

# Business Plan, Green Auto Spa

Sherpa, Nyima

2017 Laurea

**Laurea University of Applied Sciences** 

Green Auto Spa

Nyima Sherpa Degree Programme in Business Management Bachelor's Thesis May, 2017

# Laurea University of Applied Sciences Degree Programme in Business Management Bachelor's Thesis

**Abstract** 

Sherpa Nyima

Business Plan, Green Auto Spa

Year 2017 Pages 46

Business plan is an important blue print tool that helps entrepreneurs and business managers to think through their business idea, convince possible investors and ensure financial success to the business. A good business plan outlines company's product, how the production will take place and how the product or service is going to ensure that it reaches its' targeted market.

The purpose of this project is to create a business plan for a new and soon-to-be established auto wash shop with speedy quality services in Kathmandu, Nepal. The business plan was made to ensure the success of the business idea and to convince possible investors about the business idea.

The theoretical approach of the report is based on numerous business related books, internet sources and literature review of business plan development. This thesis will primarily outline the importance of creating a business plan as well as assist the author in selecting suitable research methods tools using SWOT analysis and Business Model Canvas.

In this project, both qualitative and quantitative research methods are used. Information was gathered through a period of observation and surveying at several wash shops around Kathmandu. Survey questionnaire was used as quantitative research method. The survey questionnaire was used to find out problems associated with the current wash service provider from customer's point of view. Qualitative research method such as desk research and observation was used in this project. Desk research helped in gain legal information, taxation and regulation regarding establishing a business in Nepal. Whereas observation helped in understanding the auto wash business and services provided by the several auto wash service providers in Kathmandu.

The research method has allowed the author to understand the current issues the industry is facing and to assess if there is real demand for a new auto wash shop in the Kathmandu valley. A competitor analysis was also made which has provided both an offensive and a defensive strategy to the author. In addition, the research method has also allowed the author to learn about the auto wash industry itself in Kathmandu region.

Although the car wash business can be risky due to the high financial requirement and competitive environment, the research has shown that there is a demand for a service provider that can provide effective and efficient car wash service in Kathmandu. Selecting a favourable location and choosing a right business attitude can bring profit to Green auto spa.

Keywords: Business Plan, Carwash, SWOT analysis

# Table of Contents

1	Intro	oduction	6			
	1.1	Purpose and objective of this thesis	6			
	1.2	Background of thesis	6			
	1.3	Research approach	7			
	1.4	Theoretical approach	7			
	1.5	Framework of thesis	8			
2	Theo	oretical Background	9			
	2.1	Business plan: a definition	9			
	2.2	Importance of the business plan	9			
	2.3	Types of business plan	10			
	2.4	Business plan format	11			
	2.5	SWOT analysis	11			
	2.6	Business Model Canvas	11			
3	Research Approach					
	3.1	Research Methods	14			
	3.2	Data types/sources	14			
		3.2.1 Data collection techniques	15			
4	Meth	nodology this is part of the research chapter. Please change	16			
	4.1	Observation	16			
	4.2	Survey Questionnaire	17			
	4.3	Desk research	17			
	4.4	Processing data	18			
	4.5	Validity and reliability of data	18			
5	Emp	irical Study	18			
	5.1	Observations	18			
	5.2	Green Auto Spa	21			
		5.2.1 Research result Analysis	21			
6	Sumi	mary of the main findings in the study	29			
	6.1	Business plan for Green Auto Spa	30			
		6.1.1 Title Page	30			
		6.1.2 Executive summary	30			
		6.1.3 Company overview	31			
		6.1.4 Market analysis	32			
		6.1.5 Marketing and sales plan	34			
		6.1.6 Management team	34			
		6.1.7 Financial plan	35			
		6.1.8 Financial requirements	37			

6.1.9 SWOT analysis of Green Auto Spa	38
6.1.10Business Model Canvas	40
7 Conclusion and recommendations	42
References	44
Figures	47
Tables	48
Appendices	49

### 1 Introduction

A business plan is a clear statement of plans and goals which illustrates the step-by-step process from which businesses can establish and benefit. A good business plan helps entrepreneurs and business managers reach their goals by allowing them to gain deeper understanding of their business by thoroughly understanding and examining the nature of their business.

A good business plan also guides managers to be informed about every detail that is required to keep the business in order and in profit.

### 1.1 Purpose and objective of this thesis

The main purpose of this thesis is to study and to develop the author's own business idea of starting the first ever automatic auto wash shop in Kathmandu, Nepal. The business idea of the auto wash shop is to provide fast but in the same time reasonably priced service to its customers. The author, with the help of his business partner plans to implement the business plan in the summer of 2018.

### The business plan will:

- 1. Help the author understand the nature of the auto wash industry in Kathmandu region.
- 2. Determine the opportunities and challenges that accompany the establishment of a new business and to help prepare and plan.
- 3. Determine if the business idea of having "first Automatic auto wash" shop could be profitable
- 4. Enable the author and his business partners in obtaining investment money from investors

For the purpose of this thesis, 4-Wheeler refers to all automobiles that have four wheels, regardless of whether they are 4-wheel drive or not. Nepalese Rupees (NRP) will be used as a standard currency which to the date May 8<sup>th</sup> 2017 is valued NRP 112 to Euro 1.

### 1.2 Background of thesis

The idea of starting up a new auto wash shop arose during the author's three month long internship period in Kathmandu, Nepal. Besides fulfilling the intern's regular job description, the author was also responsible for looking after the company's vehicle. The job description

required sending the vehicle for regular repair, maintenance and wash after its visit to the organization's project site.

In Nepal, manual wash is the only option available for washing a vehicle. On average, it takes about an hour for a car and half an hour for a motor bike to be fully hand-washed. It was during the long wait of the wash cycle, the author realized the potential of a fully automatic vehicle washing machine that could wash up to 30-40 vehicles an hour and could save time and money for both customer and the service provider. This, along with watching other customers in long lines waiting for their turn motivated the author to explore the possibility of entering the auto wash industry in Kathmandu.

The author does not have previous experience in an auto wash industry. However, the author believes his previous experiences in customer service, hospitality, sales and his "can-do" attitude with limited resources and his personal efficiency will be greatly beneficial to successfully establishing and running the business in future.

### 1.3 Research approach

Both qualitative and quantitative research methods were used to conduct the study. Qualitative research included finding information from the internet, desk research, interviews with car wash customers and personal observation. Quantitative research included a survey, conducted at a various vehicle washing centers and parking spots in Kathmandu.

### 1.4 Theoretical approach

The research is supported by various theories. The first section of the theoretical approach will discuss the importance of writing a business plan. In this chapter, various viewpoints regarding the importance of a business plan and author's chosen business plan will be discussed.

The second section will discuss business plan theory along with different versions of business plans where the structure of the business plan will be outlined. The last section will clarify the use of the SWOT analysis tool along with Business Model Canvas.

### 1.5 Framework of thesis

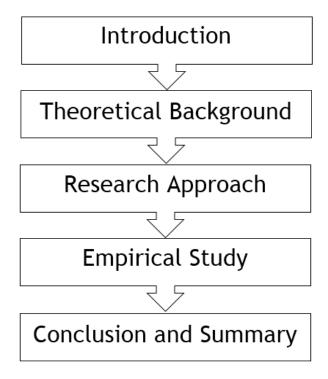


Figure 1: Framework for Thesis

The thesis is made up of five section. The first section is an introduction to the study topic. It outlines and explains the main purpose and objective. It also provides readers with an understanding of basic layout and structure of the thesis document.

The second section is composed of theoretical background where theories related to the subject matter are outlined and discussed. This chapter will support the empirical study that can be found in chapter four, Empirical Study. The main part of theoretical background includes various types of business plan, business plan format and SWOT analysis. These parts will be explained in detail.

The third section, The Research Approach, will examine the research method used in conducting the study. In this chapter, the chosen research methods and the reasons for their choice as well as the importance of the chosen method will be explained in detail.

The fourth section, Empirical Study, will discuss the comprehensive business plan. The findings of the research methods will be examined and presented. The theoretical background of the second chapter will be applied in the business plan.

The final section will be the conclusion of the study topic. It will outline the author's final thoughts related to the business viability and its potential success in both short and long

terms. The conclusion will summarize the study topic along with some suggestions for further research and improvements.

### 2 Theoretical Background

### 2.1 Business plan: a definition

According to Bovee and Thill et al. (2005), a business plan is a written document that summarizes an entrepreneur's business idea, its goals and a plan to achieve those goals, how the company will manage its operations and carefully shows how both the consumers and company benefit from company's products and goals.

Kaplan and Warren (2005, 340) describes business plan as "a 25-40-page written document that describes where a business id heading, how it hopes to achieve its goals and objectives, who is involved with the venture, why its product (s) and service (s) are needed in market-place, and what it will take to accomplish the business aims."

Although definition of business plan varies from one author to the other, it is necessary to stress that all business plan contributes to the overall success of the business and that it creates a foundation in which ideas related to business grow and prosper.

### 2.2 Importance of the business plan

Constructing a business plan is one of the major steps in opening a new business or expanding an existing one. A well-constructed plan guides business managers in developing long and short term goals and helps managers identify potential threats and risks. In return a comprehensive business plan serves as a blueprint which, like any map, outlines the direction where the company is going. (Collin, Paul & Robert 2012)

In the modern globalized world, information technology and the invention of new technologies in the marketplace have revolutionized, making the business environment more competitive. A business in today's market cannot thrive and prosper without planning its future. Organizations in every industry are forced to analyse their operations with facts and figures and act upon them responsibly. Therefore, to succeed in a competitive market, a carefully defined planning is required. (Westwood 2004)

A business plan serves two main important functions. First, it provides entrepreneurs a clear idea regarding the company's operations and helps outline its strategy in converting an idea

to reality. Secondly, it helps persuade investors to finance the business. It is important to remember that without a business plan it is nearly impossible to be even granted an interview with investors let alone secure funding. (Bovee & Thill 2005).

It is further worth noting that, as an entrepreneur, sometimes the greatest service a business plan can provide is the realization that the business idea just won't work. Realizing this and acting upon it can save considerable time, money and resources for both entrepreneur and investors. (AlliedCrowds 2017)

### 2.3 Types of business plan

Business plans differ from one another mainly because of their essential purpose. In their book, Kaplan and Warren (2005) outline three major types of business plan, namely a full business plan, an executive summary plan and an action plan. The major difference among the three types of business plan arises from differing requirements an entrepreneur has for his business.

### Full business plan

The full business plan is a complete business plan where the business is described in detail. This type of business plan is geared towards attracting outside parties such as investors, strategic partners and buyers. (Kaplan & Warren 2005)

### Action plan

An action plan is a business document that outlines the implementation process of the business. In other words, the action plan is also known as an implementation plan. This document provides plans in even greater detail than the full business plan and describes how management and its team will guide the development, launch, and initial growth of the company. (Timmons et al. 2004)

### Executive summary plan

The Executive summary plan is a short document that contains the most important information about the business and its direction. This type of business plan is very effective in attracting interest among investors in a short period of time. Many entrepreneurs use an executive summary plan to attract key employees and/or to convince friends and family members to invest in the business. (Kaplan and Warren 2005)

### Chosen business plan

The author has chosen full business plan as presented by Kaplan and Warren (2005) for this study. Full business plan offers all the important sections without going into too much detail or leaving out any necessary items.

### 2.4 Business plan format

The structure of the business plan that will be used in this study has been presented by Kaplan and Warren (2005). In the following section, the contents of the business plan format will be discussed in detail along with supporting theoretical background. A typical business plan includes:

- 1. Title page
- 2. Executive summary
- 3. Overview of the company
- 4. Market Analysis
- 5. Marketing and Sales plan
- 6. Operations
- 7. Management team
- 8. Financial Plan
- Financial Requirements(Kaplan and Warren 2005)

### 2.5 SWOT analysis

SWOT analysis is a simple and useful analyzing tool that shows a company's overall strengths, weakness, opportunities and threats. SWOT analysis can be conducted throughout the organization or for a part of the organization.

Strengths and weaknesses of a company arise because of internal factors such as company reputation, patents and locations. Such factors could help or harm the company in pursuing its set goals. Business managers could change them over time but not without some work or effort. The company itself is liable for these factors. Opportunities and threats come from external factors such as company's suppliers, customers, competitors and prices. These factors are out in the marketplace and the company does not have any influence on them. Thus, understanding the various strengths, weaknesses, threats and opportunities the company faces could empower the organization to further improve its operations through preparation and planning. (McDonald & Meldrum, 2013)

### 2.6 Business Model Canvas

The use of Business Model Canvas (BMC) in business plan becomes a very powerful when used appropriately. Overall, the business plan displays company's strategy and expected financial

performance whereas BMC shows how the company will position in its industry's value chain and manages to establish its relation with suppliers, clients and partners to generate profits.

Business Model Canvas (BMC) is an important analyzing tool that assists entrepreneurs and managers in making strategic and marketing decision in business. It is even more important so to the startup businesses because it helps in developing clear image of business's value proposition, operations, finance and customers. Many small and startup businesses often gets carried out with its daily operational routine that they often spend little time planning. Creating a BMC allows managers to clearly identify how various component of business relate to each other. This knowledge becomes very powerful because it helps decide area that requires more attention and improvements over others.

In their book, Osterwalder & Pigneur describes Business Model Canvas as a logical framework tool that helps improve the financial performance meanwhile invent, deliver and sustain the core value of the business to its customers. (Osterwalder & Pigneur 2010) . The Business Model Canvas is a visual representation of nine building blocks.

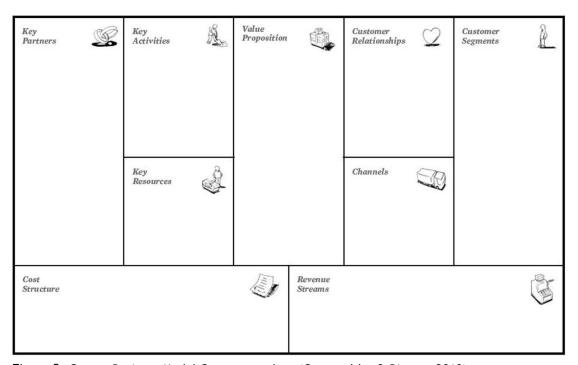


Figure 2: Canvas Business Model Canvas template (Osterwalder & Pigneur 2010)

The Business Model Canvas is composed of nine building blocks which describes the way business operates.

Customer segments: This segment helps in determining the targeted customers that
are most important for the business. The chosen customer segments later assists in
deciding other building blocks.

- Value Proposition: Value proposition segment helps outline the value business creates for its customers. This will help in answering to why customers will choose company's product or services over the competitors.
- Customer relationship: This building block helps in answering on question such as how
  customers will interact with business through sales and product life cycle? Do the
  business want to regain the existing customers or reach new targeted customer? Or
  increase the revenue output form the existing customers?
- Channels: This segment entitles business to communicate with its customers. It creates a flow in which business chooses a route to sell their product and services. For example, though internet and face to face sales
- Revenue stream: Revenue stream is the way in which business makes revenue. It
  helps determine the price customers pay or willing to pay.
- Key activities: These are the crucial things that allows business to deliver its proposition and make the business function. All task related to production, selling, advertising, training and hiring employee falls under this segment.
- Key resources: This segment helps in determining the key resources of the business. The resources could be human, physical, intellectual or financial.
- Key Partner: These are the External and internal parties that connects and has influence to certain extent with the business such as investors, partners, suppliers etc.
- Cost structure: The segment helps outline the fund that is required to make the business operational.

The BMC offers the possibility to analyze every single key component of the business whereupon, the business managers can review their strengths and weakness and improve the overall business structure. The BMC model helps understand how everything inside the business is tied together as a working business plan.

### 3 Research Approach

In their book Saunders, Lewis and Thornhill (2009) describe research as a systematically collected and interpreted data designed for a clear purpose. Good research explains the chosen methods in collecting data, the results and insights as to why the results are meaningful. It makes it easier in 'finding out things' when a clear purpose with an answer to the research questions is laid out (Saunders et al.2009).

In addition to this, the overall market research also assists in improving marketing decisions; selecting optimum alternatives or even assisting executives in making effective decisions based on facts and understanding. The basis of good decision-making is having effective information available and wisely using it. A researcher must be able to explain any available information that is used in contributing to decision-making (Paul Hauge 2002).

### 3.1 Research Methods

Quantitative research methodology involves techniques that deal with collecting numerical data. Constructing a clear and simple questionnaire is vital in generating data input for this type of research. Software like SPSS or Microsoft Excel are useful in analyzing quantitative research. Besides using these software instruments, statistical and mathematical analyzing skills play an important role during the analysis process. In order to make the analyzing process easy, the quantitative research method typically uses charts, graphs, diagrams and tables. This makes it easier for the reader to follow and understand when the data are analyzed (Saunders et al. 2009).

Qualitative research methodology, on the other hand, involves gathering non-numerical data, or data that cannot be quantified. Qualitative research is purely based on interpretation. The information from qualitative data can easily be summarized, categorized and structured. This research method is used in getting concrete information about, and explanation of, certain topics. Pictures and video clips are few examples of qualitative data. One of the limitations of having qualitative data is that it can be relative. Nevertheless, using qualitative research is a great research method in understanding surveyor respondent's point of view to the subject matter (Saunders et al. 2009).

It is important to note that both quantitative and qualitative research could be combined or mixed to produce detailed and concrete results in research (Saunders et al. 2009).

This thesis will use the combined method of analyzing both quantitative and qualitative research. The results will be analyzed separately.

### 3.2 Data types/sources

It is essential for the researcher to choose which data sources the research will be based on prior to conducting a research. The research can be based on either primary and secondary sources or based upon both sources, which Saunders, Lewis and Thornhill describe as triangulation or dual methodology (Saunders et al. 2009).

A primary data source is described as data "collected specifically for the research project being undertaken". Examples of this include interview, observation, action research and case studies. Conversely, secondary data sources are those that "have been collected for some other purpose". Secondary data can be observed and learned from sources such as previous research, journals, government reports and official statistics. (Saunders et al. 2009)

In this research, data are gathered employing both primary and secondary sources.

### 3.2.1 Data collection techniques

### **Ouestionnaires**

The use of questionnaires in survey-taking is one of the most common and useful techniques in research. Questionnaires, in general, comprise any data collection method in which the respondents are asked sets of questions in predetermined order. The main purpose of employing this technique is to understand what a set group of people thinks and feels about a certain topic. The use of survey as a questionnaire in research is considered a relatively cheap and effective method of data collection as it can collect data from a large population quickly. It is also considered easier for respondents as it could be answered at any time and place (Gillham 2000, cited in Gray 2009).

Depending on the level of interaction between the researcher and respondents, questionnaires are characterized as either self-administered or interviewer-administered. When questionnaires are conducted through the use of internet and intranet-mediated questionnaires, they are considered self-administered. When questionnaires are gathered and recorded simultaneously through structured interview or by telephone, they are considered as intervieweradministered (Gray 2009). Different types of questionnaire classification are displayed in 3.

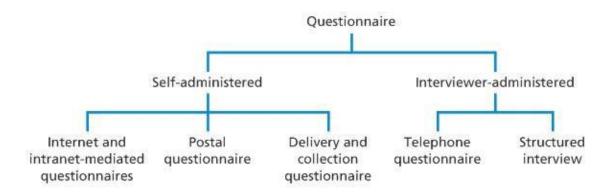


Figure 3: Types of Questionnaire

### Interviews

Interviews are one of the data collection methods in which researchers try to "capture the experience and perspectives of the research participants in such a way as to get as close to the reality of these experiences as possible." (Crouch & Pearce 2012, 112)

### Observation

Observation is one of the most effective techniques used by the researcher in gathering data. It provides researchers with ways to connect with the research environment. It is very effective because it allows researchers to "check for nonverbal expression of feelings, determine who interacts with whom, grasp how participants communicate with each other and check for how much time is spent on various activities" (Schumuck, 1997).

### Desk research

Desk research is considered as a secondary source research. The information from desk research is collected from sources such as journals, newspapers and the internet. The analysis made from desk research can help solve a problem. Although it cannot be a complete answer to the problem, it can assist the researcher in finding market trends and developments and give an insightful view of a certain topic (Hague, Hague & Morgan 2013).

### Chosen data collection methods

In order to gain deeper understanding of the nature of the vehicle washing business in Nepal, unstructured observation, desk research and survey questionnaires were employed as data collection methods. Unstructured observation was used to gain a general idea regarding the vehicle washing business operating in Kathmandu. No specific goals for observation were set, as this could lead to limiting the possible findings. Desk research was primarily used to collect legal and financial information concerning vehicle washing business in Nepal.

A survey questionnaire was also employed and distributed among vehicle owners to find out about the issues vehicle owners face during the wash process. The survey result will assist the author in discovering if there is the potential for introducing a new service that could better serve customers currently dissatisfied by existing providers. The results from the survey questionnaire will be discussed towards the end of the business plan.

The business plan will also outline the detailed operation of the service.

4 Methodology this is part of the research chapter. Please change

### 4.1 Observation

The main purpose of the observation was to gain an understanding of how the current car wash shops operate in Kathmandu. The observation took place in X Auto Wash and Y Auto Wash, both located near the city center. The complete customer journey was observed, from the customer's arrival, payment, waiting during the wash and dry process and his departure.

The observation was conducted during the month of February 2016 by the author himself. The author chose X Auto Wash and Y Auto Wash because these two were the top providers that received customers on a regular basis. The author thought that it would be wise to conduct a benchmark study and reflect upon these two-auto wash centers while contemplating the establishment of an auto wash business in future. The observation was conducted on different days and at different times in order to avoid any specific habits that could be present during similar days and time.

### 4.2 Survey Questionnaire

The primary purpose of the survey questionnaire was to find whether the vehicle owners in Kathmandu were frustrated or dissatisfied with the service currently provided by the auto wash service providers. An additional purpose of the survey was to elicit findings about out the customers' willingness to pay an extra sum of money for effective and efficient customer service. The collective information received from the survey will help the author in identifying if there is a potential of establishing an automatic vehicle washing business in Nepal.

The survey was conducted during the months of February and March 2017. The survey questionnaire forms were delivered and collected in a self-administered manner by distributing them directly to the vehicle owners. The author visited various car wash centers around Kathmandu to conduct the survey. This was a very effective research process because it allowed the author to discuss and gather quantitative and qualitative data in a face-to-face manner with the targeted customers, the vehicle owners.

In total 81 surveys were collected. The results were analyzed quantitatively with the help of Microsoft Excel. The results gathered from surveys are collected and presented in forms of graphs and charts.

### 4.3 Desk research

The purpose of the desk research was to help gain deeper understanding of the legal aspects of operating a business in Nepal. The information collected though desk research will assist in preventing future conflict. The desk research will also help the author in completing financial calculations.

No specific date or time was set for implementation of desk research but the research began in January 2015 and onwards for some time. The desk research was conducted on a regular basis. The main source for information on establishing small and medium size business in Nepal was collected from the official Nepalese government website, newspapers, journals and

the internet. The information collected from these sources such as taxes and VAT (Value Added Tax) will help the author in planning and preparing the financial calculations.

### 4.4 Processing data

The data collected during the research was collected and analyzed to identify problems, strengths, weaknesses, opportunity and threats involved in the vehicle wash business.

The observation will help in understanding how an auto wash industry in Kathmandu operates, what customer problems could the author solve and what new additional service(s) would give the author a competitive advantage. The observation will also help the author gain an understanding of how important the physical appearance of the business, employee and shop design is in getting the customer's attention into focus.

### 4.5 Validity and reliability of data

It is important to note that the validity and reliability of data collected during the course of this research cannot be used in generalizing to other situations and is subject to change. The findings from the survey and observation were confined to the author's selected locations in Kathmandu. The situation and the results could differ in other parts of the city and variables such as age demographics, customer loyalty and location of the business could affect the outcome.

### 5 Empirical Study

The following section will explore the findings collected during the empirical study. The first section of this chapter will describe the findings collected through observation. The second section of this chapter will outline author's SWOT analysis and Business Model Canvas on establishing an automatic vehicle washing center. The final part of this chapter will explain the business plan of the company in detail.

### 5.1 Observations

The observation conducted during the research revealed that all the car wash centers in Kathmandu use manual labor in cleaning the vehicle. The average number of employee among the

visited car wash centers was 8. It was observed that all the car wash centers use a basic technology system such as high pressure water guns and hydraulic lift to clean exterior, interior and the chassis part of the vehicle.



Figure 4: Hand scrub in cleaning small sized vehicle



Figure 5: Use of hydaulic lift and high pressure water guns.

The price of washing the vehicle depended largely around the size of the vehicle. Washing SUVs and heavy vehicles such as jeeps are costlier than washing sedan and hatchback cars.

This is because of work associated with manual labor. Larger vehicles required greater expenditure by the owners than smaller vehicles.

In addition, the price also depended on customer's choice of washing category. The two terms "full wash or half wash" are widely used in the car wash industry in Kathmandu. Full wash entails inside, outside, underneath the chassis wash. This process is time consuming and expensive since a hydraulic lift is used while washing the underneath surface of the car. Half wash refers to internal and external cleaning only. Half wash is less time consuming and cheaper than full wash. In the car wash shop called Y Auto Wash, full wash for SUVs is NRP 1,000; for Sedan and hatchback vehicles the full wash charge is NRP 600.

Furthermore, it was observed that hand scrub was used to clean the exterior parts of the vehicle and hand towels were used to dry the vehicle. A vacuum cleaner is used in cleaning the interior part of the car. The whole washing and drying process took about 40-50 minutes on average excluding the waiting time for a vehicle owner's turn. In some cases, the author noticed that some customers waited 2.5hrs for their vehicle to be fully cleaned.

In addition, the author also noticed that because of the long waiting time, some customers either decided to leave their car at the wash center and visit later for pickup while others simply waited in the auto wash center. While conducting a survey, a few respondents commented that the waiting line problem could be easily solved by adding a "pickup and drop off" service where the vehicle will be picked up and dropped after cleaning from customer's choice of location, with an additional fee.

In addition to the washing process, the author also noticed that the overall environment and feeling of most of the car wash center from service to design was not well thought out. The employees had no dress code and it was difficult to distinguish between employees and the customers. The author noticed that in many cases in both Y Auto Wash and X Auto Wash, the customers seemed to be lost while entering inside the auto wash shop. There were no clear signs and signals indicating the parking, waiting, washing and customer relaxing area. The regular and loyal customers seemed to be ok with it but many may consider this a poor customer experience. Long waiting times with poor customer experiences are unhealthy for any business. It is worth considering the creation of an easier service design with the help of a customer journey mapping tool. This would enable the author to improve the customer's experience and help understand how the customers are interacting with the service.

While conducting surveys, the author was advised by the respondents that most of the auto wash centers use untreated underground water. Underground water contains arsenic and sand particles. The survey respondents complained that the untreated water caused scratches and

stains to their vehicles. Many have decided not to use such service from some service providers. This would be worth noting while establishing Green auto spa. Green auto spa will only use treated and filtered water.

### 5.2 Green Auto Spa

Green Auto Spa will be a limited liability company that plans to go operational in August 2018. The main purpose of Green auto spa is to provide a quality vehicle cleaning service in a speedier and timelier manner. The author plans to employ imported automatic vehicle washing machines that will allow the author to wash, wax and clean the exterior parts of a vehicle within 5 minutes. The author believes that the customers using Green Auto spa will pay for such service as they will save significant amount of time compared to other service providers.

The author also plans to employ highly trained employees that will serve customers with a smile and make better connections with the customers.

### 5.2.1 Research result Analysis

The survey was conducted from January 28<sup>th</sup> to March 28<sup>th</sup> 2017 in which 81 responses were collected. The survey was conducted in various parking lots and carwash centers of Kathmandu city.

# Q1. The ownership of the vehicle

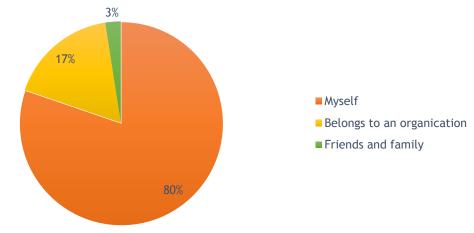


Figure 6: Ownership of the vehicles

From the results collected, 80% of the vehicles were owned by survey respondents themselves, whereas 17% of the respondents drove vehicles that belonged to an organization where they worked. Only 3% of the people responded that the vehicle they drive belonged either to a friend or a family member.

The result indicates that personal ownership of the vehicles is very popular. This means that most of the people that visits auto wash centers drives and owns vehicles by them self. It would be wise to be informed that communication with the vehicle owners with issues related with wash activities could be conducted inside the business premises when they visit. Information such as seasonal discounts, membership offer and other wash related service can be effectively communicated on face to face manner with the vehicle owners.

# Q2. What is your age group?

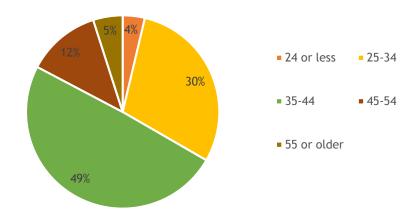


Figure 7: Respondents age group

The majority of respondents participating in the research were aged between 35-44; these constituted almost 49.4% of the total respondents. People between the ages of 25-34 represented 29.6%. The third biggest respondents were of the 45-54 age group, representing 12.3% of the total respondents.

It is evident from Figure 7 that drivers in the age categories of 24 or less and 55 or older represent only 9% of the total respondents. Drivers between the ages of 25-55 represent 91% of the total respondents. Although this data cannot be used to generalize towards the whole vehicle driving population of Kathmandu, it certainly provides enough information on what age categories Green auto spa will interact while operating. With this information, the author can plan a marketing and pricing strategy, and develop a suitable service design for Green auto spa.

# Q3. How often do you wash your fourwheeler in a month?

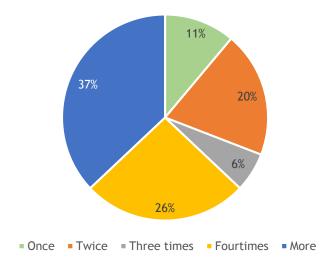


Figure 8: Frequency of wash per month

When asked about the average frequency of wash at a wash center and cost of washing vehicle per visit, almost 63% of the respondents reported that they wash their vehicles four times or more per month. 6% of the respondents said that they wash their vehicles 3 times a month whereas 20% and 11% of the respondents reported that washing their vehicles twice or once a month at an auto wash shop.

This data provides an information on regular customer. Green auto spa's will target customers that visits three times or more at auto wash shops. Green auto spa can benefit largely by this category of customers as they will be viewed as a loyal or regular customers. During its first quarter of operation, Green auto spa will invest a portion of its time and resources to identify its regular customers and come up with suitable service package that will allow them to have special discounts and offers after certain wash per month.

### Auto wash Workplace At home ■ Never ■ Rarely ■ Sometimes ■ Often ■ Always

## Q4. Where do you wash your four wheelers?

Figure 9: Rating Four-wheeler wash venue

Figure 9 shows that the majority of the car owners like to get their vehicles cleaned on a regular basis. Collectively, 74% of the car owners get their cleaning done at least 3 times or more a month at an auto spa. These categories of customers are the ones that Green Auto Wash would like to attract. Combining wash frequency with the price the customers pay and the time they spend on each wash will help the author in deciding the suitable price and customer waiting time for a carwash. This section is further explored in page number 27.

Among the three attributes in the venue of car wash, washing vehicles at the auto wash center appeared to be the most commonly used place. Only 3 respondents reported that they rarely wash their vehicle at an auto wash shop. In the same category, 78 respondents reported that they visit the auto wash frequently. It is evident from the figures that washing a vehicle at home and at a workplace showed weaker positions compared to washing at an auto wash center. Fifty respondents from the workplace category reported that they never wash their vehicles at home. Also, washing vehicles at home appear negatively stronger, as 21 and 14 respondents respectively stated that they rarely or never wash their vehicles at home. This result suggests that washing vehicles at an auto spa is more popular than washing at work place or at home. If the washing services could be improved by making the service faster, better and affordable, Green Auto Spa can greatly benefit.

# 35 30 25 20 15 10 6 7 2 Affordable at wash center Time consuming Completely agree Neitherdisagree nor Agree Disagree Competely Disgree

# Q5. How do you rate the affordability and time consumption at your current auto wash shop?

Figure 10: Rating affordability and time consumption at an auto wash shop

The respondents were also asked to rate their opinion on the affordability of washing vehicles and time consumed in the process at their regular auto wash shops. Collective 42 respondents completely agreed and agreed that they find the wash service affordable at their current auto wash shop. In addition to this, 30 responded as neutral about their decision and only 9 responded that they disagree or completely disagree. This result shows that the current wash service providers are charging a fair price for their service. Majority of the respondents thinks that the price for the service is affordable. This information will help Green auto spa in making a strategic pricing decision. The pricing range must be affordable yet not higher that the market price.

Among 81 respondents, 20 respondents completely agreed with the fact that the wash in vehicle wash center is time consuming; an additional 34 responded by agreeing with the same statement. Fourteen respondents were neutral about their opinion, whereas only 13 reported that they don't find the wash process time consuming.

It is worth noting that the consensus is that the wash process is time consuming (agreed by 54 of the 81 respondents). The results clearly shows that the majority of the respondents find the wash service affordable and very time consuming at the same time. It will be necessary for Green auto spa to find a suitable price for its service, which is making it affordable and less time consuming at the same time. Customer's willingness to pay more for faster service has been further explored in page 28 which suggests positive response in customers engaging with such services.

# Q.6 How much do you pay for each car wash?

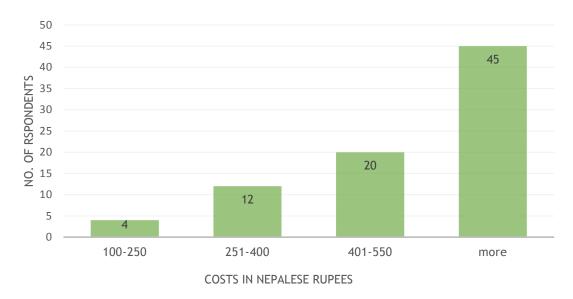


Figure 11: Cost for washing four wheelers at an auto wash shop

The survey report also suggests that of 81 respondents, 45 paid more than NRP 550 at an auto wash shop. Twenty respondents paid between NRP 401-550, while 12 reported paying between NRP 251-400. Only 4 respondents reported that they paid between NRP 100-250 for their cars to be washed. This result indicates that the market's price range is above NRP 550.

# Q.7 How long do you often have to wait for your four wheeler to be fully washed in a car wash shop?

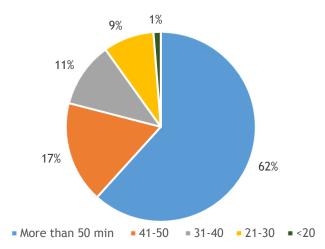


Figure 12 Customer's waiting time at an auto wash shop

The respondents were also asked about the average time consumption for service at a wash center around Kathmandu City, Sixty-two percent of respondents reported that the service took more than 50 minutes. This was followed by the 17% that stated that it took an average of 41-50 minutes; 11% responded that it took between 31-40 minutes and 9% reported that it

took 21-30 minutes. Only 1% reported that it took them less than 20 minutes to get their vehicle fully washed and waxed. The service process time that Green auto spa will promise to its customers is about 15 minutes. It is clear that none of the competitors is able to deliver such service. The 15-minute wash service will help position Green auto spa very well in the auto wash industry in Kathmandu and make it competitive for its competitors.

The information gathered from average cost of washing per vehicle and waiting time will also help determine a suitable price range for Green auto spa. It is clear from figure 11 and figure 12 that the majority of respondents pay more than NRP 550 and wait more than 50 minutes for a car wash. Green auto spa can benefit from this as the pricing for its service, which is NRP 600, seems very attractive towards customers considering the amount of time the Green auto spa's customers will save. The automatic vehicle washing machine that Green auto spa will use will be able to wash each car in 5 minutes. This will provide Green auto spa a huge advantage over competitors as none such service exists in the market. This statement has been backed by the results provided by question number eight where respondents were asked their willingness to pay an extra sum of money for faster service.

# Q.8 Will you be willing to pay extra amount of money for faster service?

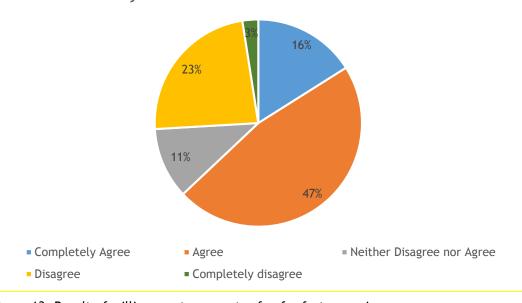


Figure 13: Result of willingness to pay extra fee for faster service

The survey result in Figure 13 clearly shows that the majority of respondents were willing to pay an extra fee for faster service. Sixty-three percent of total respondents reported that they "completely agreed" or "agreed" in paying an extra fee for such service. Eleven percentage of the people "neither disagreed nor agreed" whereas 26% of the people disagreed with paying extra for such service. There is a clear indication that, in general, more people

showed interest in a service that would allow them to save significant amount of time. Customers value their time and majority are willing to pay extra sum of money if the wash time could be decreased significantly. This constitutes an attractive market base for Green auto spa.

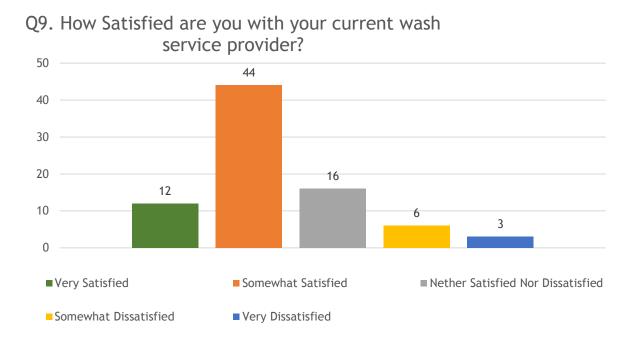


Figure 14: Result of satisfaction level with current wash service provider

The final question asked whether the respondents were satisfied with the current service provided by the auto wash centers around the valley. Fifty-six of 81 respondents reported that they were satisfied with the current wash service providers. Sixteen responses were neutral about their decision whereas only 9 were dissatisfied with their wash service provider.

It appears that the level of satisfaction with their current wash service provider is quite high. This suggest that majority of the vehicle owners are satisfied with status quo. On one hand the data provides a challenge for author to penetrate the fairly stabilized industry; on the other hand, it also provides opportunity for improvement within the car wash service industry. Green auto Spa will need to be very competitive with its marketing, service and pricing.

### 6 Summary of the main findings in the study

By going through the survey results, it is clear that service provided by the car wash industry in Kathmandu could be improved or even changed to a certain extent. Majority of the customers wants the auto wash industry to bring changes to its services primarily by reducing its service process time.

Beginning off with the ownership of the vehicles, it is necessary to remember that majority (80%)of the customers from the survey respondents owns and drives their own vehicles. This category of customers takes their vehicles to the wash centers to be cleaned personally. Combining the different age category among the respondents between the age of 25-55 years, it is evident that 25-55 age categoregy of respondents represent 91% of the total respondents. Although the age category is irrelevant in having a clean car, it could be concluded that the as a new entrant in the auto wash business, Green auto spa should expect majority if its customers between the age of 25-55.

It is also important to point out that the customers prefer visiting auto wash to have their vehicles clean. It could be due to the challenges associated with washing vehicles at home or at work place. Therefore, the service designed at the auto wash shops need to be of great quality. Most importantly, the customers should feel cleanliness factor of both their vehicle and the auto wash shop in general.

It is clear from the survey result that the wash service is time consuming with 62% of the respondents reporting that it takes more than 50 minutes for their vehicles to be cleaned. It is essential to to remember the vale of time and especially when it comes to customers. Therefore, the service time needs to be reduced without sacrificing the quality.

The survey result also indicate that 63% of the total respondents have shown willingness to pay extra sum of money for faster service, hence indicating value for their time. On the other hand, conversely, 26% stated that they do not what to spend more for such service. Green auto spa will reach both category of customers by setting different prices for both parties, extra sum for those who wants a faster service, and base price for parties that is willing to wait more.

In conclusion, majority of the customers wants to see improvements in service in the auto wash business. Fifty minutes is not something a customer should have to wait for. The amount of time customers will save, affordability and quality of service are the factors that will provide Green auto spa a competitive advantage over many competitors.

### 6.1 Business plan for Green Auto Spa

### 6.1.1 Title Page



### 6.1.2 Executive summary

Green Auto spa will be a limited liability company that will focus primarily on washing and cleaning four wheel vehicles in Kathmandu, a capital city where one-third of the total economic activities of the country is concentrated. (NEPAL RASTRYA BANK, 2015)

The growing middle income class with a strong purchasing power is contributing enormously to the overall economy. The rapid urbanization and increasing economic activities in Kathmandu have dramatically increased vehicle ownership and usage. The growth of vehicle ownership with unconditioned and dusty roads in Kathmandu is making the auto wash market intrinsically attractive.

The current auto wash shops in the market offer traditional methods of washing vehicles with hand scrub and water pressure guns hence making the process labor intensive and costly for business. The most unattractive aspect of the auto wash service providers in the capital region is that the wash process takes about 40 min to an hour to clean and dry a vehicle, excluding the customer's waiting time for their turn.

Green Auto spa will revolutionize the auto wash industry in Kathmandu, Nepal by providing wash and clean service within the total timeframe of 15 minutes. Through employing a fully automatic vehicle washing machine, for the first time in Nepal, the customer's vehicle will be washed, dried and waxed within 15 min. The service will be affordable and 80% faster than any competitors in the market. The car wash industry is attractive because it will generate steady income.

Green auto spa will target a specific market of individuals who like riding in a clean vehicle, want good and fast wash service, want to save time and energy by avoiding long washing and waiting time, and are frustrated by the service provided by the current wash service providers. The target market is both male and female between the age of 25-44 living in Kathmandu Valley with and income level of NRP 1,000,000-1,500,000 per year.

Introducing the use of an automatic vehicle washing machine is a new and exciting concept and it has been estimated that it will be a profitable endeavor. The fact that Green auto spa will be the first in this business will give the business manager first-mover advantage over any competitors that may follow.

The service development and testing will commence during the months of September and October of 2018.

### 6.1.3 Company overview

Green Auto Spa will be a limited liability firm that will provided vehicle washing service to a local market. The main business idea of Green auto spa is to provide faster and good quality wash service to vehicle owners. Green auto spa will be a place where vehicle owners will enjoy a spacious clean and green environment. A cafeteria and waiting lounge will in place for the customer.

The business model will rely on providing best wash and clean quality in less time. The business model will also rely on the location and the demographics of the business. Once a suitable site has been selected, the operation of this business will have the potential to provide a steady income to the investors and owners.

The value this business model brings to the marketplace is to the individual vehicle owners, who are frustrated by the long waiting time yet are compelled to choose a market's service provider that is slow and inefficient. Green auto spa will charge an appropriate pricing to attract and retain customers from their competitors that are currently using the traditional method of washing their vehicle. This pricing will also allow appropriate profitability.

### 6.1.4 Market analysis

Kathmandu, the capital city of Nepal is the home of 2.3 million people and is one of the fastest growing metropolitan cities in South Asia (The World Bank, 2014). The rapid urbanization and strong growth in middle income class families has resulted in a tremendous increase in vehicle numbers, particularly personal vehicles in the recent years.

A report from the Ministry of Transportation suggests that in the year 2000, a total of 24,003 vehicles were registered in the Kathmandu Valley. By 2014, this figure had increased to 67,449. This almost threefold increase in vehicle registration in Kathmandu Valley is a continuing trend. The report also suggests that the Kathmandu Valley alone comprises 66% of total vehicles registered in Nepal. The average annual growth of vehicles in the last 10 years has been 17%.

With the increase in the number of vehicles in the capital region, vehicle owners are increasingly washing their vehicles at car wash centers. The proportion of consumers washing their car at home is also in decline because of high cost involved in purchasing proper washing equipment, time consuming and inadequate washing facility such as water, hand pressure water gun and other equipment.

Although the significant increase in the number of vehicle registration in Kathmandu is clearly evident, there has not been any change in the services provided by the vehicle washing service provider. The current service still takes 40 min to an hour. The market has not changed and the trend has been the same since the establishment of the carwash industry in the country. An automated car washing will offer speed and convenience to vehicle owners.

### Competition analysis:

With more than 30 competitors already established inside the Kathmandu Valley, fierce competition is expected. With well-positioned competitors such as Y Auto Wash and X Auto Wash, Green auto spa will need to be very competitive with its service offerings. The advantage factor that Green Auto wash will have over previously mentioned competitors is its ability to offer an affordable service with speed and quality. The use of automatic vehicle washing machinery will provide speedier service; this will differentiate Green Auto Wash from its competitors. This will provide competitive advantage and will create a strong presence of Green auto spa in the market.

X and Y Auto Wash are the top leaders in the carwash industry in Kathmandu. Table 6 below outlines the offering, price range with time consumption comparison of two main competitors, X Auto Wash and Y Auto Wash.

	X Auto Wash			Y Auto Wash				Green Auto Wash				
	Standard		Premium		Standard		Premium		Standard		Premium	
	Price	Time	Price	Time	Price	Time	Price	Time	Price	Time	Pric e	Time
Small Vehicle (Hatchback)	500	30	600	40	600	30	700	40	450	7	550	12
Medium (Sedan)	700	30	800	40	750	40	900	50	650	7	750	12
Large (Jeeps and SUVs	1000	40	1200	50	1000	45	1200	60	850	7	950	15

Table 1: Competitor Analysis. Green Auto Spa can easily outweigh its competitors in terms of price and service time.

### Marketing Strategy:

Green Auto Spa will promote itself by using social media platforms such as Facebook and YouTube to attract customers. The content of the promoting materials will focus on Green Auto Spa's core value proposition of "quality, speed and affordability".

- · Special offers during festivals
- Special offer hours (11-14). During quieter hours.
- Membership carwash a fifth wash within a set time frame will be free of charge. This will keep the customers close.

### Sales Forecasts:

Based on the observation conducted, Green auto spa expects to wash an average of 15 vehicles in a day. The hours of operation will be 7am-7pm. It was observed that the busiest time of most of the wash centers were between 8:00 to 10:00 clock in the morning and between 16:00 to 18:00 in the evening. Green Auto Spa expects 10% increase in the first quarter of its operation.

Other external factors such as festival seasons and weather can affect the sales of Green Auto Spa. Sales are expected to increase by 10% during the rainy season which starts from June to August. This is mainly because of the unconditioned and muddy road condition of Kathmandu valley.

### 6.1.5 Marketing and sales plan

Product: Green Auto spa will offer vehicle cleaning service to the vehicle owners living in Kathmandu. The business will use automatic washing machine to wash, dry and wax the vehicles. The range of other services will include vacuuming, express engine cleaning and rain protection coating. Green auto spa will offer these services with speed and quality. None of the competitors can guarantee the same level of service with quality in the region; therefore the gap provides an opportunity for Green auto spa to penetrate the market. The speed service will provide competitive advantage to Green auto spa as the customers will easily be able to save a significant amount of time.

Price: Pricing of Green auto spa's service will depend upon the type of wash and the size of the vehicle. The average cost for washing, waxing and vacuuming each vehicle will be NRP 600. The pricing strategy Green auto spa will employ will be 10% higher compared to the competitors. From the sale of NRP 600 from each vehicle, NRP 75 will go towards variable cost such as water, electricity and detergent and NRP 293 will go towards fixed cost such as rent and salary; the remaining NRP 232 will be deemed profit.

Place: Green auto spa is currently looking for a suitable location to set up its business. A few places inside the valley have been targeted and a study related to the area, vehicle traffic, income level of people living around the area is being conducted. The business operation will commence inside the premises. The customers will purchase the service face-to-face.

People: People associated with Green auto spa will need to be very effective, motivated and engaged in providing best customer care and service. The main value proposition of Green auto spa is providing speedy quality service. The employees will be provided an intensive training program prior to starting their job.

### 6.1.6 Management team

The management team of Green Auto Spa consists of Nyima Sherpa, the sole owner and CEO of the business along with his business advisor Ngowhang Sherpa and three other employees. As this is Nyima's first venture to the business world, on his request, Ngowhang Sherpa has agreed to assist him in the business establishment.

Nyima Sherpa is in the process of completing his undergraduate degree in Business Management in Laurea University of Applied Sciences in Finland. His previous work experiences include planning, logistics, presentation, customer interaction and web content management.

Ngowhang Sherpa is a hydropower developer in Nepal and has more than 20 years of experience in establishing various businesses and managing employees. His experience and understanding of the business environment in Nepal will be of great value to Green auto spa. His role in Green auto spa will also be assisting in making strategic and executive decisions.

Two full time employees and one part time with technical knowhow of operating basic machinery will be employed. The employees will be provided with sufficient training in cleaning and maintaining a vehicle. The salary will be based according to the labor contract agreement. The organizational chart of Green Auto Wash will be as illustrated in figure 14

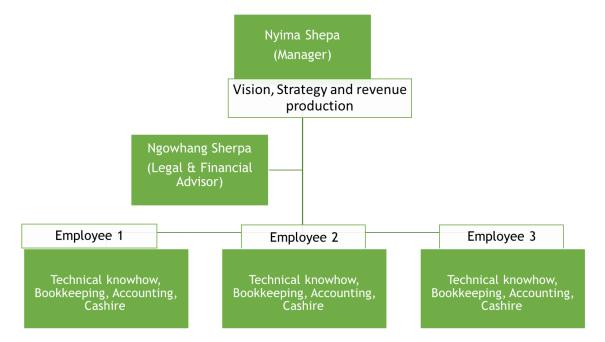


Figure 15: Organizational Chart of Green auto spa

### 6.1.7 Financial plan

Set of Assumptions: It has been assumed that an average of 15 vehicles will be washed per day, 10 of which will be washed between rush hours (7:00-10:00 and 16:00-19:00) and remaining of the vehicles between 10:00-16:00.

An average of NRP 600 will be charged for each car wash, from which NRP 75 will go towards variable cost such as water, electricity and detergent and NRP 293 will go towards fixed cost such as rent and salary, and the remaining NRP 232 will be profit. Green auto spa will be in operation 28 days a month. Based upon these assumptions, a Projected Income Statement, Cash-flow Statement and Balance Sheet have been outlined in the sections below.

Projected Income Statements: Following is the projected income statement of Green Auto Spa as of 31<sup>st</sup> of August 2019. A 10% increase in sales is expected after first quarter of Green Auto Spa's establishment.

Projected Income Statement							
	2018	2019			31.8.2019		
	Sep-Nov	Dec-Feb	Mar-May	Jun-Aug			
Net Sales	756,000.0	831,600.0	914,760.0	1,006,236.0	3,508,596.0		
Cost of Sales	94,500.0	103,950.0	114,345.0	125,779.5	438,574.5		
Gross Profit	661,500.0	727,650.0	800,415.0	880,456.5	3,070,021.5		
Operating Expenses							
- Selling, general, administrative expenses	180,000.0	180,000.0	180,000.0	180,000.0	720,000.0		
- Depreciation	110,000.0	110,000.0	110,000.0	110,000.0	440,000.0		
Operating Income	371,500.0	437,650.0	510,415.0	590,456.5	1,910,021.5		
Other Income							
- Interest Income							
- Interest Expenses							
- Other Income (expense), net							
Income before income tax	371,500.0	437,650.0	510,415.0	590,456.5	1,910,021.5		
Income tax expense	92,875.0	109,412.5	127,603.8	59,045.7	388,936.9		
Net Income	278,625.0	328,237.5	382,811.3	531,410.9	1,521,084.6		

Table 2: Projected Income Statement of Green Auto Spa.

The following table outlines the projected cash flow for Green Auto Spa from September 2018 to 31st August 2019.

Cash Flow From Operation							
	Sep-November	December-Feb	March-May	June-August			
Opening balance	7,500,000.0	3,488,625.0	3,926,862.5	4,419,673.8			
Cash inflows:	756,000.0	831,600.0	914,760.0	1,006,236.0			
- Net sales	756,000.0	831,600.0	914,760.0	1,006,236.0			
Cash outflows:	4,767,375.0	393,362.5	421,948.8	364,825.2			
- Variable costs	94,500.0	103,950.0	114,345.0	125,779.5			
- Salary	90,000.0	90,000.0	90,000.0	90,000.0			
- Property rent	90,000.0	90,000.0	90,000.0	90,000.0			
- Equipment	4,400,000.0	-	-	-			
- Tax	92,875.0	109,412.5	127,603.8	59,045.7			
-Bank loan							
Closing balance	3,488,625.0	3,926,862.5	4,419,673.8	5,061,084.6			

Table 3: Projected Cash Flow of Green Auto Spa

The following balance sheet is of August 31st 2019, one year after the operation of Green Auto Spa.

Assets		Liabilities		
Current Assets		Liabilities		
Bank	5,061,084.6	Short-term Liabilities		
Cash	-	- Payables	-	
Temporary Investment	-	Total Short-term Liabilities	-	
Accounts receivable	-			
Inventory	-	Long-Term Liabilities		
Supplies	-	- Bank loans	5,500,000.0	
Prepaid Insurance	-	Total Long-term Liabilities	5,500,000.0	
Total Current Assets	5,061,084.6			
		Total Liabilities	5,500,000.0	
Non-current assets				
- Land	-	Stakeholder's Equity		
- Equipment	3,960,000.0	- Own financing	2,000,000.0	
Total Non-current Assets	3,960,000.0	- Retained earnings	1,521,084.6	
		Total Stockholder's equity	3,521,084.6	
Total Assets	9,021,084.6	Total Liabilities and Stakeholder's equity	9,021,084.6	

Table 4: Balance Sheet of Green Auto Spa, August 31st 2019.

## Breakeven analysis:

The breakeven point has been analyzed to be 6.5car sales per day.

Breakeven point quaterly = 
$$\frac{\text{Fixed Cost}}{(\text{Price per wash - Variable Cost})}$$

$$= \frac{190,000}{(600-75)}$$

$$= 552.4 \text{ Cars/quarter}$$

$$= \frac{554.4 \text{ cars}}{3 \text{ months}}$$

$$= 184.67 \text{ cars per month}$$
Breakeven point daily
$$= \frac{184.67}{28 \text{ days}}$$

$$= 6.59 \text{ cars per day}$$

To survive, Green Auto Spa must be able to sell its service to at least 7 customers a day. Any additional sales will yield profitability.

# 6.1.8 Financial requirements

Green Auto Spa will require an estimated NRP 7,500,000 to fully become operational. The full amount of NRP 7,500,000 will be used to purchase automatic vehicle washing equipment, construction of the wash center, legal assistance fees and preliminary advertising. The author plans to invest NRP 2,500,000 of his personal funds and will require additional NRP 5,000,000 in loans from financial institutions.

Once, the total fund has been guaranteed, registration and legal process of obtaining a business name will proceed immediately.

The author plans to launch his service in August 2018.

#### 6.1.9 SWOT analysis of Green Auto Spa

The strength of Green Auto Spa is that it will provide the best car wash service in a shorter time period. The service provided by Green auto spa will be 80% faster than the current service providers in the market by using automatic vehicle washing machine. This will differentiate the service and save a lot of time for customers. Green Auto Spa will be the first one to penetrate the market by using an automatic washing machine. This will give Green Auto Spa first-mover advantage over any competitors that may follow. The price of washing a vehicle itself will be within the range of market prices, making it affordable for all the customers. The staff members will also be highly trained in customer care and service.

The weakness associated with Green auto spa is its high initial investment cost. The business will need to depend on external funding providers and provide higher interest return to the investors. As the washing equipment will be imported from abroad, the maintenance and repair of the equipment will be extremely challenging. The business will solely depend on the vehicle washing machine; therefore, any issues related to the washing equipment will affect the business.

The opportunities Green Auto Spa will provide is that it will locate itself in one of the most economically vibrant cities of Nepal, Kathmandu. A lack of faster, better and affordable service related to vehicle wash makes the industry very attractive. This market gap could be filled by using automated vehicle washing machines. The business itself will provide a new and exciting concept to the vehicle owners living in the Kathmandu Valley in that it will now be possible to easily get their vehicles clean and save time through efficiency. Green Auto Spa will take advantage by being available to a market where the growth potential of motor vehicle industry has been showing strength.

The possible threats to the business are the amount of competitors in the market and that the industry is somewhat weather reliant. The automatic vehicle washing machine is easily available and competitors can easily install and run such a business. Therefore, green auto spa will not market itself with its available technology; rather the business will focus primarily on its service; highest wash quality with speed. The carwash industry is very weather sensitive, high demand during the summer, spring and winter and low during monsoon season. With 3 months of monsoon season every year, this seasonal down-time must be recognized in the business plan.

# STRENGTHS WEAKNESSES 80% faster than the current service • High initial investment cost provider • Maintenance and repair of the equip-Market Differentiation ment will be challenging Affordable compared to market price Highly trained customer care and service **OPPORTUNITIES** THREATS • The business is weather reliant. • Establishing in a very economic vibrant city. • Existing competitors can easily copy • Penetrating the untapped market for the concept faster, better and affordable car wash service Rapid growth in motor vehicle industry

Table 5: SWOT analysis of Green Auto Spa

#### 6.1.10 Business Model Canvas

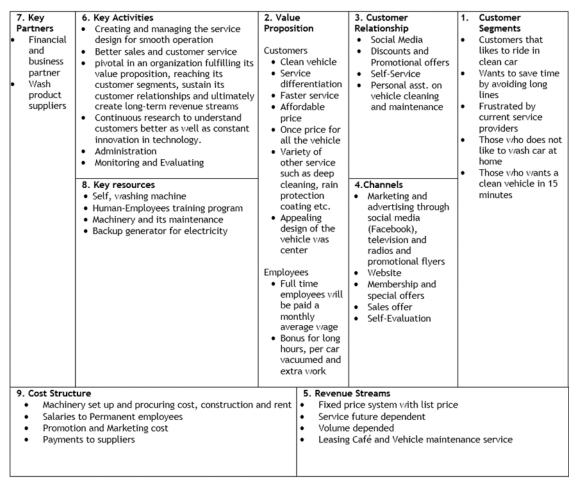


Figure 16: Green Auto Spa's Business Model Canvas

#### **Customer Segments**

The customer segment of Green auto spa is composed of vehicle owners who visit a vehicle wash center to have their vehicles clean on a regular basis. The segment is also composed of those who want to save time and energy by avoiding long washing and waiting times in conventional wash centers. The business will attract a customer base that is dissatisfied by the level of service currently provided by the existing wash service providers.

## Value Proposition

Customers of Green Auto Spa will be able to receive a high-quality service. Besides offering a vehicle cleaning service, Green auto spa will offer a service that is 80% faster compared to competitors and at an affordable rate. Customers using Green auto spa's service will save a significant amount of time. The service will also provide convenience to the customers as the wash time is promised to be under 10 mins. The business will also offer a variety of other services such as deep interior cleaning, rain protection coating which will add value to the business and help attract more customers. Besides customers, the value proposition Green Auto

Spa will provide is jobs for the full-time employees. The value proposition in regards to price and the amount of time vehicles owners will save is shown in Table 2.

## Customer Relationship

Customer relationship will be highly valued. Green Auto spa will attract new customers via different channels and with the help of modern technology such as Facebook, YouTube and Instagram. The business will eventually offer discounts and promotional offers and membership benefits. This will encourage customers to use the service again. Personal assistance on vehicle maintenance and cleaning will also be offered. Green Auto spa will take comments and suggestions from customers on how the services could improve.

#### Channels

Green auto spa will reach its customers by employing channels such as social media and broadcast media. Social media is widely used in Nepal; using such channels will help Green auto spa to reach targeted customers effectively. A Facebook page will be created where information related to Green auto spa's services will be maintained and updated regularly. In addition, brochures and pamphlets will be distributed around its region to raise awareness of its services.

#### Revenue streams

The revenue stream will be based upon sales. Green auto spa will have a standard and premium price for each type of vehicles; small, medium and large. The prices will differ depending upon the size of the vehicle. The main source of revenue for Green auto spa is through customers who pay to get their vehicles cleaned.

	X auto wash			Y auto wash			Green Auto Wash					
	Standard F		Premium		Standard		Premium		Standard		Premium	
	Price	Time	Price	Time	Price	Time	Price	Time	Price	Time	Price	Time
Small Vehicle (Hatchback)	500	30	600	40	600	30	700	40	450	7	550	12
Medium (Sedan)	700	30	800	40	750	40	900	50	650	7	750	12
Large (Jeeps and SUVs	1000	40	1200	50	1000	45	1200	60	850	7	950	15

Table 6: Price and time in minutes comparison of X auto wash and Y auto wash with Green Auto Wash

#### **Key Recourses**

The business will be labor intensive to a certain extent. Although the exterior part of the vehicle can be washed and cleaned by using automatic vehicle washing machine, vacuuming the interior will require some personnel. The machinery and its maintenance will be very important to the business as well because it is the main source of income for the business. Additionally, the digital infrastructure such as keeping a log of vehicles washed, etc., will be necessary for the business. Marketing materials and a Facebook page will be created prior to the opening.

## **Key Activities**

For a smooth business operation, Green auto spa will maintain and repair its wash equipment on a regular basis. The service quality in business will improve with the help of better service design. The employees will be trained in providing better customer care and service.

## **Key Partners**

In order to operate smoothly, Green auto spa will need to maintain good relationships with its key partners. As the cost associated with establishing the business is very high, it will be important to communicate clearly with the involved investors and financial partners. Green auto spa will also need to keep a good relationship with its suppliers as they can have a great impact towards the business.

# **Cost Structure**

The cost structure of Green auto spa is divided into three areas. The largest amount of cost will be associated with procuring washing equipment from abroad. The second largest cost will be constructing wash bay and parking areas. A significant amount will also go towards salaries, promotion, marketing and payments for the suppliers. A detailed cost structure of the business is outlined in the executive summary of the business plan.

## 7 Conclusion and recommendations

The research conducted by the author has helped answer many problems and questions related to an auto wash industry in Nepal. It has become clear that the market lacks an effective service provider that can save significant amount of time to the vehicle owners. This fact provides the author an opportunity to offer services currently unavailable in the market.

Through the use of research methodology such as observation, surveys, business model canvas and SWOT analysis, the author has been able to understand the opportunities, problems and

challenges associated within the auto wash industry in the Kathmandu Valley. It has also allowed author to understand how those problems could be solved and the services improved.

The financial calculations: income statement, balance sheet, cash flow statement and breakeven point have helped determine whether or not the auto wash shop could become a profitable business. The competitor analysis gave better understanding of what measures Green auto spa could employ to ensure competitiveness.

Limitation of research: The first limitation of this thesis is the obstacle of the limited time. The survey was conducted during the months of February and March 2017 in which only 81 responses were gathered. February and March are considered low season in the car wash industry in Kathmandu. Frequency of wash could differ during other seasons. A bigger sample varying across different seasons could offer more answers to the research problem.

Future areas of research could focus on finding a suitable legal advisor, conduct in-depth research during low and peak season and service pricing strategy.

#### Summary

This research was used to analyse the preliminary work on evaluating the feasibility and profitability of establishing an auto wash in Kathmandu Valley. Several theories were used to analyse the operation of auto wash industry and the customers involved within the industry, vehicle owners. The analysis came to the conclusion that a profitable business could be established if an affordable service could be developed which would satisfy the vehicle owner's demand of reducing the waiting time.

The research conducted showed that the average waiting time was more than 50 minutes per service. The research also showed that the customers showed strong support in willingness to pay more for faster service, hence demonstrating that there is a business potential for a quality and fast service provider in the market.

#### References

Barrow, C., Barrow, P. and Brown, R. 2008. The business plan workbook. London: Kogan Page.

Blackwell, E. 2008. How To Prepare A Business Plan. 5th edition. London: Kogan Page.

Bovée, C. & Thill, J. 2005. Business In Action. 3rd edition. Upper Saddle River, NJ: Prentice Hall.

Bryman, A. & Bell, A. 2011. Business research method. New York: Oxford University Press.

Crouch, C. & Pearce, J. 2012. Doing Research In Design. Oxford: Berg.

De Vaus, D. 2002. Surveys in social research. London: Routledge.

Gray, D. 2009. Doing research in the real world. Los Angeles: Sage

Hague, P., Hague, N. & Morgan, C. 2013. Market research in practice. London: Kogan Page

Kaplan, J. & Warren, A. 2005. Patterns Of Entrepreneurship. 2nd edition. Hoboken, NJ: John Wiley & Sons.

Kotler, P. & Keller, K. 2009. Marketing Management. Upper Saddle River, N.J.: Pearson Prentice Hall.

Osterwalder, A & Pigneur, Y. 2010. Business Model Generation. John Wiley & Sons, Insc., Hoboken, New Jersey.

McDonald, M. & Meldrum, M. 2013. The complete marketer. London: Kogan Page Limited

McDonald, M. & Woodburn, D. 2007. Key account management. Oxford: Elsevier

Saunders, M., Lewis, P. & Thornhill, A. 2009. Research Methods For Business Students. 5th edition. Harlow, England: Prentice Hall.

Timmons, J., Spinelli, S. & Zacharakis, A. 2004. Business Plans That Work. New York: McGraw Hill.

Walliman, N. 2011. Your Research Project. 3rd edition. London: Sage Publications.

Williams, S. 2014. The Financial Times Guide To Business Start Up 2014. 20th edition. Harlow: Pearson Education.

# **Electronic Sources**

Funding 2016, Accessed 5 May 2017 https://alliedcrowds.com/entrepreneur-hub

Business Model Canavs. 2016. Accessed 24 March 2017 http://www.alexandercowan.com/business-model-canvastemplates

Creating a business plan, 2015. Accessed 4 November 2016 http://businesslink.ca/planning-your-business/creatingbusiness-plan

Data collection methods. 2010. Accessed 5 November 2016. http://mypeer.org.au/monitoring-evaluation/data-collection-methods/

Department of Transport and Management, Government of Nepal, Ministry of Physical Infrastructure and Transport, Old Statistic. 2017. Accessed 18 March 2017 https://www.dotm.gov.np/en/facts-and-statistics/

Department of Transport and Management, Government of Nepal, Ministry of Physical Infrastructure and Transport, Vehicle Registration pdf. 2017. Accessed 18 March 2017 https://www.dotm.gov.np/uploads/files/Vechicle%20registration.pdf Forecast and plan your sales. 2009. Accessed 2 Dec. 2016. http://www.infoentrepreneurs.org/en/guides/forecast-and-plan-your-sales/

Government of Nepal, Ministry of Commerce and Supplies, Trade and Export Promotion Center, Foreign Trade Statistics of Nepal, Comparison of total imports of some major commodities in the first ten months of the Fiscal Year 2012/13 and 2013/14. Accessed: 20 December, 2016

http://www.tepc.gov.np/news-events/details.php?id=26

Himalayan Times, 2016. Auto industry accelerated in 2016. Accessed 21 February 2017. https://thehimalayantimes.com/automobile/automobile-industry-in-nepal-accelerated-2016/

How to Define Operations in Your Business Plan - For Dummies. 2015. Accessed 2 Dec. 2015 http://www.dummies.com/how-to/content/how-to-define-operations-in-your-businessplan. html

How to Define Operations in Your Business Plan - For Dummies. 2015. Accessed 2 Dec. 2016 http://www.dummies.com/how-to/content/how-to-define-operations-in-your-businessplan. html

Kathmandu Post, 2015. 5 zones amount for 90pc of vehicle registrations. Accessed 15 February 2016. http://kathmandupost.ekantipur.com/printedition/news/2015-07-07/5-zones-account-for-90pc-of-vehicle-registrations.html

Kathmandu Post, 2015. Automobile sector gaining maturity. Accessed 15 November 2016. http://kathmandupost.ekantipur.com/printedition/news/2015-09-16/automobile-sector-gaining-maturity.html

Kathmandu Post, 2016. Middle class swells to 22pc of population. Accessed 15 February 2016. http://kathmandupost.ekantipur.com/printedition/news/2016-06-30/middle-class-swells-to-22pc-of-population.html

Lovelock, C. and Wirtz, J. 2011. Services marketing. New Jersey: Pearson.

Ministry of Finance, Government of Nepal, 2011. Vehicle registration FY 2009/2011. Transport and Communication. Accessed 15 March 2017 http://www.mof.gov.np/uploads/document/file/Economic%20Survey%202010-11\_20141224054855.pdf

Ministry of Physical Infrastructure and Transport, Department of Transport Management, Government of Nepal, Registration of Transport in Bagmati, Fiscal Year 2046/47-070/71 office wise. Accessed: 21 October, 2016; http://www.dotm.gov.np/uploads/files/transport\_registration\_fiscal\_year\_2046\_47\_070\_71\_typewise.pdf

Nepal Bank, 2013. Consumer loans. Accessed 28 March 2017 http://www.nepalbank.com.np/loan/homeloan.php

Nepal Electricity Authority (NEA), Annual Report, 2015, pp.111.Accessed: August 10, 2015. http://www.nea.org.np/images/supportive\_docs/year-review-2014-15

Nepal Standard Industrial Classification, Government of Nepal (2000). Accessed 28 March 2017 http://www.ocr.gov.np/images/pdf/nepal%20standard%20industrial%20classification.pdf

Office of the Company Registrar, 2012. Ministry on Industry, Government of Nepal. Accessed 30 March 2017

http://www.ocr.gov.np/index.php/en/publications/act-directives/212-the-companies-act-2006

Republica, 2015. Ten-fold rise in vehicle registration in two decades. Accessed 5 May 2017 http://admin.myrepublica.com/economy/story/26077/ten-fold-rise-in-vehicle-registration-in-two-decades.html

The Economic Times. 2016. Marketing Mix. Accessed on 15 December 2016. http://economictimes.indiatimes.com/definition/marketing-mix

The World Bank Group. 2016 - Ease of Doing Business in Nepal, Associated costs, Time and Procedure. Accessed 1 February 2017.

http://www.doingbusiness.org/data/exploreeconomies/nepal

Trochim, W. 2006. Research methods knowledge base. Accessed 2 March 2017. http://www.socialresearchmethods.net/kb/

Water and Energy Commission Secretariat (WECS), Energy Sector Synopsis Report. Government of Nepal, 2010. Accessed: 4 November, 2016, http://www.wecs.gov.np/pdf/snyopsis.pdf

World Bank Group. 2016. - International Development, Poverty, & Sustainability http://www.worldbank.org/?cid=ECR\_GA\_HPlaunch\_searchad\_EN\_EXTP&gclid=CJXH073q4tMC FcekGAo FYMPZw

# Figures

Figure 1: Framework for Thesis	8
Figure 2: Canvas Business Model Canvas template (Osterwalder & Pigneur 2010)	12
Figure 3: Types of Questionnaire	15
Figure 4: Hand scrub in cleaning small sized vehicle	19
Figure 5: Use of hydaulic lift and high pressure water guns	19
Figure 6: Ownership of the vehicles	21
Figure 7: Respondents age group	22
Figure 8: Frequency of wash per month	23
Figure 9: Rating Four wheeler wash venue	24
Figure 10: Rating affordability and time consumption at an autowash shop	25
Figure 11: Cost for washing four wheelers at an auto wash shop	26
Figure 12 Customer's waiting time at an auto wash shop	26
Figure 13: Result of willingness to pay extra fee for faster service	27
Figure 14: Result of satisfaction level with current wash service provider	28
Figure 15: Organizational Chart of Green auto spa	35
Figure 16: Green Auto Spa's Business Model Canvas	

# Tables

Table 1: Competitor Analysis. Green Auto Spa can easily outweigh its competitor:	s in terms of
price and service time	33
Table 2: Projected Income Statement of Green Auto Spa	36
Table 3: Projected Cash Flow of Green Auto Spa	
Table 4: Balance Sheet of Green Auto Spa, August 31st 2019	
Table 5: SWOT analysis of Green Auto Spa	
Table 6: Price and time in minutes comparision of X auto wash and Y auto wash v	
Auto Wash	

4	19
<b>Appendix</b>	1

Appendices	
Appendix 1: Four Wheeler questionnaire	50

# Four Wheelers (Cars and Jeep)

- 1. The owner of the vehicle I drive is
  - a. Myself
  - b. Belongs' to an organization where I work
  - c. Friends or family members
- 2. What is your age group?
  - a. 24 or less
  - b. 25-34
  - c. 35-44
  - d. 45-54
  - e. 55 or older
- 3. How often do you wash your four-wheeler in a month?
  - a. Once
  - b. Twice
  - c. Three times
  - d. Four times
  - e. More
- 4. Where do you wash your four-wheeler? Please give your answer to the alternatives on a scale from 1 to 5 (1=always, 2= often, 3=Sometimes, 4=Rarely, 5=Never)

	Always	Often	Sometimes	Rarely	Never
At home	1	2	3	4	5
Auto wash shop	1	2	3	4	5

5. Please give your reply to the alternative reasons on a scale from 1 to 5.

I think washing four-wheeler is

	Completely disagree	Disa- gree	Neither disa- gree nor agree	Agree	Completely Agree
Affordable at car wash center	1	2	3	4	5
Time consuming at car wash center	1	2	3	4	5

- 6. On average, how much (Nepalese Rupees) do you pay for your four-wheeler to be washed and waxed per visit?
  - a. 100-250
  - b. 251-400
  - c. 401-550
  - d. More
- 7. How long do you often have to wait for your four-wheeler to be fully washed in a car wash shop?

	c. d.	10-20 min 21- 30min 31-40 min 41-50 min More				
	1		2	3	4	5
8.		•		ter service. (rating t gree nor disagree, A	o 5) gree, completely agree	
	Comple gree	tely disa-	Disa- gree	Neither disagree no	or Agree	Completely Agree
	-	1	2	· 3	1	5

9. How satisfied are you with your current wash service provider?							
Very Dis- satisfied	Somewhat Satisfied	Neither Satisfied nor dis Satisfied	Somewhat dis- satisfied	Very Dis- satisfied			
1	2	3	4	5			