# Abbreviations & Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNS</td>
<td>TechnoServe</td>
</tr>
<tr>
<td>DUKA</td>
<td>A Micro Retail Merchant who sells FMCG Products</td>
</tr>
<tr>
<td>POS</td>
<td>Point of Sale System</td>
</tr>
<tr>
<td>Smart DUKA</td>
<td>A program implemented by TechnoServe funded by Citi Bank and Elea Foundation to enhance the business capacity of micro enterprises.</td>
</tr>
<tr>
<td>DUKA POS</td>
<td>A mobile POS developed and owned by Buymore Ltd that enables microenterprises to run book keeping activities at their outlets</td>
</tr>
<tr>
<td>FSR</td>
<td>Field Support Representative</td>
</tr>
<tr>
<td>MFI</td>
<td>Micro Finance Institution</td>
</tr>
<tr>
<td>FIs</td>
<td>Financial Institutions</td>
</tr>
<tr>
<td>Fintechs</td>
<td>Financial Technology Firm</td>
</tr>
<tr>
<td>FMCG</td>
<td>Fast Moving Consumer Goods</td>
</tr>
<tr>
<td>CAK</td>
<td>Communication Authority of Kenya</td>
</tr>
<tr>
<td>GSMA</td>
<td>Association is a trade body that represents the interests of mobile network operators worldwide.</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>MNO</td>
<td>Mobile Network Operators</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

**EXECUTIVE SUMMARY** 2

**INTRODUCTION** 4
- Smart Duka Program 4
- Smart duka program partners 5

**BACKGROUND & OBJECTIVES OF THIS CASE STUDY** 6
- Gaps identified by the Smart Duka Program 6
- Identifying a Tech Partner 8

**OBJECTIVES OF THIS CASE STUDY** 8
- PILOT SCOPE 9
- Timelines 9
- On Boarding of Dukas 10

**KEY FINDINGS** 11
- Constraints 12

**RECOMMENDATIONS** 14

**VALUE PROPOSITION TO STAKEHOLDERS** 15

**CONCLUSION** 16
- APPENDIX 1.1 17
- APPENDIX 1.2 24
The Kenyan retail sector is the second most developed in Sub-Saharan Africa (after South Africa) with 30% of total revenue coming from formal retail sector and generating annual revenues of $26B (A.T. Kearney Global Consumer Institute, 2016). The retail sector is a key priority area in Kenya Vision 2030 economic pillar as it contributes to 30% of the Kenyan GDP and 50% of employment in both formal and informal establishments (Kenya Vision 2030, 2008).

The informal retail sector in Kenya takes the larger share generating 70% of total retail revenue with 95% of all retail shoppers in Kenya frequenting Dukas to stock up day to day products while frequenting supermarkets only once in a month (Nielsen 2015). This shows the critical role Dukas have in making everyday products accessible to millions of Kenyans on a daily basis.

Despite the fact that micro retail accounts for 70% of all retail sales in Kenya, this segment has largely been seen as a low skill and low pay sector for generations – with very limited support from key players such as government, manufacturers & Financial Institutions. These key players have been unable to formalize the micro retail sector and in the process build the business capacity of the entrepreneurs running these Duka outlets.
The Smart Duka Program, implemented by TechnoServe and funded by Citi Foundation & Elea Foundation for Ethics in Globalization was designed to address these challenges. The program has been building business management skills of Duka owners across 10 different regions within Nairobi.

During the implementation TNS identified the following limitations; inefficient record keeping and inventory management systems, Loss of sales as Duka owners close shops to replenish stock from local wholesalers who are often located far away from their shops. In addition, since informal retail sector is 98% cash, it has led to high levels of insecurity and lack of financial discipline which negatively affects the welfare of the Duka owners,

To sustainable solve the gaps identified above, introduction of digital solutions is critical. Kenya has one of the highest mobile penetration rates in Africa; with 88% of Kenyans owning a mobile phone (CAK, 2015), and 60% of those devices being smart phones (GSMA, 2017). The high mobile penetration in Kenya presents a great opportunity for technology companies to reach this segment by building mobile based tech solutions. To leverage on this widespread mobile penetration TNS partnered with Buymore POS to pilot an android based application (DUKA POS) to help Duka owners capture sales, manage inventory & track goods sold on credit.

Pursuant to this goal, TechnoServe through the Smart Duka Program conducted a 10 month pilot study on 31 Duka owners. Being a new concept, the pilot focused on small pool of Duka owners to provide knowledge and lessons before rolling out to a large pool of Duka owners. Throughout the pilot, the program got key insights on retail sector trends including; Duka owners on average serve up to 145 customers on a daily basis, Dukas make an average of 10-15% profit margins & identified best performing products in the Dukas.

From the pilot, TNS also found the significance of the financial data that was generated through the digital platform. For instance, manufactures, market research firms and distributors can use the data to get detailed market intelligence on consumer trends to make policy & FIls/MFIls can use the financial data to extend credit to Duka owners by developing customized retail financial solutions.
TechnoServe is an international non-profit organization that provides business solutions to poverty by connecting enterprising people to information, partners and markets. Since January 2016, TechnoServe has been working to increase the profitability of 840 high potential mom and pop shops in Nairobi-Kenya through a program called Smart Duka.

In partnership with Elea Foundation for Ethics in Globalization and Citi Foundation, the Smart Duka Program builds on the success of a similar effort in Bolivian and provides shop owners in Kenya with the knowledge, training and tools to significantly improve their incomes. The program, currently in its 3rd year of implementation has trained over 700 DUKA owners in 10 informal settlements within Nairobi on key business management skills.
SMART DUKA PROGRAM PARTNERS

Citi Foundation seeks out opportunities to help address societal challenges that impact our clients and communities, including enterprise scaling, job creation and readiness, affordable housing and protecting the environment through sustainable growth.

-------------------------------

Elea Foundation for Ethics in Globalization exists to fight absolute poverty through entrepreneurial means, capitalizing on the benefits and opportunities of globalization. We aspire to be a role model organization with charisma in the field of entrepreneurial philanthropy.

As a professional and active investment manager, we create measurable, lasting impact. We strive to be the partner of choice for social entrepreneurs and philanthropic investors, and to provide an attractive platform for ambitious, talented professionals.
BACKGROUND & OBJECTIVES OF THIS CASE STUDY

Gaps identified by the Smart Duka Program

The Smart Duka Program has been building the capacity of Duka owners with a focus on three key areas:

- Capacity Building Initiatives e.g. business training
- Networking & business associations
- Adoption of innovative digital technology

One of the Key challenges identified by the program as the lack of appropriate digital solutions designed for the micro retail sector. This meant that most Duka owners operated their shops with limited information on the financial performance of their business. For instance, in a market of about 160,000 Dukas (Nielsen), and estimated 65,000 (41%) capture and store sales and expense data manually, and a further 87,000 (54%) do not capture or store any form of transactional data.

As a result, Dukas find it very difficult to scale their businesses and often suffer from operational challenges that threaten the entire fabric of their enterprise. Together with its partners, the Smart DUKA program set a goal of exploring the introduction of practical and innovative digital solutions that enable for more efficient inventory management and adoption of mobile payments within Dukas.

To facilitate this, the Smart Duka Program conducted an in-depth analysis on the digital needs of micro retailers and identified FOUR key areas that digital technology can assist Duka owners to run their businesses more efficiently.

Record keeping booklet of an average Duka owner in Kenya
These areas are outlined below:

**Record Keeping** - 90% of the shop owners who currently participate in the Smart DUKA Program use traditional record keeping methods, (i.e. either manual ledger books or don’t record any transactional data). The manual books get lost or become tattered which affects the quality and use of data recorded.

**Inventory Management** – most shops owners do not take stock of their inventory and hence cannot account for the value of their stock or manage their inventory which leads to expiries or dead stock.

**Cash Management** - 98% of all transactions at Dukas are cash based and this leads to insecurity – cash thefts, cash misuse, poor cash management and a lack of proper accounting of how money was spent.

**Ordering System** - majority of Duka owners source for 75% of the products they sell from wholesalers and distributors often located far from their shops. This means that on a daily basis they have to close shops for an hour or two to get products from wholesalers, and this leads to lost sales, time wastage and high transportation cost. This need analysis presented a framework of what was needed in a digital solution for it to be viable to Duka owners. Moreover, the program was cognizant of the fact that this solution needed to be one that was designed to work for the average micro retail owner. To further cement the importance of digital gaps in the micro retail sector, in a workshop organized by Smart Duka Program that brought together key stakeholders in the retail sector, panel members highlighted the importance of digital solutions in the retail sector:

“*What elea would like to see the most is the ecosystem coming together to connect the dots and enable all sorts of disruptive digital innovations and models that are going to be a tremendous source of additional power and development capabilities of the informal retail sector*."

  *Adrian Ackeret, Elea Foundation for Ethics in Globalization*

“*Citi Bank will help in the digitization of the micro retail sector to make the sector more efficient for all partners and give visibility to a major part of the retail sector that has been left in the dark for so long.*”

  *Joyce-Ann Wainaina, CEO Citi Bank East Africa*

“*Digital technology will play a big role in the way micro retailers conduct their businesses. Specifically, mobile technology has the technology to bridge significant gaps that exist and hinders the growth and skill of micro retailers. This technology should be tailored to the uniqueness of the micro retailers and will go a long way in helping them capture their daily transactions, keep proper records, connect with suppliers, monitor credit, manage and interact with their customers as well as help in managing inventory. This is the technology that will transform the informal retail trade and enable a thriving in formal retail sector.***

  *Dr. Julius Kipngetich – Former CEO & Director Uchumi supermarkets Ltd.*

Having identified the gaps, the program identified and approached different technology companies that had solutions that would address.
Identifying a Tech Partner

After approaching various tech companies and matching the products they had in comparison with the identified gaps, the program settled on, and partnered with a startup called Buymore (located at the Strathmore University Hub) to explore this opportunity by independently testing and deploying their existing POS product to shops participating in the Smart Duka Program.

ABOUT: Buymore Limited

Buymore is a tech startup that specializes in providing digital solutions that empower merchants in the retail space to better manage and scale their businesses to the next level. Our flagship product is a mini ERP solution called Buymore POS (Point Of Sale) that enables retail merchants to capture sales and purchases, record expenses, accept mobile money and manage inventory.

Buymore has worked with over 750 small businesses in the retail space in the last 2 years (www.buymore.co.ke)

OBJECTIVES OF THIS CASE STUDY

The case study aims to evaluate and document the digital solution used by Smart Duka participants to assist them in record keeping & inventory management, identify lessons learnt and how such solutions and data generated can be useful to various retail stakeholders in Kenya.

This report highlights the success and challenges of the pilot, key findings on what it takes to deploy a digital solution in the micro retail space as well as a proposed way forward on how to scale the solution to more Duka owners and other stakeholders.
PILOT SCOPE

Timelines

The pilot took place between October 2016 and July 2017. 31 Smart Duka participants were recruited to join the pilot. The 10-month period was broken down as follows:

- 3 months for consultation with Duka owners – process mapping and product development (Conducted by Buymore)
- 7 months for Buymore and TechnoServe to jointly run a pilot that would test the DUKA POS across micro retail outlets in Nairobi

In the first month, October 2016, TechnoServe mobilized Duka owners to attend town hall meetings for consultations. These consultations focused on:

- Understanding the key challenges faced by Duka owners
- A demo of Buymore’s existing POS solution
- Review of mockups of what an improved solution would look like
- Insights from DUKA owners on what features of the Buymore POS they find most useful.

These consultative sessions were a critical part of the program as we were informed on what kind of product was required and envisaged by Duka owners and most importantly it was a useful platform to validate the key assumptions we had. In the 2nd and 3rd month Buymore developed an app that would address the gaps identified. As a result, the final product to be rolled out (DUKA POS) would have the following key features:

- Capture sales and purchase records real time
- Monitor and manage inventory
- Provide profit and loss statements to Duka owners

In addition, the Smart Duka Digital Program developed various tools that were used in the pilot and are critical to the deployment of a digital solution in the micro retail space. Examples of these tools include:

- A master inventory list
- A criteria to selecting Dukas eligible for the pilot
- Metrics used to measure the activity and productivity of a digital solution among micro retail merchants.
ON BOARDING OF DUKAS

The program developed a criteria of recruiting Dukas who would join the program. The criteria was as follows:

- Have an android based smart phone
- Undergo a week long training on the app and further follow ups in the future
- Carry out a stock taking exercise to establish the quantity and prices (buying & selling) of all products in the Duka

Because the pilot was non-funded (both parties catered for their own costs), we settled on running a pilot for a small number of shops to allow for proper support and ease of monitoring. We initially settled on 15 shops, however, demand to participate in the pilot from Dukas was high and 65 Dukas showed a strong interest to participate.
KEY FINDINGS

ACHIEVEMENTS

a. **Determining daily sales & profit margins as a result of utilizing the Duka POS**

Over the course of the pilot, Dukas captured an average 69% of all their sales transactions and as a result, they were able to view and analyze the sales reports at the close of each business day. Before the POS, Duka owners were not capturing the individual transactions and were therefore forced to rely on cash at hand at the end of the day to estimate their sales. The POS improved this process by enabling them to now account for both cash at hand and a breakdown of the products sold. This enabled them to quickly understand which products contribute most to their revenues. In addition, using the Profit and Loss module in the POS, Dukas were able to determine their profit margins on a daily basis. This feature helped them to prioritize stocking of items that bring in the highest margins.

b. **Efficient Inventory Management**

The average product range in a Duka is estimated between 300-600 unique items. From this numbers, roughly 45 items are sold on a daily basis, 62 at least once a week and 39 at least once a month. This represents a range of 149 items sold month on month. This means that Dukas are holding up cash which could be used as working capital. At the same time, a small percentage of this stock, roughly 8% often expires on the shelves and this runs into losses for Dukas.
The POS solved this challenge by enabling Duka owners to monitor goods with the highest turnover or those that sold regularly versus those that did not. Moreover, they were able to determine their stock levels at any given time, and were also able to use the stock module as a reference before making purchase orders.

c. Debtors Management
At least 23% of the Dukas that used the product were able to recover 30% more from credit sales. As reported by FSD Kenya, 10% of all Duka sales in Kenya are done on credit. This segment of the market is one of the nation's biggest lenders. The DUKA POS significantly improved debt collection by enabling Duka owners to digitally record debtors.

d. Increase in transparency and accountability
Given that most Dukas are family owned, using the DUKA POS transparency in the family business helped keep the family united. The partners (mostly husband and wife) were able to use the inbuilt sales reports to be accountable to each other when they operated their different shifts. The POS also provided a reference which would enable them to analyze their sales patterns and growth of the business.

CONSTRAINTS

a. Limited access to the smart phones
Devices were the major constraints in implementing the pilot. Multiple challenges around devices inhibited us from either signing up more Dukas, or sustaining some of those who had signed up.

These are some of the constraints we encountered:
• 18/31 merchants who participated in the pilot had unique/different android brand devices. Because of a limited budget, the product was only tested across 3 unique devices. As with any other android product, the DUKA POS application reacted differently to the different devices. The user experience was not streamlined across all the merchants, and as a result we had a total of 13 specific device related bugs. This led to a churn rate of 7 merchants.

• 34 Dukas who had expressed a strong willingness to use the product either had no smart phone device or had devices with outdated android versions which could not run the application. This means that we were not able to sign up 52% of the merchants who wanted to participate in the pilot.

b. Minimal use of DUKA POS during peak hours
Most of the merchants who signed up for the pilot and used the DUKA POS had low end smart phone devices and as a result scanning products as a way of capturing sales was difficult. After rolling out the product, we quickly realized that there was low usage during the peak times. Most Dukas operate 12-15 hours a day, but make 64% of their sales during a 5 hour period in the course of the day:
During these peak times, Duka owners have an average of 90 seconds to serve one customer and therefore it’s difficult for them to sell and manually key in sales into the POS. Buymore POS introduced a scanning feature which reduces the keying in of a sale from 40 seconds to 17 seconds. However, this feature is largely dependent on the quality of the phone camera. Most of the Dukas have entry level smart phones which have low quality cameras and hence were not able to actively make use of this feature. Consequently, capturing of sales during peak times only marginally improved for those who did not have good quality cameras.

c. Inadequate number of dedicated Duka device

For the pilot, we installed the POS on Duka owner’s personal devices. This presented major challenges – whenever the owner was not in the shop for one reason or the other, the DUKA POS was not used to capture data. The net effect is that data was captured sporadically and this greatly affected the accuracy of the product because the data captured did not give a full picture of the transactions in the shop.

d. Inadequate resources

Because this pilot was limited in resources, the program did not have enough personnel on-board to monitor product use across multiple shops. This meant that we initially limited ourselves to 15 Dukas to participate in the pilot, but because of strong interest among Dukas this number increased to 31 Dukas.
RECOMMENDATIONS

a. On boarding: Training model on product use is important

Most Duka owners are not used to operating with digital systems within their shops and thus a huge gap exists in understanding how such platforms can make managing Duka operations easier.

Therefore, extensive training is critical to ease adoption and overall success of a digital product. As experienced in the pilot, consistent use of the DUKA POS app was determined by how well training was conducted.

Our initial analysis was that DUKAs could be on-boarded and trained within 3 days. Over the curse of the pilot, it became abundantly clear that more time would need to be commit to each Duka owner to enable them fully grasp how to use a digital solution and how to extract value from it. Our conclusion is therefore, the successful roll out and adoption of any digital product in this market segment will be determined by how well training is conducted.

b. Long Term Support is Critical

Based on our estimation, early adopters of the product will need a two-month onboarding and support period to properly utilize and get acclimatized to any digital solution. This two-month period will require weekly visits from a support representative to continuously communicate the value proposition to Duka owners and monitor how they are using the product to ensure they extract maximum value.

Our analysis and interaction with Duka owners shows that:

• Most Dukas are family owned, where the principal owner is either the husband or the wife, and are from time to time supported by their children or relatives. Therefore, training on how to use the application needs to happen across all potential users for it to be effective. Multiple visits to the Duka enable facilitation of this training.

• The true value of the product for business owners is being able to generate and review long term reports. This enables them to compare and understand trends among other issues. Most Duka owners do not have the ability to properly review these reports, so from time to time we have had to run free consulting services to enable them better comprehend these reports.

• Regular visits and interactions with the Duka owners encourage consistent usage of the application. This is because Duka owners are able to ask more questions on how the app works, understand the value proposition better and set themselves weekly targets to achieve before the next visit. Therefore we can say there is a direct correlation between FSR interaction and the usage of the app by the Duka owner.
VALUE PROPOSITION TO STAKEHOLDERS

A digitally connected Duka presents real and viable possibilities to key stakeholders in the sector and also an opportunity to transform the informal retail sector as we know it today in Kenya.

For example, key stakeholders such as FMCG companies (who sell 70% of their products through micro retailers) will have access to data that enables them make more strategic decisions and get access to a more efficient supply chain that will enable them to sell more products.
CONCLUSION

The Smart Duka Digital Pilot’s objective was to provide practical and objective solutions to the micro retailers in Kenya to encourage the adoption and use of digital products to solve the myriad of challenges they face. This case study looked into the solution provided by Buymore POS; evaluated its success, challenges and ways into how various stakeholders can exploit the opportunities digital technology provides.

The key mandate of the digital pilot was to solve 4 critical gaps identified by Smart DUKA: Record keeping

- Inventory management
- Cash management
- Ordering system

Due to a variety of factors the pilot did not solve all four gaps. However it comprehensively addressed the two which are: Record keeping & inventory management. Cash management & ordering systems gaps needed a larger retail sector support from various stakeholders e.g. FIs/MFIs/MNOs which was not possible to achieve within the 10 month period.

In addition, given that the pilot was limited in resources, there were a number of limitations in conducting the pilot e.g. working with a small sample size of Duka owners. This in part was deliberate due to lack of funds to deploy and monitor a larger sample size of Dukas. Additionally, most Dukas were ineligible to participate in the program because they did not have standard smart phones that could run the application, and those that did have were personal and not business devices.
The pilot also tested the viability and appetite on the uptake of digital solutions within the micro retail sector. Most Duka owners showed willingness to pay up to $2 per month to use the product. However, whether this is commercially viable will largely depend on the business model chosen by respective investors willing to exploit the potential opportunities that exist. While the pilot worked with a small number of Duka owners, a lot of lessons & insights would be applicable on a wide rollout of a digital solution to a larger number of Duka owners. This would allow us to get more insights and data that can help key stakeholders make strategic & financial decisions and inform policies.

The program has started reaping benefits from financial data generated by the app using key insights (revenue cycles, product margins and restocking patterns of Dukas) from this pilot to develop an access to finance approach and to identify a financial partner aligned to the financial needs of Duka owners. As a result, the program is conducting a pilot with a Fintech called 4G Capital to provide mobile based loans to Smart Duka participants. The partnership which relies on data collected from Smart Duka record books has shown that a POS would be better as it would collect granular data which makes a credit scoring more accurate.

### APPENDIX 1.1

**Profile of participating DUKAs**

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>13</td>
</tr>
</tbody>
</table>

Average age of participating Duka owner: 31

Average sales revenue per Duka per day: 8,420 (70%)

Average number of customers a Duka serves on each day: 98
Douglas Kariuki, owner of Mountain Shop in Kangemi, using the Duka POS app

**USAGE STATISTICS**

**Shop – Mountain View | Owner – Douglas Kariuki**

“I can’t imagine life without DUKA POS. it has really helped me to manage my business in ways I could not have imagined before”

**USAGE STATS**

- **10,275** – Total number of sales transactions generated during the pilot
- **145** – Average number of all daily transactions (including stock and recording of expenses)
- **72%** – Percentage of total sales records captured

**IMPACT**

Discovered that his net profit margin was in the range of 10-13.8%

Was able to know with certainty how much revenue he generates on a daily basis

Able to identify his top 10 most selling products and how much they contribute to his overall revenue and profit margins
Lucy Mwangi, owner of Annita's Cake Shop in Dandora showing Adrian Ackeret of elea Foundation for ethics in globalization on features of the Duka POS app

Shop – Annita’s Shop | Owner – Lucy Mwangi

“The POS changed how I do my business. I now have something that can help me know whether or not I am in business.”

USAGE STATS
14,313 – Total number of sales transactions generated to date
92 – Average number of daily transactions including stock and expenses
100% - Percentage of total sales records captured

IMPACT
Discovered that her Gross Profit margin is in the range of 18-22%
Is able to use the POS to inform her if she achieved sales targets
Uses POS as a point of reference when restocking
DUKA PROFILE & EXPERIENCE

SHARING

An interview with Peninah Karemi of “Hope” Shop in Githurai, Nairobi Kenya on how the DUKA POS has been impactful to her business:

Please introduce yourself
My name is Peninah, and my shop is called The “Hope” Mini Shop. I am 33 years old.

What are some of the challenges you experienced running your shop before you started using the Buymore POS? And how has the POS solved these challenges?
Recording of sales was very difficult. I recorded my sales in an exercise book which got lost very easily. In addition, analyzing my sales from a book took too much time and was therefore unhelpful in determining how much money I made in the shop and which products brought in the most sales. It was also very difficult to determine profit margins, and therefore relied on estimates. However, this changed when I started using the Duka POS. I can easily capture sales in my shop and the POS would give me an accurate record of what my sales and profit margins are on a daily basis.

Were those all the challenges?
Since I stock a wide variety of products, I had no idea of how much stock I had in my shop & when they were about to expire. This meant that at times I didn’t have in stock products needed by my customers or stocked more products than the demand. This lead to loss of sales which affected my business significantly.

How has the POS solved the issue of debt management?
With the POS, I am now able to record my debtors in the app. I get reminders on when any debt is due and the amount. This helps me recover more debt from my customers which lead to more sales as I would now give products on credit and still recover.

Tell us more about how you used to manage stock before you started using the POS
Since there is quite a wide variety of products in my Duka, managing stock has been one of the most difficult challenge I have faced so far. It is hard to keep track of all products and therefore I used to keep track of products like milk and bread which are delivered on a daily basis and in low stocks. For other products, I would rely mostly on instinct and when a customer orders a product and I find out I don’t have it in the Duka commonly referred to as “kuuza hakuna” translating to “selling nothing”
How has the POS improved the process of stock management for you?
Before I started using the POS, we did a stock count of all the items in my shop and recorded it on the POS. Since each product is captured in the app, with each transaction of each product the app captures that and the POS indicates to me when the stock is about to run out. This helps me make purchases at the right time and avoid “Kuuza hakuna”. The POS has also helped me to understand which products brings in the highest profit margins and vice versa. The POS also keeps me informed on product movement and therefore rely on it to make decisions on which products to stock.

What would you say is the greatest benefit of having a POS?
I would say it is. Due to the magnitude if products sold, knowing exact profit margins manually is next to impossible. Therefore I used to rely on estimates to know my profit margins. The POS has really helped to determine my profit margins with clarity. Currently I am aware of what my profit margins are on a daily basis and this has helped me make informed business decisions e.g. what amount to save and re-invest in my Duka.

What do you use the POS to do on a daily basis?
I use the POS to capture sales, manage my inventory, record customers who take goods on credit and more importantly to know the financial performance of my Duka through various reports the app gives me access to.
**Would it be better if the wholesaler could deliver the items to you?**

Yes, that would be great for my business. Though there are few companies who deliver but I rely on local wholesalers to stock my Duka. I am sometimes forced to close my shop and visit the wholesaler which leads to time wastage and loss of sales. Delivery in shops by the different wholesalers would be a game changer.

**Anything else you would want to mention?**

To make the system perfect it would be advantageous if the POS could help me establish the value of my stock at any given time by simply tapping a button. It would also be nice if I could use the POS to order for goods from my wholesaler.

### TOP TEN MOST SELLING ITEMS

<table>
<thead>
<tr>
<th>Product Name</th>
<th>SKU</th>
<th>Selling Price</th>
<th>Quantity Sold</th>
<th>Total Sales</th>
<th>Gross Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eggs</td>
<td>1pc</td>
<td>12</td>
<td>1,221</td>
<td>14,652</td>
<td>1,221</td>
</tr>
<tr>
<td>KDF Mandazi</td>
<td></td>
<td>10</td>
<td>1,034</td>
<td>10,340</td>
<td>2,068</td>
</tr>
<tr>
<td>Safaricom Airtime</td>
<td>20</td>
<td>20</td>
<td>1,032</td>
<td>20,640</td>
<td>2,064</td>
</tr>
<tr>
<td>Maziwa Kupima</td>
<td>1L</td>
<td>65</td>
<td>1,011</td>
<td>65,715</td>
<td>15,165</td>
</tr>
<tr>
<td>F Care Diapers</td>
<td>Large</td>
<td>15</td>
<td>1,009</td>
<td>15,135</td>
<td>2,018</td>
</tr>
<tr>
<td>Fresha Milk</td>
<td>500ml</td>
<td>50</td>
<td>997</td>
<td>49,850</td>
<td>4,985</td>
</tr>
<tr>
<td>Pekee</td>
<td></td>
<td>20</td>
<td>945</td>
<td>18,900</td>
<td>2,835</td>
</tr>
<tr>
<td>Salad Oil</td>
<td>1L</td>
<td>150</td>
<td>610</td>
<td>91,500</td>
<td>3,050</td>
</tr>
<tr>
<td>Royco Cubes</td>
<td></td>
<td>5</td>
<td>512</td>
<td>2,560</td>
<td>1,024</td>
</tr>
<tr>
<td>Menengai</td>
<td>1/4</td>
<td>30</td>
<td>509</td>
<td>15,270</td>
<td>1,273</td>
</tr>
</tbody>
</table>
APPENDIX 1.2

1. Kenya’s retail spending hits Kshs 1.8 Trillion:  
   http://www.nation.co.ke/business/Kenya-retail-spending-hits-Sh1-8-trillion/996-3804314-djvOng/index.html

2. Africa: How to navigate the distribution labyrinth:  

3. Jumia Business Intelligence and GSMA Mobile:  
   White Paper 2017: Trends from the Kenyan Smartphone and E-Commerce Industry