



JUNTOS™

The Tigo Pesa – Juntos Partnership:  
Increasing merchant payments through  
engaging SMS conversations

## Introduction

**Tigo Pesa** is a leading mobile money provider in Tanzania with over 4.5 million active customers. Its first-in-market approach to innovative services such as “profit share” payments and international transfers direct into a mobile wallet provide Tigo users with a wide and growing array of financial services.

**Juntos** is a venture-backed startup based in Silicon Valley that equips financial service providers with a conversation platform to build trusting, informative relationships with their clients. This relationship lays the foundation for moving the newly banked from simple financial access to true financial inclusion by empowering engagement with new digital financial tools, the adoption of new financial behaviors and the development of lasting financial habits. This behavior change is driven by high-touch, engaging, personalized conversations designed by Juntos and delivered via SMS using Juntos’ technology platform.

Among Tigo’s many financial offerings is merchant payments. This innovative feature gives customers the ability to easily purchase goods and services using their mobile wallet in much the same way that card based payments work. Although the concept of creating economic opportunity for merchants while providing convenience and security to customers is commercially appealing, a merchant network is one of the most difficult mobile money products to launch. As mobile money payments specialist Arunjay Katakam writes, “Building an active merchant network is no small feat. It requires substantial investments in human capital and marketing, as well as laser-sharp focus from the management team. It is potentially as difficult as building an agent network.”<sup>1</sup>

Tigo Pesa partnered with Juntos to pilot the use of Juntos’ personalized two-way SMS conversations to help customers and merchants increase their comfort with, and usage of, the merchant payments feature.

Juntos and Tigo Pesa targeted multiple behavior change “KPI’s” (Key Performance Indicators) in order to determine the potential for changing customer behavior relating to merchant payments through SMS-based conversations.

The two KPIs that are the focus of this paper are:<sup>2</sup>

1. Increase the number of consumers doing merchant payments
2. Increase the number of merchant payments performed by consumers

## The Design Process

The Juntos team uses A/B testing, rapid prototyping, and data science to guide the development of engaging conversations that result in measurable financial behavior change. Before deploying in partnership with Tigo Pesa, ethnographic and linguistic research was conducted with a particular focus on what motivates and triggers users’ current financial behaviors. The research was carried out by the Juntos behavioral design team in urban and peri-urban districts of Tanzania. The centerpiece of this groundwork was a series of long, deep-

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<sup>1</sup> Katakam, Arunjay. "Setting up Shop: Strategies for Building Effective Merchant Payment Networks." GSMA Mobile Money for the Unbanked (2014): [Http://www.gsma.com/](http://www.gsma.com/). Web.

<sup>2</sup> More than two KPI's were targeted by Juntos and Tigo however the others will remain confidential to protect market sensitive information.

dive ethnographic interviews with Tanzanian users of Tigo Pesa. More informal research was also done in markets and businesses. The interviewees' habits, needs, hopes, concerns, and goals were discussed in depth in an effort to identify obstacles to the use of Tigo Pesa as a purchase mechanism and behavioral triggers that might impact increased usage.

In the second stage of the process, these findings were incorporated into the initial design of SMS conversations that aimed to first engage, then build trust with, and finally drive behavior change in users. Multiple conversation strategies were tested simultaneously on small, random samples of Tigo Pesa customers to reveal the strongest designs. Response rates were the basis of determining which strategies engaged users most, and a data science team analyzed customer transactional data and messaging behavior to determine which strategies led to the most significant, reliable behavior change.

On a weekly basis, the results of ongoing conversations were analyzed and new insights were delivered to the design team, which then produced new conversations to be tested. During the iterative design process, multiple successful conversation strategies were identified and then combined to create a set of "core" conversations that could reliably increase user engagement with the account across multiple targets over time.

Applying this iterative process to Tigo Pesa users, Juntos conducted over one hundred unique messaging design tests. Throughout the partnership, the Juntos behavioral design team assessed the outcomes of these tests and identified several different conversation strategies which significantly increased the number of consumers doing Tigo Pesa merchant payments. Due to technical disturbances during a portion of the deployment, some of the customers tested did not receive the entirety of their messaging treatment as designed. The outcomes described in this paper are for customers within a select cohort who received at least sixty-five percent of their Juntos messages, isolating the true messaging impact as Tigo and Juntos intended.<sup>3</sup>

### **KPI 1: Increase the number of consumers doing merchant payments**

One successful strategy employed was sharing the real life stories of Tigo Pesa users who had incorporated merchant payments successfully into their business or their lives. These stories were derived from both interviews and stories shared in the ongoing SMS conversations with the Juntos service and were anonymized to protect users who agreed to share their stories. When these stories were shared with those who had never used Tigo Pesa to make a purchase before, those users became more likely to start using the payment feature of their account.<sup>4</sup>

The Juntos data science team identified the impact of this conversation strategy as positive and statistically significant. It was subsequently combined with other successful strategies to create a core multi-pronged conversational approach to increasing the number of consumers doing Tigo Pesa merchant payments.

This core conversational design effectively increased the usage of merchant payments. The strategy was tested on a treatment group made up of 1,853 randomly selected customers, most of whom had never made a purchase with Tigo Pesa. It was measured relative to a control group of 4,904 randomly selected customers.

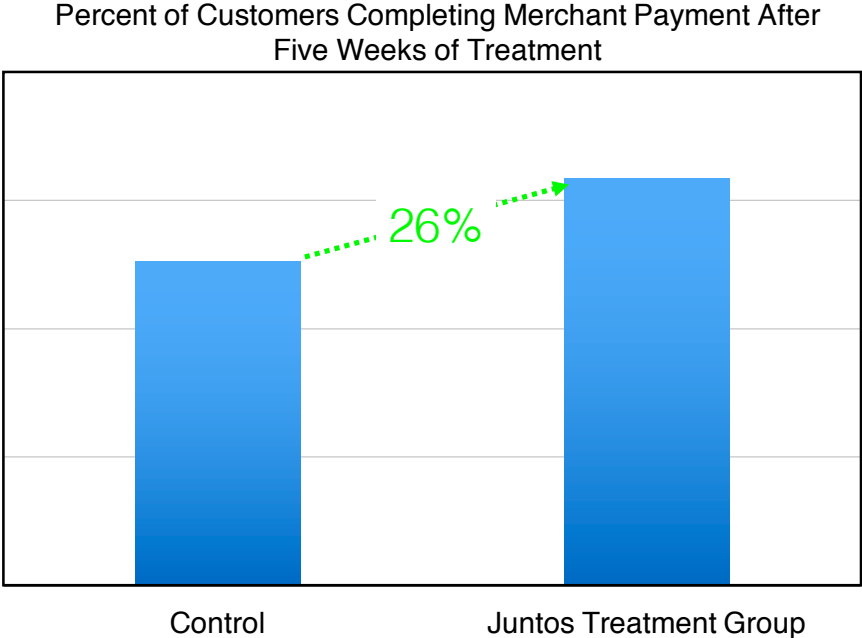
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<sup>3</sup> See appendix section 1 for results of the cohort of customers who received at least eighty percent of the intended messaging.

<sup>4</sup> See appendix section 3 for a real life example of this conversation.

Over a period of five weeks, the treatment group was messaged by Juntos and engaged in this core conversation. The control group received no communication from Juntos over the same period.

During those five weeks, the percent of the treatment group that began using merchant payments was twenty six percent greater than the percent of the control group that began using merchant payments over the same period.<sup>5</sup>



**KPI 2: Increase the number of merchant payments performed by consumers**

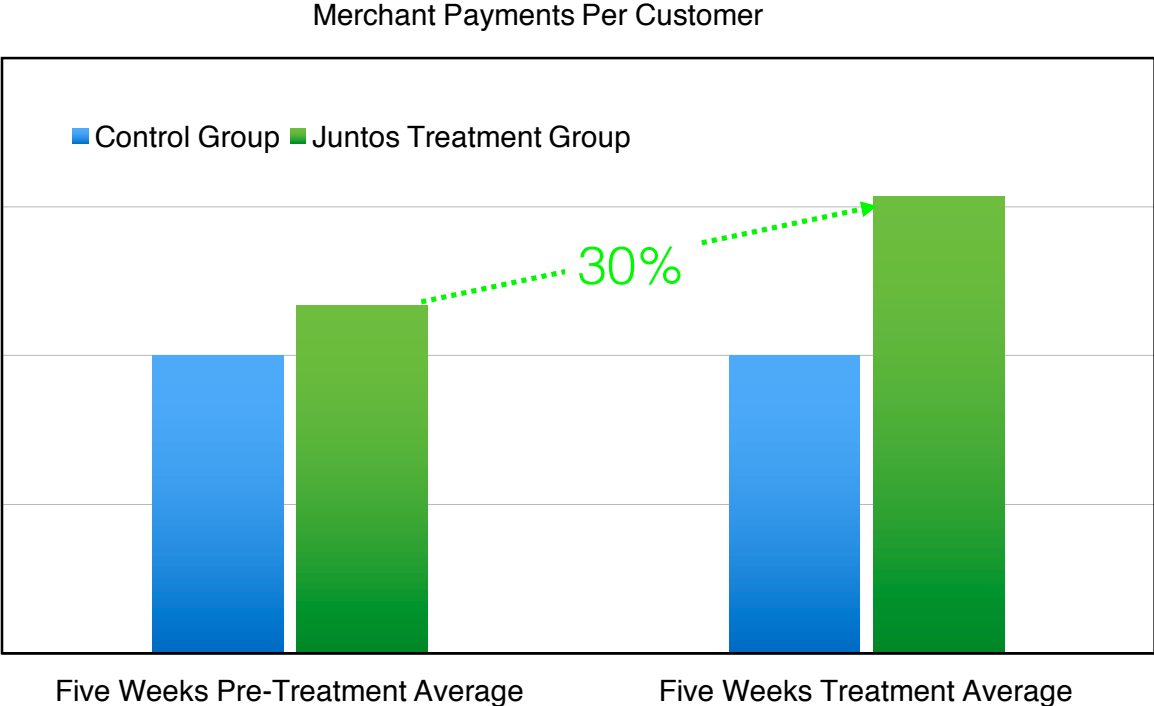
Over the course of the pilot, the Juntos team also identified several conversation strategies for increasing the number of merchant payments performed per customer.

One of these successful strategies consisted of conversing with customers about what to do with savings as a way of encouraging them to use Tigo Pesa merchant payments. Through the course of conversation, the Juntos system pointed out different ways they could spend their savings, reminding them that Tigo Pesa merchant payments is useful for unexpected expenses, weekend shopping, and longer term purchases such as housewares.

After validation by the Juntos data science team, this strategy was expanded into a core conversation for consumers. This core conversation strategy was tested by randomly selecting a treatment group of 1,870 customers and randomly selecting a control group of 4,965 customers. The treatment group was engaged with SMS conversations designed around this approach for five weeks, while the control group received no communication from Juntos during that same period.

<sup>5</sup> See appendix section 2 for details on merchant transaction increases.

Over those five weeks, the average number of merchant payments per customer in the control group remained roughly constant while the average number of merchant payments per customer in the treatment group increased by thirty percent compared to transaction levels prior to the conversations.<sup>6</sup>



### Conclusion

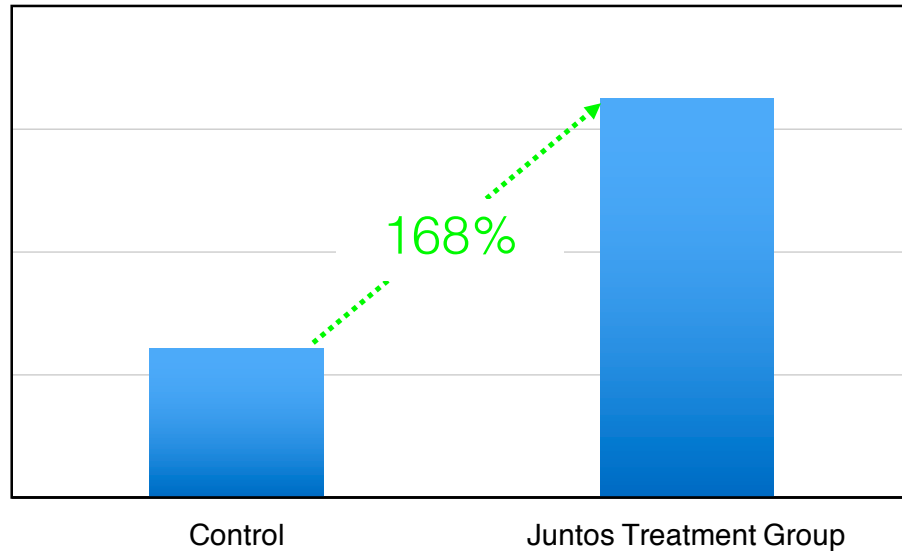
The partnership between Tigo Pesa and Juntos revealed that personalized two-way SMS conversations can help customers increase usage of merchant payments. The thirty percent increase in merchant payments per customer and the twenty-six percent higher merchant payment adoption rate compared to the control group illustrate the potential for changing customer merchant payment behavior through engaging SMS conversations. Such an impact on merchant payments has the potential to broaden economic opportunities for merchants and provide increased security and convenience for customers, financially empowering mobile financial service users.

<sup>6</sup> See appendix section 2 for details on merchant transaction increases.

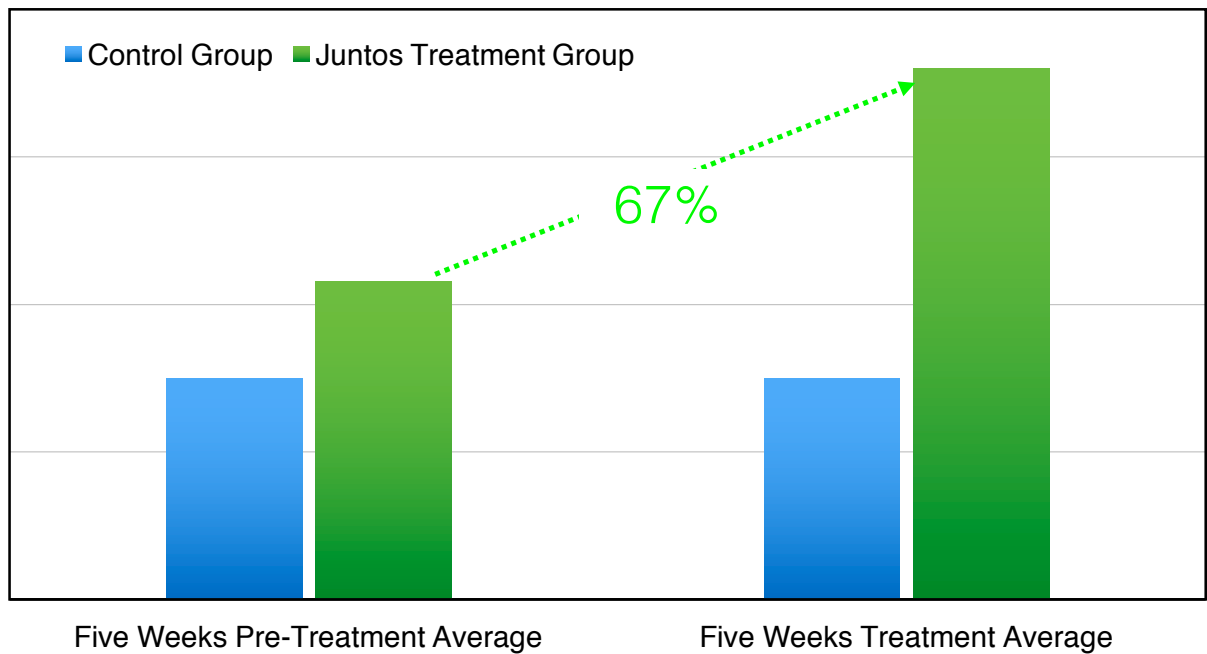
# Appendix

1. KPI Results for customers who successfully received eighty percent of designed messages:

Percent of Customers Completing Merchant Payment After Five Weeks of Treatment (80% message success rate)



Merchant Payments Per Customer (80% message success rate)



## 2. Results Details

<b>KPI 1</b>	Increase number of consumers doing merchant payments
<b>Treatment Initiation Date</b>	30/07/15
<b>Control Group Size</b>	4904
<b>Treatment/Juntos Group Size</b>	
80% message success rate	137
65% message success rate	1853

	5 weeks before 7/30 (percent doing merchant payments)	5 weeks after 7/30 (percent doing merchant payments)	Change (percentage points)	Juntos Impact (percentage)
<b>Randomly Selected Control Group</b>	Confidential market sensitive information			
<b>Treatment/Juntos Group</b>				
80% message success rate				168.47%
65% message success rate	25.71%			

Results for KPI 1 were calculated comparing the weekly average percentage of customers doing a merchant payment 5 weeks prior to treatment to the weekly average percentage of customers doing a merchant payment 5 weeks after treatment. These values are confidential due to market sensitivity. The Juntos impact was calculated as the percentage gain in the proportion of the portfolio doing merchant payments.

<b>KPI 2</b>	Increase number of merchant payments performed by customers
<b>Treatment Initiation Date</b>	30/07/15
<b>Control Group Size</b>	4965
<b>Treatment/Juntos Group Size</b>	
80% message success rate	139
65% message success rate	1870

	5 weeks before 7/30 (weekly avg payments)	5 weeks after 7/30 (weekly avg payments)	Change	Juntos Impact (percentage)
<b>Randomly Selected Control Group</b>	Confidential market sensitive information			
<b>Treatment/Juntos Group</b>				
80% message success rate				66.7%
65% message success rate	30.3%			

Results for KPI 2 were calculated comparing the weekly average number of merchant payments 5 weeks prior to treatment to the weekly average number of merchant payments 5 weeks after treatment. Similar to KPI 1, these values are confidential due to market sensitivity. The Juntos impact was calculated as the percentage that the average weekly number of merchant payments was greater for the Juntos group compared to the control group.

### 3. Conversation Examples

Friday, August 21<sup>st</sup> 2015

JUNTOS: Save time and transportation costs. Use Tigo Pesa to pay the following taxes without having to leave your business physically. Send 5 to get more information.

5

JUNTOS: Great! You can use Tigo Pesa to purchase LUKU, water, AZAM TV, DSTV, Tanzania Revenue Authority taxes or to withdraw cash from your bank account without challenges.

...

Tuesday, September 15<sup>th</sup> 2015

JUNTOS: A merchant is an expert in his field. Please send us a story on how Tigo Pesa has connected you more with your customers and we are likely to choose best practice examples to teach the rest.

I am a business man at a butcher. Many times, my customers pay me by Tigo Pesa. This enables me not to lose customers especially if they come and have no hard cash in pocket.

JUNTOS: Thanks for being a part of the merchants community that uses Tigo Pesa. We will communicate with you once your story is chosen.

...

Thursday, October 22<sup>nd</sup> 2015

Assist me to reach my goal.



Sunday, September 13<sup>th</sup> 2015

JUNTOS: Denis works hard so that he can be one of the top performing business people. One of his secrets in his mission is he usually asks his customers whether they would want to pay by Tigo Pesa as a more modern way of making purchases.

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Tuesday, September 22<sup>nd</sup> 2015

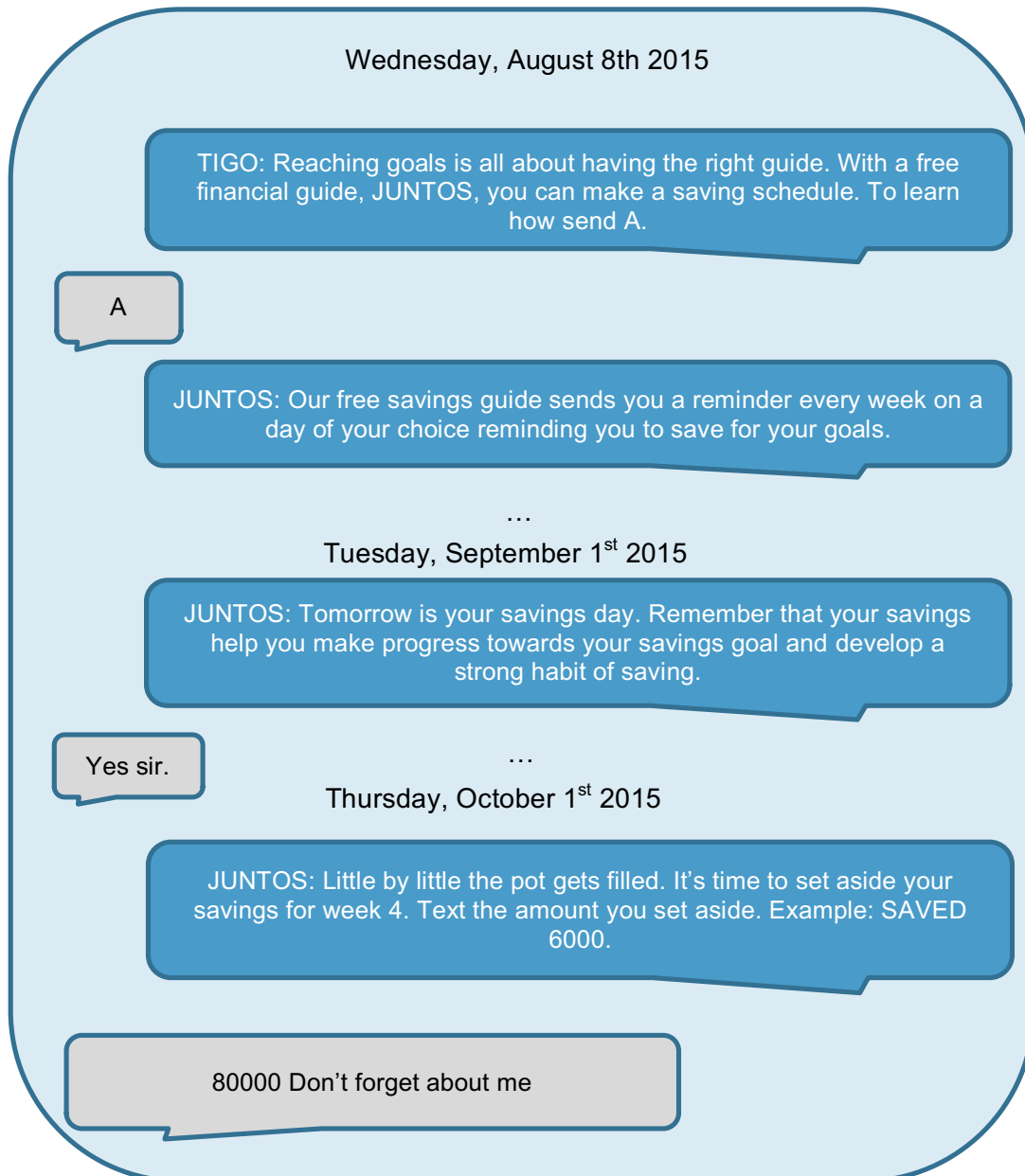
JUNTOS: The last time a customer used Tigo Pesa to buy goods from you, how was the entire exercise? Tell us so that we can see whether it was seamless or challenging.

There was no difficulty at all. In fact it was easy and improved my business experience

JUNTOS: Thanks for sharing your experience. We will keep your experience and we continue to make Tigo Pesa as the easiest way to make payments anywhere, for anything throughout the country.

Thank you so much for connecting me to this service

Example savings conversation that leads into a discussion about using Tigo Pesa to spend savings:



Example responses to a Juntos prompt asking merchants to share their success stories:

**Example Merchant #1**

It started getting me more customers that I had failed to reach previously, because it was difficult at that time when a customer would say they want to pay by Tigo Pesa and I failed to accept because I was afraid of being charged cash out fees. At that time, I was not yet a registered Tigo merchant. But now since I was connected to Tigo Pesa, I have been making the right choices regarding accepting Tigo Pesa payments from my customers and I now enjoy the Tigo Pesa life.

**Example Merchant #2**

Tigo Pesa makes life easier. Even muggers have reduced because many of us are keeping our cash on the mobile instead of the pockets

**Example Merchant #3**

One day a customer came to my shop and asked me how much I was selling a certain good for. I mentioned the price and then he asked me whether he could pay by Tigo Pesa. I answered him that I could receive payment by Tigo Pesa. The customer paid me by Tigo Pesa, but soon after his departure, a fellow neighbor came into my shop and asked whether the customer had paid me. Then the business man asked me how much I had sold the good for...I then replied to him that one of the best ways to increase sales is by using Tigo Pesa or accepting it as payment from his customers