Whatsapp in War-Torn Yemen opens opportunities to improve resilience, livelihood, and prosperity through microfinance communication innovation.¹

Abstract
With poor mail services and with a large number of customers who live across a wide range of geographical areas, NMF cannot do a 21st century audit using 19th century technology. With the technology and telecommunication advancements, leveraging such technology provides an opportunity to apply these technologies to reach clients and achieve low transaction costs in the audit function. This paper provides an overview of how NMF has been able to apply the WhatsApp confirmation mechanism to achieve its objectives. The findings provide an opportunity for all organizations in survival mode to lower their transaction costs and leverage telecommunications advancements.

Background
NMF was founded on October 2003, and was the first microfinance institution (MFI) in Yemen with the purpose of improving life of poor dreamers to become economically active members in society. NMF improves life through providing Islamic financial services to the dreamers in different sectors by meeting their needs and requirements. It provides financial services and solutions to a wide range of people in different sectors such as agriculture, livestock, fishery, and general businesses. NMF continues to strive to be the best, and evolves everyday through introducing new products and services to deliver its purpose, resulting to an increase in customers from only 18,000 to more than 120,000 through 18 branches all over Yemen. Yemen is currently in conflict and is facing the worst humanitarian crisis since the world war. Furthermore, around 70% of the population need humanitarian assistance, unemployment has reached 80%, currency has been devaluated by over 100%, there is a severe cash crisis, interrupted energy supplies, and epidemics among other disasters. The international community looks at Yemen as a “can’t wait” crisis. All the support is to create opportunities to improve resilience, livelihood opportunities, and social cohesion. Much of these objectives can be achieved through microfinance, where the National Microfinance Foundation is its leader in Yemen.

For an MFI working in such situation, portfolios at risk fall as people are displaced as the war hitting every corner in the country. Clients have closed, changed addresses, or downsized their operations. Consumer spending dropped, and businesses suffered financial difficulties.

¹ By Sharaf Alkibsi and Mustafa Hantoush, March 2018
Increased security risks along with interrupted energy supplies have increased the cost of doing business. Public services in many areas were shutdown as public salaries were suspended. Utilities, postal mail, and public transportation among others, were no longer functioning.

NMF internal audit department role is to provide independent assurance that NMF risk management, governance and internal control processes are operating effectively. One of the most important audit procedures is getting confirmations from clients. This confirmation is to check the existence of the borrower and to confirm the loan balance. In this paper, we will discuss confirmation challenges with NMF and its experiment to introduce a new confirmation method.

Introduction

Paper-based confirmations have been with us since the beginning of the audit profession 130 years ago. Through numerous changes in technology, business practices and auditing rules and regulations, the paper and mail system for making direct contact with third parties has endured. In the process, it has become increasingly outdated, less efficient, and less secure every year.

You cannot do a 21st century audit using 19th century technology\(^2\). In 2007, The AICPA’s Auditing Standards Board approved the use of electronic confirmations\(^3\) as a much-needed replacement to the traditional paper and mail-based process. Starting October 1, 2008, Bank of America required all of its customers’ external auditors to use electronic confirmations through Confirmation.com\(^2\).

However, bank customers are way different from microfinance customers. The microfinance industry has its own distinction, especially in third world countries. Customers are poor entrepreneurs and small businesses who are lacking access to banking and related services. Those customers need another confirmation mechanism that fits their particular needs.

This paper describes NMF WhatsApp confirmation experiment, which was designed to have direct access to customers by in an easy way, in a short time, and without additional cost. There are currently 2.3 billion smartphone users worldwide. Facebook has 2.2 billion active users and WhatsApp has 1.5 billion active users\(^1\). Most people have smartphone, internet access, and are at least using one social network. Yemen has over 7 million users on the internet. WhatsApp has been rated among the top social media applications and has been widely used for communications.

The increasing usage and penetration of WhatsApp in Yemen has been forced as the only alternative to many day-to-day activities. When the country faced 100% shutdown of public electricity, people had to buy solar panels, and mobile phones were among the only devices running when everything was off. Mobile phones were used to transfer documents when transportation was very expensive. People used to do their work and send it over WhatsApp. WhatsApp was the only way to connect with others with real time updates during airstrikes and internal displacement. Therefore, WhatsApp provided an alternative communication method for many, and for NMF, it was an opportunity to help with the confirmation process.

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\(^3\) Use of Electronic Confirmations, of SAS no. 67, The Confirmation Process (AU section 330).s
The problem

One of the most important audit procedures is getting confirmations from the clients and performing this in the microfinance industry has some challenges. The audit team has to visit the customers for confirmation because of poor mail services. During the Yemen war, mail service was shutdown, and no mail was sent or received, even international carriers such as FedEx and DHL shut down their services for long periods. This has some negatives aspects that cause auditors to waste much money and time moving from one place to another and traveling between cities.

NMF Auditors work based on direct communication with customers to make sure that all the customers are really in existence, and all the loans' credits are identical. They usually visit customers and use paper-based confirmation, which is hard to conduct for different regions and remote areas. Moreover, it is difficult to visit a large number of customers in their field and this has reduced audit sampling checking.

The other point is that using the face-to-face method is very expensive. Auditors spend long hours and a lot of money traveling to visit customers around the country. Furthermore, auditors visit clients and might not find them on the first time and the time, travel allowance, and transportation charges they spend all will be wasted.

In conclusion, visiting customers for paper-based confirmation is ancient and no longer accomplishes NMF objectives and current situation requirements. To be in line with the age of technology, to reduce costs, and not waste time, the audit department was required to create a new method that meets present requirements. NMF leadership directed the investigation of alternative technology to conduct business objectives and confirmation procedures were among them.

The idea

With the ongoing advance in technology and the world changing every day, NMF Internal audit has started using WhatsApp for performing confirmations. Therefore, auditing the traditional ways are no longer practical, so looking for a new style that contains unique characteristics (electronic style) is mandatory to reduce the cost, time, and to get accurate and timely outcomes.

By using WhatsApp, we can contact most customers without incurring more costs, and we can also cover many clients who live in remote areas without further expenses. Generally, nowadays the majority of people have Smartphones, which have become part of their lives, so it is useful to apply this technique as a new approach for confirmations, keeping the cost at the lowest point.

Using WhatsApp is a shortcut to get the confirmation and a faster way to replace the traditional paper based and mail approaches. In addition, the work that used to be done in weeks can be done in a few seconds by using social media, and a high degree of assurance can be materialized via applying this sophisticated technique. Moreover, this method will enable auditors to get precise confirmations because the communication process is directly between the auditors and client.

Taking everything in consideration, NMF internal audit department has implemented WhatsApp conformations as a new approach, which is considered to be an easy and practical method.
Work Performed

We have selected the range of customers who will receive conformation messages. For the sake of the project, NMF customers were classified as micro enterprises and salary-backed loans. Table 1 provides the distribution of NMF clients’ segments.

Table 1  Number and percentage of MSMEs by sector as if 31 Dec. 2017

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of MSEs</th>
<th>% of MSEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary-backed loans</td>
<td>6,882</td>
<td>54%</td>
</tr>
<tr>
<td>Micro Entrepreneurs</td>
<td>5,917</td>
<td>46%</td>
</tr>
<tr>
<td>Total</td>
<td>12,799</td>
<td>100%</td>
</tr>
</tbody>
</table>

For the purpose of this project, NMF would like to use the WhatsApp balance confirmation method with those micro enterprises only. The salary-backed loans’ confirmations occur at the employer level. As employers would confirm their employees balances with NMF on a corporate level. NMF contracts with these salary-backed loans were with employers and did not require the confirmations with the employee. Employers take the responsibility to confirm with their employees.

For the 5,917 active micro entrepreneurs, the database was analyzed. Table 2, provides the list of micro entrepreneurs whom we have their mobile numbers. Around 3,396 had mobile numbers in our database, and this would be the target segment for the new projects.

Table 2  Availability of mobile number in the database (Micro Entrepreneurs)

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of active MSEs</th>
<th>% of MSEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile number is available</td>
<td>3,396</td>
<td>57%</td>
</tr>
<tr>
<td>Mobile number is not available</td>
<td>2,521</td>
<td>43%</td>
</tr>
<tr>
<td>Total</td>
<td>5,917</td>
<td>100%</td>
</tr>
</tbody>
</table>

Once the target segment was identified, 3,396 clients were added to the system to be approached via WhatsApp. System engineers set up the system and the confirmation process started. The result of confirmations in 31 Jan. 2018 appears in Table 3.

Table 3  WhatsApp confirmations result

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of MSEs</th>
<th>% of MSEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No reply</td>
<td>2,246</td>
<td>66%</td>
</tr>
<tr>
<td>No WhatsApp</td>
<td>815</td>
<td>24%</td>
</tr>
<tr>
<td>Replied</td>
<td>296</td>
<td>9%</td>
</tr>
<tr>
<td>Wrong mobile number</td>
<td>39</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>3,396</td>
<td>100%</td>
</tr>
</tbody>
</table>
The findings show that around 24% of clients do not have WhatsApp accounts; a reasonable representation of the population. Since there are around 6 million internet users in Yemen, with a potential population of 15 million over 18 years of age; the results were reasonable.

Among those who have WhatsApp accounts, 1% had the wrong mobile number in our database. This was an acceptable margin or error, and was a great chance to update their mobile numbers in our database system; a by-product of the project that opened a new opportunity.

Around 66% did not reply. This high percentage was an indicator that the process will require further development and patience for it to fully work. The fact that WhatsApp provides a confirmation that the recipient received the message or has actually seen the massage, is of a great value. That was information not provided by regular SMSs nor mail services.

A challenge was faced with WhatsApp that did not exist with traditional SMSs or mail services; it was that the WhatsApp rules and regulations are very strict with spam. A risk that the entire project is subject to. If clients continue to hit “report as spam”, NMF’s number can be blocked and the process can be marked as a failure. When clients get the confirmation messages, WhatsApp would show NMF’s logo and name, and we would hope that customers would not immediately hit ‘report as a spam.’ In addition, future customers are requested to add NMF’s number to their contact lists, so that it is recognized immediately.

Among those who replied to NMF’s messages, 84% confirmed their balance immediately. There was 14% that replied but did not confirm their balance. Only 2% indicated their balances were not correct. An immediate measure was conducted for these customers and corrective actions were taken.

Conclusions and further work
WhatsApp is a powerful communication application; no wonder it was taken over by Facebook for over 19 billion USD. The power of WhatsApp can provide much value to the audit profession. It has provided much value to the microfinance industry in Yemen. The National Microfinance Foundation has taken the project to the end and have experienced many positive benefits from the application.

The WhatsApp application did not only confirm the balance of customers, but opened new communication channels to provide better products and services to customers. Customers feel they are very close to NMF as this is the most efficient communication method. Clients understand they do not have to pay any additional communication charges using their WhatsApp application. NMF customer management has opened a new door to customers that will reap much value to our mission; which is to service the poor in war torn Yemen.

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