QuickPark

HamCheese

Reserved parking area

Ву

Napat	Boongaree	6488001
Pittinunt	Sirigittikul	6488081
Thanachay	Sujarit	6488087
Peerapong	Tantasilp	6488096
Pattaraporr	6488110	

A Report Submitted in Partial Fulfillment of

the Requirements for

ITCS335 Introduction to eBusiness Faculty of Information and Communication
Technology

Mahidol University

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Customer Information

Customer Segmentation (Target group)

Since our target groups are car users and landowners and our business is intermediary between customers, our model is C2C model or customer-to-customer. We separate the business's target group into 2 main groups.

- o **Renter**: 2 sub-kinds of renter.
 - People who are trying to find parking.
 - Background Information:
 - o People who have age in range of 20 to 40 years.
 - o People who want to park a car in a limited area.

Motivated:

- Due to the limitation of parking that is inconsistent with the number of visitors in some places such as hospitals, cafes, department stores, and so on.
- People who do not have enough area to park.
 - Background Information:
 - o People who have age in range of 20 to 40 years.
 - People who want a parking space near their home because of the limit of their space.

Motivated:

Due to some people not having enough parking space in their house, they
may have to park in front of the house instead. It could be safer from
crashing if they have an option of monthly rental parking.

Landlord

- People who want to benefit from their space.
 - Background Information:
 - People who have a space in the city or crowded places such as department stores, café, famous place, hospital and so on.

Motivated:

o In part of house owners who have unused space, they can use it to make a small income.

Customer's Pain

Renter

People who are trying to find parking.

- It is hard to find a parking space when they visit any famous place, especially in town.
- They waste time searching for a place to park when they go to a place where there is less parking.
- Finding a parking space for a long time may cause the driver to get upset.

People who do not have enough area to park.

- Because of not having enough parking space in their house, they may need to park in front of their house where they could be scratched or bumped.

Landlord

People who want to benefit from their space.

- Some people must face other people parking in front of their homes.

Solution

: Creating an application to be intermedia for renting parking space and announcing of rental parking space.

o Renter

People who are trying to find parking.

- They can find hourly parking near them from the application with locations and prices to choose from based on their preferences.
- They can reserve a parking space in advance to save time.

People who do not have enough area to park.

- Renting a car park that's on the fence will also be safe from getting scratched or bumped into.
- They can find monthly parking near them or their house from the application with locations and prices to choose from based on their preferences.

Landlord

People who want to benefit from their space.

- They can post or announce on the application how many parking spaces are available, where it is, at what price rate.

Persona

Renter

People who are trying to find parking.

- Name: Mr. Tuna

- **Age**: 21

- **Pain:** He needs a parking area that is near the hospital because the limited parking area of the hospital makes him waste of time.

- **Solution:** He loaded the 'QuickPark' that can help him find the parking area near the hospital and save his time.

People who do not have enough area to park.

- Name: Mr. Marshmallow

- **Age:** 32

- **Pain:** He needs a parking space near his house because the area of his house isn't enough to park more cars.

- **Solution:** He used 'QuickPark' to find the location near his house. Then he found the location where he could park his car at a reasonable price.

Landlord

People who want to benefit from their space.

- Name: Miss Pie

- **Age:** 45

- Want: She have a unuse space in city and want to use it benefit

- **Solution:** She loaded the 'QuickPark' and then she posts on the application that she has available space for parking at Sukhumvit 46 where there are many cafés around here.

<u>Prototype</u>

1. The user will be asked to log in or sign in before using the application.



- 2. After logging in, the user will be brought to the home page. The home page contains the username, the option to other pages, like parking page, contact, or member, and coupons that can be kept.
- 3. When the user wants to park anywhere, they can press the word parking on the bottom which can bring them to the parking page.





4. On the parking page, the user can choose how long they want to park such as for hours, for days, or custom by themself.



- 5. After choosing, the user will be brought to a search page where they can find the location that they want to park on the search box.
 - 5a. Once they park in the area they reserve, they must submit the button 'PARK' to confirm and then the application will start counting the time.







5b. When they leave, they must press the button 'LEAVE' to stop the time.

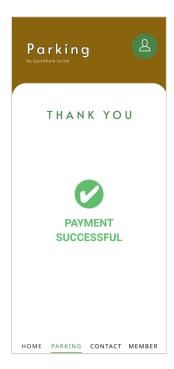






6. Following that the customer will be brought to the payment page. They can pay by mobile banking or cash after that the application will verify their payment.





7. In part of Landlord, they user can change mode from renter to landlord by press the three points on the up-right. Then, the user will be brought to the management page. They must register and verify themselves first.



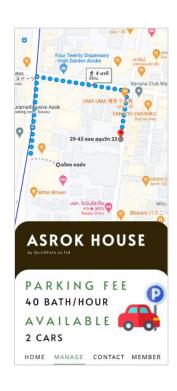




8. After that they can upload their area. On this page, they must give brief information about their area including the picture and location. They can set the price by themselves.







9. Then their post will show on the homepage.



10. For both type of customer, the renter and landlord, can contact our staff via chatting by press the contact on the bottom of the application. Also, the member page will show their information.





Customer Interview

Summary from interview:

- For customers Customers believe that a decent price is less than 30 baht per hour. Almost all of them like the prototype; they say our program is simple to use and straightforward to understand. They also propose having a timer, such as an alarm that sounds when the timer is about to expire.
- For owner Owners believe that an appropriate rate is around 50 baht per hour, which is higher than the client believes a reasonable price is. They are also concerned about privacy and security, and customers are concerned about the safety of their vehicles.

Financial Estimation

- Key Cost Items:
 - 1. Material costs: 1,100,000 Baht / 3yrs (30,556Baht/month)
 - 1.1 Hardware cost: 700,000 Baht / 3yrs (19,445Baht/month)
 - 1.1.1) Computers for coding (200,000 /3yrs):

This is one of the most important pieces of hardware for our startup because we must develop our website and application for our customers.

We assume that a normal pc or laptop can code very well.

The same spec as the computer lab in our faculty has cost around 30,000\$ per computer and have 3yrs warranty service. So, in 3yrs, we can buy around 7 computers for coding which might be enough for our startup.

Around 5,556\(\text{\$\beta}\)/month

1.1.2) The server computer $(100,000 \ \beta/3 \ yrs)$:

It is so important to keep all our startup information, and our customer information so we must have a server to keep all of these.

From advice.com we can get a good server for around 100k baht and it also has a 3yrs warranty, so in 3yrs, we don't have to buy more servers.

Around 2,778\(\text{B}\)/month

1.1.3) Computer for other departments (300,000\(\Beta/3\)yrs):

Even though we can manage everything that needs to access the internet by using our smartphones, the computer is still important for our startup. Such as doing a document computer it's still better than a smartphone.

The other departments' computers should be cheaper than the software developer's computers. We can assume that the computer costs around 10k Baht

and has a 3yrs warranty. We can have 30 computers for our laborers. It might be enough for a startup.

Around 8,334\(\mathbb{B}\)/month

1.1.4) Smartphone for customer service (56,000\(\Beta\)/3yrs)

For customer service, smartphones are very important. We must use smartphones to receive calls from customers or answer messages from customers. We assume that a good smartphone costs around 8k baht so in 3yrs we can have 7 smartphones which is enough for 2 members of the customer service team because they also have a computer for their work.

Around 1,556B/month

1.1.5) Other tools (44,000\(\beta\)/3yrs):

This is the budget for other tools such as technical tools.

Around 1,223\(\mathbb{B}\)/month

1.2 Vehicle cost: 300,000 Baht/3yrs (8,334Baht/month)

The vehicle is very important for every company for traveling or when must go out for some reasons. It's not good to use our labor's personal car when it's company work. From the Facebook marketplace, normal second-hand vans or cars cost around 200k -300k Bath.

1.3 Furniture: 100,000 Baht/3yrs (2,778Baht/month)

We must have good furniture or other electric devices to treat our labor such as a good table, economic chair, cooking devices, entertainment devices, refrigerator, etc.

2. Labor costs: 8,676,000 Baht / 3yrs (241,000Baht/month)

2.1 Head: 792,000 Baht/3yrs (22,000Baht/month)

We must have a head guy who can control the work of our start-up and can make good decisions. The head should have known everything about the company. Salary 22,000 Baht per month

2.2 Software development team: 2,160,000 Baht/3yrs (60,000Baht/month)

This team is one of the most important for our company because our main revenue stream has come from our website and application, so we must pay a lot of attention to this department. We plan to hire 3 software developers, 1 back-end, 1 front-end, and 1 full stack. Each one will get a salary of 20,000 Baht per month.

2.3 Marketing team: 1,296,000 Baht/3yrs (36,000 Baht/month)

To compete with other companies, we must have a marketing strategy, so we will have 1 Strategic Planner to plan our marketing and 1 Account executive to do our marketing plan.

Each one will get a salary of 18,000 Baht per month.

2.4 Financial team: 1,296,000 Baht/3yrs (36,000 Baht/month)

It's very important for every company to have people who can deal with the finances of the company such as dealing with taxes, managing salaries, managing budgets, etc. We will hire 2 specialists to deal with it.

Each one will get a salary of 18,000 Baht per month.

2.5 Technician team: 1,296,000 Baht/3yrs (36,000 Baht/month)

It's very important for every company to have people who can deal with the technical problems of the company such as setting up the system for customers, changing the light bulb, etc. We will hire 2 specialists.

Each one will get a salary of 18,000 Baht per month.

2.6 Customer service team: 1,296,000 Baht/3yrs (36,000 Baht/month)

It's very important for every company to have people who can deal with customer problems or get feedback from customers. We will hire 2 specialists. Each one will get a salary of 18,000 Baht per month.

2.7 Cleaner: 540,000 Baht/3yrs (15,000 Baht/month)

This one is one of the most important laborers. Every place should have a cleaner so we will hire one cleaner for our office.

Salary of 15,000 Baht per month.

3. Overhead costs: 1,299,000 Baht / 3yrs (36,083.33Baht/month)

3.1 Internet service: 18,000 Baht/3yrs (500 Baht/month)

Every company might have free internet or WIFI for their laborers, especially. When we were an online business from the latest promotion from AIS, there are 1000/500 Mbps Internet for 500\B

3.2 Utilities: 360,000 Baht/3yrs (10,000 Baht/month)

We must pay electrical and water bills from the research average for a small size office, The electrical and water bills should be around 10k Baht per month.

3.3 Service Insurance: 300,000 Baht/3yrs (8,333.4 Baht/month)

Our product has the choice of add-on Insurance service. If Their car gets damaged from our parking, we will pay them 5000 Baht per case. We estimate that it might be around 20 cases per year.

3.4 Office Rent: 360,000 Baht/3yrs (10,000 Baht/month)

We must have our office for work.

3.5 Other expenses: 261,000 Baht/3yrs (7,250 Baht/month)

For hardware, furniture, office, and car expenses.

4. Marketing costs: 1,440,000 Baht/3 years (40,000 Baht/month)

Advertising is the very important key to growing every business, so we have a budget for the marketing team of 1,440,000 Baht.

Revenue Streams

Our startup has 3 services.

1. 1-Hour Parking:

This is the cheapest service 20Baht / 1 hour. We expect to sell this service 177,700 times in the first year, 230,100 in the second year with a 30% Growth rate, and 345,150 in the third year with a 50% Growth rate.

2. 1-Day Parking

This is the service for those who want to park 1 Day 400Baht / 1 day. We expect to sell this service 34,300 times in the first year, 44,590 in the second year with a 30% Growth rate, and 66,885 in the third year with a 50% Growth rate.

3. Custom Time Parking

This is the service for those who want to custom the time for parking we estimate that people might spend 5 hours for 1 parking. For this service 1 hour= 15Baht 75Baht / 5 hours. We expect to sell this service 61,700 times in the first year, 80,210 in the second year with a 30% Growth rate, and 120,315 in the third year with a 50% Growth rate.

4. Insurance add-on

This is the service for those who want to have insurance for their car while parking. For this service 1 parking time= 50Baht. We expect to sell this service 29,600 times in the first year, 38,480 in the second year with a 30% Growth rate, and 57,720 in the third year with 50% Growth rate.

From these four services, we expect to earn 23,367,500 Baht in the first year.

30,221,755 Baht in the second year. 45,566,625 Baht in the third year.

COGS

From our key cost and our expect sold unit we are using Score Financial to estimate the COGS In 1 month,

Labor salary = 241,000 Baht, Materials costs = 30,556, Overhead + Marketing cost = 76,083 Bath We use the same Labor, Materials, Marketing and overhead cost so we have to divine everything with 4 for input.

So, for each product:

Labor salary = 60,250 Baht

Material Costs = 7,639 Baht

Other = 19,020 Baht

For landlord 1-hour = 10 Baht, 1-day = 300 Baht

1. 1-hour parking:

In one month expect to sell 20,916 units, and spend to the landlord 209,160Baht. We combine landlord cost and overhead and marketing together = 285,243Baht

Variable Costs of Services		
Timeframe:	eframe: Month	
Product Line:	I-hour parking	
Amount spent on labor during timeframe	60,250	
Amount spent on materials during this timeframe	7,639	
List any other variable costs associated with the delivery of your service during this		
timeframe.	228,180	
Total Service Expenses	\$ 296,069	
Number Units Sold During Timeframe	20916	
Cost of Goods Sold Per Unit	\$ 14	

2. 1-day parking:

In one month expect to sell 4,050 units, and spend to the landlord 1,214,790Baht.We combine landlord cost and overhead and marketing together = 1,233,810Baht.

Variable Costs of Services			
Timeframe:	Month		
Product Line:	I-day parking		
Amount spent on labor during timeframe	60,250		
Amount spent on materials during this timeframe	7,639		
List any other variable costs associated with the delivery of your service during this			
timeframe.	1,233,810		
Total Service Expenses	\$ 1,301,699		
Number Units Sold During Timeframe	4050		
Cost of Goods Sold Per Unit	\$ 321		

3. Custom time parking:

In one month expect to sell 7,285 units, and spend to the landlord 364,200Baht.We combine landlord cost and overhead and marketing together = 383,220Baht

Variable Costs of Services	
Timeframe:	Month
Product Line:	Custom time parking
Amount spent on labor during timeframe	60,250
Amount spent on materials during this time frame	7,639
List any other variable costs associated with the delivery of your service during this	
timeframe.	383,220
Total Service Expenses	\$ 451,109
Number Units Sold During Timeframe	7285
Cost of Goods Sold Per Unit	\$ 62

4. Insurance service:

In one month expect to sell 3,495 units, we have already added the cost of insurance case to our overhead cost.

Variable Costs of Services			
Timeframe:	Month		
Product Line:	Insurance Service		
Amount spent on labor during timeframe	60,250		
Amount spent on materials during this time frame	7,639		
List any other variable costs associated with the delivery of your service during this			
timeframe.	19,020		
Total Service Expenses	\$ 86,909		
Number Units Sold During Timeframe	3495		
Cost of Goods Sold Per Unit	\$ 25		

Break-even point

Gross Margin % of Sales	
Gross Margin	\$ 5,313,800
Total Sales	\$ 23,367,500
Gross Margin/Total Sales	22.7%
Total Fixed Expenses	
Payroll	\$ 2,958,592.00
Operating Expenses	\$ 1,174,964.64
Operating + Payroll	\$ 4,133,557
Breakeven Sales in Dollars (Annual)	
Gross Margin % of Sales	22.7%
Total Fixed Expenses	\$ 4,133,557
Yearly Breakeven Amount	\$ 18,177,366
Monthly Breakeven Amount	\$ 1,514,780

Future Plan

From Financial Estimation we have 4 plans to make our business grow up.

- 1. We want to have new services: such as delivery, restaurant reservation, Taxi service etc.
- 2. We want to be easier to use and an affordable platform, so everyone can use our services.
- 3. We will use the impacts of advertising to make people know us more.
- 4. We must listen to our customers' feedback and improve our product.

With these 4 plans in 10 years, we won't be just parking reservation service, but it's going to be the complex platform for everyone in one application/website you can call taxi driver, order food, plane ticket reservations and so on. People will love our easy and affordable platform. For people who doesn't know us the impact of social media, advertising, influencers will help us to going to their hearts and we also listen to all feedback and try to improve our platform.