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### **Business Plan Confidentiality Agreement**

The undersigned reader of TECN7 Business Plan hereby acknowledges that the information provided is completely confidential and therefore the reader agrees not to disclose anything found in the business plan without the express written consent of Christian Nicole Alderite.

It is also acknowledged by the reader that the information to be furnished in this business plan is in all aspects confidential in nature, other than information that is in the public domain through other means and that any disclosure or use of the same by the reader may cause serious harm and or damage to TECN7.

Upon request this business plan document will be immediately returned to Christian Nicole Alderite.

This is a business plan. It does not imply an offer of any securities.

Applicable Law

This contract shall be governed by the laws of the County of Philippines in the State of Metro Manila and any applicable Federal law.

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Signature

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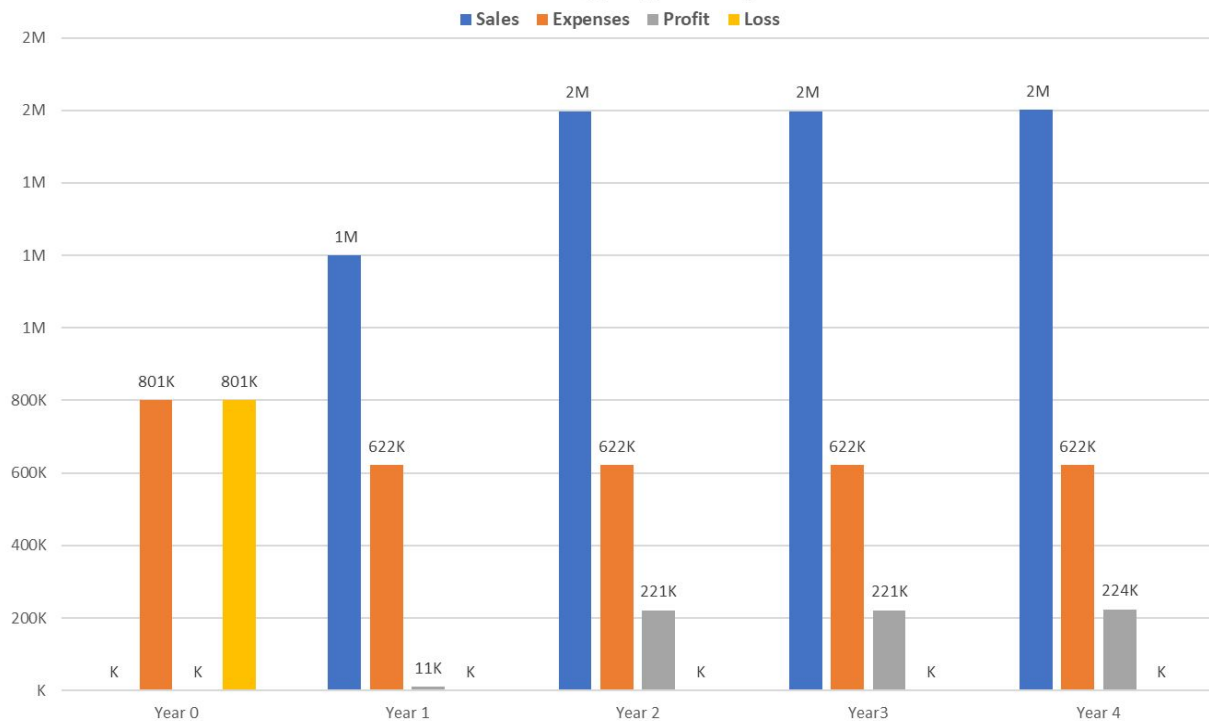
Printed Name

**TECN7**

Technology Innovation & Solutions Provider

1405, Burgundy TransPacific Place, 2444 Taft Avenue, Malate, Manila, National Capital Region, Metro Manila

### Financial Highlights by Year



### Financing Needed Statement

With the shown chart about the financial highlights of the organization's financial plan, the organization would need at least PHP 800,000.00 in order to comply with the specified project being developed for this business plan. This is for the development phase of the actual product itself, in which the team will plan to have a 4-year Return-on-Investment period in order to compensate for the overall operating expenses incurred. The group would propose and pitch the said project to Landbank and have a business loan from such.

## **I. Executive Summary**

### **A. Brief summary of the plan**

ePara is another advancement of the society that may help commuters have the ease of paying for their ride rather than digging into their pockets and bags. This kind of payment may seem hassle for others since the commuter will have to load their mode of payment but later on in the future, paying will be made easy in a few seconds.

ePara works by having a card or mobile app as the mode of transaction either through a QR code or another key identifier. The payment of the fair has its own unique formula wherein it will be based on the distance that the commuter has accumulated all throughout the ride. Having that said, the commuter may get off anywhere and not be restricted to just one place compared to the old way of paying.

### **B. Major objectives**

The main objectives of the business will revolve around the cashless payment system. These objectives are as follows:

- Convince LTFRB to purchase the system because of the importance of implementing e-tickets and RFID cards to land transportation.
- Secure an investment from LTFRB to further improve our products and services
- To utilize LTFRB as an advertising platform to make our business well-known to other businesses

### **C. Product/Service(s) description**

TECN7 provides services that caters to entities that decides to optimize business processes and minimize risks of failure. In this case, we offer a cashless payment system to LTFRB to provide convenience to both LTFRB and commuters. The cashless payment system offers:

- Payments through e-tickets and RFID cards
- Security and convenience through various payment options
- Efficiency and reduction of risks in toll collection

## D. Marketing strategy

Since the business is a startup, it is very difficult to allocate budget for advertisements and marketing. Therefore, we plan to personally sell the product and its benefits to LTFRB. Afterwards, we will help LTFRB advertise it to other franchisers in order to make transportation toll collection easy and efficient for commuters. We also made a company catalogue as part of minimizing costs for advertising our company, highlighting the cashless payment system that we developed.

## E. Financial projection

This financial projection is for the deployment of 1250 eJeepneys in 4 years. The business plans to get its ROI the same year that they develop the cashless system, which will cost PHP 1,199,400.00. On the following years, the costs are dependent on the number of manufactured eJeeps, but the business assumes that the eJeeps are distributed evenly, thus the business projects a growth rate of 33.33% for the next 3 years.

The salary of each co-worker will be PHP 25,000.00 per month in a period of 4 months in the development year. On startup, we will have 5 developers and once the business secures financing, we expect to hire at least 3 more developers this year in preparation for the following years to come.

## F. Personal investment and the description of additional financial needs

The investment of the co-owners and loans from banks will amount to PHP 1,000,000.00 in the first year to meet the requirements of starting business operations.

## II. Industry Analysis

### A. Future outlook and trends

The use of cashless payments will be inevitable in the future and will not be old anytime soon so therefore there will be a lot of companies to implement cashless payments and with public transports they may have to calculate the price manually and may either overcharge or undercharge so cashless payments can help calculate prices fairly.

### B. Analysis of competitors

**DyipKo** - DyipKo's current system for LTFRB fare calculation is based on the pickup point of the bus and then the passenger provides the drop-off

point before tapping to pay. They will be competitive since they are already being used by LTFRB.

**Grab** - Right now Grab does not have a tapping to pay system but they have cashless payments with Grabpay where they could expand to more public vehicles and possible use of QR codes.

### C. Market segmentation

**Geographic** - Product will be used in areas in Metro Manila with e-jeeps from LTFRB

**Demand for cashless payment** - People who are concern with carrying a lot of money or thick wallet can use their phones for payments instead of bringing out their wallet

**Concern for the environment** - Using cashless payments in the future can reduce the amount of waste produced when produces papers for cash so people can use cashless payments to be environmentally friendly in terms of waste

### D. Industry and market forecasts

Units will be produced as much as the amount of e-jeepneys being produced by the LTFRB in the next 4 years.

Potential Units to be used	Year 1	Year 2	Year 3	Year 4
LTFRB	250 units	333 units	333 units	334 units

## III. History

### A. Background of Entrepreneurs

The entrepreneurs behind this project are all experienced in the field of technology. All are graduates from De La Salle University - Manila, having a Bachelor's Degree in Information Technology.

#### 1. Christian Nicole Alderite

Christian Nicole Alderite, who shall serve as the organization's President, is very well known for his skills in leadership upon serving as one in various organizations in his university life. He is also known for his technical skills in web development, network administration, and database administration.



## 2. John Andrew Santiago

John Andrew Santiago takes the place of the Vice President. He is very well-known for his skills in web and mobile development, being very proficient in programming languages such as Java and Python. Additionally, Andrew is also known for having some affiliations with well-known tech companies such as being a student partner for Microsoft, thus having a respectable skillset in Microsoft Azure.

## 3. Nigel Marcus Tan

Nigel Marcus Tan who will serve as the company's Finance Head, is also known for his proficiency in web and mobile development. Being considered for the financial position is a strategic decision as Nigel had tons of experiences in the field in his university life. He has held several officership positions in his college's batch government unit.

## 4. Christian Gio Bueza

Christian Gio Bueza shall serve as the organization's Marketing Head due to his ample amount of experiences in the field in his affiliations with multimedia student organizations during his university life. Like the rest of the team, he also has lots of experiences in web development, especially in the language of PHP. He also has several experiences with database administration in making sure a database is well-designed for software systems to perform smoothly.

## 5. Anjoh Sarte

Anjoh Sarte, the organization's Research & Development Head is known for his exposure to the different fields in tech industry hence he is placed in such a position. In terms of his experience as a university student, he was primarily focused on improving his skills in making web applications using PHP. He had several collaborative experiences with the organization's president hence why he was chosen as the team member who can choose the right technologies for the company's innovations.

## B. Value Concept, Product/service origins

With the organization's goal to innovate technological products to push forward modernization in the ever-evolving society, the value that the team will put into its products are for the overall benefits of its target users. Such a goal

was formulated by the team because of each of its members sees the repetitive inconveniences in the daily lives of everyone, especially the Filipinos.

We also want to make sure that our products are also reachable for our target market. We make sure that the technological pieces that we piece together are of top-notch quality but still has a reasonable price. This is to make sure that the entities or customers who will purchase our products will be aligned to what most Filipinos belong to in terms of financial capability.

## C. Organizational structure

The team decided to employ a simple organizational structure due to its overall size. With production being mostly outsourced, only the core members of the team will be included in the chart (*Please refer to Appendix B for the organization chart*). As mentioned in the background of the entrepreneurs section, the way each individual was placed in such positions depended on each of their technical and professional experiences in the industry.

## IV. Definition of the Business

### A. The value concept to the customer

Customers have high expectations, but very little loyalty to spare if the business fails to meet them. To convince customers that the product is valuable, the team must have a clear understanding of the significance of the product, in order to have a better grasp on establishing real customer value. Being able to provide superior value to customers is a major prerequisite in establishing and maintaining long-term relationships with them. Creating *Customer Experience Design*, will help improve customer experience and customer satisfaction.

People purchase products or services that offer the most return while also appears to be most appealing among other competing options. Customers not only pay attention on the price of the product/service, but also on other qualities like design, durability, and user-friendliness. Maintaining a strict product/service quality management will ensure that the company will always meet its customers' expectations. It would be best to make sure that the product is promising through transparency. The true value of the product/service will be appreciated the most by customers, through honest promotion and compliance in meeting quality standards.

### B. The added value in the purchasing decision

The team establishes good product value and customer value, by creating a product/service that is able to capture the most attention and use,

more importantly if the product/service is considerably beneficial in other aspects outside of consumption. *Added Value* is essential for loyalty. It can be achieved in direct and indirect ways. This is where the company targets conscious consumerism, by simply taking advantage of good market information, and catering to not just financial preference, but also showing to customers that the company extends its concern to important issues as well.

With this, the company shows that it can be competitive, while also giving priority for public welfare. Showing that the company is not driven by profit, but for the greater good, giving way for customers to trust on the company and its products and services. If the company can manage to be flexible in adjusting its approach whenever there is an opportunity to get associated with status quos, or getting involved in important movements, it will acquire the trust of the customers in the long-run.

### C. Reasons for buying the product/service

Nowadays, because of the convenience technology has provided in many affairs, some people do not prefer to carry physical cash around, and instead rely on activities that require less human interaction. They want to make payments through their cards or virtually using their smartphones. With this, a lot of businesses today are considering to take on this functionality. By adding this type of payment method to the business, it gives an alternative method of payment for the customers and an efficient method of collection for the company.

Cashless payment systems offer security and convenience, since customers can pay through various payment options quickly and effortlessly. This is also because there are many online financial platforms that offer their services which eliminates energy, availability and time constraints. With the opportunity for real-time database and 24/7 operations, adding alternative ways of payment offers endless possibilities for the customers and for the company.

The cashless payment system, ePara, makes use of this opportunity, by as easy as making it possible for passengers to make payments by simply tapping-in and tapping-out. By establishing this, our system guarantees passengers that all transactions will be successfully completed quickly and safely.

### D. Reasons from buying from this specific business

We provide a cashless PUJ fare-based system that can accurately compute and collect fare. The group believes it is the best solution to lessen

human error, in particular, the current trust-based system of commuting cannot track transactions, because of this, either commuters can cheat their payments, or the drivers charge in different prices. ePara serves as a platform/intermediary, which can easily regulate the interactions between commuters and drivers, providing an easier and a smoother traveling experience.

Over-the-counter or cash payments have become an outdated method with the emergence of several cashless payment options and exceptional development in technology. Regardless of urban and rural disposition, cashless payment is being widely recognized to become the new norm for financial transactions.

Aside from its technical qualities, the method caters to most demographics as well and is less discriminating, because it is not strict with user-credibility. Soon, securitization methods of cashless payments will also grow with the use of biometrics such as fingerprint, retina scan and face ID. These innovations will ensure that the proposed system will continue to be efficient and alleviate costs/ threats of errors.

## **E. Solutions to customer problems**

Several businesses have slowly shifted to cashless methods, investing in technology to make management system changes easier. Instead of using paper and coin denominations, they use electronic currency for transfers. Although several benefits and advantages are being introduced in converting to the cashless method, there are also notable disadvantages. These disadvantages are standard, conforming to the same weaknesses that most online affairs impose. The complementing costs are possibilities of, exposure of personal information, data breach by hackers, technological problems, incentivised overspending, additional fees and negative interest rates.

In consideration for these issues, we have developed a cashless payment system that offers a fast, safe and convenient payment method. Our system will solve these underlying problems by establishing efficient security protocols, adopting the latest technology, and constructing an algorithm to accurately compute payments.

## **V. Description of Products or Services**

### **A. Define what is to be developed or sold**

The team is to develop a cashless PUJ fare payment system that accepts DyipKo cards and eWallet Credits directly from smartphones, through

the use of RFID. It uses GPS to track the distance traveled/ consumed by the passenger by simply tapping-in and tapping-out. Our system offers an alternative method of computing fare more accurately, based on the distance traveled by the passenger tracked by DyipKo's GPS and in accordance with the current fare matrix. This will make it easier to change and track price changes, eliminating discrepancies that either costs the drivers or commuters more inefficiently. The team will advertise the system to LTFRB in order to get the proper promotion. Once approved, the team is to soon target current modern jeepney franchisers.

## B. Status of the research and development

The importance of Research and Development has a vital role in successfully developing the system to better optimize resources and meet expectations. There is an importance in identifying the factors that will enable the team to successfully deploy the system with the use of modern technologies. A full research had been conducted which serves as the foundation in drafting the system, and further developing it in order to meet necessary constraints or possible opportunities. We have collected precise and updated data that supports the major components of our business plan.

The team developed ePara with adequate research with high consideration for market preference, making our cashless PUJ fare-based system qualified and exceptionally meeting standards. We are now prepared to introduce the system to LTFRB and other modern jeepney franchisers. Additionally, the team will continue to update its research and development program to better fit the product to the needs/ demand of the public.

## C. Patents, trademarks, copyrights

Intellectual property issues are the most important considerations that technological companies will encounter, especially startup companies. Patents, trademarks and copyrights can be costly to maintain and to protect technological resources for many companies. Every year, many companies lose money due to infringement of intellectual property (IP) rights in markets. Copyright laws are established to provide protection in the company. Protecting intellectual property can be essential to acquiring venture capital funding or to promote fair competition among competitors in the market.

The team has established solid proof that our company's ideas cannot be copied or can be used without permission. Our team has considered using patents, trademarks, and copyrights to protect from other companies from copying our ideas and line of work. Our company information and catalogue is

proof that we have established a solid proof that ePara is originally developed by TECN7. *(Please refer to Appendix D for the Company Information and Catalogue)*

## **VI. Production Plan**

### **A. Manufacturing process (amount subcontracted)**

For our manufacturing process, we are going to employ the services of an outsourced production line. Our target expenditure for this service, as specified in our marketing plan, will ideally be P500.00 per unit which covers just the assembly of the units since the materials will also be already provided to them. For this we will negotiate with a production line service provider or temporarily outsourced manpower to assemble each ePara scanner units for us. This would allow us to save money as it would help us avoid manufacturing costs pertaining to plant and property.

For the first year, we have to produce 250 units which will cost us P125,000.00. Then on the succeeding years, as per our target of selling 333 units per year for the 3 following years, we will have to spend up to P167,000 each. In total our subcontracted amount of P625,000.00 in total for 1250 units.

### **B. Physical plant**

If we are able to acquire the services of a production line outsourcing company then the plant will be at the provider's plant itself. But if we are only able to outsource assembly manpower then our plant will be at our own office. Both are cost effective since the former will be already part of the P500.00 per unit assembly cost while the latter will be done on the office that we already plan to use.

### **C. Machinery and equipment**

We will use no equipment of our own for the manufacturing.

### **D. Names of suppliers of raw materials**

Our materials will be sourced from different providers who happen to provide them at the lowest possible price we can find. With the advent of technology and e-commerce, we find it relatively easy find providers and compare prices through platforms like Lazada which, based on personal experience, has reputable stores that sell micro-electronics the likes of which we will use in our scanner device. They are listed below:

## 1. Makerlab Electronics:

(92% Positive Buyer Ratings from Lazada)

<https://www.lazada.com.ph/shop/makerlab-electronics/?spm=a2o4l.pdp.seller.1.2d045dbeEILLmx&itemId=141818847&channelSource=pdp>

- Arduino Uno R3 Board (price as of March 25: P350.00)
- NEO-6M GPS Module (price as of March 25: P330.00)
- MFRC522 RFID Module (price as of March 25: P195.00)

*See Appendix E for proof of price*

## 1. CircuitRocks:

(89% Positive Buyer Ratings from Lazada)

<https://www.lazada.com.ph/shop/circuitrocks/?spm=a2o4l.pdp.seller.1.2285884sOBR8G&itemId=111661632&channelSource=pdp>

- Raspberry Pi Aluminum Case (price as of March 25: P585.00)

*See Appendix E for proof of price*

## VII. Operations Plan

### A. Description of company's operation

Most of our operations will be situated on the office space that we plan to rent for this venture. Our in-office operations will revolve around entertaining interested clients, accepting payments, coordinating with outsourced accounting and legal services, accomplishing business paperwork, inventory management, and the continuous development and testing of our product. In case we outsource production manpower rather than a production line service then the main office shall also serve as the assembly plant.

## 1. Legal and Financial Services Outsourcing

Our legal and financial services will be outsourced to ensure expert assistance and counsel when it comes to fulfilling financial and legal responsibilities as a business entity. We plan to pay up to P90,000.00 per year as the lawyer's retainer fee and up to P96,000.00 as the hired accountant's retainer fee. Regular consultations will be conducted with them.

## 2. Product Development

Another focus of our daily operations is product development to ensure that we improve on ePara technologies mostly will then involve software such as being to integrate other payment systems such as Grab, GCash, Beep, etc. to the ePara scanner system.

## 3. Entertaining Clients

Our operations will also involve talks with interested companies who wants to avail of the ePara service or partner with us. This covers the signing of business contracts, negotiations, and the physical financial transactions that will be made to us by the interested parties.

## 4. Paperwork

Since we are a business venture, of course, the need for paperwork is quite heavy, most of our daily operations will also revolve around completing business paperwork which mostly cover financial and legal matters.

# B. Flow of orders for goods and/or services

## 1. Production

### a) Outsourced Production Line

If the production gets outsourced to a production line, then we are going to provide them step by step details on how to assemble the physical scanner product along with the raw materials that they will have to use. This includes issuing blueprints for them to follow.

### b) Outsourced Production Manpower

If the production gets outsourced to manpower, then we will be the ones to directly handle the assembling the scanners.

### c) Production Process and Quality Control Workflow

- (1) The Raw Materials will be provided to outsourced manpower/production line.
- (2) The outsourced manpower or production line are taught how to produce these scanners using the scanners provide. A blueprint will also be issued.



- (3) The production is constantly observed and quality-assessed to ensure the scanners are up to standard of what we provide to the clients.
- (4) After the product has been assembled, it is given back to us for testing. If it does not work or does not meet our specifications, we will take note of it and report to the outsourced production line, or talk to the outsourced manpower.
- (5) The system is installed to the scanner and is tested to ensure functionality. Similarly, it will be noted if the system and/or scanner did not work properly.
- (6) If the system is quality assessed and approved for deployment, then the installers are to deliver and install the scanner to the client vehicle.
- (7) Continuous updates and feedback reception from clients will be attended to.

## 2. Inventory

- a) The ingress and egress of the raw materials will be recorded from purchasing to handing to production.
- b) The number of products produced by outsourced manufacturing will also be accounted for to ensure that they are producing the right number of products per the raw materials we have provided.
- c) Daily recounts of the product will also be conducted and checked against other product motion records such as sales to ensure that no product will suddenly go missing.

## 3. Cost

*The break down for the cost of production can be found at Costs section of the Marketing section.*

# C. Technology utilization

## 1. Product Development

The technologies that we are going to use are mostly going to involve Arduino and other IT tools and solutions for developing and improving upon ePara. This will require us to have the latest stable installation of the development software we are going to use as well as the equipment for prototyping the system.

## 2. Website Hosting

Since our company has a website, we will also be hosting this through a network and server combination in order to reach other people/business entities who might be interested in our project.

### VIII. Marketing Plan

#### A. Pricing

##### 1. Costs

###### a) Development Costs

For the software section, the main required software would include all the necessary tools and software development environments in developing a fully functional product. The Arduino software would be used for writing the code in making the arduino board communicate with the RFID scanner and GPS modules. The Notepad++ together with Atom Text Editor would be used for all other code-writing purposes outside of the Arduino development environment. Lucidchart would be used in order to better illustrate the flow of processes involved in how each step will go through smoothly to have a complete transaction. Web servers will be used for testing purposes of deploying the product. All of them will

For the developers section, only the monthly cost will be included which is PHP 25,000. This is based from the average monthly salary of developers in the country (PayScale, n.d.).

Lastly, for the supplies section, all the necessary physical materials and tools that the developers will need shall be included like laptops, arduino boards, RFID cards and readers, and office expenses.

#### Development Costs

Development Cost	Cost Per Unit	Qty.	Cost	Subtotal
Software				
Arduino	0.00	5	0.00	
Notepad++	0.00	5	0.00	
Lucidchart	0.00	5	0.00	

Atom Text Editor	0.00	5	0.00	
Web Server	0.00	5	0.00	0.00
Developers				
Developers	25,000.00 / mo. for 4 mos.	5	500,000.00	500,000.00
Supplies				
Laptops	0.00	5	0.00	
Arduino Uno R3 Board	350.00	10	3500.00	
NEO-6M GPS Module	400.00	10	4000.00	
MFRC522 RFID Module	215.00	10	2150.00	
RFID Cards	15.00	100	1500.00	
System Documentation	2,000.00	1	2000.00	
Office Space (Rent & Bills)	30,000.00 / mo. for 4 mos.	1	120,000.00	133,150.00
Subtotal				633,150.00

#### b) Unit Cost

After the system has been developed, we will outsource production of the ePara scanner units and the ePara card. Each unit will cost PHP 2,265.00 to produce.

	Cost Per Unit (PHP)	Qty.	Cost (PHP)	Subtotal (PHP)
<i>Materials</i>				
Arduino Uno R3 Board	350.00	1	350.00	
Unit case	500.00	1	500.00	
NEO-6M GPS Module	400.00	1	400.00	
MFRC522 RFID Module	215.00	1	215.00	1,465.00
<i>Manpower</i>				

Manufacturing labor cost	500.00	1	500.00	
Installation labor cost	300.00	1	300.00	800.00
Unit Production Cost				2,265.00

## 2. Margins or Markups

The development cost of creating this technology will cost us PHP 1,133,150.00 while each unit produced will cost PHP 2,265.00 to manufacture. Since there are currently 250 DyipKo cars, in order to have a return on investment in a year. We'll have to price it PHP 4,797.60.

### **Computation (Price of Each Product):**

**(Unit Cost \* 250 units) + Dev't Cost = Total Cost**

**(PHP 2,265.00 \* 250) + PHP 633,150.00 = PHP 1,199,400.00**

**Total Cost / 250 units = Unit Price**

**PHP 1,199,400.00 / 250 = PHP 4,797.60**

**[212% Markup]**

But since this product is more than a scanner but our own proprietary system, if the buyers are willing to pay more because of the way perceive our system's value, then we will price this much more aggressively, perhaps up to PHP 30,000.00. The price we have decided will be inconsequential compared to the price of DyipKo car which is PHP 2.2M each.

## 3. Competition

ePara introduces a cashless PUJ fare payment system that accepts DyipKo cards and eWallet Credits right from smartphones through RFID. It uses GPS to compute for the fare based on the distance traveled by the passenger from tapping in to tapping out. The team recognizes the current system of LTFRB for DyipKo as a competitor of our system. In contrast to the current DyipKo system, which offers a simple process of transportation payment, our system will provide an alternative solution that computes the fare based on the actual distance traveled by the individual passenger tracked by DyipKo's GPS and in

accordance with the current fare matrix. ePara will provide accurate fare collection and an easier travel experience.

## B. Distribution

The team will help LTFRB distribute the system to modern jeepney franchisers. The system will be installed per vehicle being manufactured. The geographic coverage would be in high concentrated areas in the Philippines, specifically for areas where modern jeepneys are available.

## C. Promotion

The team will sell the product personally to LTFRB in order to convey the full benefits of the system. After LTFRB has approved of the system, we will also advertise it to current modern jeepney franchisers to convince them to get on board with LTFRB's decision to add it to their vehicles without additional costs (for now) but with an additional PHP 4797.60 per vehicle for future DyipKo franchise sales. Keep in mind that DyipKo franchising costs PHP 2.2 million for each vehicle (Marasigan, 2018). The team will not be responsible for the system's promotion to the commuters.

## D. Product forecasts

In the first year, we plan to get a return on our investment which is worth PHP 1,199,400. Then on the following three years, since LTFRB will deploy 1000 more eJeepneys over that period, we are looking to make a total of PHP 5,997,000.00 for the course of 4 years.

	Year 1	Year 2	Year 3	Year 4
PHP 4,797.60 x	250 units	333 units	333 units	334 units
	1,199,400.00	1,597,600.80	1,597,600.80	1,602,398.40

## IX. Organizational Plan

### A. Form of Ownership

#### 1. General Partnership

This form of ownership is most suitable since everything is shared equally such as assets, liabilities, profits, and financials in the business. Having unlimited liabilities, we also have an agreement regarding accountability when another partner deals in illegal actions.

Every partner has flexibility in the company, they have the ability to closely monitor and control operations. All members are provided the opportunity to participate in the management of business. This also gives all partners the ability to enter into business contracts or deals with other partners that are supposed to adhere to. This will undoubtedly lead to disputes, and that we have an agreement that mainly focuses on the majority votes in order to settle it. Decision making is also done through majority votes.

When a partner becomes disabled, dies, or leaves the partnership, our agreement will also include provisions that provide clear instructions or guidance in such cases, such as transferring the partner's share equally to other partners, or that a successor will inherit it.

In a general partnership, partners handle their own taxes, such as money earnings from the partnership, personal income tax returns, because taxes are separate from a general partnership. Also, since we are only a small company with a small capital, general partnership tends to cost very little and has less paperwork.

*Please refer to Appendix C - Partnership Agreement for the full details of the partnership.*

## B. Identification of partners or principal shareholders

### 1. Partners

Each member of the group is a partner to one another since the preferred form of ownership is a general partnership within the group. All members share the assets and liabilities equally, and that everyone shares accountability depending on the agreed terms and conditions of the contract of partnership. Even though all assets are shared, each member has their own roles and responsibilities in the business, and decisions that will affect the business should be handled accordingly.

### 2. Banks and Venture Capitalists (Kickstart PH)

Business loans are offered by money lending banks. Banks such as BPI, BDO, LandBank, and PNB offer several business loan options. Through business loans, the organization can address the demands to cover up expenses for day to day running costs. Another potential stakeholder are Venture Capitalists, specifically Kickstart PH. Venture Capitalists are investors that can provide capital for start-up, support or

expansion. Kickstart PH is a Corporate Venture Capital firm, focused on investments in startups. Kickstart PH is a wholly-owned subsidiary of Globe Telecom and is backed by SingTel and Ayala Corporation.

## C. Management team background

*Please refer to Appendix A - Management Team Resumes for the resumes.*

## D. Roles and responsibilities of members of organization

### 1. President - Christian Alderite

The president is the top person in the organization's chain of command. He shall oversee all the operations to achieve success and reach the goals of the organization. With that, the president shall create, communicate and implement the organization's vision, mission, and overall direction which is to push forward modernization in the ever-evolving society. He shall also lead, guide, direct, and evaluate the work of other executive leaders such as the department heads and the vice president. Additionally, the President shall make it sure that he regularly meet with the other executive leaders regularly to ensure that the organization's needs and plans are well thought-out. Lastly, the president shall represent the organization in civic and professional association activities locally or internationally.

### 2. Finance Head - Nigel Tan

The finance head has overall management responsibility for all services relating to finance and ensures the organization to utilize capital and resources beneficially. The finance head's responsibilities include constructing forecasting models, ensuring all accounting activities and internal audits comply with financial regulations, evaluating and deciding on investments, conducting profit and cost analyses, tracking cash flow, and creating a financial plan that analyzes the organization's financial strengths and weaknesses, thus proposing corrective actions and recommending cost-reducing solutions. Ultimately, he will maintain the organization's financial health and increase profitability in the long run.

### 3. Marketing Head - Gio Bueza

The marketing head will be responsible for all the marketing activities from social media and digital campaigns to advertising innovative and creative projects of the organization. Other responsibilities

include developing ideas and plans to help shape the organization's brand, allocating resources to different activities and projects, and setting short-term and long-term marketing goals. In addition, he will also craft strategies for the organization's marketing, analyze consumer behavior, monitor competition, and prepare and manage monthly, quarterly and annual budgets for the organization. Overall, the head of marketing will manage the organization in ways that promote higher profitability and competitiveness.

#### 4. Vice President - Andrew Santiago

The vice president closely mirrors the responsibilities of the president except the management scale is lower and more focused into a smaller portion of the organization, which are the departments. He shall serve as a member of the organization's senior leadership team along with the president and the department heads. In any case, one of the vice president's primary responsibilities is to serve as the backup for the president for several reasons especially for absences. Lastly, the vice president is respected closely to the president, giving him/her responsibilities of also signing contracts and speaking for the company in certain occasions.

#### 5. Research & Development Head - Anjoh Sarte

The Research & Development Head is a very important role in this technology-focused organization. He is responsible for research, planning, and implementing new programs and protocols into the organization, and as well as overseeing the development of new products in the target industry. Lastly, he/she will also be responsible in the production concerns of the company.

*Please refer to Appendix B - Organizational Chart for the organizational chart of the business.*

### **X. Assessment of Risk**

#### **A. Evaluate weakness(es) of business**

As all startups are, the business is not well known, and that the group is bold enough to sell to LTFRB, which is the main public transportation agency of the Philippines. They might not accept our proposal, and rather ask another well reputed company, since reputation amounts to credibility almost all the time.

Lack of capital is also an area of concern. Since we are a startup, most of the fundings will come from personal pockets and from loans. To get



investors, we would first have to make a good impression from our first project, and make our objectives in line with what investors would desire.

Additionally, risks and liabilities are distributed in the business, moreso in startups since there are only a few employees to distribute the work to. This leads to its employees exerting more effort from managing projects, to marketing the business, which leads also to distribution of risks. Also, without much experience, it will be very difficult to handle these risks well, so there is a high chance that the startup might fail.

Furthermore, structure and leadership may also be a weakness of the company if not discussed properly. While flexibility has its advantages such as increase in speed and coordination, it always has a high chance of power struggles since businesses often have to make big decisions and people often have different points of views regarding the subject matter. This may eventually cause confusion among the employees and even owners themselves.

Competitors are also an area of concern for the business. Even though there is still a small market for electronic toll collection, it is not that difficult to develop a cashless payment system, given the technologies around the Philippine market nowadays. Other big companies that tries to copy our system may even make it better, as they have more access to resources from their suppliers.

## B. New technologies

An emerging technology that might make e-tickets or RFID cards obsolete in the future is the biometric chips that are being implanted in people in other countries. These chips have the same technology as NFC cards and thus, has the capability to act as an e-ticket.

## C. Contingency Plans

To prevent power struggles, the group will be delegating decision making to the most educated person in the given field so that decisions are made wisely, thus preventing confusion in the business.

To respond to the growing threats of our competitors, the immediate thing that we could do is to improve our system by providing more services to the commuters. For example, it may be a good idea to add customer benefits such that it drives them to use our system all the time.

If the risk of biometric chips should occur, we must first predict when it will hit the Philippine market. From there, we will slowly introduce the microchips that could be implanted into their skin. As we expect a lot of people to oppose the idea, we could first introduce microchips implanted in bracelets in order for customers to have a similar “feel” when biometric chips are implanted.

## **XI. Financial Plan**

### **A. Assumptions**

In the first year, we assume to get a return on our investment, which is worth PHP 1,199,400. This means we'll have essentially 0 Gross Profits (OpEx deducted) for the first year but will start to turn a profit on the three years that will follow as we plan to deploy a total of 1250 units over a four-year period.

Manufacturing is accounted for by unit produced. We can outsource part of the production process, i.e., the manufacturing and installing of devices per unit. With this, assembling time and costs can be saved by outsourcing a costly production process to an external company/supplier who can do it at a cheaper cost. There are no Operating Expenses (OpEx) because we won't be needing to have an office since production labor is outsourced.

We will get our initial investment from capital investments of all partners, which is every member of the group, and loans from banks that will amount to PHP 1,000,000.00.

### **B. Projected / Pro-forma Income Statement (In Pesos)**

In the first year, our target sales is PHP 1,199,400.00 while our projected CoGS is PHP 566,250.00 (*See Marketing Plan for the breakdown*). This gives us a Gross Profit of PHP 633,150.00 which is also the same amount for our Operating Expenses (Developer Salaries, Prototyping Supplies, and Office Utilities). This allows to meet our target of having a return on our investment in one year (PHP 0.00 Gross Profit minus the Operating Expense).

In the second year, we plan to sell 333 units which will cost us PHP 754,245.00 in CoGS (includes Outsourced Manufacturing and Production Costs) but will give us PHP 1,597,600.80 in Sales. This gives us a Gross Profit PHP 843,355.80. Unlike the first year, we won't have Operating Expenses because we have already finished developing the product and won't anymore need an office space since the production is outsourced anyway. The same goes for the third year.

In the second year, we plan to sell 334 units which will cost us PHP 756,510.00 in CoGS (includes Outsourced Manufacturing and Production Costs) but will give us PHP 1,602,398.40 in Sales. This gives us a Gross Profit PHP 845,888.40. We also won't be having Operation Expenses for the same reasons.

The industry norm for software maintenance is about 15 to 20 percent of the original development costs. Our app cost PHP 513,150.00 to build, roundly estimate to pay about PHP 102,630.00 per year to maintain the app.

According to Philippine Book Keepings, the usual retainer fee for a small business starts at Php 9,600 (inclusive of 12% VAT) or a discounted upfront quarterly fee or annual fee of Php 4,000 or Php 90,000, respectively (both inclusive of 12% VAT). For the lawyer, Inquirer says that the basic fee is P500 per hour for "plain consultation." Research would cost P500 per hour. A monthly retainership should start at P5,000. In case of our business, we are willing to pay more in case of unforeseen cases and long consulting hours. We decided to start at 80,000 per year retainer for our lawyer.

According to ThinkMobiles, it costs around \$2000.00 to \$4000.00 or PHP 103394.00 to PHP 206788.00 to maintain a website. This is inclusive of the domain, hosting, SSL certificates, and maintenance.

	Year 0	Year 1	Year 2	Year 3	Year 4
Sales	0	1,199,400.00	1,597,600.80	1,597,600.80	1,602,398.40
Less: Cost of Goods Sold	0	566,250.00	754,245.00	754,245.00	756,510.00
<b>Gross Profit</b>	<b>0</b>	<b>633,150.00</b>	<b>843,355.80</b>	<b>843,355.80</b>	<b>845,888.40</b>
Operating Expenses					
Developer Salary	500,000.00	0	0	0	0
Development Mat.	13,150.00	0	0	0	0
Product Improvement	0	102,630.00	102,630.00	102,630.00	102,630.00

Office Rent	80,000.00	240,000.00	240,000.00	240,000.00	240,000.00
Utilities					
Water Supply	2,000.00	6,000.00	6,000.00	6,000.00	6,000.00
Electricity	16,000.00	48,000.00	48,000.00	48,000.00	48,000.00
Internet/ Telephone	8,000.00	22,788.00	22,788.00	22,788.00	22,788.00
Website Deployment	181,735.04	26,644.04	26,644.04	26,644.04	26,644.04
Lawyer Retainer's Fee	0	80,000.00	80,000.00	80,000.00	80,000.00
Accountant Retainer's Fee	0	96,000.00	96,000.00	96,000.00	96,000.00
<b>Total Operating Expenses</b>	<b>800,885.04</b>	<b>622,062.04</b>	<b>622,062.04</b>	<b>622,062.04</b>	<b>622,062.04</b>
<b>Gross Profit (loss)</b>	<b>(800,885.04)</b>	<b>11,087.96</b>	<b>221,293.76</b>	<b>221,293.76</b>	<b>223,826.36</b>

## C. Projected Cash Flow

For the year 0, we target to use a million pesos as our initial capital. This money will come from our individual contributions as well as bank loans. For this year, we will focus on developing the product and we would not have any sales made. So we will have a loss of PHP 800,885.04.

The Receipts (or the Gross Sales) will be worth PHP 1,199,400.00 for the first year as per our target. The Sales Disbursements (disbursements on equipment, developer salaries, outsourced manpower, unit costs, and utilities) totals to PHP 1,199,400.00. Since our sales equal the amount of disbursements made, our cash flow is 0 which means that we'll make a return on our investment on the first year. This makes our ending and beginning balance have the same value.

For the second, third, and fourth year, we won't anymore incur development, equipment purchases, and office utilities since we won't have anymore need for those. Our manufacturing and installation will be outsourced which brings our total disbursements to PHP 754,245.00 for each of the three years.

Our projected Receipts (or the Gross Sales) for years 2 & 3 will be PHP 1,597,600.80 each from 333 units which brings our cash inflow to PHP 843,355.80 for each year. In the second year, the previous ending balance will be PHP 1,199,400.00, adding this amount to our cash inflow gives us an ending balance of PHP 2,042,755.80. In the third year, the previous ending balance will be PHP 2,042,755.80, adding this amount to our cash inflow gives as an ending balance of PHP 2,886,091.60.

Meanwhile, our projected Receipts for year 4 will be PHP 1,602,398.40 from 334 units which brings our cash inflow to PHP 845,888.40. In this year, the previous ending balance will be PHP 2,886,091.60, adding this amount to our cash inflow gives us an ending balance of PHP 3,731,980.00.

	Year 0	Year 1	Year 2	Year 3	Year 4
<b>Receipts (Gross Sales)</b>	<b>0</b>	<b>1,199,400.00</b>	<b>1,597,600.80</b>	<b>1,597,600.80</b>	<b>1,602,398.40</b>
<b>Sales Disbursements</b>					
Developer Salary	500,000.00	0	0	0	0
Development Mat.	13,150.00	0	0	0	0
Product Improvement	0	102,630.00	102,630.00	102,630.00	102,630.00
Office Rent	80,000.00	240,000.00	240,000.00	240,000.00	240,000.00
Utilities	26,000.00	76,788.00	76,788.00	76,788.00	76,788.00
Website Deployment	181,735.04	26,644.04	26,644.04	26,644.04	26,644.04

Lawyer Retainer's Fee	0	80,000.00	80,000.00	80,000.00	80,000.00
Accountant Retainer's Fee	0	96,000.00	96,000.00	96,000.00	96,000.00
<b>Total Disbursements</b>	<b>800,885.04</b>	<b>622,062.04</b>	<b>622,062.04</b>	<b>622,062.04</b>	<b>622,062.04</b>
<b>Cash flow</b>	<b>(800,885.04)</b>	<b>577,337.96</b>	<b>975,538.76</b>	<b>975,538.76</b>	<b>980,335.96</b>
<b>Beginning balance</b>	<b>1,000,000.00</b>	<b>199,114.96</b>	<b>776,452.92</b>	<b>1,751,991.68</b>	<b>2,727,530.44</b>
<b>Ending balance</b>	<b>199,114.96</b>	<b>776,452.92</b>	<b>1,751,991.68</b>	<b>2,727,530.44</b>	<b>3,707,866.40</b>

## D. Pro-forma Balance Sheet (Year 1)

Pro-forma Balance Sheet simulates how we are going to handle the assets, liabilities and equity of the first year of our business. This scenario simulates a situation where we have already acquired all the 250 units of the scanners we need but will still need to pay a remaining PHP 266,250.00 payable to the outsourced manufacturers. We also still haven't paid for the last month of the four months when it comes to salary, rent, and bills. We have paid for the remainder and the equipment/prototypes that we used.

Assets		
Current Assets		
Office Space	201,788.00	
250 Scanners	300,000.00	
Website	26,644.04	
Lawyer	80,000.00	
Accountant	96,000.00	

Total current assets		704,432.04
Fixed Assets		
Equipment (Prototyping Supplies)	13,150.00	
Less depreciation		0.0
Total fixed assets		13,150.00
<b>Total assets</b>		<b>717,582.04</b>
Liabilities and Owner's Equity		
Current Liabilities		
Outsourced Production Payable	100,000.00	
Production Materials Payable	166,250.00	
Rent Payable	100,000.00	
Utilities Payable	15,000.00	381,250.00
Owner's Equity		
C. Alderite	67,266.40	
N. Tan	67,266.41	
J. Santiago	67,266.41	
G. Bueza	67,266.41	
A. Sarte	67,266.41	
Total owner's equity		336,332.04
<b>Total Liabilities and Owners' Equity</b>		<b>717,582.04</b>

## E. Break-Even analysis

For the calculation of the Break-even point for the 1st year of operation of the business, the total sales is PHP 1,199,400.00 and the costs of good sold is PHP 566,250.00 which gives us a 0.47 ratio. Multiplying this to the unit cost

PHP 4,797.60, we'll get PHP 2,265.00 which is our estimated variable cost per unit. For the succeeding years, the ratio of the sales and costs of good sold results to the same 47%. Additionally, since the operating expenses for the 2nd, 3rd, and 4th year are the same, only one computation will be done for those mentioned years. Using the formula below:

$$B/E = \frac{\text{Total Fixed Costs}}{\text{Selling Price} - \text{Variable Costs per Unit}}$$

The resulting break-even point for the first year is:

$$B/E = \frac{566,250.00}{4797.60 - 2265} = \text{approx. 224 units}$$

The resulting break-even point for the second, third, and fourth year is:

$$B/E = \frac{622,062.04}{4797.60 - 2265} = \text{approx. 246 units}$$

For the first year of operation, the business needs to sell more than 224 units of the product in order to become profitable. While for the rest of the remaining years, the organization needs to sell 246 units for each year in order to become profitable. In summary, we need to sell approximately 962 units of our ePara products in order to become profitable for the 4 years of operating after the development phase.

## **XII. Concluding Remarks**

### **A. Evaluation of internal and external risks and contingency plans to PROTECT the value concept's performance from any threats**

The main internal risk of the startup is the inability to create some form of structure, even minimal. Without some form of hierarchy, there will always be power struggles within the company since owners and employees alike do not always see eye-to-eye when it comes to business decisions. We will resolve this by distributing decision making to the people who know the most about the given matter since it will be more credible than people without a background



having to make that certain decision. Moreover, the external risk that we have identified is about the competitors. Even though the e-toll collection market is small in the Philippines, other companies could always try to make their own version of the cashless system, which may even be better than ours. To mitigate this, we would have to improve our system to provide more services and benefits to its users. In other words, we would have to adapt to our competitors and highlight what makes our system unique from others.

## B. Growth and development to IMPROVE the value concept's sustained competitive advantage edge and productivity goals for its continuous renewal and improvement

Since the organization prioritizes the benefits and affordability values of its products, we will always make sure that the technologies that we incorporate in such are always the ones that will provide the most advantages and appropriate for the Filipinos. This will always have an edge in terms of competition because we make sure that our products are inconvenience-free and the costs incurred by our consumers will be as minimal as possible. For ePara, this is shown through the minimal costing we provide for the overall system, it does not cost millions and millions of money. Each unit of our device product costs as much as a low-end smartphone. The costs that will be incurred by its consumers will be the fairest possible since it is based on the actual distance traveled. For its future improvements, we also want to make sure that we actively listen to and value our consumers' feedbacks. This is to continue on improving the product based from such feedbacks and implement such in the next iterations of the product line.

## C. The venture's future possibilities and overall prospects to EXPAND the value concept through internationalization, harvesting, and/or exit prospects

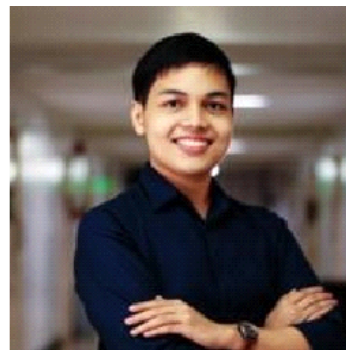
The organization's strategy for the future of the product line is to utilize the harvesting strategy. While it may look like a bad move since we want to make sure we maximize the profits once the product launch cycle is complete, we will always make it sure that we use such profits earned for the future improvement of the product line or for the launching of a new one. Technology changes a lot now and then, and we want to make sure that we get the most appropriate ones for our Filipino customers by incorporating them into our innovative products that will solve the core problems of our ever-evolving society.

### **XIII. Appendices**

#### **APPENDIX A – Management Team Resumes**

## Appendix A – Christian Alderite Resume

20 Gumamela St., Katipunan Village, Western Bicutan  
Taguig City, 1630 0995 756 1818 <https://www.linkedin.com/in/christianalderite>  
[christian\\_alderite@dlsu.edu.ph](mailto:christian_alderite@dlsu.edu.ph)



### CHRISTIAN NICOLE ALDERITE

**OBJECTIVE** As an intern, I intend to work and learn in a competitive and purposeful work environment seeking to further advance my knowledge in mobile and web development and in the Information Technology field in general while contributing to the organization using my hardearned skill set.

#### EDUCATION

##### **TERTIARY: DE LA SALLE UNIVERSITY (MANILA)**

##### **BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY (2015-PRESENT)**

1<sup>st</sup> Honor Dean's Lister Term 3 AY 2015-2016; 2<sup>nd</sup> Honor Dean's Lister Term 1 AY 2015-2016, Term 1 AY 2016-2017, Term 3 AY 2017-2018; St. La Salle Full Scholar;

##### **SECONDARY: CAYETANO SCIENCE & TECHNOLOGY HIGH SCHOOL (2011-2015)**

Champion in Extemporaneous Public Speaking; Best in Skills Dev't; Best in Software Applications

#### COMPETITION PARTICIPATED

##### **1<sup>ST</sup> RUNNER-UP, NEXTBIGTHING BY SAMSUNG (2018)**

Christian Alderite, John Andrew Santiago, and Betlee-Kyle Barraquias' (Team Leader) BIGBADBET team won 1st Runner-Up in the Next Big Thing competition by Samsung Philippines for their BidConnect application. BidConnect is an android application designed to cater to the needs of the bidding community of De La Salle University.

#### CO-CURRICULAR ACTIVITIES

##### **2018-PRESENT - CATCH2T19 LA REPRESENTATIVE (UNIVERSITY STUDENT GOVERNMENT - LEGISLATIVE ASSEMBLY)**

As the Legislative Assembly representative for my batch (CATCH2T19), I pushed for a university wide RFID based transaction processing using our school ID, an eco-friendly DLSU, and the streamlining enrolment processes. I also have authored seven manifestos regarding sectoral and national issues as the Chairperson for National Affairs of the Legislative Assembly.

##### **2017-2018 - STUDENT ASSISTANT (STUDENT ASSISTANTSHIP AND RESOURCE TRAINING PROGRAM (START))**

As a telemarketer for the Alumni Advancement and Relations Office under De La Salle University's Student Assistantship and Resource Training (START) Program, I reached out to the University's alumni, offering them the chance to give back to their Alma Mater through financial or in-kind contributions.

##### **2016-2017 - UNDERSECRETARY FOR DOCUMENTATIONS AND LOGISTICS (LASALLIAN SCHOLARS SOCIETY)**

Serving in the Office of the Executive Secretary, I aided in the processing of projects and activities related paperwork, contacting internal and external parties for the procurement of event materials and venues, and was also an editor of the organization's publication.

**2016-2017 – ADVISER FOR NATIONAL AFFAIRS (CATCH 2T19)**

As an advisor to the LA representative of our batch, I helped address campus related issues, most notably the lack of enthusiasm when it came to school activities, and the student body's lack of active participation in the political conversations in society.

**2015-2018 – JUNIOR OFFICER (LASALLIAN COMPUTER SOCIETY)**

As a junior officer, I have volunteered in different events and programs. Besides this, through the LSCS network I was able to get connected to the right individuals and attend seminars about improving my IT skills and business skills.

**SEMINARS**

(March, 2018) ChatBots Tutorial, Microsoft Student Partners  
 (February, 2018) Capstone Project Best Practices, De La Salle University  
 (January, 2018) Introduction to Azure Services, Microsoft Student Partners  
 (September, 2017) DevCon 2017, DevCon  
 (December, 2016) Life of an IT Professional, De La Salle University  
 (October, 2016) Technical Writing & Effective Presentation, De La Salle University  
 (September, 2016) Business Process Modeling, De La Salle University

**TECHNICAL SKILLS**

Data crawling/scraping  
 Network security and administration (Cisco Systems)  
 Programming (Java, Python)  
 Web Development (JSP, PHP, CSS, HTML, MVC Framework)  
 Mobile Development (Android, Firebase Services)  
 Database Management (MySQL, NoSQL)

**RESEARCH PAPERS  
PREPARED**

(2018) LAPDoc: Loaning Association Web Portal and Document Management System  
 (2017) FloRento: A Scheduling, Ticketing, and Inventory Management System  
 for Pancipane Trading, Inc.  
 (2017) Coping with School-related Stress through Playing Casual Videogames

**PERSONAL  
BACKGROUND**

Date and place of birth: October 24, 1997; Manila  
 Languages spoken: Tagalog, English  
 Hobbies & interests: Religion and politics; Science and Technology; Horror and Science  
 Fiction, singing in choir-groups; singing at functions in my free time.

**REFERENCES**

**TANGKEKO, MARIVIC**  
 Thesis Adviser (LAPDoc System)  
 Systems Analysis and Design (SYSTANA)  
**MALABANAN, OLIVER**  
 Introduction to Information Technology (INTR-IT)  
 Introduction to Database Management (INTR-DB)

## Appendix A – Gio Bueza Resume

### **Christian Gio C. bueza**

6941 Washington St. Brgy. Pio Del Pilar, Makati City  
+639268195519 (02) 819-5405  
christian\_bueza@dlsu.edu.ph



### **EDUCATION**

De La salle University  
Bachelor of Science degree in Information Technology  
1<sup>st</sup> Honor Dean's List: 2nd Term, A.Y 2015 – 2016.

ST. MARY'S ACADEMY PASAY  
High School Diploma, March 2015.

### **WORK EXPERIENCE**

May – August 2015 EMPLOYEE, GOLDEN ARCHES DEVELOPMENT CORP.  
Worked as a Barista in McCafe by McDonalds. Handled Inventory and Sales.

### **CO-CURRICULAR ACTIVITIES**

- |             |   |
|-------------|---|
| 2015 – 2018 | <b>LA SALLE COMPUTER SOCIETY</b><br>An organization that strives to support their members in their academic workload and serve as a liaison between the faculty and the students.   |
| 2015 – 2018 | <b>LASALLIAN SCHOLARS SOCIETY</b><br>The Lasallian Scholars Society (LSS) is the sole accredited scholars' organization in De La Salle University.  |
| 2017 – 2018 | <b>DE LA SALLE GREEN MEDIA GROUP</b><br>Green Media Group is a premiere university-based media and production organization that pioneers student empowerment and social change through advocating film development in the name of Culture and the Arts. |

### **SEMINARS ATTENDED**

October 2016 EFFECTIVE PRESENTATION SKILLS SEMINAR

Information Technology Professor, De La Salle University

March 2017                RUBY ON RAILS CODE CAMP  
Penbrothers, Makati City

November 2017        CODE-A-THON  
Microsoft Partners Philippines, Makati City

March 2018            user interface seminar  
Information Technology Professor, De La Salle University

July 2018              SHAPING THE FUTURE WITH INNOVATION AND INTELLIGENCE  
Next Big Thing, De La Salle University

## **PERSONAL BACKGROUND**

Fluent in English and Filipino. Knowledgeable in Microsoft Office programs and some programming languages. Basic proficiency in Mathematica. Hardworking, Motivated and Friendly. Interests: Reading, Photography, Music, and Movies.

## **REFERENCES**

OLIVER MALABANAN  
Special Enterprise Systems Professor  
+63 923 930 4004; [sirolimalabanan@gmail.com](mailto:sirolimalabanan@gmail.com)  
2401 Taft Ave, Malate, Manila, 1004 Metro Manila.

ARTURO PEPITO CARONONGAN  
Data Applications Professor  
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2401 Taft Ave, Malate, Manila, 1004 Metro Manila.

## Appendix A – Andrew Santiago Resume

### **JOHN ANDREW SANTIAGO**

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Lipa City, Batangas 4217  
(043) 741-8475  
+63 995 478 2797  
john\_andrew\_santiago@dlsu.edu.ph



### **OBJECTIVE**

To join an organization as an intern where I can utilize and improve my skills in mobile and web development, as well as to seek in learning new things about the said fields.

### **EDUCATION**

TERTIARY                      De La Salle University  
Bachelor of Science in Information Technology Consistent Dean's Lister, AY 2015-2016.  
Consistent Dean's Lister, AY 2016-2017 & AY 2017-2018. Current CGPA: 3.565

SECONDARY                      DE LA SALLE LIPA  
High School Diploma, March 2015. Awards: Consistent Achiever, 2011-2015.

### **COMPETITIONS PARTICIPATED**

JULY 2018                      SAMSUNG NEXT BIG THING HACKATHON, 1ST RUNNER UP  
Developed the front-end and back-end of BidConnect, an android application that serves as a platform for bidding items

### **PROJECTS AND RESEARCH**

APRIL 2018                      CCS COMAPP  
Developed the front-end and back-end of the android application inspired by the well-known Facebook community group in the university. It allows students to rate their professors, communicate freely in the forums, and ask the simple QnA AI anything about the university.

### **CO-CURRICULAR ACTIVITIES**

2017-Present                      STUDENT PARTNER, MICROSOFT  
Ran and co-organized workshops for the students in the university about developing and deploying web applications and making and deploying a simple chatbot to social media applications using Microsoft Azure.

2017-2018                      TRAINING AND DEVELOPMENT committee, DLSU MICROSOFT  
STUDENT COMMUNITY

## **JOHN ANDREW L. SANTIAGO**

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Contributed in organizing workshops such as getting resource speakers from Microsoft, particularly in the first workshop of the Azure 101 series project.

2018-2019                      EVENTS HEAD, DLSU MICROSOFT STUDENT COMMUNITY  
Managed a team in order to have a proper execution of the biggest competition event of the organization, Imagine Bootcamp 2018.

2019-Present                      PUBLICATIONS AND CREATIVES OFFICER, CATCH2T19 BATCH  
GOVERNMENT  
Created branding materials for the batch government and edited the display pictures of the officers involved in the organization.

## **SEMINARS ATTENDED**

May 2018                      MSP APAC Summit SINGAPORE 2018  
Microsoft Corporation

## **SEMINARS CONDUCTED**

June 2018                      CHATBOTS OVER COOKIES WORKSHOP  
DLSU Microsoft Student Partners

February 2018                      AZURE 101: INTRO & BOTS WORKSHOP  
DLSU Microsoft Student Partners

## **PERSONAL BACKGROUND**

Date and place of birth: March 18, 1998; Lipa City, Batangas

Languages spoken: Tagalog, English

Hobbies & interests: Developing mobile and web applications; playing competitive & casual video games in PC; PC building & assembly; Reading articles and watching vlogs about the PC & Mobile hardware industry.

## **TECHNICAL SKILLS**

- Database management (MySQL, NoSQL, SQLite)
- Web development (HTML, CSS, Javascript, jQuery, PHP, JSP, Polymer, Benchmarking)
- Mobile development (Android)
- Network & security administration and management (Cisco systems)
- Data scraping and crawling (Jupyter)
- Programming (Python, Java)



- Multimedia Production (Adobe Photoshop, Adobe After Effects, MAGIX Vegas Pro)

## REFERENCES

Available upon request.

## Appendix A – Anjoh Sarte Resume

### **Anjoh Michael L. Sarte**

1822, Manila Residences Tower 2

Taft Ave., Malate, Manila 1004

+639983216210

[anjohsarte@yahoo.com](mailto:anjohsarte@yahoo.com)

**OBJECTIVE** To join an organization where I can use my skills in programming and design that allows improvement in my skills.

## EDUCATION

2014 – 2019 DE LA SALLE UNIVERSITY

Bachelor of Science degree in Information Technology, December 2016.  
Dean's List 1<sup>st</sup> Term, AY 2014 – 2015; Dean's List 2<sup>nd</sup> Term, AY 2016-2017.

2002 – 2013 ST. JOHN'S SCHOOL

High School Diploma, November 2013. Most Outstanding Student, 2013.

## SEMINARS ATTENDED

OCTOBER 2015 BUSINESS PROCESS MODELING SEMINAR

Information Technology Department, De La Salle University

OCTOBER 2015 EFFECTIVE PRESENTATION

Information Technology Department, De La Salle University

MARCH 2017 ITS KONGPLICATED

Information Technology Department, De La Salle University

## **PERSONAL BACKGROUND**

Born on November 7, 1996 in Brunei-Muara District, Brunei Darussalam. Fluent in English and learning Filipino.

## **TECHNICAL SKILLS**

Programming Languages/ Frameworks

JAVA, PHP, HTML, Python

Software Applications

Microsoft Word, Microsoft Excel

Databases

MySQL

Development Environments

Eclipse

## **REFERENCES**

Available upon request.

## Appendix A – Nigel Tan Resume

### **NIGEL MARCUS T. TAN**

912 Pablo Ocampo Street,  
Malate, Manila  
(632) 525-0001; 09164981833  
+639179947259  
nigelmarcus\_tan@yahoo.com

Claro M. Recto Street  
Lucena City  
(042) 719-2312



### **OBJECTIVE**

To join an organization where I can use my skills in systems administration and attain a high level of performance in systems management and optimization and improve technical background on different systems.

### **EDUCATION**

2015 - PRESENT      de la salle university  
Bachelor of Science degree in Information Technology,  
1<sup>st</sup> Honor Dean's List: 1<sup>st</sup> - 3<sup>rd</sup> Term, AY 2015 - 2016; 1<sup>st</sup> - 3<sup>rd</sup> Term, AY 2016 - 2017; 1<sup>st</sup> - 3<sup>rd</sup> Term, AY 2017 - 2018, 1<sup>st</sup> Term, AY 2018 - 2019. Jose Rizal Awardee, 2017. Current CGPA: 3.683

2011 - 2015      HOLY ROSARY CATHOLIC SCHOOL  
High School Diploma, March 2015. Salutatorian. Awards: Academic Excellence, 2015.

### **COMPETITIONS PARTICIPATED**

JULY 2018      SAMSUNG NEXT BIG THING HACKATHON  
Developed the back-end part of BHB – an android application using crowdsourcing to collect data of the flood levels in affected areas.

2016 - 2017      CODE-A-THON  
Code for Asia  
Presented a theoretical website that showed which countries moved forward with human rights via ratings on how people treat foreigners.

### **PROJECTS AND RESEARCH**

2018 - PRESENT      AN INTEGRATION OF IMAGE PROCESSING SOLUTIONS FOR SOCIAL MEDIA LISTENING  
Integrated different image processing tools that work together to perform social media listening on images for further improvement of social media listening tools, especially in accuracy of data.

APRIL 2018      NEUROLLS

Co-developed as the back-end developer for the application. It allowed users to keep track of files, books, and games that they want to watch or play, and was published on Google Play.

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## **CO-CURRICULAR ACTIVITIES**

2019 - PRESENT      FINANCE COMMITTEE OFFICER, CATCH 2T19 BATCH GOVERNMENT  
Prepares financial reports for all phases of financial activities, especially fundraising activities of the Batch Student Government.

2016 - 2018            EXECUTIVE FOR NETWORK AND COMMUNICATIONS, MICROSOFT  
STUDENT COMMUNITY (MSC)  
Invited both local and outside speakers to talk and teach students in workshops handled by MSC.

## **SEMINARS ATTENDED**

JULY 2018            SQL OR NOSQL: A PRACTICAL COMPARISON  
Computer Studies Government, De La Salle University

                              Infrastructue as code and how it enables cloud computing  
Computer Studies Government, De La Salle University

MARCH 2017        IT's Kongplicated  
La Salle Computer Society, De La Salle University

JANUARY 2017      Business Management Students' Convention  
Business Management Society, De La Salle University

## **PERSONAL BACKGROUND**

Born on September 14, 1998 in Lucena City, Philippines. Fluent in English and Filipino.

Interests: Playing musical instruments and strategy games, collecting different kinds of puzzle cubes, researching scientific ideas, developing web and mobile apps. Adaptable, goal, quality, and team oriented.

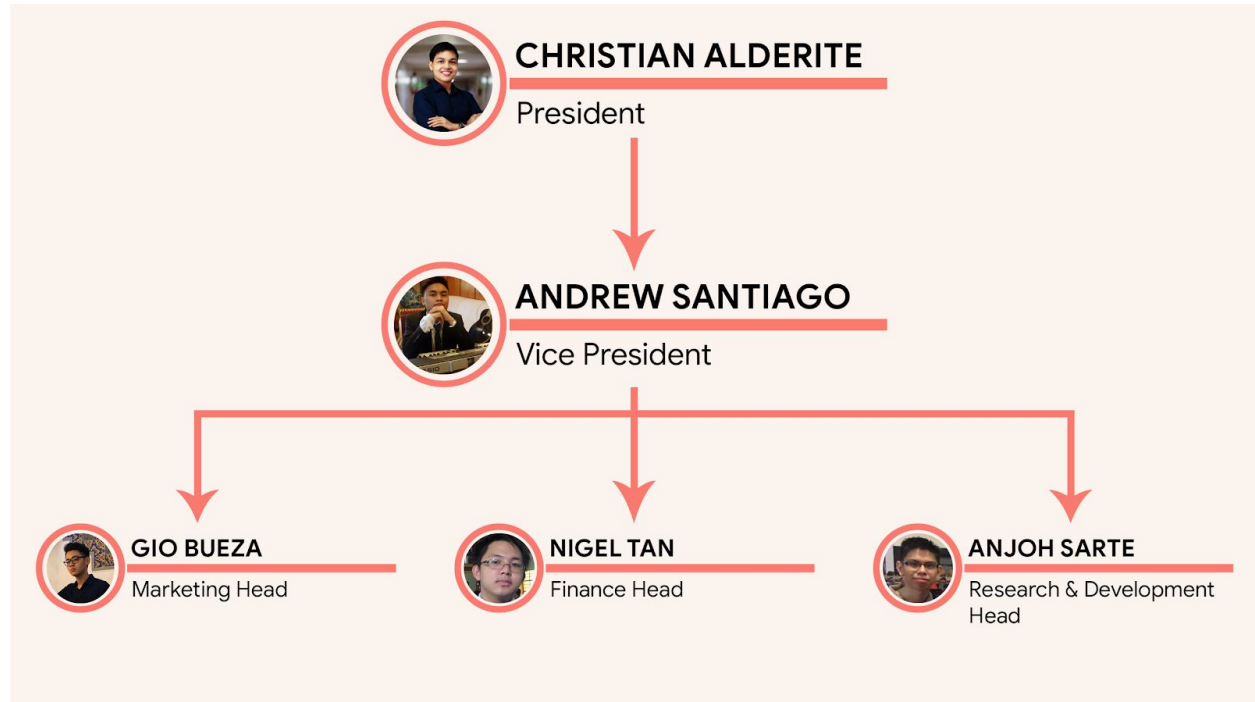
## **TECHNICAL SKILLS**

- Web development (HTML, CSS, PHP, JSP, Polymer, Javascript) using NetBeans IDE and Eclipse IDE
- Mobile development (Java) using Android Studio
- Database development (MySQL, NoSQL) using MySQL Workbench
- Network and security administration using CISCO Packet Tracer
- Programming (Python, Java, C)

## **REFERENCES**

Available upon request.

## APPENDIX B – Organizational Chart



## APPENDIX D – Company Information and Catalogue

WE ARE A SMALL GROUP OF TECHNOpreneurs AIMING TO PUSH FORWARD MODERNIZATION IN OUR EVOLVING SOCIETY



09994566969  
02-7416969



tecn7tech@gmail.com



1405, Burgundy TransPacific Place, 2444 Taft Avenue, Malate, Manila, National Capital Region, Metro Manila







### WE OFFER A CASHLESS JEEPNEY FARE PAYMENT SYSTEM

#### WHAT WE DO

We provide services that caters to entities that decides to optimize business processes and minimize risks of failure. In this case, we offer a cashless payment system to LTRFB to provide convenience to both LTRFB and commuters.

#### OUR PRODUCT





ePara is another advancement of the society that may help commuters have the ease of paying for their ride rather than digging into their pockets and bags. This kind of payment may seem hassle for others since the commuter will have to load their mode of payment but later on in the future, paying will be made easy in a few seconds.

### HOW DOES IT WORK?

- 1) The passenger taps the card on the scanner held by the jeepney conductor.
- 2) Tapping marks the starting point of the journey.
- 3) When the passenger reaches his/her destination, the passenger must tap again.
- 4) The amount of money will be deducted from his/her e-wallet.



## Appendix E - Price Proof

 <p><b>9 DAY</b></p> <p>Neo-6m Gps Module Aircraft Flight Controller For Arduino Mwc Imu...</p> <p><b>P332.00</b></p> <p><del>P664.00</del> -50% <small>Free</small></p> <p>China</p>	 <p>Arduino Uno R3 Motherboard with USB CABLE</p> <p><b>P350.00</b></p> <p><del>P499.75</del> -30%</p> <p>★★★★★ (265)</p>
 <p>RC522 RFID Reader Module 13.56MHz</p> <p><b>P199.75</b></p> <p><del>P449.75</del> -56% <small>Free</small></p> <p>★★★★★ (20)</p> <p>National Capital...</p>	 <p>Raspberry Pi B+ 2B 3B Aluminum Case</p> <p><b>P585.00</b></p> <p><del>P685.00</del> -15%</p> <p>National Capital Region (NCR)</p>

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