TDT4259: Applied Data Science

Individual Project

On

Customer growth at Nagad

Table of Contents

List of Figures

List of Tables

1 Business Initiative

Bangladesh is continuing its digital transformation day by day and digital wallet services are helping to do so in the financial sectors. More than seventy percent of the total population of the country lives in outside of the city. These mass amount of people live almost out reach of the financial service providers. In this scenario digital wallet services are enabling the essential financial services. bKash is the first and leading mobile financial service (MFS) provider of the country who has started their operation on 2010. Despite of being only limited time in operation, from November 2016, Nagad has become the second largest MFS provider of the country.

Nagad is a joint venture company within which majority percent of the share are owned by Bangladesh Post Office. The other shareholder is Third Wave Technologies. Nowadays Nagad has more than 58.5 million of customer accounts and daily transaction surpasses 7 thousand million taka. MFSs collects fees and/or charge while transferring money to some other personal accounts, withdrawing money from agents or while doing transaction with other banking channels. So more the number of the customer, more the number of transaction and more is the profit for MFSs.

However, according to the customer growth of Nagad of last four years it is obvious that the last two years has not been the best years in terms of customer increase. Table 1 shows the customer growth of Nagad in last four years.

#	Year	Growth (%)
1	2018	23.46
2	2019	25.65
3	2020	21.45
4	2021	19.82

Table 1   Customer growth of Nagad in last 4 years

Obviously, growth has ben affected by the covid-19 situation in Bangladesh, but in comparison to the growth of other competitors this has not been good. covid-19 situation

was same for all the competitors, but despite that some other leading MFS has managed to keep their growth. Table 2 shows the growth some other competitors of Nagad in last two years.

#	Company Name	Growth of the year 2020 (%)	Growth of the year 2021 (%)
1	bKash	19.65	21.38
2	Rocket	16.57	18.46
3	mCash	12.36	15.82
4	Upay	10.15	13.55

Table 2   Customer growth of some competitors Nagad in last 2 years

So to make the growth again in a positive trend and more than the previous will be the focus of this project.

2 Stakeholders

Achievement of increased customer number require inputs from several groups. A collaborative input from different groups together will perform to keep the growth steady for Nagad.

2.1 Customers

The most important group to achieve the customer growth is the customer group itself. Happy customers trends to act as an ambassador of the organization. So inflow of customer bringing, engaging new customer in the transaction activity, and keep remaining the customers happy would be the most important step while trying to increase the customer growth for the present year.

2.2 Agents

Agents are the second most important factor for making steady growth. Agents acts as a hub for the customers. Customers can take out or take in cash in their mobile through the agents. Agents make profit in terms of commission through this procedure. So increased number of agents will also work for customer increase. It is also important to remember that like the customer an happy agent will also bring new agents and thus new customers.

2.3 Marketing Department

Nagad's marketing department works for sales department so that the targets that are set on sales department can be achieved. They play important role while executing the decisions of sales department about informing new products and services to customers and agents. The more the marketing department could perform the more there will be new customer and obviously more profits.

2.4 Sales Department

Nagad's sales department gets target for their yearly achievement, who uses their own team and with the help of marketing team try to achieve the target. Although the marketing department works for the benefit of the company on a holistic way but it works for the sales team too. Otherwise the products and services that Nagad already has or going to introduce will not reach to general people in proper channel and thus growth will be hampered. Sales department ultimately works with the agents and corporate entities to increase the overall sales of the organization.

2.5 Senior Management

Senior management is also one of the important entity of the stakeholders. They are the entity who ultimately take the decisions and also observe the progress. To oversee the progress and take proper initiative accordingly they will play the most vital role in the system by proper guidance. They get information from R&D department and also from sales & marketing department and take decision on those.

2.6 R&D Department

Research and Development department is also an important part of Nagad. They are the entity who ultimately searches the business scopes and finds whether a implemented initiative are working properly or not.

2.7 Partners

Partners are one of the key elements for the success of the achievement. As MFS is dependant on mobile operators, then partnership with the mobile operators will play an important role in the customer increase plan. This type of partnership is strategic by nature. As users need

to be connected in one of the mobile operator of the country to become customer of Nagad so strategic partnership with telecom service providers can be very useful. in Bangladesh while taking a mobile SIM card nowadays they need to ensure their identity. So collaboration with the MFS can be important aspect for increasing customer.

Stakeholder	Responsibility
Customers	Utilize the service of Nagad and use the products
Agents	Act as the hub for Nagad's products & service, promotion points for Nagad
Marketing Department	Promoting and marketing Nagad's services & products to current and future customers, make them aware what benefit awaits if someone become customer
Sales Department	Drives the sales of the products and services according to the plan of senior management
Senior Management	Takes the initiative of business, defines target and oversee the progress
R&D Department	Analyse the business outcome, finding new opportunity, inform them to the senior management and / or marketing & sales department
Partners	Provide a leading edge for facilitating easier access to service and products.

Table 3   Summarizes responsibilities of the stakeholders

3 Business Entities

3.1 Customers

Nagad's customers are those who has enabled Nagad's service in their mobile handset. MFS in Bangladesh did not impose any change or fees for becoming member. Once upon a time only agents have the capacity to enable the membership. But customer can now open their account by sitting their home only. They only need their national ID card, an active internet connection and a mobile device with camera for the task. After registering the account, the customer then can go to a agent to cash in money in their Nagad account. Customer can also

cash in money in their Nagad account if they used some online bank account because some of the online banking provider banks has collaboration with Nagad to transfer money from bank account o Nagad account.

3.2 Area Coverage

Nagad's success will mostly depend on how much area they are capable to cover by their service. More covered areas means more agents and thus that will lead into more customer. Not only that, Nagad need to define the density of agents they need to assign minimum in an area to become successful and keep the upward trend of the new customer inclusion.

3.3 Employees

Employees will play a vital role as business entity. The effort of internal eployees will reflect in the field. They will ultimately enable the service and products to the end users by delivering them to the agents. Number of new agents, number of new customers, total sales amount can be the data that will be achieved from the entities.

3.4 Competitors

Nagad has number of competitors in the market. These service providers are also thriving to get new customer and increase transaction volume. By looking into the competitors Nagad can gain the competitors services and offers and can target the market that competitors are yet to target.

4 Use Cases

A. Increase new customer

- As the total effort is to establish the increased customer base then increasing the customer to a certain extent is the main target of the business initiative.
- Dependant on marketing, sales, R&D, senior management and partners.

B. Partnership with telecom service provider

- New partnership with mobile operators will certainly increase the opportunity of inclusion of new customers. If is it possible to make the account opening process easier and not to involve the NID even while registering and can be done from the

messaging system to open the account, then there will certainly be number of account increased if there is a collaboration between telecom service provider and Nagad.

- Dependant on service and products, marketing, senior management

C. Reducing churn rate

- To keep the customer base active and more inclusive the effort to include the customer those are registered but not using the service anymore need to bring back and also need to make effort so that this action do not recur.
- Dependant on service and products, marketing, sales, R&D

D. Partnership with corporate houses

- Different corporate organizations can be targeted to increase the subscription. If Nagad can bring this service and enable the corporate house to pay their different payments, like wedges and bills through Nagad then the total number of customer and as well as the revenue will automatically increase.
- Dependant on marketing, R&D, senior management

E. Increase the service providing area

- The more the service providing area is covered the more customer will be interested in the service and products. Agents need to be in continuous monitoring to keep them happy and up to date so that customer can get all the facilities in the outlet.
- Dependant on marketing, R&D

F. Training the staffs

- Training is an important factor in every aspect of an organization. So increasing the training hours has impact in customer increase because staffs will be more rady and equipped with the knowledge of how to do their work and how they can organizethe work.
- Dependant on human resources, R&D

G. Activity involving customers

- Though as a part of advertising and marketing but this can also increase number of new customer. This can be another strategy to increase the customer and also for marketing of the organization.

- Dependant on marketing

H. Reduce charges and fees

- As there is some charges and fees involved during the transaction, so one strategy could be reducing the charges and fees. Reduced charges and fees will certainly be interest of customers and thus number of transaction volume will increase and also may increase the number of new customers.
- Dependant on senior R&D, management

5 Use Cases Prioritization

If we prioritize the use cases in a matrix we will get the matrix that illustrated in figure 1, where cases were prioritize on the basis of feasibility and business values.
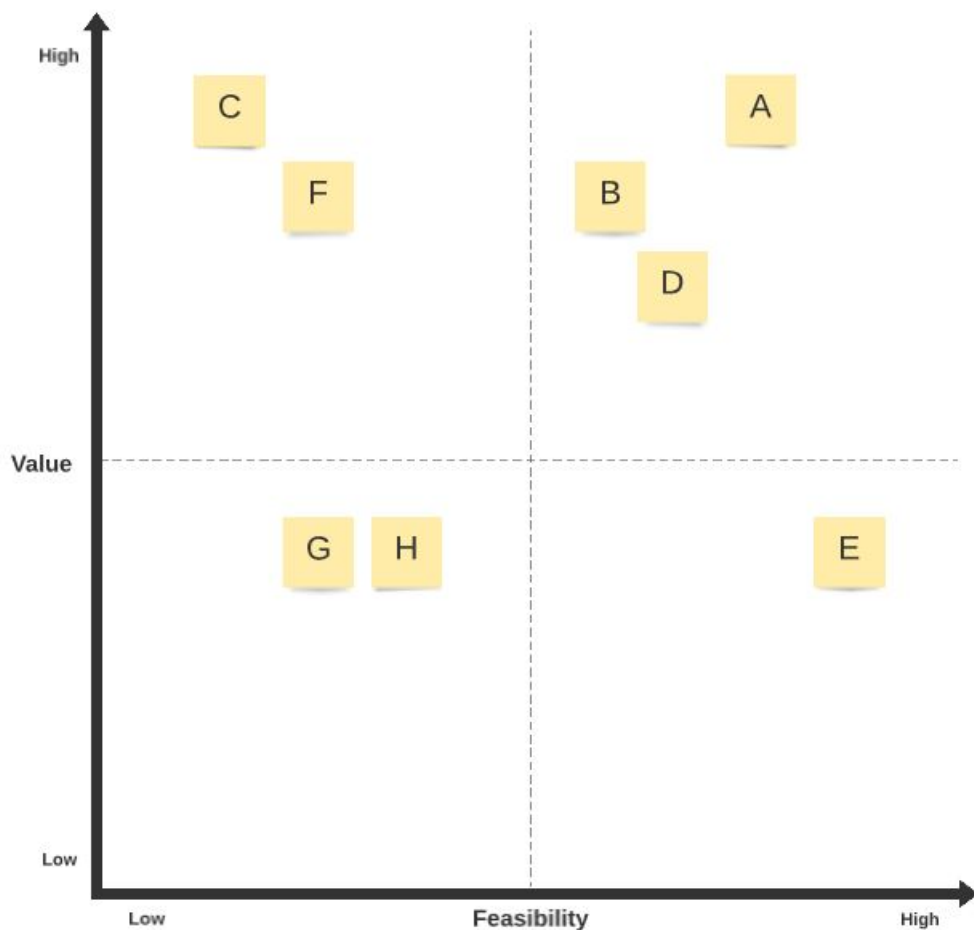

Figure 1   A prioritization matrix of where use cases were mapped

6 Data Sources

A. Increase new customer

- Data source:
  - Basic customer information such as Name, Date of birth (DOB), gender, location, income level etc.
  - Marketing concern data, like number of probable customer reached because of marketing, and number of them turned into new customer.
  - Types of campaign: Advertisement, bonus cash, redeems or discounts which strategy were used.
  - Corporate houses. Need to research on which corporate houses used Nagad and which does not.
  - Competitor study. Research on market competitors and their success factors. For example, which customers they reached most, what were their marketing strategy etc.
  - Staff training: How many hours training received by employees? How was the performance before and after the training?
  - Educational institute. Marketing in educational institute will increase the new customer. Inclusion of educational institute to avail different services also will increase new customer.
  - Customer comments and feedback. Customer feedback on the products and services are important. How satisfied or dissatisfied the customers are about Nagad's products and services?
  - Engage customer in different events. Engage customer on different events? How much customer was engaged?

B. Partnership with telecom service provider (telco)

- Data source:
  - Number of customers the telecom operator has? How easily a new customer can join Nagad's system? Integration of systems.
  - Collection of basic data, i.e. name, DOB, gender, location etc.

- o Active customer of the telecom provider. How active the customer is? How remote area they live into?
- o How this joint venture may benefit both Nagad and telecom service provider? What others benefit Nagad may get from this joint venture?
- o Study of other MFS connected to the telecom service provider. Does this telecom service provider is connected to other MFS provider? Which customers availed other MFS's service through the telecom service provider?

D. Partnership with corporate houses

- Data source:
- o Research on corporate house, i.e. does it has office in the city only? does it also has factory? Total number of workers and how their wages are paid?
- o Sharing data. Nagad can use the data of the organization. It could be the basic information and also the more insight data. As this will be a partnership, Nagad can use the brand value of the partner also.
- o Introduce new product and service. What new services and product need to provide? How much variety can be made to make services and products more attractive?
- o Competitive offer. What are competitors are offering to the corporate houses? How our products and services are more competition then them?

Data sources	Use Cases		
	A Increase new customer	B Partnership with telecom service provider	D Partnership with corporate houses
Customer data	4	4	2
Marketing outcome	3	2	2
Campaigns	4	0	1
Customer comments & feedback	4	3	2
Competitor study	2	0	0
Staff training	2	0	1

Data sources	Use Cases		
	A Increase new customer	B Partnership with telecom service provider	D Partnership with corporate houses
Educational institutes	4	0	2
Active customer list	2	4	0
Customer location	1	3	0
Telco partnership	3	4	0
Corporate house partnership	3	0	4
Customized service and products	2	1	3
Information of customer of telco who availed service of other MFS	3	3	0

Table 4   Relevancy of data sources and the use cases. 0 denotes not relevant and 4 denotes most relevant

7 Scores

By grouping different variables that are related to interest of stakeholders and also to the use cases we can made common structure in support to make decisions of our study. For the case of Nagad we can use the following scores based on our data source and relevancy study.

A. Potential customer score:

This score defines the possibility of inclusion of new customer from different opportunities. From the above discussion of segment 6 we already came to know which organization are potential for Nagad and same also goes for which educational institutes etc. The score is closely related to our goal of increase new customer for Nagad.

- Customer data. A potential customer list gives the understanding that which customers are target customer for Nagad and where Nagad need to do marketing.

- Campaigns. Good opportunity for Nagad to spread their names. This will not only good for marketing but there will be opportunity to get new customer as well.

- Partners opportunity: If it is possible to identify potential partner organizations, then this is big opportunity for Nagad always.

- Educational institute opportunity: The opportunity in educational institutions is twofold. First the institute itself is an opportunity. The institute can be act as a partner organization and run its financial operations through Nagad and secondly the students are another target of Nagad whom may become potential future customer.

B. User satisfaction score:

This score defines how much the customers are satisfied and which are the placed needed improvement. A collection of those can be used to develop or fine tune the products and / or services. Moreover this will also be a chance why some users are happy and there parameters can be used to keep happy other unhappy users. This (happy customer) will ultimately bring more customer in future.

- Customer data. This information will help to accumulate which customers are happy and which are not. Not only that they can be grouped together on age, sex, location etc. so that Nagad can have a clear picture of their products and services and can do necessary fine tuning.

- Customer comments & feedback. Collecting this data will help Nagad to accumulate the real customer comment on Nagad. Thus Nagad has direct information from customer about the idea of making them happy. This will in turn work for both making the current customer happy and bringing the potential new customer.

- Partnerships. Partnership will happen between organization and Nagad by fulfilling certain conditions from both the organization. The conditions organization will demand are the points that will usually make the other organizations happy as well. So in this circumstance Nagad may have direct advantage of understanding what is the necessity of general organizations and how to please them.

- Competitor study. Although data of this kind may be tough to find but partnership may avail some of the data and which can be used to understand why some users are using other MFS other than Nagad. Having this information Nagad may use those to generate some customer of its own by finding out the reason why those customer are

not happy. This study can be done in vice-verse to understand why some of them are happy as well.

C. Staffs performance score:

This score will define whether the internal staffs are performing accordingly and whether their efforts are taking place into actions. Together as a organization internal staffs are trying to achieve organization goals, whether it need more improvement or the growth is in proper way these can be found out by these scores.

- Marketing. They try to find the potential customer by various means for the organization. Their performance can be measured by the rate of inflow of new customers and the net volume of transactions.
- Training: The number actions taken to bring the customer vs total number of customer inflow can be translated into the amount of time are spent for education and training.

D. Marketing performance score:

This score will define whether the marketing policies are performing accordingly. The effectiveness of marketing section can be found here.

- Marketing outcome. Effectiveness of marketing lies in the amount of customer it managed to bring from its targeted customers. These customers should be effective customers as well. Thus, the customer become effective.
- Campaigns. Like marketing whether or how many customers were generated from the campaign and how many of them are actual effective customers. This study will also answer whether the campaigns are being in effective manner or not.
- Customized service and products. These are also part of marketing. By this the effectiveness of product customization and necessity of product customization can be understood. The effort that was make to customize a product and in return how many customers were accounted ae the catch of this study. This also shows how to improve this process and why customers are not happy yet after customize (if any).

7 Recommendations and score mapping

Use cases	Recommendations	Scores
Increase new customer	Target customer segment for marketing	Potential customer score
	Most effective marketing campaign	Marketing performance score
	Potential educational institute and business.	Potential customer score
Partnership with telecom service provider (telco)	What necessary customization to do	Marketing performance score
	Which organizations to focus	Potential customer score
	How to study competitors	User satisfaction score
	Necessary training of the staffs	Staffs performance score
Partnership with corporate houses	What necessary customization to do	Marketing performance score
	Which organizations to focus	Potential customer score
	Necessary training of the staffs	Staffs performance score
	Which organization to be partner	User satisfaction score

Table 5   Use cases, Recommendations and score mapping

7 Bibliography

[1] "The independant," 11 12 2021. [Online]. Available: https://www.theindependentbd.com/post/271191. [Accessed 12 10 2022].

[2] "Nagad," [Online]. Available: https://nagad.com.bd/. [Accessed 6 10 2022].

[3] "Business Inspection," [Online]. Available: https://businessinspection.com.bd/rise-of-nagad/. [Accessed 8 10 2022].

[4] "bKash," [Online]. Available: https://www.bkash.com/. [Accessed 8 10 2022].