

## **RELOADABLE DEBIT BUS CARD**

**Hannah Carla P. Bondad, Kathlene P. Burgos, Ruth Mae L. Flores, Erika Andrea A. Zarraga**

### **ABSTRACT**

*The continuous advancement of technology brought different changes in the Philippines especially in the business world. The owners of different businesses are being competitive by maintaining sustainability advantage to their competitors. The technological advancement pushed various businesses in the Philippines to continuously improve their services in order to match the taste of their consumers. One of the most used technological advancement services is the Cashless Payment. The number of businesses that use Cashless Payments is increasing, as it provides convenience and secured transaction for the benefit of the company and the consumers. After considering several factors, the researchers came up with an innovative idea that is related to technological advancement in order to improve the services of the Bus Companies. The researchers proposed a project about the implementation of cashless payment in provincial buses specifically in CALABARZON area. The proposed project also includes an application where the commuters can view their balances, earned points and transaction history. The application will be exclusively available for the commuters that avails the Convenience for Travel (CFT) card. The researchers also maximized the benefits that the Bus Companies and commuters can acquire by having this proposed project implemented. Considering that transportation is a necessity and the Philippines populations are increasing two percent (2%) annually, and fourteen (14%) of it is an increase in CALABARZON area, the researchers can say that this study is possible to be implemented.*

**Keywords:** *Bus card, travel, reloadable debit card, convenience for travel*

## **PROJECT PROPOSAL**

Proposed Business: Reloadable Debit Bus Card: Convenience for Travel Card

Industry Classified: Manufacturing

### **I. Descriptive Definition**

#### **a. Rationale**

Because of the wide range of unethical activities that are done today, businesses, as well as its consumers, want a secure and convenient transaction which is why cashless payment system is used immensely when given the opportunity in the country. In fact, businesses try as much as possible for their form of payment be cashless in order to have security, convenience and privacy in a way so that money cannot be tracked for both the entity and their consumers. But in this country, bus companies do not have a cashless form of payment for the fares that's why unethical activities may occur. The researchers decided to conduct this study mainly because it will bring security and convenience to both the bus company and the commuters. It will become very suitable to daily commuters since the commuters will be able to set aside their budget for their transportation expenses and with the use of the new system, they will be able to save up rewards which can be redeemed for another ride if they are able to save up a certain amount of points. With this study, certain expenses for the bus companies will be lessened. The Reloadable Debit Bus Card, also called CFT Card (which stands for Convenience for Travel Card). is a transportation pass that can be conveniently used in buses. It has its own application where the balances, points and transaction history can be found.

## II. Nature of the Business

### A. Business Description

#### i. Name of the business

The business corporation will be named “CFT Corporation.”

#### ii. Properties of the Business

The initial product of this business, reloadable debit bus card, will be produced by the employees and will be distributed to the potential users of the product. Same with the augmented product of this business, the application that will be deployed by the IT expert and will be used by the potential users as well.

#### iii. Uses of the Product

The reloadable debit bus card will provide the potential users a convenient and secured experience of payment as it will become the newest form of payment for the bus fares. Also, it may be used in purchasing of goods in the convenience stores partnered with the CFT Corporation.

#### iv. Users of the Product

The target users of this card, Convenience for Travel Card are the commuters that travel daily and occasionally who ride the bus as a means of their transportation.

### B. Target Market

#### i. Geographic

Cavite, Laguna, Batangas, Rizal, Quezon

ii. Demographic

The potential users of this reloadable bus card are the Filipino bus commuters, whether regular or occasional, like those who contribute to the labor force. The usual age of the regular bus commuters is 16 and above.

### C. Competitors

The CFT card has no direct competitors and its indirect competitors are the MyBus card and Beep card.

#### Demand Projections

##### Demand

Demand is an economic principle that describes a consumer's desire and willingness to pay a price for a specific good or service.

#### Historical Demand

Historical demand reflected the total number of population in classes A, B, and C in the region of CALABARZON. Actual number of the data was gathered from Philippines Statistics Authority official website ([www.psa.gov.ph](http://www.psa.gov.ph)).

Table 1. Historical Demand

YEAR	POPULATION	LABOR FORCE	EMPLOYMENT RATE	CLASS(A,B,C)	REGISTERED CARS	HISTORICAL DEMAND
2013	11,000,000	64.50%	90.80%	0.60	168,295	3,697,061
2014	12,300,000	65.50%	91.80%	0.60	169,345	4,268,175
2015	14,414,774	64.30%	92.00%	0.60	170,624	4,945,698
2016	16,100,000	64.70%	92.50%	0.60	171,216	5,610,053
2017	17,294,000	63.20%	91.80%	0.60	172,089	5,848,049

To compute for the historical demand, a research was conducted to know the demand of the commuters.

## Projected Demand

To get the projected demand, the researchers used the average increase of the population in CALABARZON to calculate the increase of each data for the next five years.

Table 2. Projected Demand

YEAR	POPULATION	LABOR FORCE	EMPLOYMENT RATE	CLASS(A,B,C)	REGISTERED CARS	PROJECTED DEMAND
2018	18,331,640	64.40%	92.38%	0.60	173,007	6,370,588
2019	19,248,222	64.60%	92.96%	0.60	173,925	6,761,459
2020	20,018,151	64.80%	93.54%	0.60	174,843	7,105,429
2021	20,618,695	65.00%	94.12%	0.60	175,761	7,392,702
2022	21,031,069	65.20%	94.70%	0.60	176,679	7,614,626

## Current Supply

As of now, there are no existing businesses that offer a reloadable bus card that is specifically for provincial buses which results in having no direct competitors that add up to the advantages of this study. There are only two indirect competitors for this study in the Philippines as of today, namely the beep card and myBus card.

The researchers consider the aforementioned as indirect competitors because both businesses offer a bus card but these cards are only for fixed terminals making fewer options for the commuters who travel on no-fixed terminals. This is the reason the researchers conducted this study, in order to be the first supplier of a reloadable bus card that is specifically for provincial buses that can unload anywhere along the route.

## Demand and Supply Analysis

After the gathering of data, the researchers have analyzed that this study does not have a direct competitor. There are existing indirect competitors but is seldom, namely the myBus Card in Cebu City and the Beep Card that is used in the MRT, LRT and soon to be used in

jeepneys if the new law is to be enacted. And as experienced Beep Card can only be used in the Metro Manila area unlike what this study is aiming to achieve. Both the indirect competitors have fixed routes making the commuters have limited terminals to stop by.

Since this study is for the convenience of the commuters, the demand for the study focuses there. Our population is very large, especially in the CALABARZON area, which this study would like to start on first. Because of this, the demand has large amount with very little competition which creates a huge possibility of meeting the breakeven sales and being more profitable.

### **III. Financial Requirements**

#### **a. Project Cost**

The project cost of the proposed project is Php 328,173,256.00

#### **b. Mode of Financing**

An amount of Php 328,173,256.00 shall be enough to establish the said project.

#### **c. Expected Returns**

After one year of operation

The proponents are expecting to get a 41.34% return of investment after a year of operation.

After second year of operation

The proponents are expecting to get a 1% return of investment on the second year of operation.

After third year of operation

The proponents are expecting to get a 0.21% return of investment during the third year of its operation.

After fourth year of operation

The proponents are expecting to get a 0.33% return of investment on the fourth year of its operation.

After fifth year of operation

The proponents are expecting to get a 0.21% return of investment on the fifth year of its operation.

d. Payback Period

The Payback Period is the length of time required in order to breakeven the cost of investment. In other words, it is the time needed for an investment to pay itself. An investment with a shorter payback period is considered to have lower risk rather than those with longer payback period. In this proposed project the proponents projected that the company will be able to breakeven in the first year of operation which is good for the incorporators.

## **RESULTS AND DISCUSSION**

### **Marketing Aspects**

Reloadable Debit Bus Card has a high demand within the area of CALABARZON. Regardless of any circumstances, the rapid growth of the population in the said region can easily affect the demand of the reloadable bus card. The demand for the application is also forecasted to increase each year. The company needs to assure that they meet the demand of the commuters every year. Market study helped the company to know the opportunities that will help the business to grow more and to fully understand everything the company's needed to fulfil for its customers.

## Operating Aspects

The information that has been gathered by the researchers in this study shows what suitable methods should be used in preserving and continuously improving of the operation of the business. The researchers made sure that the concept of this product is plausible and can really be created before making a plan on how this would be presented to the bus companies. They have showed how the product should be effectively marketed to the potential users, making sure that it would really be possible in attracting the market to achieve the goal of this study. The result of this study shall be the source of the operation of the business, where everything should be based from.

## Organization Aspects

The organization of the company is one of the key in achieving the goal of the business. The researchers have come up with some basic considerations needed by the company to effectively and efficiently reach its main goal and to serve its customers well. This assures that the environment of the company will work in the future. The company has its own way of assuring how the business will be formed effectively to meet the specific needs and to participate well in the chosen industry as it meets the legal requirements of the government to form and operate a business.

## Financial Aspects

The projected net income for the next five years will be based on their corresponding projected demand with additional other comprehensive income. It is anticipated by the researchers that the company will experience massive net income after every five years of operation because the consumers need to renew their Convenience for Travel (CFT) card as it is only valid for five years. Contrary to it, the company will experience massive decrease of net income due to the

fact that the projected demand volume will decrease in its second to fifth year of operation as the card is valid for five years.

## REFERENCES

Beep Card. Retrieved from <https://www.beetopay.com> on August 23, 2017

MyBus Card. Retrieved from <http://www.vivomigsgee.com> on August 27, 2017

Automatic Fare Collection System. Retrieved from [https://ppp.gov.ph/?ppp\\_projects=automatic-fare-collection-system](https://ppp.gov.ph/?ppp_projects=automatic-fare-collection-system) on November 16, 2017

Megakarte Smart Card Corporation. Retrieved from [http://www.megakarte.com/P\\_card\\_printers6%20ZXP%20Series%2081.html](http://www.megakarte.com/P_card_printers6%20ZXP%20Series%2081.html) on October 21, 2017

Smart Card Printer Systems. Retrieved from <http://www.alphacard.com/photo-id-systems/id-card-systems-with-special-features/smart-card-printer-systems> on October 21, 2017

Mifare. Retrieved from <https://en.wikipedia.org/wiki/MIFARE> on October 21, 2017

DILG Reports Resources 2017. Retrieved from [http://www.dilg.gov.ph/PDF\\_File/reports\\_resources/dilg-reports-resources-2017210\\_d00e89e9d7.pdf](http://www.dilg.gov.ph/PDF_File/reports_resources/dilg-reports-resources-2017210_d00e89e9d7.pdf) on October 25, 2017

Centralized Database. Retrieved from [https://en.wikipedia.org/wiki/Centralized\\_database](https://en.wikipedia.org/wiki/Centralized_database) on October 25, 2017

National Wages and Productivity Commission. Retrieved from [https://www.nwpc.dole.gov.ph/pages/statistics/stat\\_currentregional.html](https://www.nwpc.dole.gov.ph/pages/statistics/stat_currentregional.html) on October 26, 2017

Corporation Code of the Philippines. Retrieved from [http://www.sec.gov.ph/wpcontent/uploads/2015/08/Corporation\\_Code\\_of\\_the\\_Philippines\\_Batas\\_Pambansa\\_68.pdf](http://www.sec.gov.ph/wpcontent/uploads/2015/08/Corporation_Code_of_the_Philippines_Batas_Pambansa_68.pdf) on October 26, 2017

ASEAN Tax Philippines. Retrieved from [http://www.rd.go.th/publish/fileadmin/user\\_upload/AEC/Asean\\_Tax-Philippines.pdf](http://www.rd.go.th/publish/fileadmin/user_upload/AEC/Asean_Tax-Philippines.pdf) on October 26, 2017

Email Marketing. Retrieved from

<https://ph.godaddy.com/online-marketing/email-marketing> on October 26, 2017

Philippine Patent Grant. Retrieved from

[http://www.ipophil.gov.ph/images/Patents/RequestforGrantofaPhilippinePatent\\_M\\_arch\\_2015-Editable.pdf](http://www.ipophil.gov.ph/images/Patents/RequestforGrantofaPhilippinePatent_M_arch_2015-Editable.pdf) on November 5, 2017

Total Document Solution Provider. Retrieved from

<http://copylandia.com/> on October 21, 2017

Cost of Office Supplies and Equipment. Retrieved from

<http://www.crownsupplymanila.com/and>

[http://www.trojanenvelope.com/trojanenvelope\\_007.htm](http://www.trojanenvelope.com/trojanenvelope_007.htm) on October 21, 2017

Business Internet. Retrieved from <https://ssl.olx.ph/item/business-internet-pldt-fibr-dsl-unlimited-broadband-4-gadget-laptop-pc-ID7FWPQ.html?p=8&h=4fe67371be> (October 23, 2017)

High-end Servers. Retrieved from

<http://www.asianic.com.ph/product/dell-powerededge-t630-high-end-server> on October 26, 2017

Server Hardware Requirements. Retrieved from

<https://confluence.atlassian.com/doc/server-hardware-requirements-guide-30736403.html> on October 26, 2017

Legal Requirements Cost. Retrieved from

<https://businessstips.ph/the-cost-of-starting-a-small-business-in-the-philippines/> on October 26, 2017

Building and House Construction Cost. Retrieved from

<http://topnotchconstructionph.com/building-house-construction-cost-in-the-philippines/> on October 26, 2017

Atty. Andrix D. Domingo, CPA, MBA (2016). Partnership Law and Corporation Law. Corporation on October 23, 2017

Quick Stat on Region 4-A. Retrieved from

<https://psa.gov.ph/quickstat/region-iva-calabarzon> on October 22, 2017

Population of Region IV-A - CALABARZON (Based on the 2015

Census of Population). Retrieved from <https://psa.gov.ph/content/population-region-iv-calabarzon-based-2015-census-population> on October 22, 2017

Population of Calabarzon 2017. Retrieved from

<http://populationof2017.com/population-of-calabarzon-2017.html> on October 22, 2017

The Philippines in Figures 2015. Retrieved from  
[https://www.psa.gov.ph/sites/default/files/2015%20PIF%20Final\\_%20as%20of%20022916.pdf](https://www.psa.gov.ph/sites/default/files/2015%20PIF%20Final_%20as%20of%20022916.pdf) on October 22, 2017

LTO Annual Reports. Retrieved from  
<http://www.lto.gov.ph/transparency-seal/annual-reports.html> on October 22, 2017

QUICKSTAT on REGION IVA - CALABARZON August 2012.  
Retrieved from  
[https://psa.gov.ph/sites/default/files/attachments/ird/quickstat/region04A\\_0.pdf](https://psa.gov.ph/sites/default/files/attachments/ird/quickstat/region04A_0.pdf) on October 22, 2017

Office Order No. 13-171. Retrieved from  
[http://www.ipophil.gov.ph/images/Copyright/Copyright\\_Registratation\\_and\\_Deposit1.pdf](http://www.ipophil.gov.ph/images/Copyright/Copyright_Registratation_and_Deposit1.pdf) on November 15, 2017

BIR Business Registration Requirements. Retrieved from  
<http://www.full-suite.com/blog/10-easy-steps-to-registering-your-business-with-the-bir/> on November 15, 2017

Building Regulatory Services. Retrieved from  
<http://www.calambacity.gov.ph/index.php/11-government/136-building-regulatory-services-office> on November 15, 2017

MC No. 03 s.2017: Consolidated Schedule of Fees and Charges.  
Retrieved from <http://www.sec.gov.ph/forms-and-fees/schedule-of-fees/> on November 15, 2017

New Schedule Of Fees And Other Charges Of The Revised  
Implementing Rules And Regulations (Irr) Of The National  
Building Code Of The Philippines (PD 1096). Retrieved from  
[http://www.dpwh.gov.ph/dpwh/sites/default/files/laws\\_codes\\_orders/NEW%20SCHEDULE%20OF%20FEES%20%281%29.pdf](http://www.dpwh.gov.ph/dpwh/sites/default/files/laws_codes_orders/NEW%20SCHEDULE%20OF%20FEES%20%281%29.pdf) on November 15, 2017

How to Organize and Register a Corporation in the Philippines. Retrieved  
from <http://foundersguide.com/register-corporation-in-the-philippines/> on November 15, 2017

Intellectual Property Office of the Philippines Form/s (CPOYRIGHT).  
Retrieved from  
<http://www.ipophil.gov.ph/services/copyright/form-s> on November 17, 2017

Requirements for Copyright Application. Retrieved from  
<http://www.ovcrd.upd.edu.ph/wp-content/uploads/2010/02/requirements-for-copyright-application.pdf> on November 17, 2017

Guidelines on Copyright Registration. Retrieved from  
<http://www.ipophil.gov.ph/services/copyright/guidelines-on-copyright-registration-and-deposit> on November 17, 2017

Copyright Law in the Philippines. Retrieved from  
<http://www.federislaw.com.ph/faqs-resources/copyright/> on November 17, 2017

Support Technician Salary. Retrieved from  
[https://www.payscale.com/research/PH/Job=Support\\_Technician%2c\\_Information\\_Technology\\_\(IT\)/Salary](https://www.payscale.com/research/PH/Job=Support_Technician%2c_Information_Technology_(IT)/Salary) on November 17, 2017

How to Calculate Dividends per Share from an Income. Retrieved from <https://www.fool.com/knowledge-center/how-to-calculate-dividends-per-share-from-an-income.aspx> on November 17, 2017

The Retained Earnings Formula. Retrieved from  
<https://www.accountingtools.com/articles/what-is-the-retained-earnings-formula.html> on November 17, 2017