

Mercearias Online – Rollout

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1. Introduction

1.1. Background

In Mozambique, there is a startup named **Grupo Online** or simply **gOnline** which is dedicated in Software Architecture, Design, and development. In the last year, the startup developed a mobile app coined *Mercearias Online (mO)*, which is a system for groceries management. The main goal of the app is to help grocery owners or managers do control and scale up their business.

1.2. Problem

The startup is concerned about validating their idea (MVP). In this ambit, they are looking for grocery owners or managers around Maputo Province interested on testing their product so that they improve and consolidate their business module. They need a list of groceries to contact their responsible and tell them about the app and the advantages of using it. Who be available to join the and help the project, will be added and trained to use the app and will benefit from differentiated fees as much as the platform acquire potential users and grow up.

1.3. Interest

Grocery owners and manager who do not have an online system to manage their business and anyone else who wish to improve the grocery management and scale up the sales.

2. Data acquisition and cleaning

2.1. Data sources

The data for this project was collected in three different data sources. One was manual data collection going door to door in some groceries indicated by friends and relatives. In other hand was use the Foursquare API to query about groceries in Maputo city and finally using google to fill in the date related do phone numbers and emails.

name	opening year	number of employees	have electronic system ?	address	phone number	email	city	lat	lng	accept
Mini Mercarias Mafalda	2019	1	YES	Bairro Matola-Gare, Matola-Maputo	+258 84 0546824		Matola			YES
Mini Mercarias Balbina Hilário	1998	1	NO	Rua do Regimento, Bairro da Urbanização, Maputo	+258 84 8959529		Maputo			YES
Complexo Mozakil	2014	1	NO	Av. Sebastião Marcos Mabote, Bairro do Magoanine	+258 84 4624254		Maputo			YES
Mercearia Marília	2019	2	NO	Prolongamento da av. Vladimir Lenine 394, Xiquelene Maputo - Moçambique	+258 84 3973994		Maputo			YES
Mercearia Mozal	2017	2	NO	Rua da Mozal, Matola	+258 84 5084593		Matola			YES
Mercearia Khan	2015	5	YES	['Maputo', 'Moçambique']	+258 21 311374		Maputo	-25.96843831	32.57226219	YES
Mercearia CCPolana	2016	8	YES	['Av. Ahmed Sekou Touré', 'Maputo', 'Moçambique']	+258 82 1234567	ccpolana@ccpolana.co.mz	Maputo	-25.9690361	32.58243179	YES
Mercearia Estrela	2017	3	YES	Av Ho Chi Min 1673	+258 21 326619		Maputo	-25.95906575	32.56781097	YES
Mercearia Mau Tsé Tung	2017	8	NO	['Maputo', 'Moçambique']	+258 21 3030270		Maputo	-25.96529798	32.59204184	YES
Mercearia Torres Vermelhas	2014	2	NO	['Moçambique']	+258 21 3235271		Maputo	-25.98043952	32.58776189	NO
Mercearia Dinamica	2016	2	NO	['Maputo', 'Moçambique']	+258 21 3035876		Maputo	-25.97526247	32.58980011	YES
Mercearia R & K	2015	1	NO	['Moçambique']	+258 84 3032207		Maputo	-25.94446831	32.46076415	YES
Mercearia D'Amour	2016	2	NO	['Rua Fios', 'Matola', 'Moçambique']	+258 84 3132208		Matola	-25.863326	32.496483	NO
Mini-Mercearia 1º de Maio	2018	2	NO	['Maputo', 'Moçambique']	+258 84 3032609		Maputo	-25.89649945	32.60660082	YES
Nossa Mercearia	2015	2	NO	['Condominio Open - Dona Alice', 'Maputo', 'Moçambique']	+258 84 3732210		Maputo	-25.905917	32.632635	YES
Mercearia Famamel	2016	1	NO	['Estrada Nacional 200', 'Mahubo', 'Moçambique']	+258 84 3832211		Mahubo	-26.14849	32.338468	YES

Figure 1 – Clean data

3. Exploratory Data Analysis

After the data collection process was possible to clean the data and merge sources in a unique data sources. Was possible realize that the majority of the groceries do no use electronic system claiming the high cost that a system may have which in most of the case does not justify the acquisition.

	name	opening year	number of employees	address	phone number	email	city	lat	lng	Accept
have electronic system ?										
NO	12	12	12	12	12	0	12	8	8	12
YES	4	4	4	4	4	1	4	3	3	4

Figure 2 – Groceries with and without electronic system

4. Recommended Groceries

The target was the groceries without electronic system in place. During the assessment, the set of selected groceries was possible to see the availability even for those with an electronic system due to the simplicity and value of the proposed app as we can witness in the data.

		name	opening year	number of employees	have electronic system ?	address	phone number	email	lat	lng
city	Accept									
Mahubo	YES	1	1	1	1	1	1	0	1	1
Maputo	NO	1	1	1	1	1	1	0	1	1
	YES	11	11	11	11	11	11	1	8	8
Matola	NO	1	1	1	1	1	1	0	1	1
	YES	2	2	2	2	2	2	0	0	0

Figure 3 – Groceries with interest on using the mobile app

5. Conclusion

In this study, I was able to understand how much grocery owners or managers have interest on simple, flexible, reliable and cheaper solution for sales and stock management on the grocery domain. They really want to invest on the area but they also need to make sure the investment will be profitable. The *Mercearias Online* app proposes a set of useful features the can be easily accessible and for a small or almost any investment.

For a low and middle income countries like Mozambique the addition of mobile app for doing business is now the bid of many grocery owners.