MANOOGIAN SIMONE COLLEGE OF BUSINESS & ECONOMICS

MASTER OF BUSINESS ADMINISTRATION

Capstone Project Title: Digital Services for Mom & Dad shops in Armenia /Business Model/

Submitted to: Dr. Garegin Gevorgian

Submitted by: Gevorg Hakhnazaryan
Arpine Mirzoyan
Arpi Harutyunyan
Tigran Chitchyan
Anna Zohrabyan

The Head of Capstone Project Committee:
Dr. Aleksander Grigoryan, MBA Program Chair

Course Location: MBA, AUA, Yerevan Armenia
Submission Date: 05.05.2017

CERTIFICATE OF AUTHORSHIP:

We certify that we are the authors of this paper and that any assistance we receive in its preparation is fully acknowledged and disclosed in this paper. We have also cited any sources from which we used data ideas, or works, either quoted directly or paraphrased. We also certify that this paper was prepared by us specifically for this course.

Table of Content

Introduction

Armenia is an old country and traditions of past are influential on its life. One of the traditional and cultural representatives are cozy yards with a family run small shops. We call them Mom and Dad (M&D) shop simply. With this project we aim to fill the gap, giving solutions to the problem of paper-based sales, transferring to digital machines. The lack of digital services in M&D shops creates a bottleneck for their competitiveness in the market and for the contingent of customers. Therefore, we are going to identify the obstacles to adopting and using the Point of Sales (POS) terminals in M&D shops. The general outline for the project will consist of the problem identification, information analysis, market and sector researches, and the end goal is to create a business model, which will be a milestone on the pathway to adopt digital services by M&D shops.

Business Model Introduction Summary

The business model idea is to make available micro-credit lines to middle and low-level income customers, dedicated for shopping only from M&D shops. These will be called ''Non-cash wallet''. A community of M&D shops will be created, which will be the base for providing digital payment services to the ones involved and "non-cash wallets" to their customers respectively. The credit line amount (i.e. - double of the formal income amount) will be transferred to a specially issued card. The sum cannot be withdrawn from ATM's and the cardholders can only use them in the shops (M&D shops particularly). We aim to focus on small shops by putting a limit on monthly revenue to exclude from the list big supermarkets as they are not our target customers. Growing number of new type of cardholders will lead to more shops to apply for digital payment service.

Digital payment service will be provided for free and the loan company will cover costs. The loan company will cooperate with a card issuing company. The advantage for shops will be an increase in sales amount and release from the risk of bad debts. There is also an opportunity of gaining bargaining power, as the established community will negotiate for procurement of big quantities. Non-cash wallets will be provided to M&Ds' customers. This is a benefit for customers to change purchases from credit to the non-cash wallet and get more independence in the shopping process. More, this will increase the customer base and loyalty for M&D shops.

Problem Identification

First of all, according to our survey, there is low demand from shops' customers, which can be explained by below-mentioned factors:

- Psychological and trust barriers (customers do not tend to provide their card credentials to shops),
- It is easier to get goods on credit from shops (in Armenian so called "նիսյա") than to get goods for a debt with commissions and deadlines by using credit line,
- Habit to have petty cash on them when purchasing from M&D shops
- Low penetration rate of digital payments among the low income population.

On the other hand, there is low demand from M&D shops (according to our survey with M&D shops): (Exhibit 10)

- The owners of M&D shops are afraid of being transparent and do not want to have any connection with banks or other statistical institutions
- Hiding information of real total sales some shops try to avoid high turnover taxes
- High commissions from the transactions made by the POSs, (average 2.5%)
- The sector of consumers who use debit or credit cards tends to make their high volume purchases at supermarkets rather than at M&D shops.
- Concerns about using technologies and possible difficulties

Furthermore, the banking system is not encouraged to supply digital payment services to M&D shops with low-level non-cash sales. Since the profit of a bank is calculated by accumulating all the commissions of non-cash transactions and deducting initial expenses of providing the mentioned above terminal, that is fluctuating from USD 600 to USD700 for a one-time payment.

Being interested in the level of development of non-cash transactions in Armenia, our team did a research about transaction processing in big and small shops throughout Armenia (Exhibit 10.) In accordance with the first stage research results, we have observed that in the 21st century of digitalization, there is a significant gap between non-cash transactions in Yerevan comparing with rural areas (Exhibit 1). According to statistics and analysis, only 2% of all non-cash transactions are in rural areas, meanwhile, the proportion of the rural population accounts for 37% (Exhibit 2). Moreover, it came out that small shops like M&D's are the most assailable ones for digital sales and payments. There are 60 000 M&D shops

across Armenia (Exhibit 3). The main target of the research was mainly shops in Yerevan and up to 10 shops in rural areas. The results have shown that only 5% of those shops have point of sell digital payment machine which provides a service for non-cash transactions. Here is the problem, how to help shops and customers to make more convenient and accessible sales without having cash in a wallet.

Country Background, Economic Development

Armenia is a small country in the southern part of Trans-Caucasus. It shares a border with Turkey to the West, Georgia to the North, Azerbaijan to the East and Southeast, and Iran to the South. It covers an area of 29 800 sq. km.

 In 2017, according to World Bank, the total population of Armenia is 3,03 million, from which 37,33 % lives in rural areas (Exhibit 2). Population density (people per sq. km) in Armenia was last measured at 106 in 2015.

Armenia's economy has complied a deep transformation since independence. Sustained growth, reforms, as well as inflows of capital, have created a market-oriented environment.

According to Asian Development bank information, Armenia's economy grew only by 0,2 % in 2016 following growth at 3,0% in 2015.(Exhibit 5)

Also, Armenia's GDP growth is projected at 2,2% in 2017 and 2,5 % in 2018, Inflation is projected at 1,2% in 21017 and 1,8% in 2018.(Exhibit 6).

According to the World Bank reports in the first half of 2016, the account deficit remained below 3 percent of GDP, due to higher exports and subdued imports.

The banking sector was having a major recapitalization and already in January 2017 most banks met the new capital requirement.

Also, the Consumer Credit in Armenia increased to AMD 435555.70 million in February from AMD 433856.85 million in January of 2017.

Consumer Credit in Armenia averaged AMD 224899.08 million from 2004 until2017, reaching all-time high of AMD 451519.92 million in December of 2014 and a record low of AMD 37915.30 million in April of 2005.

Current situation of digitalized payments in M&D shops

M&D shops are an inseparable part of every yard, and are own and executed by one family. Main clients of this kind of shops are people living near. Clients usually know the owners or worker in person.

A big part of M&D shop sales are products for daily consumption, first need, things to buy impulsively without long thinking about it Shopping for one person from M&D shops varies from AMD 500 to AMD 7000 for grocery shops on average of AMD 3000 and AMD 4000 for other types of shops.

Credit sales in this kind of shops are traditional and are usually given to those who are well known from owners or workers. The payment period for credit sale is often up to 30 days, sometimes only 2-3 days depending on the amount.

According to our survey 67% of shops provide credit sales and for 52% it is 11-20% of total sales.
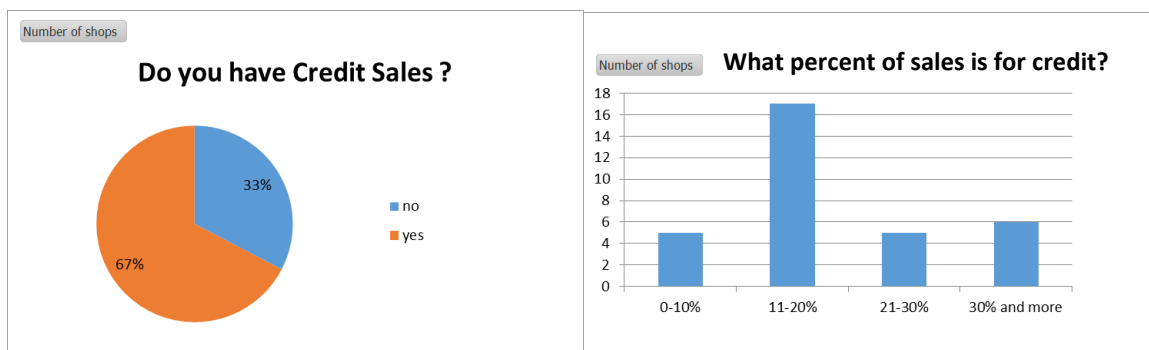
Taking into consideration the information depicted in the charts below, payment by POS terminals increased dramatically within last 4 years (quantity used approximately doubled and 37% increase in total amount).

Non-cash payments by POS terminals are about 50% in overall POS terminals activity.

POS Cash	POS
(amount)	Non-cash

	(quantity)	
2013	70 210 634	1 649 875
2014	96 336 176	2 358 908
2015	91 437 867	2 844 755
2016	96 586 970	3 340 423
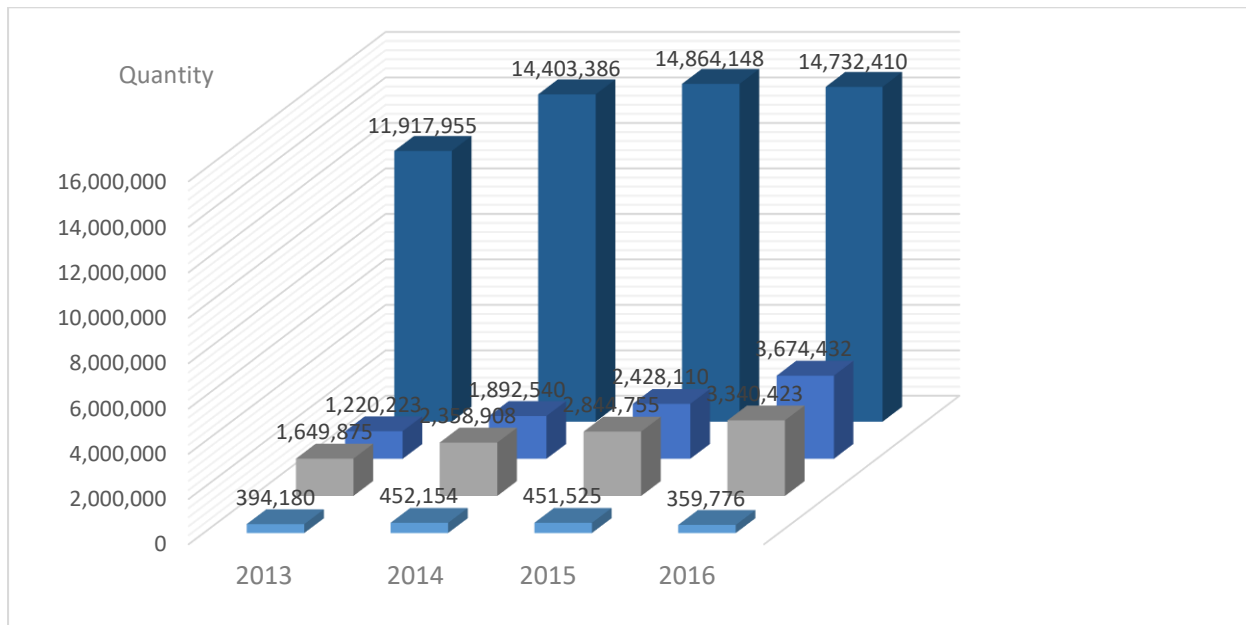
The main player among card issuing organizations is ArCa which has 85% share in all cards issued.

	2013	**2014**	**2015**	**2016**
ArCa Net	13 025 310	15 672 086	16 266 163	16 151 082
Other Nets	1 164 785	2 123 491	2 215 510	2 741 872

Today there are 1236 new generation HDM (in Armenian "Հսկիչ դրամարկղային մեքենա") check POS terminals out of which 535 have installed software for digital non-cash payment.

All the banks are involved in cards servicing business except Mellat and ARMSWISSBANK banks, there is no limit in quantity of provided terminals.

Another source of factors for the current situation in the market is the survey done by our team.

According to the survey, only about 20% of surveyed shops have implemented POS terminal in Yerevan. POS terminals are not equally distributed in the area of Yerevan, and the main part is in central parts that have lots of tourists, next to universities and other places of interest.

Designing Business Model

The result of the business model will be an increase of customer's base for M&D shops and loyalty level.

The effectiveness of the business model for customers in the community will be in cooperation with the loan company and within the community. Sale volume for M&D shops will increase. Creating chain of M&D shops will increase their competitiveness and improve their positions compared to big supermarkets. In future, a joint body can be created to coordinate the activities of M&D shops so they will have bargaining power, as they will cooperate in the process of procurement and will buy big quantities. They can also cooperate in the shipping by shipping big quantities by containers from abroad. This body can even collect big useful data about their customers and their privileges and it will be able to implement Customer Relationship Management tools for M&D shops for better efficiency. The risk of nonpaid credit sales now goes fully from the shop to the "non-cash wallet providing" loan company.

A web page with all shops in the community can be created, where customers can find detailed information about shops and feedbacks from customers. Special tags will be inserted on windows of shops to differentiate them from others. (Exhibit 11)

Tools for Business model design

In order to make more illustrative and objective business idea, our team used Porter's Diamond model analysis, Porter's five forces, Blue ocean strategy tools: Value innovation, Four action framework, Four hurdles to strategy execution and Business Model Canvas.

Porter's Diamond Model:

+ Laws

+ Regulations

Institutions

+ Loan Company's customer base of M&D shops

+ Already implemented POS terminals

+ Debit cards usage

Factors

Supporting industries

+ Trusted Loan companies and Banking system

+Availability of M&D almost everywhere

Demand

+ Loan History need

+ Low income level, everyday consumption needs

+buying habit from M&D shops

- Need for some digitalization, in case of POS implementation

- Credit sales availability and easiness

The demand for digital payments in Armenia is increasing. It is especially big in HORECA (hotels, restaurants, cafes) places. For small and medium M&D shops the demand is slower. There are shops that provide digital payment systems, but this is done mainly by debit account cards, not by credit account cards.

On the other side, the demand by Mom and Dad shops is also low, and dependent on customers. Shop owners associate digital payments with more transparency of income.

Government is highly motivated in implementing digital payments. There are separate laws that regulate digital payments in Armenia. There is a decision by National Assembly that new generation POS terminals designed both for checks and payment will be mandatory for all Mom and Dad shops.

Nowadays shops tend to digitalize their stores and stock for more efficiency. Tourists, especially in Yerevan tend to use less cash for reducing expenses in currency exchange and fraud or robbery risks.

There are IT companies that provide software for better implementation and use of digital payments systems.

So from Diamond model we can conclude that all 4 factors are in favour of the model and provide a good bade for the business model implementation.

Blue ocean Value innovation:

The value innovation for ''Non-cash wallet'' consists of two sides; from one side value innovation of using the Non-cash wallet for customers of M&D shops and from another side for the M&D shops.

M&D shops

The reduced commission fee for non-cash sales

Consumers

The interest payment to credit company for non-cash wallet line

Increase of overall turnover and decrease of petty cash circulation

Risks' shift from M&D shops to Loan Company

M&D shops

Availability of purchasing any time any where
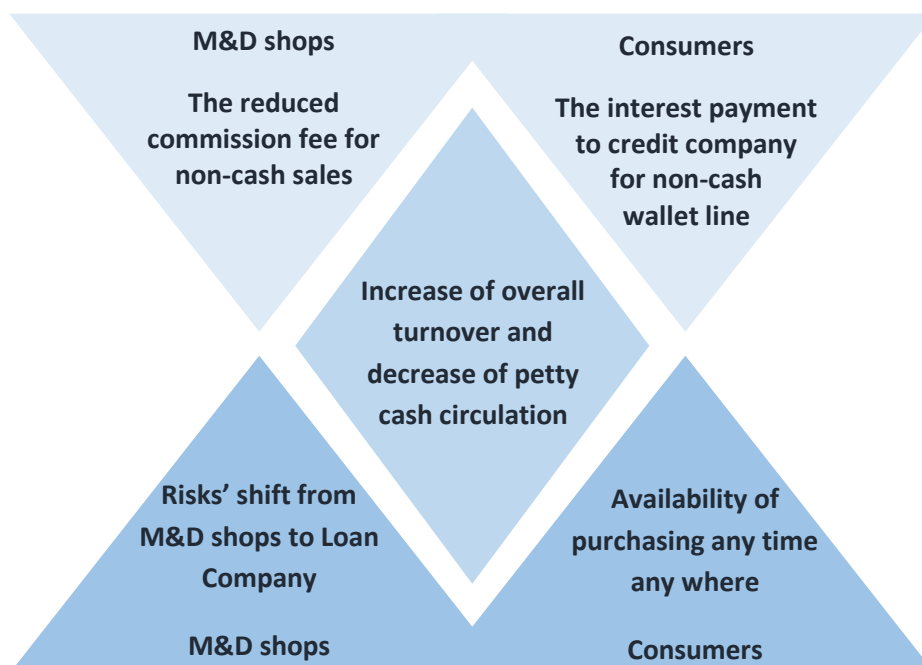
Consumers

As we can conclude, the Business model is in favour of both M&D shops and Non-cash wallet consumers. Both parts have values added by covering small costs.

Blue ocean Four Actions framework:

The goal of the Business Model is to nurture the culture of using non-cash payments also in small and medium M&D shops.

The model will eliminate paper-based notes for credit sales; there will be digitalized info which can be used more efficiently.

The model will increase the customer base for M&D shops, which will bring to bigger sales volume and hence more turnover.

The petty cash circulation will be lower which will lessen the risk for currency conversion and fraud.

Profit turnover for M&D shops

Customer bas and loyalty increase

Old paper based sales culture within M&D shops

Nurturing the culture of using non-cash payments in M&D shops

Community of M&D shops and their customers

New business model for M&D shops

Bargaining power for M&D shops

Risk of bad debts for M&D shops

Cash payments that subsequently will result in reduced fraud risk

Hence we can conclude that the business model handles 4 non-efficient issues by making the service and routine job more productive.

Blue ocean Four hurdles to strategy execution:

This framework shows that Non-cash wallet line has several hurdles that the credit line company can overcome in case of implementing a good strategy.
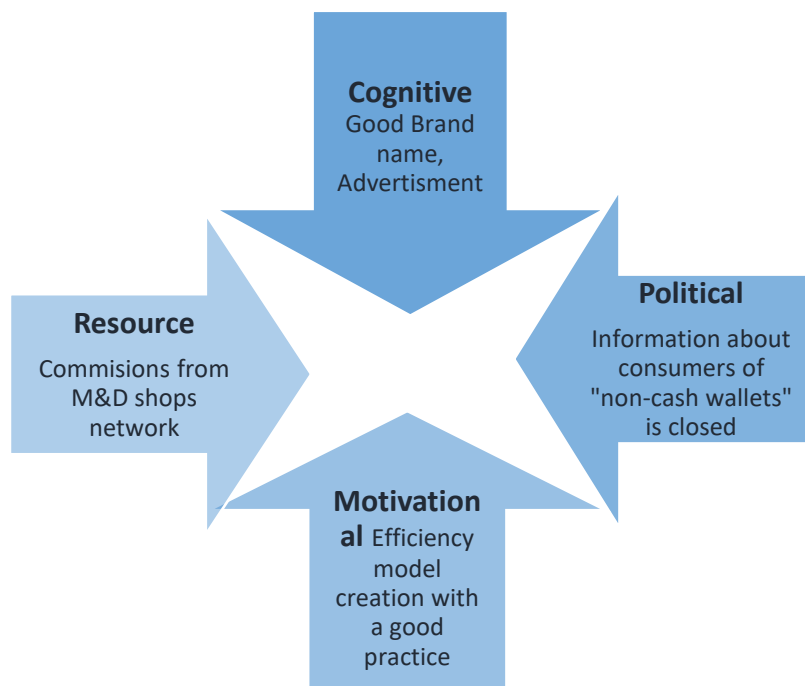
1. The Cognitive Hurdle: the non-cash wallet line is a new and fresh idea for the product, which can be promoted by a good brand name advertisement.

2. The Resource Hurdle: the scope of the non-cash wallet is still only within Yerevan region, if the idea will be well spread among rural areas and more resources will be needed, the credit company can take commissions from the already created M&D shops.

3. The Motivational Hurdle: we are going to target 10 M&D shops from each region give the right to put the special digital payment machine for from one-two months and get the efficiency model. Therefore the advertisement campaign can be on that efficiency model.

4. The Political Hurdle: since the payment machines will be separated from HDM ones, the political side can have several problems, but by the rule, the credit line cannot provide any information without a court decision.

Cognitive
Good Brand name, Advertisment

Political
Information about consumers of "non-cash wallets" is closed

Resource
Commisions from M&D shops network

Motivation al Efficiency model creation with a good practice

<u>*Porter's Five Forces*</u>

Industry Rivalry- Creating a network of M&D shops and providing non-cash wallets to their customers is something new in Armenia and was never done before. There are some other microcredit programs but we consider them as substitutes of our project but not as direct competitors. So the company who enters this market will be an incumbent company having a first mover advantage and will enjoy no or very little rivalry intensity. (Our qualitative grade is 3/5)

Threat of substitutes- From this perspective market is not that attractive. As it was mentioned, there are some other microcredit line programs and the most famous is "NURCARD". The other substitute for this project is debt book or so-called "nisya". It is when shop owner gives goods on credit and writes the name of a buyer and cost of goods in the notebook and buyer pays it later, without considering the TVM (time value of money). It is very common especially in regions and poor areas. And also for this segment it is very common to borrow little amount of money from friends, relatives, neighbours and usually it is done without any compensation rate. So the threat of substitutes is quite high for this project. (Our qualitative grade is 2/5)

Threat of new entrants- If the project shows high profitability the market will attract new entrants. There are not much barriers and all credit companies can be potential entrants. Furthermore the most difficult and resource consuming part of this project is the process of negotiations with M&D shop owners and creation of network. And new entrants can have lot of benefits working with the base that incumbent already created. And incumbent does not have any legal leverage mechanism to prevent this process. There is not much capital needed for this project and all banks can easily provide it. The only thing incumbent can do is to make high switching costs for credit holders, but considering that the project is about short-term microcredits, this would not help much. The threat of new entrants is high for this project. (Our qualitative grade is 4/5)

Bargaining power of suppliers – The power of suppliers can be different depending on who is the project owner. In case of the bank the main supply that is needed is money. And Armenian banks are financed differently; however for this project the power of suppliers will be low. If the project owner is a financial company, it will need cooperation with a bank to provide issue cards, and on the other side for credit companies to provide POS terminals. In this case the bargaining power of suppliers will be higher. So far there are 15 banks in

Armenia most of which can provide cards and in general we think that for this project the bargaining power of suppliers is low. (Our qualitative grade is 1/5)

Bargaining power of customers- We will have two different segments of customers. First segment includes people who will receive credits. In this case the bargaining power is low because they are mostly people who need money for the basic needs, like purchasing food and they are price sensitive, so if the project owner offers credits with lower market rates, they will not have more options to switch. There is still the debt book barrier, that makes their power little higher. On the other segment of our customers are shop owners. Our researches show that they do not want to work with POS terminals, because of transparency issues, lack of knowledge and some said that it is only headache for them. But there are some benefits for them, the crediting company takes the risk of credits not being paid, this project can increase trade for M&D shops and being part of network can attract customers. And this project does not have any alternatives for shop owners. In general we think customers have middle bargaining power. (Our qualitative grade is 2/5)

According to Porter's five forces theory this project can be considered as an attractive one.

Business Model Canvas

Step 1 (of 9): Customer Segments

In the identification process of customer segment for ''Non-cash wallet'' business model, we have conducted a survey and collected information from ''The Tax Service of RA'', in the result of which we came to a two-sided conclusion: divide the segments to following.

1. M&D shops with turnover more than AMD 5 million (Exhibit 8)
2. Citizens with middle and lower income

The survey also includes a part about the collection period of bad debts in shops (in Armenian so called "Սիս ամ). Shops that have collection period lower than 30 days, will be the main target. (Exhibit 7)

Considering the fact that the main customers of M&D shops are people with a formal minimum salary of RA (AMD 50000) and higher, they will represent the customer segment of the model.

Step 2 (of 9): Value Propositions

In the process of designing the business model, we used one of the tools of Blue ocean strategy. The Blue ocean Value innovation, which analyses the benefits and costs from the use of ''Non-cash wallet'' business model. (*Blue ocean Value innovation)*. Summarizing the analysis, the values proposed for the model are the following:

- Accessibility and independence of purchases
- Convenience of not keeping cash
- Boost of non-cash sales
- Decrease in cash turnover
- Low level of payment commissions
- Risk transfer of bad debt from M&D shops to credit institutions

Step 3 (of 9): Channels

The model will be suggested for the credit institutions, which will use mainly its resources to promote the new micro-credit line product named ''Non-cash wallet''. We have identified several main channels will be used for the business model:

- Making advertisement using the power of a credit institution
- Using existing customer base of credit institution
- WoM (word of mouth)
- Use created M&D shops community

Step 4 (of 9): Customer Relationships

Customer relationships are among the most sensitive parts of the model since the second segment consists of the middle and lower income people, which have lots of problems with communication, trust and reliability. The credit institution should utilize positive social proof and make it personal for each customer.

Step 5 (of 9): Revenue Streams

The credit institution which will implement the business model will have stable interest income from ''Non-cash wallet'' line.

Step 6 (of 9): Key Activities

The ''Non-cash wallet'' line business model has its clearly identified key activities, which should be implemented by the credit institution.

- Setting special digital payment machines in M&D shop with easy transaction processing
- Running marketing campaign and promote the non-cash wallet
- Creating M&D shops networks in assigned regions
- Customer Relationship Management (which will bring an additional value for the company)
- Web page creation for M&D shops network

Step 7 (of 9): Key Resources

The credit institution without new resources cannot provide the ''Non-cash wallet'' line. The institution can use already created and used resources, but we identified the key resources will differ from the already used ones:

- Platform for the credit lines
- Payment processing platform
- Credit cards issuing sources (credit releasing banks/ institutions)

Step 8 (of 9): Key Partnerships

There are specific players in Armenian Business environment with whom the Credit Company should cooperate in the process of implementation of the business model.

- M&D shops
- Credit institutions
- Credit Card releasing banks
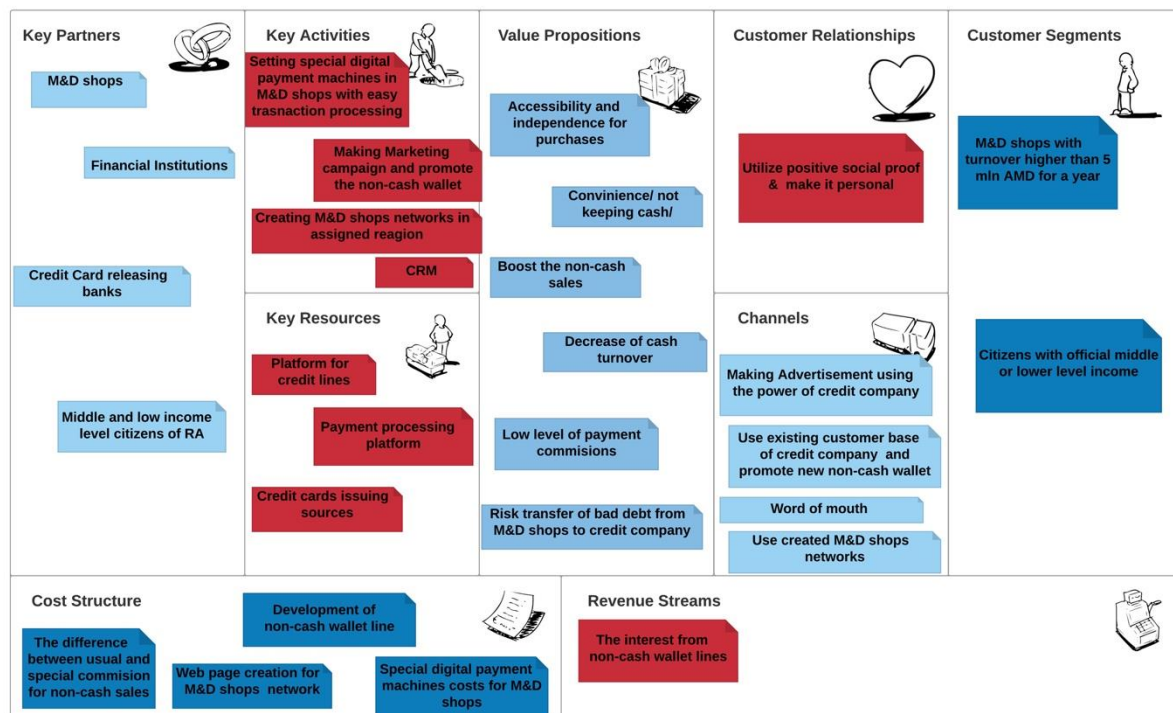- Middle and low level income citizens of RA

Step 9 (of 9): Cost Structure

During the designing stage of the model we used several tools to analyse all the possible costs which should be covered in the implementation stage the new product named ''Non-cash wallet'':

- Development of the ''Non-cash wallet'' line, including : administration, financing and marketing costs
- Special digital payment machines costs for providing M&D shops (for free of charge)
- The difference between usual and special commissions for non-cash sales
- Web page creation for M&D shops network

DIGITAL PAYMENTS FOR MOM & DAD's SHOPS — Arpi | May 4, 2017

Key Partners
- M&D shops
- Financial Institutions
- Credit Card releasing banks
- Middle and low income level citizens of RA

Key Activities
- Setting special digital payment machines in M&D shops with easy trasnaction processing
- Making Marketing campaign and promote the non-cash wallet
- Creating M&D shops networks in assigned reagion
- CRM

Key Resources
- Platform for credit lines
- Payment processing platform
- Credit cards issuing sources

Value Propositions
- Accessibility and independence for purchases
- Convinience/ not keeping cash/
- Boost the non-cash sales
- Decrease of cash turnover
- Low level of payment commisions
- Risk transfer of bad debt from M&D shops to credit company

Customer Relationships
- Utilize positive social proof & make it personal

Channels
- Making Advertisement using the power of credit company
- Use existing customer base of credit company and promote new non-cash wallet
- Word of mouth
- Use created M&D shops networks

Customer Segments
- M&D shops with turnover higher than 5 mln AMD for a year
- Citizens with official middle or lower level income

Cost Structure
- The difference between usual and special commision for non-cash sales
- Development of non-cash wallet line
- Web page creation for M&D shops network
- Special digital payment machines costs for M&D shops

Revenue Streams
- The interest from non-cash wallet lines

Linear Regression

The non-cash wallet credit line should clearly define the scope of their cooperation with M&D shops. For understanding the current situation of M&D shops, as we mentioned, we have implemented a survey for several regions of Yerevan. According to the survey results, mainly part of participated M&D shops have sales on credit, but if they do not cover it, in the end of the year they will have a bad debt. Now applying a regression analysis by SPSS we want to find the correlation between the bad debt and the size of the sales. The results of the regression are the follows: (Exhibit 12)

Mean :

Bad debt: 1.021635E6

Sales: 5.42E6

Correlation between sales and bad debt is 0,267. It means that that if the sales increase by one unit the bad debt of the shop will increase by 0,267.

Financial Feasibility

For financial feasibility we have discussed several scenarios.

Baseline scenario:

For more clear understanding of ''Non-cash wallet'' credit line's working process, we have applied financial feasibility analysis according to the data from our survey and market monitoring. We have come up with components of Statement of financial position and Statement of Comprehensive income for M&D shops. Below is provided baseline scenario for a medium M&D shop. Interest cost is accrued from the loan that shop takes for covering bad debts and other cost gaps. It was calculated applying 24% interest rate.

Components of Statement of Comprehensive income M&D Shops (AMD, Monthly)

Total Sales:	
Cash Sales	3,000,000
Credit sales	1,000,000
Loss	50,000
Cost of Goods Sold	(3,400,000)
Interest	(90,000)
Operating Profit	460,000

Components of Statement of Financial Position for M&D shops (AMD, Monthly)

Accounts		Accounts	
Receivable	1,000,000	Payable	5,00,000
Inventory	4,000,000	Loan	4,500,000

Scenario 1: Credit risk will shift from M&D shops to the credit company.

In the first scenario, we are going to decrease and transfer the accounts receivables of AMD 1,000,000 to the financial institution, due to this decrease the taken loan will be decreased also, thereafter the same will be with the interest. The sales level will remain at the same level, but everything will be on cash. According to these changes, comparing with the baseline scenario, the Operating profit will be increased by AMD 70,000 (AMD 530,000-AMD 460,000).

Components of Statement of Financial Position for M&D shops (AMD, Monthly)

Accounts		Accounts	
Receivable	0	Payable	5,00,000
Inventory	4,000,000	Loan	3,500,000

Components of Statement of Comprehensive income M&D Shops (AMD, Monthly)

Total Sales:	
Cash Sales	4,000,000
Credit sales	0
Loss	0
Cost of Goods Sold	(3,400,000)
Interest	(70,000)
Operating Profit	530,000

Scenario 2: The shift of bad debt risk brings an availability to increase overall sales.

In the second scenario, we also deceased and transferred the accounts receivables 1,000,000 AMD to the financial institution, keeping the loan amount at the same level, meanwhile increasing the level of inventory by the same amount (1,000,000 AMD). Therefore increasing sales and Cost of goods sold proportionally. Comparing this scenario with the same baseline, our operating profit will be increased by 100,000 AMD (560,000 AMD- 460,000 AMD). The M&D shop can reinvest 30,000 AMD in the business and also decrease the prices, still having 70,000 AMD increase in profit as in the scenario 1.

Components of Statement of Financial Position for M&D shops (AMD, Monthly)

Accounts Receivable	0	Accounts Payable	500,000
Inventory	5,000,000	Loan	4,500,000

Components of Statement of Comprehensive income M&D Shops (AMD, Monthly)

Total Sales:	
Cash Sales	5,000,000
Credit sales	0
Loss	0
Cost of Goods Sold	(4,530,000)
Interest	(90,000)
Operating Profit	560,000

Scenario 3: Benefits for Non Cash wallet users

- Credit takers will get financial stability. For poor people this is very important because of instability of their incomes there are days they do not have enough money to cover their daily needs.

- The next benefit for them is gaining discipline. As we know financial leverage brings more discipline into people's life. Credit takers will be more cautious in the way of how they spend money.

We assume that due to its experience and professionalism Credit Company can give AMD 2 million instead of AMD 1 million receivables on monthly basis. So consumers will increase their purchases by AMD 1 million. The prices will decrease by 10% and

consumers will have AMD 200 000 benefit from the discount. The interest for AMD 2 million will be AMD 480 000.

So 1 000 000 + 200 000 – 480 000 = 720 000 AMD additional value will be created for consumers for one month.

Conclusion

Concluding from models and tools used in the process of investigation we reach values that will be added with the implementation of the model.

	Attractiveness	Solution clarity	Impact on service quality	Probability of implementation	Total for Model
Porter's diamond	5	3	4	5	17
Porter's five forces	5	4	4	4	17
Blue ocean: Value innovation	5	5	5	4	19
Blue Ocean: Four actions	5	4	5	4	18
Blue Ocean: Four hurdles to strategy execution	4	4	3	5	16
Total for Criteria	24	20	21	22	

We have given qualitative grades to Project selection criteria according to models implemented in our research process. As we can conclude Business Model is attractive, well described in terms of solution, has a big impact on service quality and a big probability of implementation.

Overall effectiveness of implemented models for Business Model's Criteria description is 87%.

This is way new Business Model to promote economic transformation and bring M&D shops business culture to a new level. Moreover, as our society rapidly moves to becoming more digitalized and heavily dependent on technology, this is a great opportunity to be on track. Besides, the key advantages for M&D shops are the following:

- Increase in overall sales turnover
- Decrease the amount of bad debts and risks for incurring it

- Broaden M&D shops customer base
- Substantially decrease of conflicts between shops owners and customers
- Etc.

We, definitely cannot neglect the unavoidable cost which M&D shops and The Loan Company will incur in short term, however business owners should look at it simply as a cost of doing business and realize that it will pay in long term and will bring them competitive advantage among other SMEs.

References

Asian Development Bank- https://www.adb.org/

World Bank- http://data.worldbank.org/country/armenia

Yerevan territorial department of the staff of state committee of real estate cadastre adjunct to the government of the RA- Yerevan/ http://www.cadastre.am/

National Statistical Service of the Republic of Armenia-http://www.armstat.am/en/

Armenia - Population density (people per sq. km)- http://droidall.ru/armenia/population-density-people-per-sq-km-wb-data.html

Central Bank of Armenia – Yerevan/ https://www.cba.am/

Armenian Card- Yerevan/ http://arca.am/

Tax Service of Republic of Armenia- Yerevan/ http://www.taxservice.am/

Blue Ocean Strategy- https://www.blueoceanstrategy.com/

The Business Model Canvas- https://strategyzer.com/canvas/business-model-canvas

Exhibit 1. Non-cash transactions in Yerevan and Rural areas. Source: Arm Stat.am and ARCA.

Distribution of non-cash sales between Yerevan and rural areas
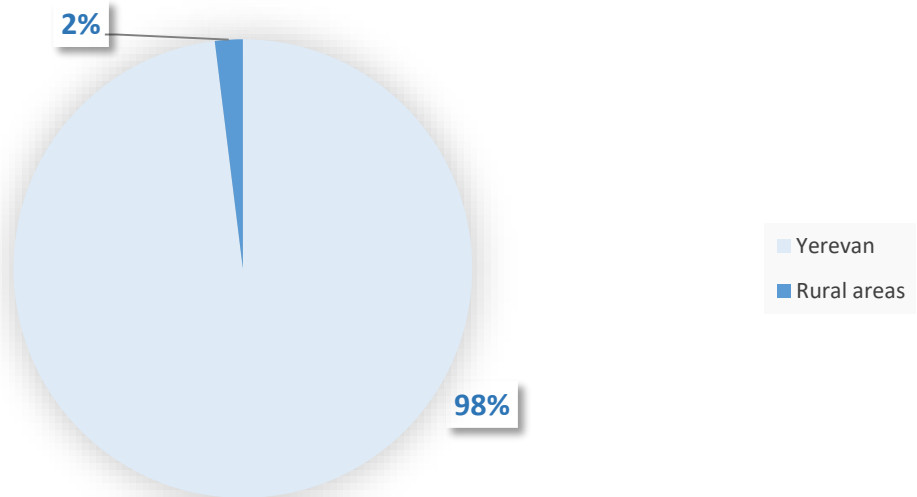

Exhibit 2. The proportion of RA population in Yerevan and rural areas. Source: ArmStat.am
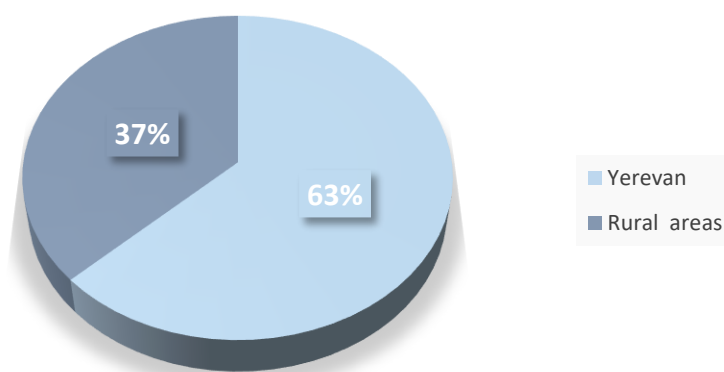
Total registered Armenian Population

Exhibit 3. The research results for M&D shops. Source: ArCa
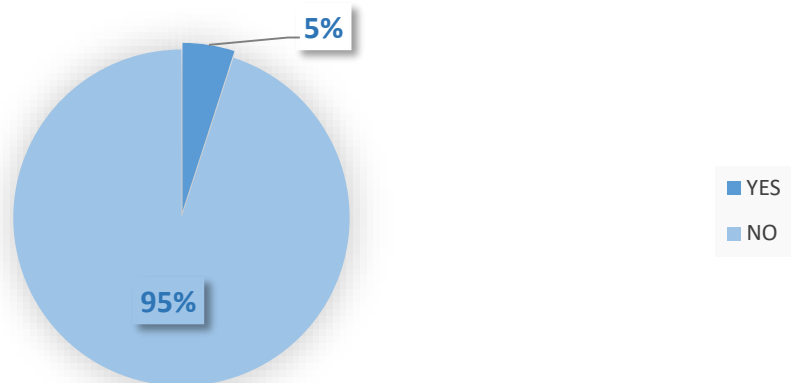
Availability of POS in M&D shops

5%

95%

YES
NO

Exhibit 4. Research results from cardholder banks. Source: ArCa

Commissions paid by shops for non-cash trasnactions

2.7%

2.5%

1.5%

VISA Electron   Master   ARCA
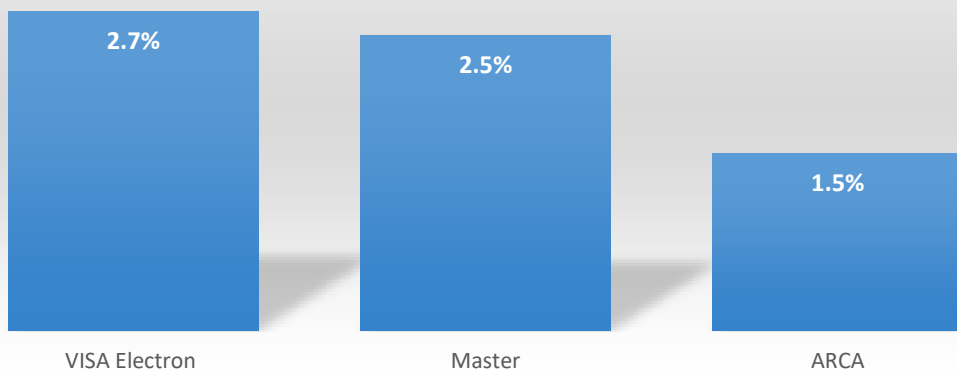
Exhibit 5. GDP growth in Armenia (% per year). Source: Asian Development Bank (ADB)

	GDP growth(% per year)		Inflation (% per year)	
Country	**2017**	**2018**	**2017**	**2018**
Armenia	2,2	2,5	1,2	1,8
Azerbaijan	-1,1	-1,2	9	8
Georgia	3,8	4,5	4,2	4,5
Kazakhstan	2,4	2,2	8	7
Kyrgyz Republic	3	3,5	5	4
Tajikistan	4,8	5,5	8	7
Turkmenistan	6,5	7	6	6
Uzbekistan	7	7,3	9,5	10
Average	3,1	3,5	7,8	7,3

Exhibit 6. GDP growth and Inflation (% per year) comparison by the countries. Source: Asian Development Bank (ADB)

Exhibit 7. Total survey results from M&D shops

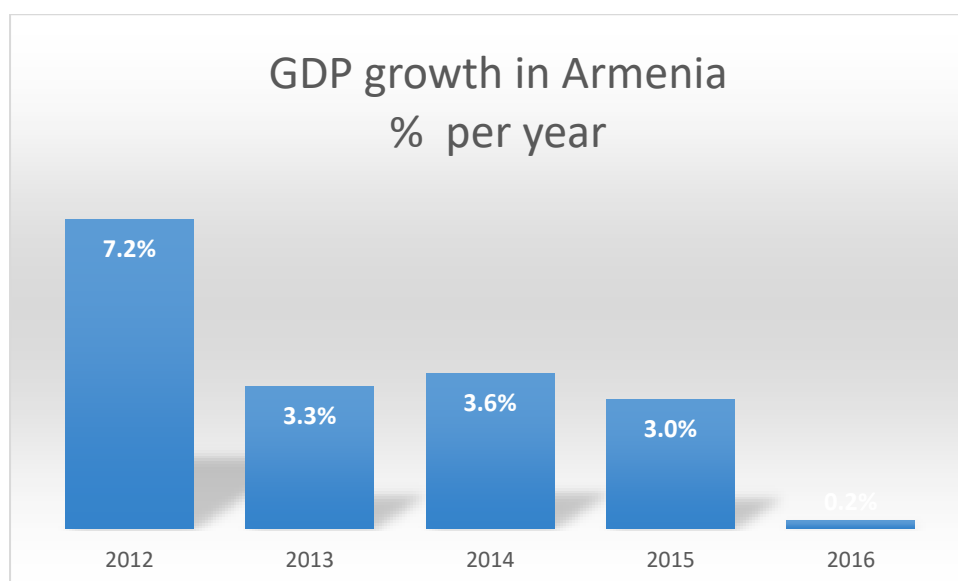| #	Sales for credit	Percentage of total sales is credit sales	Days for providing credit sales	The percentage of bad debts	Percentage of debtors pay within one month	POS	Percentage of total sales paid by POS	Percentage of customers paying by POS	If you do not have, why
1	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	no demand
2	yes	11-20%	30 and more	0-3%	60-80%	no	0	0	no demand
3	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
4	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	no demand
5	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
6	no	0-10%	0-10 day	0-3%	up to 60%	yes	0-10%	0-10%	0
7	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	costy
8	yes	21-30%	30 and more	3-7%	up to 60%	no	0	0	no demand
9	yes	0-10%	11-20 day	3-7%	60-80%	no	0	0	costy
10	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	costy
11	no	0-10%	0-10 day	0-3%	up to 60%	yes	11-20%	0-10%	0
12	yes	11-20%	21-30 day	7-12%	60-80%	no	0	0	no demand
13	yes	21-30%	30 and more	12% and more	up to 60%	no	0	0	no demand
14	no	0-10%	0-10 day	0-3%	up to 60%	yes	21-30%	11-20%	0
15	yes	11-20%	11-20 day	0-3%	up to 60%	no	0	0	costy
16	yes	0-10%	11-20 day	0-3%	up to 60%	yes	0	0-10%	0
17	yes	21-30%	11-20 day	3-7%	60-80%	no	0	0	costy
18	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
20	yes	30% and more	30 and more	12% and more	80% and more	no	0	0	no demand
21	yes	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
22	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	no demand
23	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
24	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
25	yes	11-20%	30 and more	0-3%	60-80%	no	0	0	no demand

26	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	no demand
27	yes	11-20%	21-30 day	7-12%	up to 60%	no	0	0	no demand
28	yes	0-10%	11-20 day	0-3%	up to 60%	yes	0-10%	0-10%	0
29	yes	30% and more	30 and more	12% and more	80% and more	no	0	0	no demand
30	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	no demand
31	no	0-10%	11-20 day	0-3%	up to 60%	yes	0-10%	0-10%	0
32	yes	21-30%	30 and more	3-7%	up to 60%	no	0	0	no demand
33	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
34	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	no demand
35	yes	11-20%	21-30 day	7-12%	60-80%	no	0	0	no demand
36	yes	30% and more	30 and more	12% and more	80% and more	no	0	0	no demand
37	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
38	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	no demand
39	yes	11-20%	21-30 day	7-12%	60-80%	no	0	0	no demand
40	yes	11-20%	21-30 day	0-3%	80% and more	no	0	0	no demand
41	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
42	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
43	yes	11-20%	21-30 day	7-12%	60-80%	no	0	0	no demand
44	yes	30% and more	30 and more	12% and more	80% and more	no	0	0	no demand
45	yes	30% and more	30 and more	12% and more	80% and more	no	0	0	no demand
46	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand
47	yes	30% and more	30 and more	12% and more	80% and more	no	0	0	no demand
48	yes	21-30%	30 and more	3-7%	up to 60%	no	0	0	no demand
49	yes	0-10%	11-20 day	0-3%	up to 60%	yes	0-10%	0-10%	0
50	no	0-10%	0-10 day	0-3%	up to 60%	no	0	0	no demand

Exhibit 8. Survey results for sales and bad debts for M&D shops

#	Sales	Bad debt	Sales by POS
1	4570000	639800	
2	6093333.33	974933.333	
3	5103166.67	0	
4	5941000	653510	
5	3427500	0	
6	6778833.33	0	677883.333
7	4874666.67	877440	
8	4265333.33	1066333.33	
9	6017166.67	601716.667	
10	8759166.67	0	
11	6855000	0	959700
12	6702666.67	871346.667	
13	3427500	754050	
14	19437733.3	0	2915660
15	3427500	582675	
16	6550333.33	524026.667	
17	6321833.33	1643676.67	
18	4417666.67	0	
20	3960666.67	1227806.67	
21	7007333.33	280293.333	
22	8378333.33	4189166.67	
23	4113000	0	
24	5027000	0	
25	6474166.67	1035866.67	
26	7235833.33	1374808.33	
27	7007333.33	981026.667	
28	9871200	394848	493560
29	4189166.67	1508100	
30	5864833.33	762428.333	
31	13710000	0	411300
32	4646166.67	1300926.67	
33	9140000	0	
34	4036833.33	565156.667	
35	3351333.33	536213.333	
36	4341500	1736600	
37	2513500	0	
38	7312000	1169920	
39	3656000	548400	
40	3427500	616950	
41	7464333.33	0	
42	9901666.67	0	
43	1066333.33	127960	
44	6017166.67	2166180	

45	3503666.67	1051100	
46	5331666.67	0	
47	4570000	1371000	
48	7159666.67	1503530	
49	7616666.67	76166.6667	685500
50	4265333.33	0	

Exhibit 9. Source: ArCa

The number of online deals in the ArCA system

- 2013: 1,649,875
- 2014: 2,358,908
- 2015: 2,844,755
- 2016: 3,340,423

Number of POS cash services in ArCA system

- 2013: 394,180
- 2014: 452,154
- 2015: 451,525
- 2016: 359,776
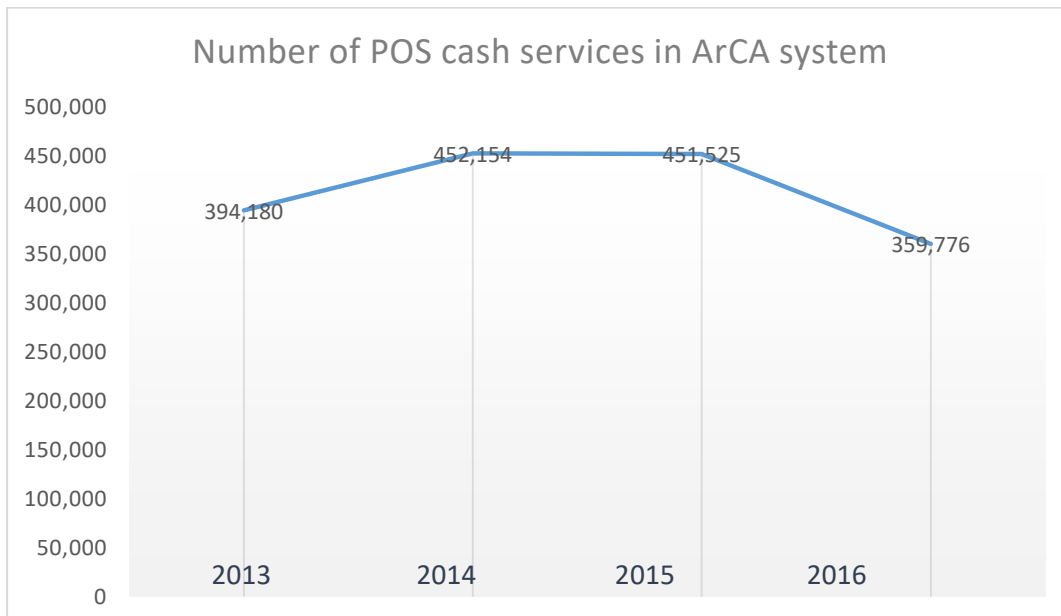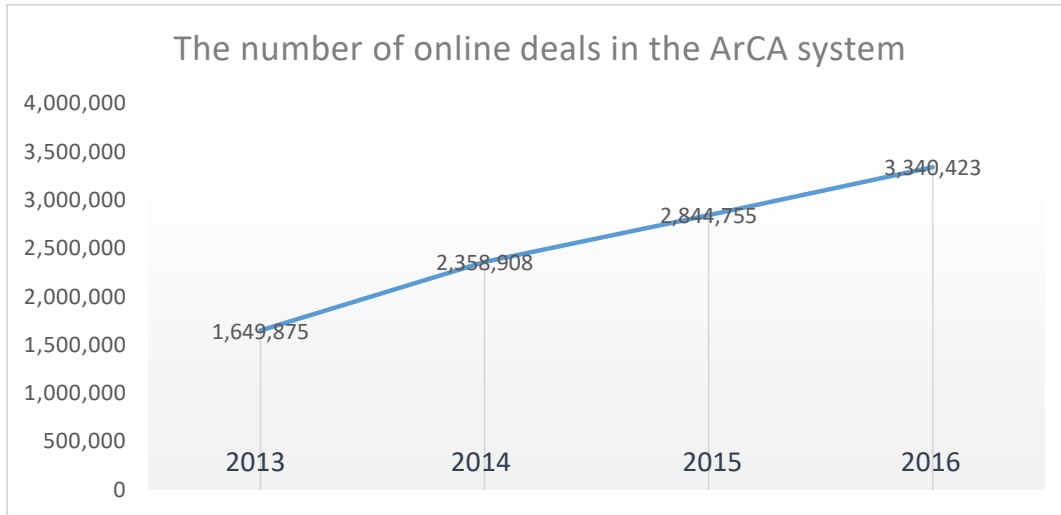
Number of POS non cash services in ArCA system

	2013	2014	2015	2016

- 1,649,875 (2013)
- 2,358,908 (2014)
- 2,844,755 (2015)
- 3,340,423 (2016)
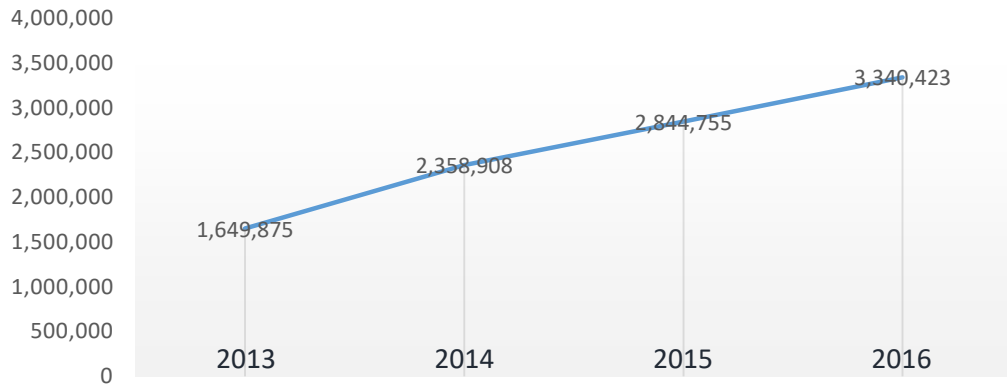
Number of ATM services in ArCa system

- 11,917,955 (2013)
- 14,403,386 (2014)
- 14,864,148 (2015)
- 14,732,410 (2016)

Non-Cash transactions with ArCa System

Legend: Total · ArCa cards · Non-ArCA cards

X-axis: 2013թ. · 2014թ. · 2015թ. · 2016թ.

All types of transactions in ArCa system

- 12%
- 14%
- 2%
- 72%

Legend: ATM · Cash withdrawal · Service centres · Online shopping

Gross value of ArCa system cards in
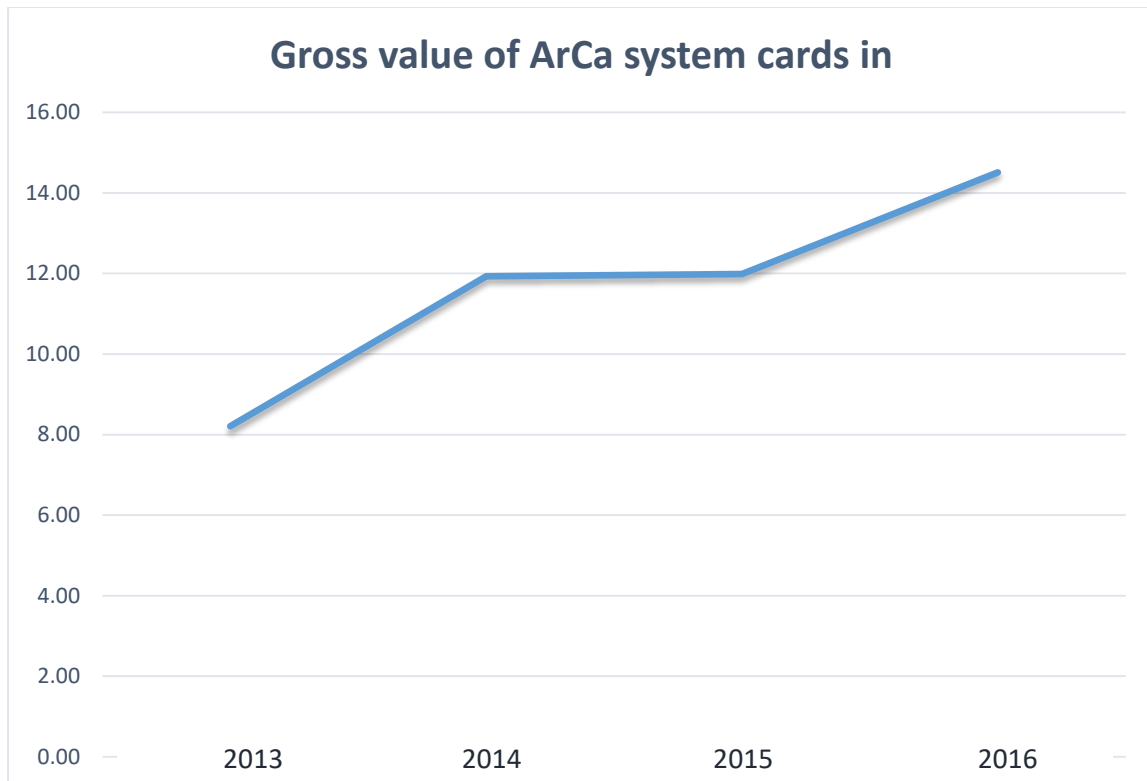
	2013	2014	2015	2016
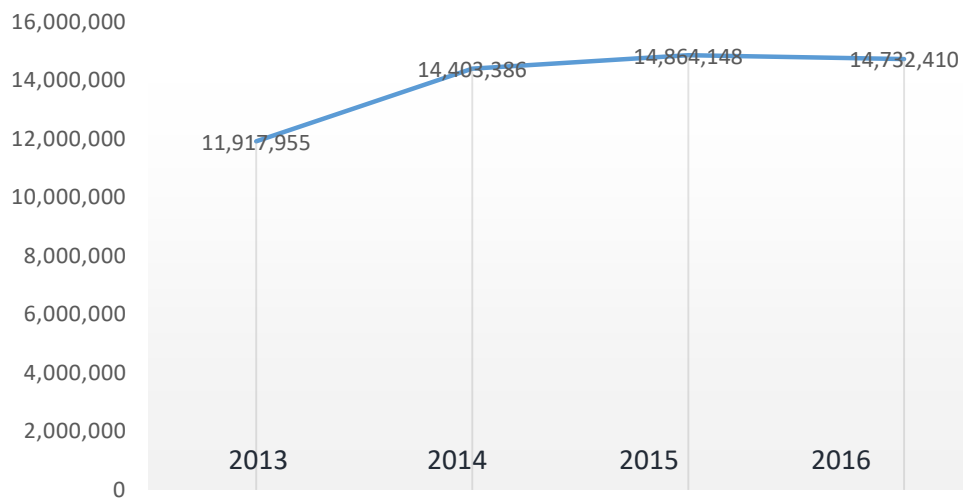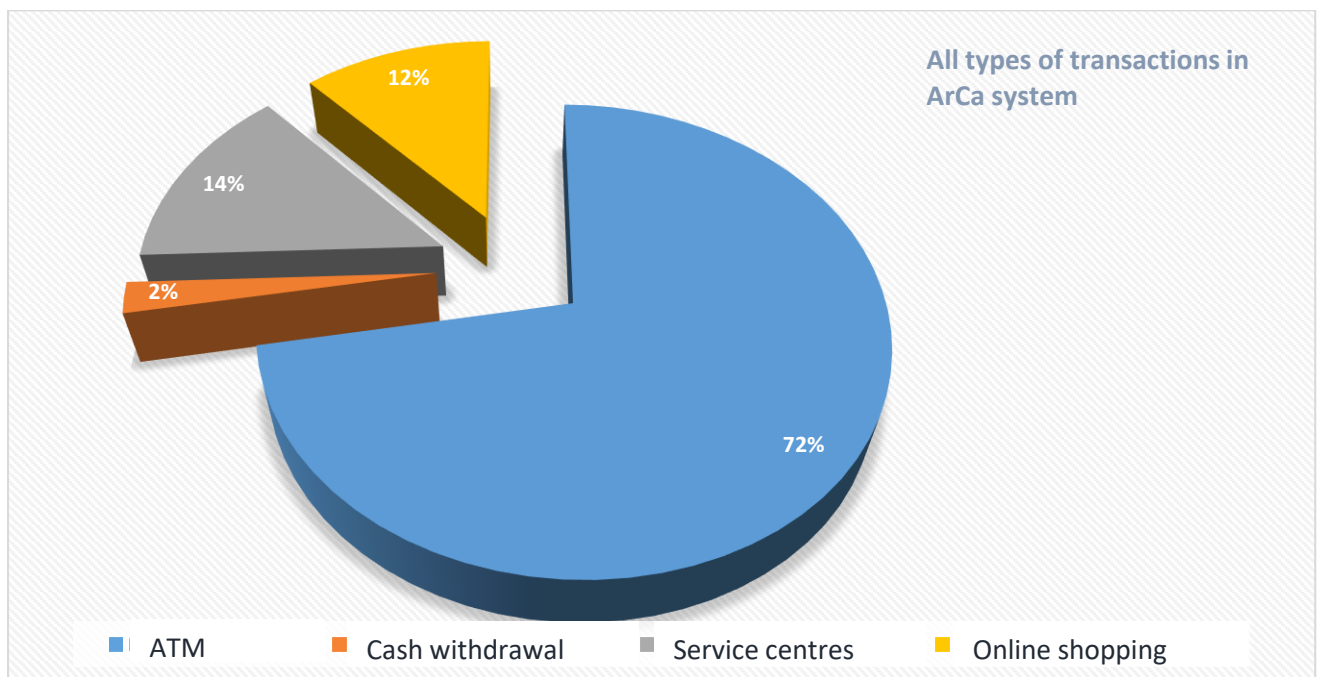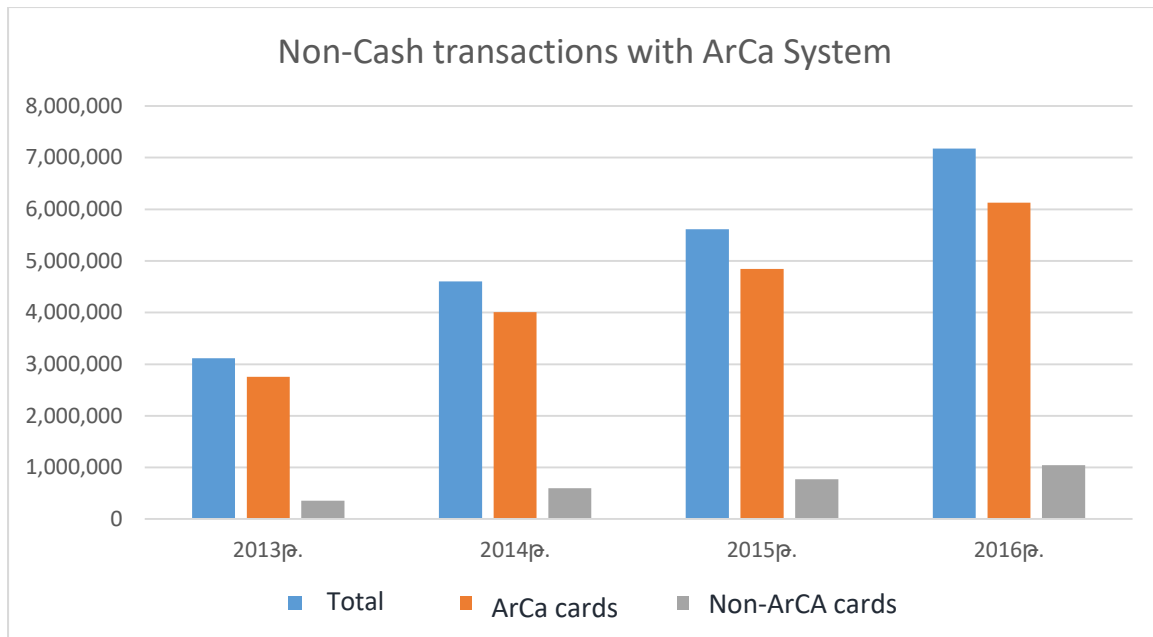
Exhibit 10: Survey Template

SURVEY

Do you have sales for credit?

* Yes
* No

What percent of total sales is for credit?

* 0-10%
* 11-20%
* 21-30%
* 30% and more

For how many days do you provide credit sales?

* 0-10
* 11-20
* 21-30
* 30 and more

What is the percentage of your bad debts in total debts?

* 0-3%
* 3-7%
* 7-12%
* 12% and more

What percentage of those who make credit sales pay within a month?

* Up to 60%
* 60% - 80%
* 80 and more

Do you have POS terminals?

If Yes

What percentage of sales is done by POS payment?

* 0-10%
* 11-20%
* 21-30%
* 30% and more

What percentage of customers prefer to pay by POS?

* 0-10%
* 11-20%
* 21-30%
* 30% and more

If No, why?

* No demand
* Too complicated
* Costy
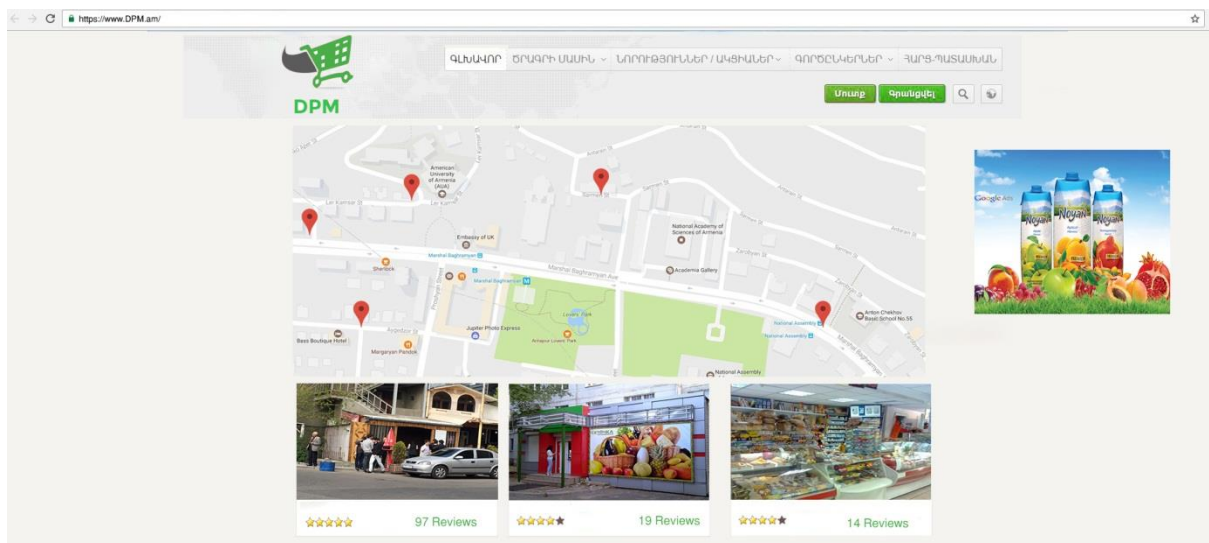* For the sake of transparency

Exhibit 11: Model for Web page

Exhibit 12: Linear Regression between Sales and Bad debt

[DataSet2]

Descriptive Statistics

	Mean	Std. Deviation	N
Baddebt	1.021635E6	7.4274120E5	33
Sales	5.42E6	1829784.766	33

Correlations

		Baddebt	Sales
Pearson Correlation	Baddebt	1.000	.267
	Sales	.267	1.000
Sig. (1-tailed)	Baddebt	.	.066
	Sales	.066	.
N	Baddebt	33	33
	Sales	33	33

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Sales[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Baddebt

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.267[a]	.071	.041	7.2717035E5

a. Predictors: (Constant), Sales

b. Dependent Variable: Baddebt

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.261E12	1	1.261E12	2.385	.133[a]
	Residual	1.639E13	31	5.288E11		
	Total	1.765E13	32			

a. Predictors: (Constant), Sales

b. Dependent Variable: Baddebt

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	433503.369	401308.358		1.080	.288	-384970.424	1251977.162
	Sales	.108	.070	.267	1.544	.133	-.035	.252

a. Dependent Variable: Baddebt

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	5.491965E5	1.504491E6	1.021635E6	1.9852468E5	33
Residual	-1.1837160E6	2.8466460E6	-1.9755327E-10	7.1571813E5	33

Std. Predicted Value	-2.380	2.432	.000	1.000	33
Std. Residual	-1.628	3.915	.000	.984	33

a. Dependent Variable: Baddebt

Charts

Histogram

Dependent Variable: Baddebt

Mean =-2.71E-16
Std. Dev. =0.984
N =33

Frequency

Regression Standardized Residual
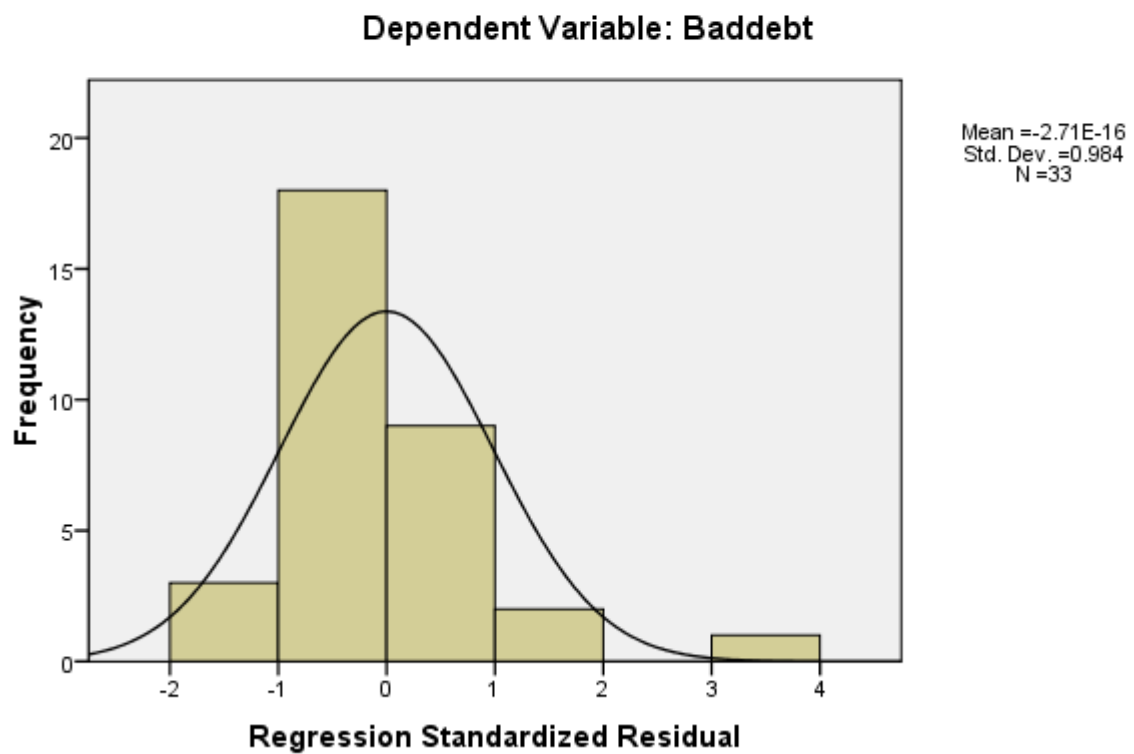
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Baddebt
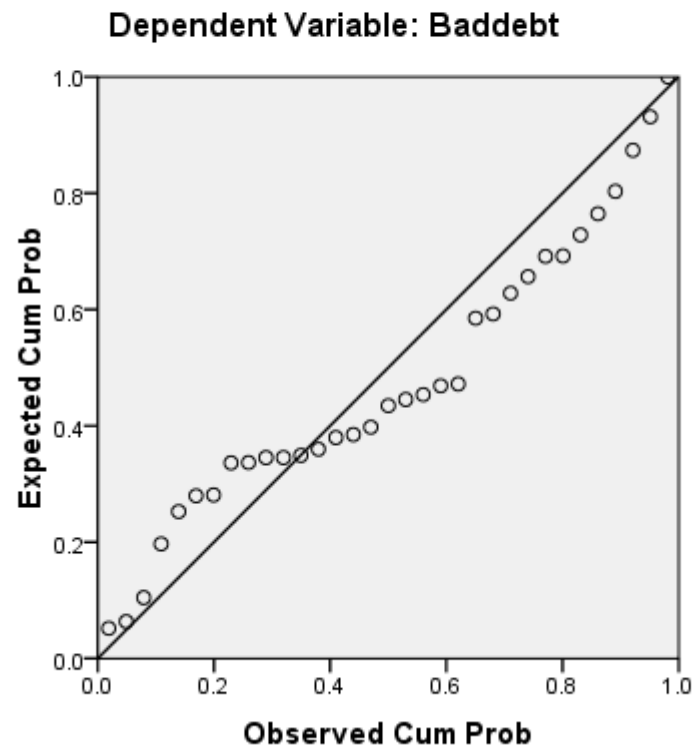
Scatterplot

Dependent Variable: Baddebt