mobile money services.

<u>Strengths</u> <ul style="list-style-type: none">• Synchronized mobile money services• Large customer base• Increased accessibility• Low charges on transactions	<u>Weaknesses</u> <ul style="list-style-type: none">• Mobile money and Over the Top tax.• Lack of reliable records in case of review.• Risk of swindling since mobile money deposits and withdrawals don't go on within banks.
<u>Opportunities</u> <ul style="list-style-type: none">• Providing services to remote areas• Digitalizing services	<u>Threats</u> <ul style="list-style-type: none">• Lack of interoperability (Each telecom company having its own mobile money network)

Taking a closer look at this SWOT analysis, MTN's mobile money services has a good number of strengths which include; synchronized mobile money services such as mobile banking, government payments which, in turn, increases customer accessibility to services. This would hence increase MTN's customer base and improve customer loyalty. One of their greatest strengths is that MTN place low charges on transactions. MTN has some opportunities for growth which include; increasing accessibility to remote areas in Uganda which would enlarge MTN's customer base. And the other opportunity they require to address the most is to increase digitalization of services allowing customers to carry out more operations on their own rather than relying on mobile money agents.

Examining the SWOT analysis on MTN's mobile money services, it has quite a number of weaknesses within the system. One of their biggest weaknesses is largely not of their creation, but rather due to government taxes as mentioned earlier. The OTT tax has been a hindrance for communication between customers and businesses as it required to pay this tax before performing most transactions. Another weakness is the lack of reliable records/documentation of transactions that occurred in the past. In case of review, this could be a hindrance in providing information that MTN can use for re-evaluation. MTN and other companies in Uganda could take a leaf from multinational companies like World Remit to greatly improve their services in this area. Security of money kept on someone's bank account needs also to be increased as it improves on customer confidence in the system. There has been incidences of customers losing their savings through unscrupulous means of fraudsters working with mobile money agents. Lastly, one of the weaknesses is the risk of swindling because transactions occur in mobile money agent kiosks and so there aren't any legal methods of checking for counterfeit notes etc. Currently, the counterfeit notes can be checked and noticed with the design of the notes.

The biggest threat to MTN's mobile money system is the lack of interoperability. This is where different telecommunication companies have different mobile money systems that operate independently. This leads to difficulties in carrying out transactions with people that use a different mobile money system because it would require the person to have a secret code to complete the transaction.

Overall, the strengths and opportunities of the mobile money system outweigh the weaknesses and threats. With the increasing digitalization of services, weaknesses such

as the lack of reliable records are reduced because of possibility of using digital records for review rather than hardcopy records. Telecommunication companies have already begun to take action to tackle the main threat which is the lack of interoperability. For example, it is now possible for Airtel users to send mobile money to MTN users without the struggles of a secret code that was required in previous case to receive the money but MTN users cannot do the same. This then solidifies my thesis statement that the ongoing synchronization between the mobile money system and the banking systems is a great factor that has led to the growth of businesses in Uganda. (Ssewankambo)

In conclusion, the ongoing synchronization between the mobile money system and the banking systems is a great factor that has led to the growth of businesses in Uganda. Though the mobile money system still faces some challenges today, the integration of mobile money services into banking services has greatly had a positive impact on the welfare of businesses in Uganda.

SECTION 2: *How this integration has improved the ease of business transactions?*

With new mobile money services emerging from the ongoing synchronization of mobile money services with banking services, business welfare has been boosted due to a number of different factors. One of the major factors in enhancing business welfare is the way synchronization of mobile money services with banking services has improved ease of business transactions. This has led the increase in brand loyalty which has improved the brand image of several prominent telecommunication companies. This integration has improved the ease of carrying out business transactions in different aspects which are; time, costs, reliability and convenience.

As mobile money services are continuously being synchronized with banking services, this has led to the increasing digitalization of mobile money services. Due to this, the speed of transactions has increased which, in turn, has increased the sales volumes of businesses. Time taken to carry out transactions has reduced because customers do not need to move to banks to deposit, send money to their bank accounts. Hence this reduces time spent by customers when travelling to banks and waiting in a long queues to make withdraws or deposits. This has led to an increase in sales volume because there are more transactions going on within the same time and transactions will not be hindered by bank holidays.

The ongoing synchronization of mobile money services with banking systems has improved the ease of business transactions by reducing costs incurred by customers. With the increasing digitalization of mobile money services, business transactions have been easier because customers do not need to spend money on unnecessary things.

For example; with the new mobile banking service, customers do not need to spend money on transport travelling to banks to withdraw, transfer and deposit money. Before the synchronization of mobile services, statutory payments (such as Taxes) and government payments were required to be paid in government offices or banks. But with the integration of mobile services into banking services, such transactions can be done anywhere reducing transport costs. This has led to an increase in the customer base for telecom companies.

With the increasing synchronization of services, business transactions have become easier because of improved reliability. As mobile money services are continuously synchronized with banking services, customer trust has improved which has enhanced brand image. Due to the increasing digitalization of services, transactions are safer to conduct without any risks of fraud because of the use of digital records in place of hardcopy records. This has improved customer loyalty because of the trust customers have for the telecom companies and hence has improved their brand image. With synchronized mobile money services, transactions are much safer for customers. This is also because of the agent licenses that assure customers there will be no exchange of counterfeit notes. Hence, with a better brand image their customer base will increase which will boost the sales volume of the telecom companies.

The ongoing synchronization of mobile money services has led to increased accessibility of mobile money services to customers. This has improved convenience for customers when carrying out transactions. This has been through the exponential increase in mobile money branches (kiosks) and mobile money agents throughout Uganda. This in turn has increased the number of people that have access to banks because mobile money agents

are trained to teach customers how to use banking services that are integrated with the mobile money system. This will then increase the customer base of telecommunication companies which would hence increase sales volume.

Similarly, with the synchronization of mobile services, the convenience for customers to carry out transactions has improved because it allows long distance trade (e.g. cross-border trade). Customers are able to do long distance trade without moving to banks. This has improved the brand image of telecom companies. Online shopping companies such as Jumia and Kikuu that allow people to use mobile money to for transactions has improved convenience for customers that don't have bank accounts.

Through innovative technology, the mobile money systems operations not only improve ease of transactions for customers, but has also improved welfare of businesses. With synchronized mobile money services costs of salaries/wages are reduced which would help maximize profit earned by telecommunication companies. According to Ivan Ssettimba's data (see table 2), this proven by the increase in sales volume every year up to 2015. This is because of the ongoing synchronization of mobile services which has improve the brand image of telecom companies hence increasing their customer base. A greater customer base leads to an increase in the sales volume of businesses in Uganda which matches with Ivan Ssettimba's data (see table 2). (Ssettimba)

On the other hand, the synchronization of the mobile money system has improved the ease of business transactions but not necessarily improved the welfare of businesses. Using innovative technology to synchronize mobile is expensive which would require telecom companies to use price skimming to reimburse money spent in research and

development. High charges would not favor customers of lower classes which could cause brand switching or rebuttal to use mobile money services. This would depreciate the brand image of telecom companies. Possibly, the efforts of telecom companies to improve ease of business transactions could have negative effect to the welfare of a business. As a long-term investment, the digitalization of mobile money services to improve the ease of business transactions is a profitable choice of action for telecom companies.

In conclusion, the digitalization of the mobile money services because of the synchronization of mobile money services with banking services has improved the ease of business transactions. While examining the different factors of how synchronized mobile money services have improved ease of business transactions, it became clear that it has led to a greater brand image for telecom companies. Though it still has its negative effects, the positive side of the synchronization is worth the long-term investment for telecom companies. After analyzing how the synchronization has improved ease of business transactions, it is clear that the integration of mobile money services into banking services has greatly boosted business welfare.

SECTION 3: *How this has improved business welfare?*

The ongoing synchronization between the mobile money system and the banking systems has greatly improved the ease of business transactions, which in turn, has pushed the welfare of businesses to a higher level. This has all been part of a goal to enhance financial inclusion which would hence increase sales volume. To achieve such a goal, telecom companies have been digitalizing mobile money services to synchronize the services with banking services. This would hence improve the ease of business transactions. This ease of business transaction has been a major factor that has led to the great improvements of business welfare in Uganda

The synchronization of mobile money services into banking services has improved the sales volumes of different businesses. This has been due to the increased accessibility of mobile money services with more mobile money agents spread throughout the country. The increased accessibility of mobile money services has then led to an increase in customers which has increased the sales volume. This trend can be seen in graph 1 where there is an exponential growth in the mobile money transaction volumes caused by the growth in registered customers.

As the ongoing synchronization between mobile money services and banking services has improved the ease of business transactions. The customer base of telecom companies has grown exponentially due to the improved services as shown in mobile money payment analysis (see graph 1). As shown in the graph 1, the volumes of mobile money transactions have greatly increased with the growth of customers. With new simplistic services like paying bills using mobile money, people that live in remote areas

without banks are using such services hence increasing the customer base of telecommunication companies. Companies like Jumia and Kikuu that allow online shopping payments with mobile money have had an increase in customers because they have access to a larger group of customers living in different cities within the country. (Bank of Uganda)

One significant way the synchronization of mobile money services with banking services has greatly improved business welfare is it exposes business to new locations because of services that provide long-distance trade. Most businesses now use the growing community of mobile money users to provide capabilities for long distance trade payments using mobile money. This allows mobile money users that are not located within the office centers of the business to carry out transactions increasing the customer base of businesses in the process. This could lead to expansion of businesses to new locations due to high demand and a large customer base.

Another major way the synchronization between mobile money systems and banking systems has improved business welfare is cost reduction. With the wide reach mobile money agents countrywide, banks are able to capitalize on such benefits to introduce services such as mobile banking. This would hence reduce the costs of building brick buildings for banks. For small scale businesses, synchronized mobile money services have reduced employment/training costs because they would not need to employ or train cashiers because synchronized services have improved the ease of business transactions. This reduction in costs allows the service provider to maximize profit.

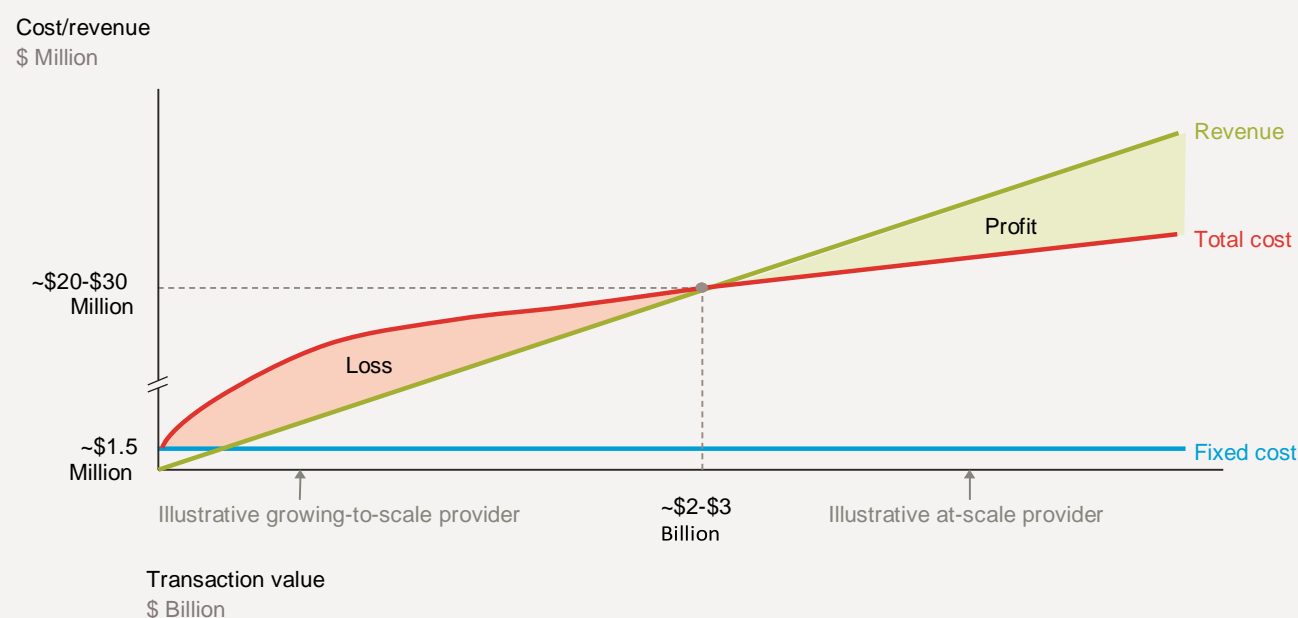
According to a report released by Global banking, by creating digital finance services, mobile money service providers are able to reduce costs by \$400 billion annually. After analyzing transaction values and costs of multinational telecommunication companies (In Uganda's case could possibly be MTN, Orange/Africell etc.), they created a break even analysis of estimated costs and revenue. (Kwaako, Singer and White)

Break even analysis of multinational telecom companies

Exhibit 1

Mobile money providers must achieve scale to be profitable.

Provider cost and revenue with scale



¹ Transactions include both CICO + digital counterparty transactions.
Source: Aggregated provider data; McKinsey analysis

Taking a closer look at the break even graph above, most multinational telecom companies providing mobile money services start making profit once they make approximately \$3 billion in transaction values. According to an article from New Vision, MTN's transaction values in the year of 2015 was \$4.5 billion. Telecommunication

companies in Uganda require a fixed investment for the mobile money services operations. As more revenue flow into the system, unit costs continue to decrease. As time goes by, the most significant fixed cost is only the IT infrastructure required for operations. While service providers grow, costs in sales and marketing reduce as customer awareness increases via below the line methods such as word of mouth. (Kwaako, Singer and White) (New Vision)

On the other hand, with a great monetary input in the IT sector of the mobile money service providers and businesses. It would place the telecom company to either increase charges on transactions to compensate for research and development or maintain current rates to improve their brand image. Increasing charges would discourage lower class customers reducing sales volume. Maintaining their current charges means the telecom company may break even after a very high amount of transactions creating losses for the service provider. Businesses

In conclusion, the synchronization of mobile money services with banking services has greatly improved the welfare of businesses in Uganda with a great number of beneficial improvements. Though there are a few challenges with maintaining the system, as the sales volumes of businesses increases costs will decrease and over time fixed costs become less of a burden. Overall, the advantages the synchronized mobile money systems have on businesses immensely outweigh the potential drawbacks.

CONCLUSION

Since the introduction of the mobile money system in Uganda, telecom companies began a ceaseless search to improve its financial capabilities. This led them to begin synchronizing mobile money services with banking systems to provide the growing numbers of people with telephones an alternative to handling money. This synchronization created a new set of services such as mobile banking and merchant payments that changed the customer perception of this service. This evolution in the mobile money system immensely improved the ease of business transactions both for customers and businesses. The synchronized mobile money improved the ease of transactions by improving the following; time taken carrying out transactions, customer reliability on business, convenience of carrying out transactions and reduced costs incurred by customers. The integration of mobile money services into banking systems also boosted the welfare of businesses in Uganda. It boosted the sales volume of businesses, their customer base, it reduced unit costs and exposed businesses to new locations. Looking at MTN, a major benefactor of the mobile money system, this system has a significant number of strengths and opportunities outweighing the weaknesses and threats. This is because such businesses have been quick to incorporate these services into their companies which have enabled businesses to stay ahead of competition and increase customer awareness. Naturally, this essay acknowledges that the general interpretation and that the data based approach followed here ignores the individual perspectives of businesses that may yet challenge the points raised in this essay. This essay also doesn't acknowledge external factors such as population growth, improved services, and the evolving banking sector to accommodate and keep pace have contributed to the rapid growth of the mobile banking and services sector growth.

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Appendices

Table 1: Current Mobile Money Services offered in Uganda. (2016)

Product/Service	Status
Domestic Transfers	Live
Merchant Payments	Live
Statutory payments (Taxes)	Live
Bulk payments	Live
Micro loans and savings	Pilot
Group wallets for SACCOs	Pilot
Cross border	Live
Mobile banking	Live
Government payments	Live

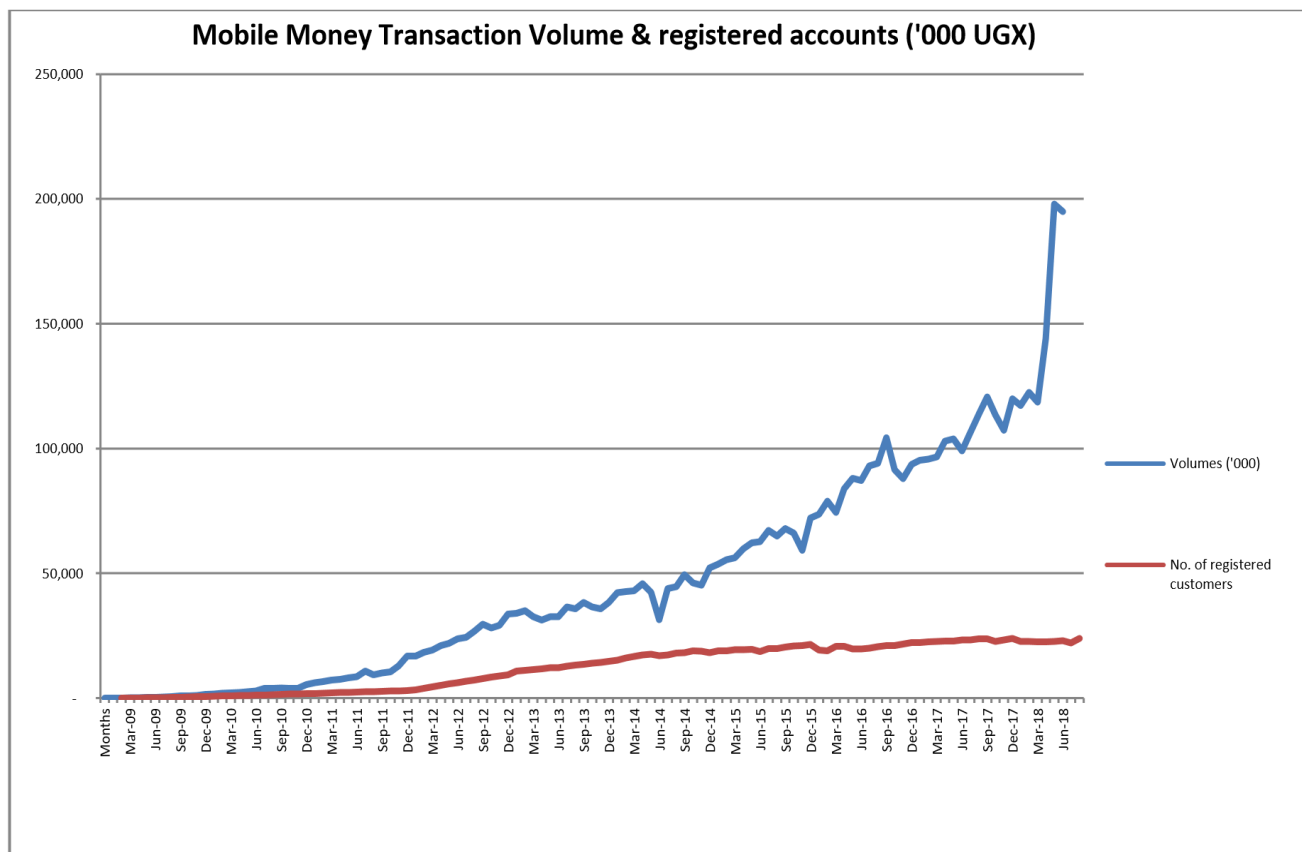
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Table 2: Number of registered customers and volume & value of mobile money transactions in Uganda. (2009-2015)

	2009	2010	2011	2012	2013	2014	2015
Registered customers (millions)	0.6	1.7	2.9	8.9	14.0	18.5	21.1
Number of transactions (millions)	3	29	88	242	400	496	693
Value of transactions (billions)	133	963	3,752	11,663	18,982	24,050	32,506

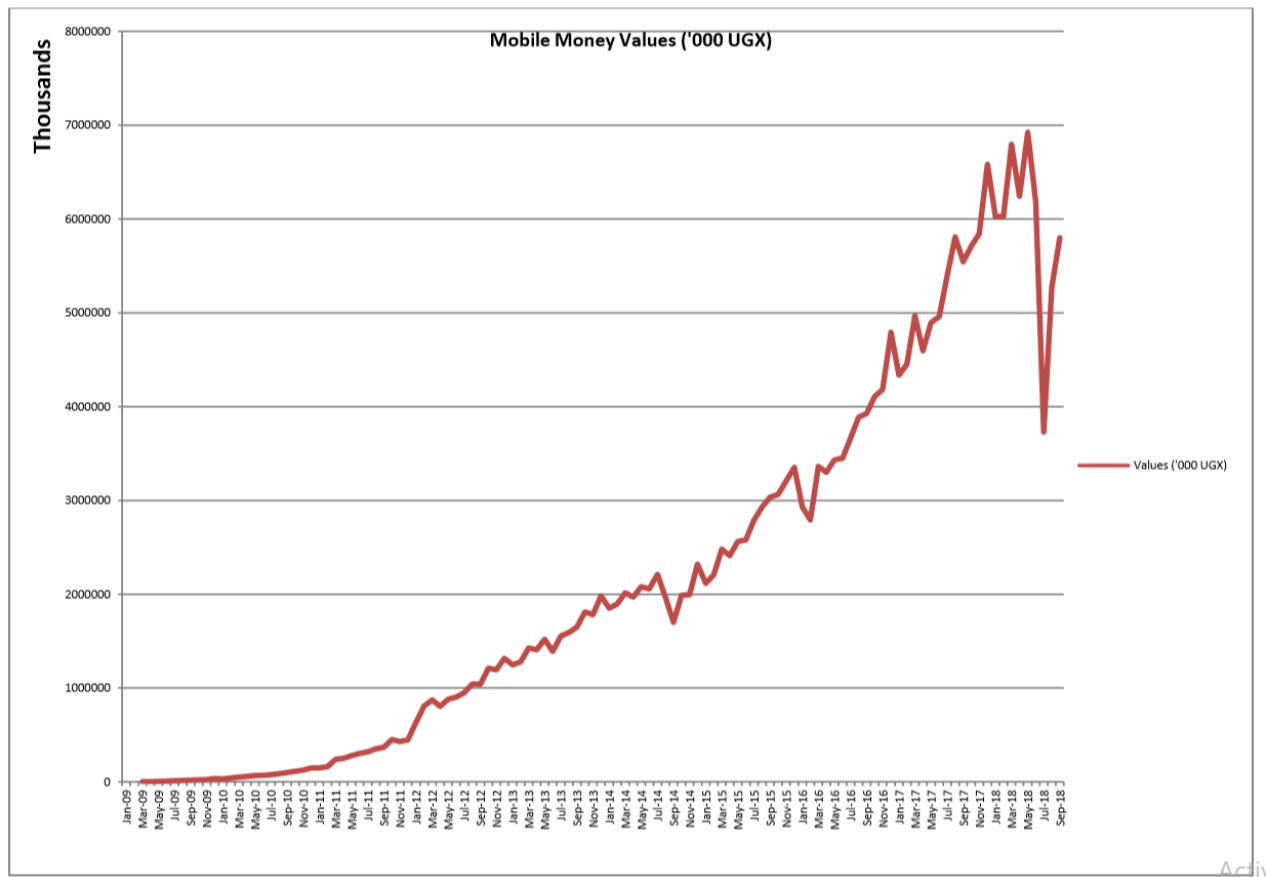
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Graph 1: Mobile money payment analysis



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Graph 2: Mobile money values in Uganda



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