

Evaluation of Business Model of E-Wallets of Nepal

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Abstract

This article is intended to evaluate business model elements adopted by Nepalese e-wallets and to find out weak points in its implementation. This article also suggests ways to reduce any loss through which they are running through proper mathematical interpretation. Grey-TOPSIS method is a mathematical interpretation tool that can be used to analyze raw data. The limitation of this research is that it is based on costumer's opinion rather than being based on company's data. Though the output of result may vary from one costumer to another, sample population taken into consideration in research have shown that the reason behind loss of e-wallets is lack of proper identification of revenue stream by entrepreneurs. Besides revenue streams, e-wallets should also prioritize their focus on their key activities, customer segmentation, key resources, value proposition, cost structure, key partners and external relationships respectively. The success of e-wallets is not far away if they prioritize their activities as per these findings.

Keywords: Business model Canvas, Correlational research, Euclidean distance framework, Grey-TOPSIS, Normalization

Introduction

Similar to most of Nepalese start-ups, few IT start-ups of Nepal have considered some elements of business model but most of them have not seriously taken business model design into consideration. Business model is the foundation that drives all activities of organization. It can also be defined as a set of reasons for the process adopted or to be adopted by an organization to make and take self-values and break other's values. People are found to adopt their own tools and techniques in their start-ups and perform trial and error method. Those self-designed tools and techniques somehow matches to some of elements of business model but bypass major idea to be implemented. When the failure of adopted method by start-ups arises, it leads them to copy others business model. Thus, modern start-ups, products and program in Nepal prefer bringing international franchisees in the country which avoids financial risk to some extent but huge national currency gets exported and one and only reason behind this is lack of adopting proper business model.

E-wallets, also termed as e-wallets or digital wallets, fall under category of growing start-ups of Nepal. This entire research has considered e-wallets as representative of all startups. ESewa, the pioneer of Nepalese e-wallets and e-wallet with highest market share which is established in 2009, is still in loss. The condition of other such wallets like CG Pay, IME Pay, ePrabhu, Khalti, iPay, Qpay etc. can easily be predicted. One of the major reasons behind loss in e-wallet business is lacking proper element in the business model or lacking appropriate strategy to implement elements of business model. Copying business model of foreign e-wallets does not match Nepalese context appropriately. Thus, e-wallets always need to focus on all 9 elements of business model and design every activity to be performed in each element based on emerging concepts of market segmentation. But lacking this knowledge have led every e-wallets to stay in loss till present context. Therefore, the purpose of this research is to find faults in implementation of business model by e-wallets of Nepal and to provide necessary suggestions to improve present

scenario by being based on research data. Besides this motive, this article also focuses on finding out those elements of business model which is being highly prioritized by e-wallet companies of Nepal. This article also suggests new modifications that are required in adopted business model.

This study has not considered financial statements of private firms into consideration. The study is based on e-wallet users' opinion which vary from person to person. It has placed all different business models as stated by Kriss (2020) like subscription model, bundling model, freemium model, razor blades model, leasing model etc. in the same basket and has analyzed all of them considering them as "business model."

Literature Review

E-wallets are one of the emerging fields of modern world. It is electronic version of the traditional wallet which makes use of smartphones and computers for any kind of payments. Nepal has also got 7.67 million users of e-wallets. Looking at these growing users, many entrepreneurs are trying to enter in this field but they are facing sustainability challenge. These applications make revenue through money floating in the system, transaction charges, commission charges, withdrawal charges, merchants, remittances etc.. Though Nepalese e-wallets have adopted all necessary charging policies for provided services, they are bearing loss since last 10 years .

Business model can be termed as hypothesis about all various parameters of stakeholders like demand, desired price, expected intensity of availability of product, business partner's expectation etc. and proper planning of enterprise's reaction towards stakeholder's action. It guides business to deliver customer value, to select investment sector and to manage all activities for long-lasting existence of business. Proper business model also protects company from loss.

Among various frameworks to design business model, most popular business model designing framework is Business Model Canvas. Though elements of business model seem to be static, the creativity of entrepreneur can be used to provide life to those elements. Those static business model elements can be implemented using various strategies as per customers' dependency upon product, and uniqueness and efficiency of product. This variation in strategies brings a challenge in effective design of model. The successful design helps to expose how practitioners can tap into new markets and opportunities by innovating on this system level construct.

Entrepreneur is the one who combines already existing elements into novel forms . Hence, a good entrepreneur with proper business model always give rise to niche or innovative business models . But this combination seems to be lacking in the context of Nepalese industries.

Business model research is at the union of strategy and entrepreneurship research (Demil et al., 2015). The research helps firms to perform business activities at system level. One way to perform business model research is by collecting data from customers and evaluating the existing business model by using Grey-TOPSIS. Grey-TOPSIS assists to determine, manipulate and verify weight analysis and ranking of affecting indices (Chang et al., 2021).

Findings cannot be made without any research. Research is simply gathering of data which can be interpreted to generate critical information. Any research has to be performed by maintaining the neutrality. The data collected during research must be reliable and valid, and should have capacity to generate generalized result. Research can be performed by using various techniques as guided by research design. Descriptive, correlational, experimental, diagnostic and explanatory research designs are major 5 types of research designs mostly used in research .

Research Methodology

Research Design

This research study is based on quantitative as well as qualitative research. Besides that, the study has used descriptive, diagnostic and explanatory research design. Primary data are collected in this research to perform quantitative analysis and qualitative. Similarly, secondary data from various sources are used for qualitative analysis. Similarly, mathematical calculations are used to fulfil objectives of the study.

Data Collection and Processing

Primary data are collected through survey among people. The collected data are used to produce necessary information by performing necessary calculations. Raw data is first normalized and weighted value of each normalized data is calculated. Ideal best value and ideal worst value in each case is determined and the concept of Euclidean distance is used. Euclidean distance from the best and Euclidean distance from the worst is used to calculate performance score which is used to determine rank of element of business model.

Result and Discussion

Grey-TOPSIS method is used to determine major sectors on which e-wallets should focus. For the research purpose, set of questions as mentioned in Appendix A were prepared and asked with public to answer them. Among 32 responds, as shown in appendix B, recorded from people of various geographic locations of Nepal, almost 93.9 percent of participants responded that their problem was solved by e-wallets. Similarly, 37.5 percent participants of survey were found to be using e-wallet very frequently. Third question of survey found that 78.1 percent of the participants have very easy access to e-wallets. Similarly, 75 percent of the participants responded on using e-wallets again. 40 percent of the participants were found to have no complaints on fee charged by e-wallet whereas 9.4 percent were not satisfied with that. People in survey were found to be using 75 percent features provided by bank and 34.4 percent people think that e-wallets should have more partners to make users life easier. In summary, 50 percent of the participants provided more than 75 percent score to e-wallets of Nepal. All these data were compiled for quantitative interpretation purpose as shown in Appendix C. Normalization of original data was done and tabulated as shown in Appendix D. Assuming that all parameters are of equal weightage, weightage of each cell in the case of 9 criteria would be 0.11. Finally, summary Table is constructed and analyzed through it.

From results in Table 1, it is observed that:

- a) From "Rank" row of summary table, channels of e-wallets got first rank. This shows that, customers are fully satisfied with the channels used by e-wallets for providing services. People are found being able to access the services provided by e-wallets in a comfortable way.
- b) Similarly, revenue stream got last position in rank. This notifies that the reason behind loss of capital of e-wallets is entrepreneur's inability to focus on revenue streams.
- c) Next to revenue streams, Nepalese e-wallets should focus on key activities to make people feel more attached towards their product and services. This can be done through proper customer segmentation.
- d) E-wallets should prioritize their work and mainly focus on customer segmentation, categorization and optimum use of resources, solving many customer problems with their product, fixing their cost structure and thus reducing expenses, identifying their key partners and maintaining good relation with stakeholders and costumers.

Table 1*Summary Table derived from interpretation of data shown in Appendix C and Appendix D*

	Value Proposition (A1)	Customer Segments (A2)	Channels (A3)	Relationships (A4)	Revenue Streams (A5)	Key Resources (A6)	Key Partners (A7)	Key Activities (A8)	Cost Structure (A9)
	0.02056	0.0203	0.02177	0.0197	0.02511	0.0226	0.0204	0.01732	0.01697
	0.02056	0.0203	0.02177	0.0197	0.01883	0.0226	0.0153	0.02309	0.02263
	0.02056	0.02537	0.01306	0.0197	0.01883	0.01695	0.0204	0.01155	0.02263
	0.02056	0.0203	0.01306	0.0197	0.00628	0.0226	0.0153	0.02309	0.01697
	0.0257	0.02537	0.00435	0.01477	0.01883	0.0113	0.0051	0.02887	0.02829
	0.01542	0.01522	0.02177	0.0197	0.01256	0.01695	0.02551	0.01732	0.01132
	0.01542	0.01015	0.01306	0.01477	0.01883	0.01695	0.0153	0.01732	0.01697
	0.0257	0.02537	0.01306	0.0197	0.01883	0.02825	0.02551	0.00577	0.02829
	0.01028	0.01015	0.02177	0.02462	0.00628	0.00565	0.02551	0.00577	0.00566
	0.0257	0.02537	0.02177	0.0197	0.01883	0.02825	0.0051	0.02887	0.01697
	0.02056	0.02537	0.02177	0.0197	0.02511	0.01695	0.0153	0.02309	0.01697
	0.02056	0.0203	0.02177	0.0197	0.01256	0.0226	0.0153	0.02309	0.01697
	0.0257	0.02537	0.02177	0.0197	0.03139	0.0226	0.0051	0.02309	0.02263
	0.01028	0.01015	0.00435	0.0197	0.01883	0.0113	0.0204	0.01155	0.00566
	0.01542	0.01015	0.02177	0.02462	0.01256	0.00565	0.0204	0.02309	0.01697
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	0.01542	0.01522	0.02177	0.0197	0.01256	0.0113	0.02551	0.01732	0.01697
	0.02056	0.02537	0.02177	0.0197	0.02511	0.0226	0.0204	0.01732	0.02263
	0.02056	0.0203	0.02177	0.0197	0.02511	0.0226	0.02551	0.01732	0.01697
	0.01542	0.01522	0.02177	0.0197	0.01883	0.01695	0.02551	0.01732	0.01697
	0.01542	0.01015	0.02177	0.00985	0.01883	0.0113	0.02551	0.01155	0.01697
	0.0257	0.01522	0.02177	0.0197	0.02511	0.0226	0.0051	0.02309	0.02829
	0.0257	0.02537	0.02177	0.0197	0.03139	0.02825	0.02551	0.02887	0.02829
	0.01542	0.0203	0.02177	0.0197	0.01883	0.0226	0.0102	0.02309	0.01697
	0.0257	0.02537	0.02177	0.02462	0.02511	0.01695	0.02551	0.02309	0.02263
	0.01542	0.02537	0.02177	0.02462	0.01883	0.0226	0.0153	0.01732	0.02263
	0.0257	0.01522	0.02177	0.0197	0.02511	0.01695	0.02551	0.01155	0.01697
	0.02056	0.02537	0.02177	0.02462	0.01883	0.02825	0.0204	0.02887	0.02829
V_i^+	0.0257	0.02537	0.02177	0.02462	0.03139	0.02825	0.02551	0.02887	0.02829
V_j^-	0.01028	0.01015	0.00435	0.00985	0.00628	0.00565	0.0051	0.00577	0.00566
S_i^+	0.04239	0.04538	0.03017	0.03075	0.07612	0.06164	0.05227	0.06403	0.0588
S_i^-	0.05677	0.05873	0.0871	0.05721	0.07816	0.08129	0.08428	0.08062	0.08081

PS	0.57255	0.56412	0.74272	0.65041	0.50662	0.56876	0.61722	0.55735	0.57884
Rank	5	7	1	2	9	6	3	8	4

In Table 1, V_j^+ : Ideal Best Value V_j^- : Ideal Worst Value S_i^+ : Euclidean distance from the best S_i^- : Euclidean distance from the worst PS: Performance Score

Conclusion

Nepalese e-wallets are in loss since their establishment. They have made huge investment in their user interface and accessibility. This have made them accessible throughout the country. Along with user service, they should also focus on various revenue streams and features to make attached to their application/webpage for faster business growth. The same business model adopted by e-wallets will work in more productive way if they focus on costumer segmentation, key resources, value proposition, cost structure and key partners in a prioritized way. Thus, they should bring some modifications in business model element's implementation strategies to make same business model work better.

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