



Creating Business Model for Terveys Food Services.

Ajay Kunwar

Haaga-Helia University of Applied Sciences

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Abstract

Author(s)	Ajay Kunwar
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<p>This thesis is about food service startup set to be established in Nepal. The startup business shall provide different food services to pre-primary to secondary level educational institutions. The main objective of this thesis is to create a business model for this case company with the primary focus on the product development.</p> <p>Theoretical detail for this thesis starts with the business development tools such as User persona, value proposition, food menu development and business model canvas. SWOT analysis is then used as the tool to evaluate the case business. Various accounting tools are also used to analyze the business and its products financially. Secondary research of the annual report and research papers of various governmental and non-governmental organizations like the United Nations (UN), Deloitte and more are studied due to the readily availability of relevant data for the environmental insight of Nepal.</p> <p>It is found that Nepal has a severe problem of child malnutrition in the country, and it has been challenging task for the government to overcome. This thesis concludes that it is equally challenging for this start-up company, since the company will have to operate with significantly lower profit margin due to the low purchase power of the consumer being one of the main reasons. Under the cost-effective circumstances it is challenging to provide nutritional food without compromising the taste, service quality and visual factors of the food.</p> <p>Aligned with the generated business model, a food menu principle for the company is also created and then the menu is developed based on the principle. These principles aim to support schoolchildren consume adequate and nutritious school meal and also to provide culturally diverse food that is socially acceptable and respects the children's food habits and specific nutritional at the same time.</p>	
Keywords	Business plan, Food menu, School meal program, Nutrition, Child health,

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1 Introduction

This thesis is product-based thesis aimed at developing a catering company that will be launched by the author himself. The business is named Terveys food services therefore the case business is addressed with its name “Terveys” in this thesis. Terveys is a Finnish word that stands for health and wellbeing. The Finnish school meal system is known to be one of the best in the world therefore the author decided to name this company “Terveys”. The author is set to establish this business in Butwal, western city in Nepal. The case business “Terveys food service” will provide catering services (school meals) to educational institutions, hence is a b2b service.

Approximately 36 percent of Nepali children under 5 years age are stunted, while 27 percent are underweight, and 10 percent suffer from wasting due to acute malnutrition (United Nation 2019). Schools provide a unique opportunity to coherently address the different causes and consequences of malnutrition. School feeding is widely accepted to reach far beyond just the plate of food as it produces high returns in education, gender equality, health and nutrition, social protection, and economic and agricultural development (Pellikka, Manninen & Taivalmaa 2019). Hence, the author believes that this company can serve better for his career and also his town in Nepal.

To this event, Terveys has secured a contract with newly opened School in Butwal, Nepal. Therefore, the research for this bachelor’s thesis revolves around the event of planning, creating a business model and implementing it simultaneously. Discussions of business development and design of business model canvas for Terveys shall guide the founder to identify crucial needs to be achieved. The overall study of the environment and internal and external aspects of the company will help to set goals for doing business differently from its competitors, and to shield the business from threats. Moreover, a developed business model for Terveys food services in this discussion shall enable the business to create the products & services specifically designed for school environment of the intended market.

1.1 Aims and objectives

The essential aim of this thesis is to create business model for “Terveys food services”. This aim is to be achieved through the preliminary analysis of the environment and the market, customer segmentation, detailed description of the concept and financial analysis. Since, Terveys is a food service company, and the author believes that food products/menu is the core element that reflects and affects the business model.

Therefore, over a traditional business model this thesis aims to focus extensively on the product and service development. Hence, one of the objectives of this thesis is set to understand the drivers of consumer's value regarding food consumption. Furthermore, it also aims to look into different aspects associated to Nepali food culture and school meal market since creating a proper business model also requires understanding its market.

In a nutshell, following are the aims and objectives of this report:

- To create a business model for the company “Terveys food services”.
- To understand the Nepali market of school meal and drivers of consumer's value regarding food consumption.
- To create products and services based on the achieved understanding.
- To financially analyse the business.
- To prepare this thesis as a manual for developing and operating Terveys food services.

The author's own learning objective is to use in practice the knowledge obtained during the study in Haaga-helia university of applied sciences. Creating a business model is a very extensive, diverse, and interesting subject. Thus, the author's learning purpose includes the understanding of business planning, its comprehension and its practical implication.

1.2 Company information

During the process of writing this thesis, the company has been established, in Butwal city, Nepal. The company has two owners, “Mala Pradhan” the operating manager with 50 percent of ownership and the author of this paper “Ajay Kunwar” with 50 percent ownership.

The company has secured an agreement with the client school “Junkiri Planet”. As a result, cafeteria will be established within the school “Junkiri planet”, and Terveys will provide food services required in the school. “Junkiri planet” is a new school established in 2019. It has total number of seventy students, fifteen teachers, two bus drivers, two cleaners and four other operational staffs and Two cleaners, three teachers and three students live in the school.

The author of this thesis who is also the founder of the company is a professional chef and has many years of experience in many hotels and restaurants of Finland. The author wants to apply his experience and knowledge gained in university to establish his own company. However, it was never in the authors mind to establish a food service company aimed at schools. But, considering that this business opportunity requires a very small

investment, it is decided that this is a perfect opportunity to experience the entrepreneurship and use the knowledge and experience.

Most of the industry experience the author has is in the fine dining restaurants and hotels. He has little to no experience in school catering services. On top of it, even though the author was born and raised in Nepal, he has been living in Finland for over 9 years till the current time. Therefore, this thesis in itself is used as a tool to acquire the needed environmental knowledge in the development of this business and its product in Nepal.

1.3 Methodology

Being a product-oriented thesis, this report consists of two parts that complement each other: the theoretical framework and the product itself. Online sources like journals, articles and websites are used to generate the theoretical information.

The theoretical framework consists of the existing knowledge regarding various tools and their application: tools used for developing business model and for product development. These tools include the user persona, value proposition canvas, business model canvas, and the food menu strategy. The value proposition canvas method, which is also part of business model canvas, is used to guide the process of designing a solution that addresses customers pain point and gains (Tomitsch & al 2019, 132). The method starts with selecting a customer segment or user group and understanding their objective – what task are they trying to get done. This method of selecting customer segment or user group is addressed here with the help of proto persona development which is the initial phase of creating a business model and development of products. Since, the case business is a food-service company, the author believes that food products/menu is the core element that reflects the companies offering. Therefore, theory on food menu is positioned after the user persona & value proposition and before the business model canvas.

The product development process is then followed by the financial analysis of the company. Finally, SWOT analysis tool is used to analyse the created business model. This analysis tool is chosen to be implemented in the end of the process as the case business “Terveys” is a start-up company and has no pre-existing information to analyse. In fact, analysing the created business model through the SWOT gives space for the further development of the company. Given that, creating a business model is not a one-time process but a continuous one.

A proper usage and implementation of the above-mentioned tools requires both qualitative and quantitative information. However, a primary research can be very expensive and time consuming. Unlike primary research, secondary research has an advantage of being cost-effective as it makes use of already existing data. Due to the nature of this thesis and constraints of time and resources, secondary research method is used to increase the overall effectiveness of the tools used.

The research in this thesis consists of the study, integration and interpretation of research material published in research reports and similar documents. The research conducted by the government and non-government organizations has been used to retrieve information. For example, UNESCO, WHO, Nepal government and Deloitte Touche Tohmatsu Limited have been valuable source of relevant data this thesis required. These documents have been accessed through online libraries and websites and have been made sure of the authenticity of the retrieved information.

The outcomes of the secondary research consist of the social and cultural dimensions of Nepal regarding food culture and public/child health. Since Terveys offers food service in a special setting: for children in an educational environment, the research also engages into understanding of the school meal culture of Nepal and the relationship between school meal & performance of children. These outcomes help to evaluate the need of the product and service Terveys wants to offer.

1.4 Key Definitions

Wasting – Wasting is the result of recent rapid weight loss or the failure to gain weight. A child who is moderately or severely wasted has an increased risk of death, but treatment is possible. (UNICEF 2021.)

Ultra- processed foods – Ultra-processed foods are defined as “industrial formulations made entirely or mostly from substances extracted from foods (e.g., oils, fats, sugar, starch, and proteins), derived from food constituents (e.g., hydrogenated fats and modified starch), or synthesised in laboratories from food substrates or other organic sources (e.g., flavour enhancers, colours, and several food additives used to make the product hyper-palatable)”. (Ministry of Health of Brazil 2014, 44.)

Traditional food systems – Traditional food system are typically characterised by ‘short’ supply chains involving localised production, distribution and consumption of unprocessed and minimally processed staple foods (Baker & Friel 2016).

Malnutrition – Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients. The term malnutrition covers 2 broad groups of conditions. One is 'undernutrition'—which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals). The other is overweight, obesity and diet-related noncommunicable diseases (such as heart disease, stroke, diabetes, and cancer). (World Health Organization 2020.)

Cognitive skills – One definition of cognitive skills is "Cognitive skills are mental abilities that help us process external stimuli.". (Pearson Canada, 2006). Cognitive skills, by this definition, include differentiating between letters and thinking symbolically, effecting a student's ability to read. For non-readers, the concentration that is required to suddenly think of letters abstractly and establish them into their schema requires a significant attention span as well as mental alertness. Cognitive skills also include distinguishing patterns and orders which has a direct effect on math skills.

2 Theoretical framework

2.1 Product development

2.1.1 B2B User persona

Market today is demanding more than ever. Companies need to innovate products, services, and information that are prompt and can address the market specific needs and desires. Traditionally, products are developed based on broad market segmentation and demographics, making the assumption that the product will meet the needs of all of the customers in that demographic—a "one size fits all" mentality (Connor 2011). But the market has transitioned from a mass manufacturing to a mass customization model. With this shift, customers' needs, and desires are required to be identified more accurately to create a valuable product (Connor 2011). And user persona is one of the tools that helps to understand the customer more closely.

The purpose of personas is to create reliable and realistic representations of the key audience segments for reference (Usability 2019). "A persona represents a cluster of users who exhibit similar behavioural patterns in their purchasing decisions, use of technology or products, customer service preferences, lifestyle choices, and the likes" (Connor 2011). According to Harvard Business Review, User Persona is a "single tool that does the best job at spreading empathy throughout a business" (Merholz 2009). Meaning that user persona is the best tool for companies to use in order to understand and empathise its customers.

Since, the purpose of personas is to create reliable and realistic representations of the key audience segments, traditionally, they are based on qualitative and quantitative research. This consumes time and therefore is expensive to create, especially for the smaller organizations or start-up businesses. For situations such as these, an alternative type of persona can be valuable: the proto persona. Proto persona is also referred as Fictional persona, since the fictional persona does not emerge from user research, but it emerges from the experience of the team (Dam & Siang 2021). Hence, it requires the team to make assumptions based upon past interactions with the user base to deliver a picture of what, perhaps, typical users look like (Dam & Siang 2021). The proto persona is divided into 4 sections as depicted in figure 1

NAME Sketch of the individual, a name, and basic demographics.	BEHAVIOUR Identify the behaviour and beliefs of the persona
DEMOGRAPHICS Explore and list more detailed demographics	NEEDS/GOALS Identify the needs and goals of the persona

Figure 1: Example of proto persona (adapted from Gothelf 2012).

The figure 1 can be broken down into the following set of instructions for creating a proto persona:

- Sketch of the Persona: A rough sketch of the persona and basic demographics like personality.
- Demographic: A little background about the persona. For example, where he/she is from and where he lives, education, etc..
- Behaviour: What the person likes or dislikes.
- Needs/Goals: What solution the companies can provide to their customers. (Idea theorem, 2020.)

Creating a proto persona is an initial phase of the of product or service development. Therefore, the act of creating persona is considered as brainstorming of the team. As a result, there are supposed to be many different personas created by the brainstorming team. They will include duplicates and similar personas. The personas then need to be reduced into a smaller, more manageable group based (Gothelf 2012). The goal is to end up with 3-5 personas.

2.1.2 Value proposition

Designing products that offer a pleasurable experience can provide a strategic advantage and help solutions to stand out in a competitive landscape. Therefore, the product/service development process should be directed towards the creation of the product that meets the needs and the values of the customers. However, understanding the values and needs of the customers can be as difficult as delicate it is. Given, “to design a product or service that provides a pleasurable experience, it is necessary to understand the “value proposition” that a solution offers; the underlying reason a customer would want to engage with the solution” (Tomitsch & al 2019, 132).

Alexander Osterwalder created a useful application that can be used for discussing, testing, examining and afterwards designing valuable proposition for customer products. This application was discussed in his book *Value Proposition Design: How to Create Products and Services Customers Want* (2015). The author himself called it “plug-in tool to the Business Model Canvas” (Osterwalder 2012.). This tool is called value proposition canvas.

According to Alexandra (2020), “A value proposition refers to the value a company promises to deliver to customers should they choose to buy their product”. A value proposition is part of a company's overall marketing strategy. It provides a declaration of intent or a statement that introduces a company's brand to consumers by telling them what the company stands for, how it operates, and why it deserves their business (Alexandra 2020). The value proposition canvas is divided into two segments: Customer profile and Value map, this can be seen in the “Figure 2”.

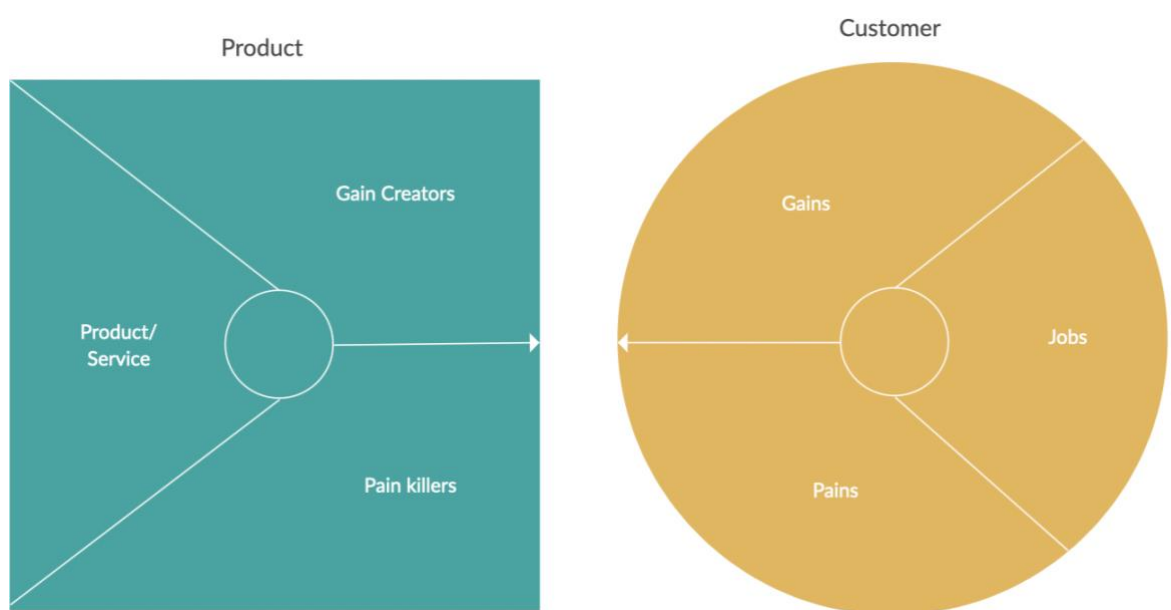


Figure 2. The Value Proposition Canvas (based on Osterwalder & al 2014.)

The figure 1, the customer profile (circle part) is the further insight into the user-persona (customer segment). This is the part that is recommended to be first thought of (Tomitsch & al 2019, 132). This segment puts an emphasis on what is the customer trying to accomplish (customers job) and what are the pains of the customer: before, during and after getting their job done (pains). This is then followed by the gains: this section questions what outcomes or benefits the customers want.

The second segment (square part) of the value proposition canvas demands the answer to the question; “What products or services exist that enables the target customer to accomplish their job?” (Products and services). The further investigation is into how the listed products and services overcomes the customer’s pain (pain relievers). Which is then followed by how the listed products and services creates customers gain (Gain creators). The pain reliever and gain creators does not differ very much linguistically. However, they are different in this context.

Jeffries (12 September 2019) describe the differences as follows:

- The gain creators are the positive, improved states of being that come from products and services features.
- The pain relievers are the negative, annoying states of being that the features remove.

2.1.3 Food menu strategy

The word menu is also used frequently in the context of electronic devices and computer programs. There it usually refers to a navigable list of options a user can interact with. The meaning of menu can be applied virtually in any context where a list of services or options is presented to a customer or user. The same applies in the context of food service. The food menu is also called “the driver” of a foodservice operation (Egan 2020). This descriptive term indicates that every part of a foodservice operation is affected by the menu and stresses how the menu is a managerial tool for controlling many aspects of a foodservice operation (Egan 2020).

Menus can be categorized in a variety of different ways and there are different types of menus, which are often associated with particular types of foodservice operations. A classical way to categorize menus is by the frequency of repetency. Static menus basically stay the same every day. It is the most widely used menu among restaurants especially for dinner. They typically provide the best customer experience because of the number of options they provide, their consistency, and their easy navigation. (Egan 2020.)

Cycle menus are most often used in non-commercial foodservice operations that serve the same group of customers every day, such as corporate dining (business and industry), healthcare, schools, and long-term care or CCRCs. A cycle menu follows a particular pattern designed to meet the needs of the operations customers and repeats on a regular basis. The length of the cycle should be set with the customer in mind. For instance, a hospital can typically use a shorter cycle menu, perhaps five to seven days, for patients,

since most do not stay in the facility for many days. However, a foodservice operation in a continuing care retirement community may need a cycle as long as six weeks since customers may be eating in the CCRC dining room on a daily basis. Cycle menus are often planned seasonally so an operation might have a spring, summer, and fall/winter cycle. (Egan 2020.)

Daily (or single use) menus change on a daily basis or may be planned for a special event with a one-time use. Daily menus are often used in fine dining or for foodservice operations that feature locally sourced products, which are available in the market on a given day. Single-use menus are planned for catered events like banquets or parties and are also used in many operations for “daily specials.” (Egan 2020.)

Menus can also be categorised on the basis of function, such as a tasting menu, catering, hotel room service, dessert, wine or drinks. Other way of categorizing a menu is meal/time period such as breakfast, lunch and dinner. Furthermore, style of the service also can categorize a menu, for instance; American, French or Russian.

In-terms of foodservice and operation, these different categories of menu overlap among each other, whether commercial or non-commercial and put forward both advantage and disadvantage to management and control. For example, static menus would be easiest for forecasting, purchasing and labour scheduling since they are the same every day, but cycle menus have those same advantages over daily menus (Egan 2020). However, this same advantage of the static menu can create disadvantage as it takes a long time to make the change to a menu for chain restaurants. Daily menus have advantages over flexibility as it can be easily changed to adjust to product or market price changes. Static, and to an extent cycle menu, offer the customer a predictable dining experience, but daily menus offer a new dining adventure with every visit to the foodservice operation (Egan 2020). Therefore, it is in the best of the foodservice operations to combine elements of these different types of menus to gain the advantages offered by each. For example: many restaurants using a static menu offer daily specials or features, which give some flexibility to offer menu items that are seasonal, or trendy, or use product that needs to be sold and not wasted (Egan 2020.).

2.1.4 Business model canvas

The Business Model Canvas (BMC) is a strategic management tool which presents your business idea or concept visualize easily and clearly (Ebinum 2016). Osterwalder, Pigneur & Clark (2010) explained their motivation for creating BMC as, “We need a business

model concept that everybody understands: one that facilitates description and discussion, we need to start from the same point and talk about the same thing. The challenge is that the concept must be simple, relevant and intuitively understandable, while not oversimplifying the complexities of how enterprises function". According to them the concept of BMC is to become a shared language; it will facilitate creation of new strategic alternatives by allowing an organization to describe and manipulate business model easily (Osterwalder, Pigneur & Clark 2010).

The model is so famous that basically everyone around the world working with Entrepreneurship knows what it is; more than 650,000 people all over the world are using it says Ching and Fauvel (2013). However, it doesn't necessarily mean that it's free from shortcoming and downsides. The main criticism of BMC done by Kraaijenbrink (2012) is that BMC exclude strategic purpose, mission, vision and strategic objectives. He claimed that the Canvas somehow suggests that only financial success can drive entrepreneurs and start-ups. Furthermore, it has also been claimed that BMC failed to include notion of competition and the environmental understanding.

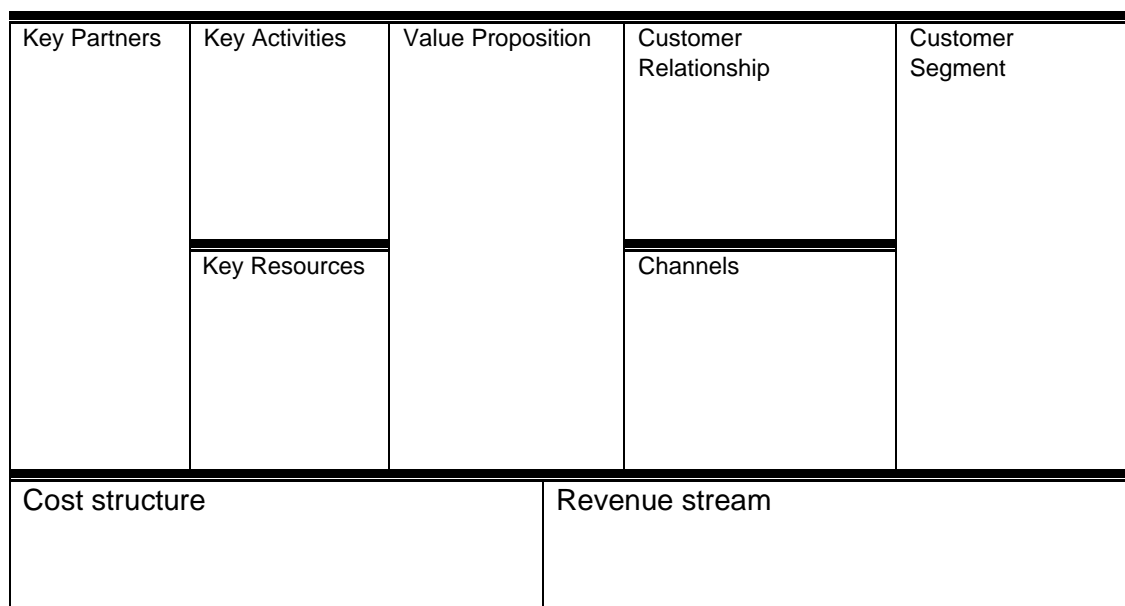


Figure 3: Business Canvas Model (adapted from Osterwalder, Pigneur, Bernarda & Smith 2014.)

As stated by Osterwalder, Pigneur & Clark (2010, 15) "The business model is like a blueprint for a strategy which is simplified by nine blocks in it to show the logic of how a company intends to make money and those nine blocks over the four main areas of a business: customers, offer, infrastructure, and financial viability". Figure 3 above represents the business model canvas.

Customer Segment

“Customer Segmenting is the practice of dividing a customer base into groups of individuals that are similar in specific ways, such as age, gender, interests and spending habits” (Ebinum 2016). Company’s aim to serve to certain customer in order to fulfil their business goals and it is exceedingly vital for companies to know who and which segment they want to serve.

According to Osterwalder, Pigneur & Clark (2010), Customer groups represent separate segments when they require a distinct offer and demand different types of relationship and channels to reach them.

Value proposition

In simple words, value proposition is solution to the customer’s problem through distinct combination of offering of the firm so as to create value to them (Luenendonk 2020).

According to Osterwalder, Pigneur, Bernarda and Smith (2015) in their book; Value Proposition Design: How to Create Products and Services Customers Want “Great value propositions focus on pains that matter to customers, in particular extreme pains. It is not needed to come up with a pain reliever for every identified pain in the customer profile- no value proposition can do this. On the contrary, great value propositions often focus only on few pains that they alleviate extremely well”

Each Value Proposition consists of a selected bundle of products and/or services that caters to the requirements, need and problem of the customer and these offerings provide customers with reasons to one company over another (Osterwalder, Pigneur & Clark 2010). There can be several elements of value propositions such as:

- Newness
- Performance
- Customization
- Getting the job done
- Design
- Brand
- Price
- Cost reduction
- Risk reduction
- Accessibility
- Convenience/usability

Channels

Now that the company knows who their customer is and what value are they serving to them, next block explains how companies deliver value proposition to its customer Segments and use different channels to communicate. Some of the question a company can ask are:

- Through which Channels do our Customer Segments want to be reached?
- How are we reaching them now?
- How are our Channels integrated? Which ones work best?
- Which ones are most cost-efficient?
- How are we integrating them with customer routines? (Osterwalder, Pigneur & Clark 2010.)

As can be seen in the figure 4 below, there can be different type of channels such as direct /own channel; sales force, web sales or own stores and indirect/partner channel; partner stores and wholesaler. Each channel cover all or some of the phases listed below. An organization can decide to reach their customer directly or indirectly passing through few or all phases. Awareness phase is about make the customer aware about the product and services. When the customers are aware, it's time to help customer evaluate organization's proposed value. The next phase, purchase, followed by delivery and after sales phase is all about facilitating customer to purchase, delivering them the promised value proposition and providing post-purchase support.

Channel Types			Channel Phases				
Own	Direct	Sales force	1. Awareness How to raise awareness about our company's products and services.	2. Evaluation How do we help our customers evaluate our organizations value proposition?	3. Products How do we allow customers to purchase specific products and services?	4. Delivery How do we deliver a value proposition to customer?	5. After sales How do we provide post purchase customer support?
		Web sales					
Partner	Indirect	Own stores					
		Partner stores					
		Wholesaler					

Figure 4: Channel type and phases (adapted from Osterwalder, Pigneur & Clark 2010).

Customer Relationship:

After knowing the value proposition, customer segment and channels to reach the target customer, the next important part for any organization is defining how they interact with

customers. The Customer Relationships Building Block is about establishing and maintaining relationship with each customer segment in many ways and types from personal to automated.

Customer relationships may be driven by the following motivations (Osterwalder, Pigneur & Clark 2010):

- Customer acquisition
- Customer retention
- Boosting sales (upselling)

Customer acquisition is process of persuading a customer in favor of your product and services over choices available in the market (Cleverism, 2020). Different tactics and mediums are used to achieve customer acquisition such as content marketing, digital marketing, search engine optimization, social media marketing etc. The next two motivation are retention of the customers and upselling by creating long-term relationship. Organizations achieve customer retention through strategies such as creating experience, surprising the customer, sales and incentive programs, creating brand loyalty by providing higher values and maintaining personal relationship with customer. (Cleverism, 2020.) Implication of different ways and categories of customer relationship may vary according to different customer segment or even coexist with particular customer segment.

Revenue streams

” If customers comprise the heart of a business model, Revenue Streams are its arteries” (Osterwalder, Pigneur & Clark 2010, 30). The revenue stream building block represents what and how the company generates cash/revenue from each customer segment which is calculated by subtracting cost from the revenue. Question an organization can ask are:

- At what price customers are willing to pay?
- How much do they pay now?
- By what method?
- What is their preferred means of payment?

According to Osterwalder & all (2010), there are mainly two different type of revenue streams listed below and under these types there can be several ways to generate revenue streams such as asset sale, usage fee, subscription fee, lending/leasing and licensing.

1. Transaction revenues from one-time customer payments.

2. Recurring revenues from ongoing payments: provide post-purchase customer support.

Key Activities

Key activities building block explains what a company must perform or do to create value proposition and make the business model work (Osterwalder, Pigneur & Clark 2010). They are the main task that company do in order to solve target customer's problem. Key activities are required to create other element of business model canvas explained above; Value proposition, customer relationship and earn revenue. Key activities may differ according to business model of the company such as production, problem solving or platform/network.

Key resources

If key activities are company's undertakings to make business model work, Company's must have assets to make business model work is key resources. Similar to key activities, they are required to create Value proposition, customer relationship and earn revenue and their need depend upon type of business model. According to Osterwalder, Pigneur & Clark (2010), the key resources can be physical (buildings, machines, manufacturing facilities), intellectual (brand, knowledge, skills, copyright), human and financial.

Key partners

The list of other external companies/suppliers/parties an organization may need to achieve your key activities and deliver value to the customer are key partners (Ebinum 2016). Among all the other building block, key partnership is also equally important to make the business model work since company cannot perform in isolation.

The main motivation for an organization to create partnership can be for optimization, achieve economies of scale, reduction of risk and acquisition of resources/activities (Osterwalder, Pigneur & Clark 2010, 39).

Cost structure

Lastly, the final building block describes how much cost does a company incurred while operating and implementing the business model. What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key

Activities are most expensive? are some of the questions a company will be able to answer after completing the cost structure block (Osterwalder, Pigneur & Clark 2010).

2.2 Financial planning

2.2.1 Financing the business activity

“Investing is the process of buying assets that increase in value over time and provide returns in the form of income payments or capital gains” (Forbes 2020). Such investments are also known as capital investment. Capital investment refers to money used by a business to purchase fixed assets, such as land, machinery, or buildings. Similarly, it also refers to money invested in a business with the understanding that the money will be used to purchase fixed assets but not day-to-day operations. (Ward 2020.)

Businesses require a lot of investment in areas such as labour, facilities, and equipment, along with repair and upgrades which needs to be considered before making any decision regarding company's financing ways and sources (Ward 2020). Once they know the numbers, it's time to decide on financing process and ways.

Financing the business is one of the critical phases in any business planning; start-up or already growing business. Different business activities, making purchases or investments, depends open fund which gets generated through financing process (Hayes 2020). While proper financial strategy of the company will act as a pillar of business to purchase products out of their immediate reach and as well as achieve their goals and objective, the wrong one can make a successful company rather vulnerable to failure (Fields 2002, 181).

A company can finance its activities in two ways, Equity or Debt financing. The choice of the companies between these two depends upon accessibility of the source of funding, it's cash flow and how important maintaining control of the company is to its principal owners (Maverick 2020).

Equity in accounting means ownership. In this type of financing, money is received through shareholders who owns percentage of the company (Detweiler 2021). As shareholders are owners of the company, they receive returns and dividend but requires no repayment. “In addition to raising funds, equity may also be used for the purpose of expanding ownership of the stock, reducing concentration of voting power, and making the stock more liquid for stock market purposes” (Fields 2002, 190).

Now on contrary to Equity, Debt is mostly familiar to everyone; it is a loan. In this kind of financing, a firm gets money (business loan) for working capital/investment from lender and lender expects certain rate of interest. Usually, these loans are secured by assets like in banks. (Detweiler 2021). The debt can be short-term; business have to pay it back within 1 year, and long-term debt; business have more than a year to repay the debt.

While starting up a business, it is a crucial decision whether to finance through debt or equity. Both have their pros and cons to be evaluated. For instance, let's assume that a business enters bankruptcy. Here, the greatest advantage of equity financing is you don't have anyone that you owe the money to because the shareholders are part-owner of the business; their money is also lost (Hayes 2020). However, even if there is less financial burden in equity financing and many more advantages, that doesn't mean there are no downsides. One of the biggest disadvantages is losing the control over the business decisions.

Furthermore, even though the debt financing increases the financial burden of business as they have to pay monthly debt payment including interest and might also even lead to failure of the business in the case of high debt ratio, there are some advantages as well. For example, the interest paid is tax deductible which contributes on decrease in tax and lenders have no control over the business decisions.

2.2.2 Cost accounting

Costing is "the technique and process of ascertaining costs". In the modern management for product costing, operational planning and control decisions, cost accounting is one of the vital and indispensable part. (Lalitha & Rajasekaran 2010.) The main objective of performing a cost accounting is to get the necessary data foremost for performing financial statement analysis and make effective, timely decision (Lalitha & Rajasekaran 2010). There are many cost categories such as direct, indirect, operating, fixed and variable cost. But the two-basic type of cost are fixed cost and variable cost.

Fixed costs are the type of cost that does not change in relation to the production volume i.e., even when production increases the fixed cost remain same (Corporate Finance Institute 2020). For example, rent, insurance expense, advertising etc.

Variable costs on the other hand are tied to company's production volume i.e., the cost increases if the production increases (Corporate Finance Institute 2020). For example, direct raw material, direct labours etc.

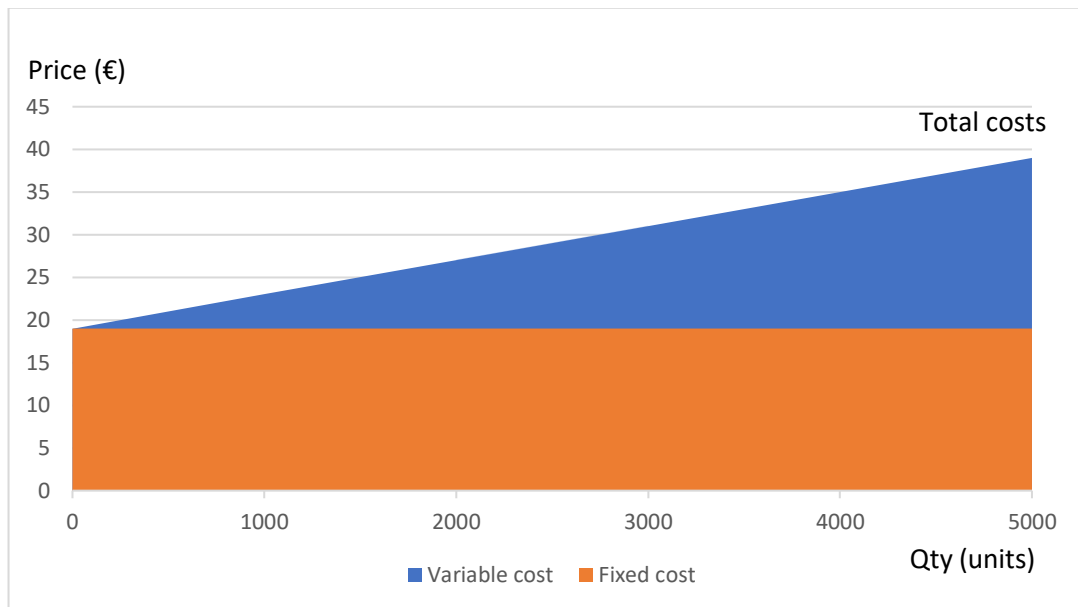


Figure 5: Fixed and variable cost (adapted from Boyce 2021)

The figure 5, above illustrates the nature of fixed cost and variable cost. The X-axis and Y-axis present quantity produced in unit and price/cost of the production. As can be seen in the figure, variable cost is around 20 at the starting point, which is increasing with the increase in production unit. On contrary, Fixed cost remain constant regardless of increasing unit of production. Total cost is the sum of variable cost and fixed cost.

2.2.3 CVP (Cost-volume-profit) analysis and breakeven point

CVP analysis is one of the most hallowed yet one of the simplest analytical tools in management accounting (Guidry, Horrigan & Craycraft 1998). It acts as foundation for managers on decision making. It is a way to find out how changes in variable and fixed costs affect a firm's profit (Kenton 2020). In other words, it helps to shows how many sales should the business target to pay for the cost of doing business (Hayes 2020).

The calculation begins by dividing the expenses(costs) of the business in two categories: Variable and Fixed cost. Few things that a company needs to know before doing CVP and breakeven analysis are sales revenue per unit, fixed cost and variable cost per unit.

The first thing to do is to calculate contribution margin income statement and contribution margin ratio (Egan 2020). In order to calculate contribution margin, variable costs are reduced from net sales revenue: "Net sales revenue – Variable cost = Contribution margin". Next, the amount we get after reducing the fixed cost out of contribution margin is operating profit: "Contribution margin – Fixed cost = Operating profit".

Table 1: Contribution Margin Income Statement (adapted from Egan 2020).

Statemen Item	Amount	Percentage of income
Sales	100	100%
(Deduction) Variable Costs	60	60%
(Total) contribution margin	40	40%
(Deduction) Fixed costs	40	30%
(Total) operating costs	10	10%

The table 1 shows total income from sales, total contribution margin after variable cost deduction, and operating income after reducing operating costs. Now we can calculate required sales unit to achieve the target profit or required sales dollar amount to achieve the target profit.

The calculation is to be followed as follows:

- Required number of units sold For Targeted Profit =

$$\frac{(\text{Fixed Costs Dollar} + \text{Targeted Profit Dollar})}{\text{Contribution Margin Dollar Per Unit}}$$
- Required Dollar Sales for Targeted Profit =
$$\frac{(\text{Fixed Costs Dollar} + \text{Targeted Profit Dollar})}{\text{Contribution Margin Percentage (\%)}}$$

In the above-mentioned calculation, “=” is a mathematical symbol used to symbolizes the equation, “/” symbolizes the fraction and “+” symbolizes addition. Break-even point analysis is like a subset of CVP. CVP analysis can be used to estimate the sales amount needed to achieve the breakeven point. The break-even point is where there is neither gain nor loss; total cost of the company is equal to total revenue of the period making operating income of \$0.

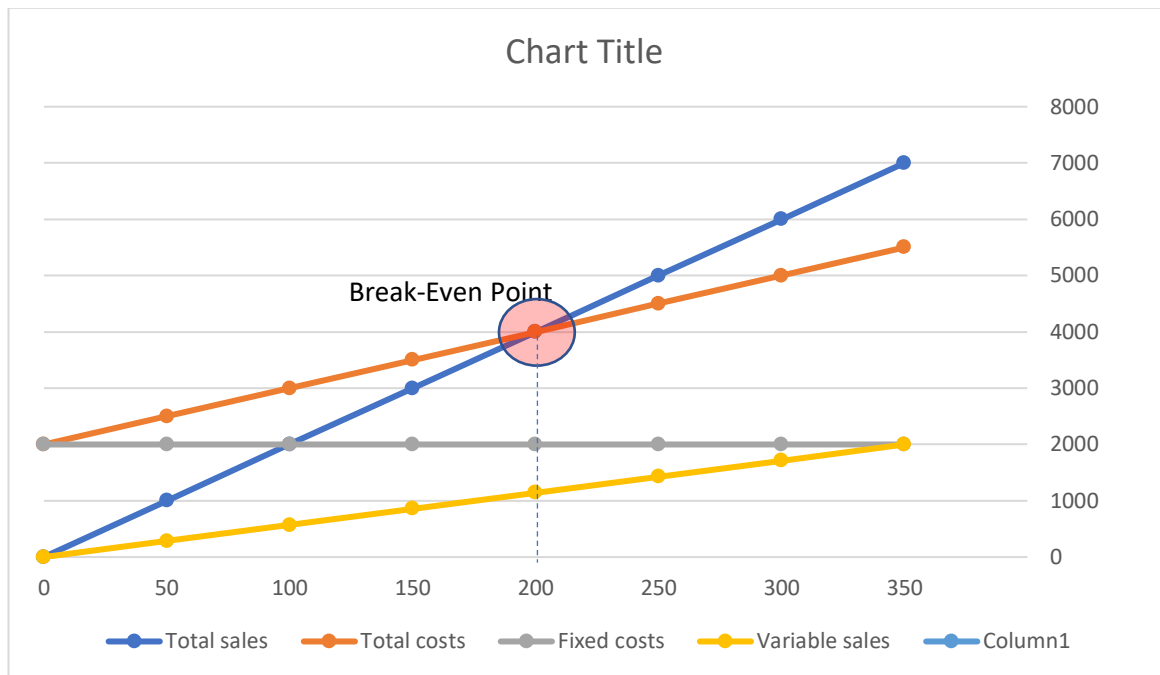


Figure 6: Break-even point (adapted from Egan 2020).

As can be seen in the figure 6, the point where total sales and total cost inter-cross is break-even point; 0 operating profit. Which means that if the company represented by figure above sale 200 covers with €4000 sales revenue, they would not make any profit but will be able to cover their cost incurred while achieving those sales.

2.2.4 Income statement

Income statement shows what balance sheet didn't; profit/loss of the company. According to Fields 2002, The income statement, often called a statement of operations or a profit and loss statement (P&L), describes the performance of the company over a period of time, usually a month, a quarter, or a year (Fields 2002). It measures all the sales and revenue of the company and expenses incurred while achieving those sales and revenue. The complexity of the income statement may vary according to the company. However, it can be simplified as depicted in figure 7 company.

Revenue/sales	1000
Cost of Goods Sold	300
Gross Profit	700
Operating Expenses	200
Interest Expenses	150
Earnings Before Income Tax	350
Income Tax	150
Net Profit	200

Figure 7: Income statement

Showing the profitability of the company through statement such as balance sheet and income statement is crucial in many instances such as if company is operating profitably, it demonstrates its ability to borrow loans from bank or funds from investors. On the other hand, to those unprofitable companies, it might be a signal not to lend money for bank/creditors. However, one thing to consider is that income statement shows revenues, expenses, gains, and losses; it does not show cash receipts (money you receive) nor cash disbursements (money you pay out) (Averkamp 2020).

2.2.5 Balance sheet

The balance sheet is a representation of the company's financial health. It is presented at a specific point in time, usually the end of the fiscal (accounting) period, which could be a year, a quarter, or a month. It also helps us to measure the company's operating performance. (Fields 2002, 190.)

It helps managers to analyse many aspects of the business such as company's ability to meets its short and long-term obligations, ratio analysis, total revenue available etc. Alongside other financial statement such as the income statement and statement of cash flows, Balance sheet is used in conducting fundamental analysis or calculating financial ratios (Fernando 2020). However, it is not wise to overly rely on balance sheet as not everything can be analysed with it. It doesn't show us if the company is in loss or profit, nor does it show the flow of cash in and out of the account.

All the assets the company owns and all the liability that company owns to other are listed in balance sheet. The financial position of the company is measured by three items (Total

assets, total liabilities and equity) and it gives us accounting equation. This can be equated as; $\text{Assets} - \text{Liabilities} = \text{Equity}$ and $\text{Total Assets} = \text{Total liabilities} + \text{Equity}$.

Assets are everything the company owns and hence, they are company's resource. Example: cash, accounts receivable, inventory, prepaid insurance, investments, land, buildings, equipment, and goodwill. From the accounting equation, we see that the amount of assets should be equal to combined amount of liabilities and shareholder's equity (Averkamp 2020).

Liabilities are amount the company owes to other which makes their obligation. Examples of liabilities include notes or loans payable, accounts payable, salaries and wages payable, interest payable, and income taxes payable.

Similarly, Owner's or stockholders' equity reports the amounts invested into the company by the owners plus the net income of the company that has not been withdrawn or distributed to the owners as dividend. It's the amount remaining after deducting liabilities from asset (Averkamp 2020).

According to the accounting rule, the accounting equation will always be "in balance," meaning the left side of the equation will be equal to the right side. The formula above is self-explanatory; everything a company owns they have to pay for it(assets) by either borrowing money (taking on liabilities) or taking it from investors (issuing shareholders' equity) (Fernando 2020).

2.3 SWOT analysis

SWOT analysis is the tool companies uses to analyse the strengths, weaknesses, opportunities and threats of businesses (Schooley 2019). The strength and weakness fall under internal factor whereas opportunities and threats are more about external factors. According to Cadle, Pau, & Turner (2010), SWOT is used to summarise and consolidate the key issues identified when analysing an organisation and its business environment and it follows the use of techniques such as PESTLE (external) and Resource Audit (internal). Before making a business decision, an organization needs to develop a full awareness regarding all those factors, and it is the main objective of SWOT analysis (Schooley 2019). Table 2 depicts the SWOT analysis in matrix form.

Table 2. SWOT analysis matrix (adapted from Whalley 2010)

	Strength	Weakness
Opportunities	How do I use these strengths to take advantage of these opportunities?	How do I overcome the weaknesses that prevent me from taking advantage of these opportunities?
Threats	How do I use my strengths to reduce the impact of threats?	How do I address the weaknesses that will make these threats a reality?

Strengths are a positive capability of the firm (Cadle, Pau, & Turner 2010, 15). All organization/firms have something they excel on and that separates them from the competition such as a strong brand, loyal customer base, a strong balance sheet, unique technology, and so on (Grant 2021).

Weakness are the negative internal factors of a firm that needs to be addressed to run a successful business because they are a hurdle for them to achieve their desired goals (USDA 2008). It can be a weak brand, higher-than-average turnover, high levels of debt, an inadequate supply chain, or lack of capital (Grant 2021).

Opportunities are external elements that helps in achieving the desired goals of the organization and gain competitive advantage. Opportunities are out in the market/environment which an institution should be able to take advantage of and execute strategies that enable it to become more profitable. (Hashemi, Samani, & Shahbazi 2017).

Threats are factors that have the potential to harm an organization are threats for them. Its answers the question such as What new regulations threaten operations? What do our competitors do well? What consumer trends threaten business? (Grant 2021). It can be increasing competition, technological changes, changing market trends etc.

3 Business plan

3.1 Introduction to Terveys food services.

The company is called Terveys food services. It has been established in Butwal city, Nepal. The field of the company is designing and operating catering services for educational institutions. The primary focus of the business is on the pre-primary to secondary level education operators. The company has two owners, “Mala Pradhan” the operating manager with 50 percent of ownership and the author of this paper “Ajay Kunwar” with 50 percent ownership.

The company has been established, at the client school “Junkiri Planet”. As a result, cafeteria has been established within the school “Junkiri planet”, and Terveys is providing all necessary food services required in the school. “Junkiri planet” is a new school established in 2019. It has total number of seventy students, fifteen teachers, two bus drivers, two cleaners and four other operational staffs. Two cleaners, three teachers and three students live in the school therefore the food service includes breakfast, lunch, mid-day snacks, evening snacks and dinner.

There lies mutual benefit to both Terveys food services and Junkiri planet: Terveys gets the platform to experiment and develop products and services aimed at schools, and Junkiri planet gets all the food services practiced in its organization at a competitive cost.

3.2 Market research

3.2.1 Insight of the food culture in Nepal.

Nepal is a diverse country, customs and traditions differ from one part of Nepal to another. These differences therefore also bring diversity in foods people eat. The food culture is further enhanced by the influence of two great culinary tradition of the region, India, and China.

Tea is Nepal’s beverage of choice. Nepali people start there day with a hot tea. The most common teas are black tea; tea boiled with spices and ginger and sugar, milk tea; black tea with milk and lemon tea; black tea cooked with lemon (The Kathmandu post 2016). These tea variations are consumed throughout the day. During the breakfast, tea is accompanied by the pastry and confectioneries. There are traditional pastries like Selroti; deep fried rice flour doughnut, Puri; flat bread, and Gwarmari; spiced round bread

(Lonleyplanet 2021). However, these traditional breakfasts have been replaced by industrially produced products which are influenced by the western cuisines. These industrial products are mostly based on highly processed carbohydrate, added sugar, additives, and preservatives, and has little to no essential nutrients.

As diverse the food is, Nepali culture has diverse method of cooking. The regular Nepali meal daal (lentil soup), bhat (boiled rice) and tarkari (curried vegetables), most often accompanied by achar (pickle) and Curried meat (chicken, goat and buffalo) is very popular (Nepal tourism board 2021). Rice remaining constant, the side dishes bring a lot of variety to the meals in Nepali cuisine. Rice is the major source of energy in the country, and Nepali people consume this meal setting two times, as lunch and dinner every day. However, Rotis (Flat bread) and dhedo (boiled barley flour) replaces rice as the source of carbohydrate sometimes. This replacement mostly occurs in the dinner.

In-between the main meals; lunch and dinner, Nepali people often have one snack time but also twice. Acquired from Tibetans, moms (steamed or fried dumplings) are one of the most popular snacks among Nepali people (Nepal tourism board 2021). It is a staple snack for workers. The alternative to mamo,s are chowmein; stir fried noodles and samosha; deep fried pastry stuffed with potatoes. The influence on food culture is quite visible as these preferred snacks do not relate to Nepali traditions: Chowmein is a Chinese dish and Samosha is an Indian dish.

Contrary to what Nepali people eat today the traditional Nepali food are diverse in method of preparation, regional availability, flavours, shelf-life and use. Nepalese indigenous foods and beverages are praised for their unique cuisine, preparatory technique, and delicacy. (Subba 2014, 1.)

These traditional foods are seasonal, regional, and full of nutrition's. Subba (2014, 4) explains the need for organizing food festivals to display the gamut of Nepalese indigenous and traditional foods to the Nepali people as well as to the tourists. These food festivals should keep the objectives to educate young people about nutritional and health benefits, preparation method and shelf stability of traditional foods. Such events will help to promote local, seasonal, nutritious, and traditional foods in the market says Subba (2014, 4). This kind of initiatives encourages the restaurants to serve traditional foods instead of the industrial processed unhealthy foods as eating behaviour is the compound outcome of environmental, individual and social dynamics (Tamrakar & al 2020).

Nepal is one of the poorest and least developed countries in the world. However, the Nepali people have been rapidly transitioning from an agricultural to more urbanized work and lifestyle. The rapid urbanization is also introducing more processed food in the market. “The transition of lifestyle, including the advent of more processed foods, Nepal is experiencing an epidemiological transition from infectious to chronic diseases” (Tamrakar & al 2020, 1). Globally, recent decades have seen marked growth in availability of energy-dense, nutrient-poor snack foods and beverages and the consumption is rising among adults and children in low- and middle-income countries (Baker & Friel 2016, 10). According to the nationwide STEPS survey report by Aryal & al (2015, 14), “One quarter of the adult Nepali population is overweight, 4% have diabetes and 26% have hypertension”. Shrestha & al (2016, 48) says “an unhealthy diet might have contributed to the high prevalence of these diseases and risk factors”. According to Shrestha & al (2016, 48), dietary pattern of refined grains, meat and alcohol is associated with a higher prevalence of overweight and obesity. “And deep-fried foods are associated with hypertension; the cereal and vegetable pattern are inversely associated with diabetes prevalence” (Shrestha & al 2016, 48).

A research conducted on the perception of healthy eating among 60 Nepali adults in a working environment found that most participants described unhealthy eating as the consumption of food that is rotten and prepared unhygienically (Tamrakar & al 2020, 4). All the participants worked for the same company and were served meals in the same cafeteria. Oily foods and processed foods such as packaged instant noodles, chips, and soda (Coke, Pepsi, Fanta, or Sprite) were perceived as unhealthy foods. “However, one support staff participant stated that the sodas were useful for treating gastritis” says Tamrakar & al (2020, 5).

Several misconceptions about diet and diabetes were expressed by the participants, for example:

- Washing white rice multiple times before cooking reduces the quality of carbohydrate.
- Eating fruits and salads can increase the risk of diabetes.
- Eating irregularly can lead to diabetes.
- Satiation after eating causes weight gain.
- Eating Taichung rice (a short-grain rice variety largely used to make beaten rice) causes diabetes and obesity if served as boiled rice. (Tamrakar & al 2020, 5.)

The consumer and providers perspective on barrier to healthy eating were the lack of skilled kitchen workers. Lack of availability of healthy food options in the workplace cafeterias and higher cost of healthy foods as the barrier to healthy eating. The providers/ management opinion on barrier to healthy eating were inadequate knowledge about healthy eating and skills of food preparation. The unavailability of healthy foods

ingredients in the market was also mentioned by the providers/manager as the cause of unhealthy eating behaviour. (Tamrakar & al 2020.)

3.2.2 Child health and nutrition in Nepal.

Nepal ratified its new constitution in 2015 in a peace process that restructured the country as a federal democratic republic following a decade-long conflict that ended in 2006 (Strasheim 2019). This process created a stable government for the first time in 25 years and an enabling environment to make much needed progress toward the achievement of the Sustainable Development Goals (SDGs) by 2030 (Strasheim 2019). The 2018 Right to Food Act enshrines food as a fundamental right of every citizen, is a powerful step toward meeting Nepal's commitments to rid the country from malnutrition, hunger, and food insecurity (Right to Food and Food Sovereignty 13/2018). A lack of proper food intake is known as malnutrition/malnourishment, and it does not only imply that there is a lack of food; moreover, malnutrition signifies a lack of nutrients (Chen 2020). However, the Zero Hunger Strategic Review (ZHSR) conducted in 2017-18 found that the country still suffers from severe food insecurity and malnutrition (Towards zero hunger Nepal 2018).

Ranking 148th out of 189th among world's poorest countries, Nepal had a Human Development Index (HDI) score of 0.574 in 2019 (Ventura, 2020). Challenging geography, civil unrest, and a lack of infrastructure complicate efforts to improve livelihoods, establish functioning markets and transport food. One quarter of Nepal's population live below the national poverty line, on less than US\$0.50 per day. Approximately 36 percent of Nepali children under 5 years age are stunted, while 27 percent are underweight, and 10 percent suffer from wasting due to acute malnutrition (United Nation 2019). This problem is visible throughout all families regardless of the economic status.

Almost two million people are considered undernourished in Nepal according to a report released by the (IFPRI) International Food Policy Research Institute and (IFRP) International Food Research Policy (2017). This condition is worsened because Nepalese living in remote areas, especially the Mountains, have less access to food than those in the Terai. Even when food is physically available, the affordability is a greater concern; therefore, poverty and household incomes are directly related to food insecurity (Towards zero hunger Nepal 2018, 3). In 2015/16, the average household spent 53.8% of their income on food. Although the average household consumption of urban households (Rs 4,31,337) was almost 1.7 times higher than that for rural households (Rs 2,48,893), food was still the major expenditure item in both urban (44.9%) and rural areas (59.8%). (Towards zero hunger Nepal 2018, 3.)

On one hand poverty is causing the undernourishment of the Nepali children, while on the other hand consumption of junk food and beverage is associated with lower dietary adequacy among children in Kathmandu valley (Pries & al 2019).

The findings of a study conducted in Kathmandu Valley, Nepal by Pries & al (2019) documented quantities of foods and beverages consumed by 745 children, over two years of age, the findings showed that majority of children were consuming unhealthy and highly processed and packaged foods and beverages. Pries & al (2019, 1847) stated that “Nearly all the unhealthy snack foods and beverages assessed in the study were commercially packaged products such as biscuits, instant noodles, candies, chocolates, and juice drinks”. The highest commercial junk food consuming children received nearly 50 percent of their caloric intake from these foods and these children were shorter than other children of their same age (Pries & al 2019, 1847). These children also had lower consumption of nutrients like protein, calcium, iron, vitamin A, and zinc which are critical for growth and development, and most were at risk of inadequate iron and folate intakes including thiamin, niacin, and vitamin B-6 (Pries & al 2019, 1847).

3.2.3 Relationship between school meal and child’s development.

Nepal has around 5,2 million children of primary and lower secondary school age (aged 5 to 12 years), of whom 51,3 percent are boys and 48,7 percent are girls (Ministry of Education & al 2016). According to Census 2011, there were 0,77 million children who were not attending school, of whom 0,57 million were of primary school age and 0,20 millions of lower secondary school age (Ministry of Education & al 2016). Close to half (46,5 per cent) of the out of school population in Nepal are in the Central Development Region – a total of 0.36 million children – while the Eastern Development Region is home to a fifth (20,5 per cent) – or 0.15 million – of the country’s out of school children (Ministry of Education & al 2016). The government of Nepal therefore has a great opportunity to nourish the health, eating behaviour, and education of the children through the school meal.

The reasons for promoting health through schools are clear. In addition to the formal educational settings, school meals are increasingly recognised as a vital investment in human capital with a significant positive impact on both the national and local economy (Pellikka, Manninen & Taivalmaa 2019). In almost every community, the school is a setting in which many people learn and work, it is a place where students and staff spend a great portion of their time. Therefore, school meals programs are also widely considered as one of the most effective interventions to simultaneously improve nutrition and

education outcomes for schoolchildren in developing countries (Ministry of Education, Nepal 2016, 18). As more children than ever receiving a formal education, schools are an efficient way to reach school-age youth and their families in an organised way, and to ensure the individual growth (World Health Organization, 2000, 5)

School meals programs contribute to alleviating short-term hunger in schoolchildren, which increases their ability to concentrate and learn while they are at school (Shalini N & al 2014, 119). Such programs also increase student enrolment, attendance, and retention rates (Aliyar, Gelli & Hamdani 2015). “Nepal reports that school feeding has contributed positively to increasing school enrolment and attendance and providing needed proper meals for children, especially in regions of high food insecurity and low educational performance” (Global Child Nutrition Foundation, 2019, 36).

In addition to the students increased enrolment, attendance, and retention rates, school meals also facilitate children’s access to school and improves their cognitive development (Pellikka, Manninen & Taivalmaa 2019). For example, a study was done in Ghana wherein it was established that socio-economic factors greatly influenced student’s success due partially to the fact that higher socio-economic status meant better nutrition, which parlayed into more refined cognitive skills and higher academic success. (Francis 2005). However, a family with higher socio-economic status with low knowledge of nutritional eating does not equate to the child’s better nutrition. Nevertheless, factors such as motivation and energy, are also greatly affected by nutrition, and not having these factors would also have a direct effect on expression of cognitive skills (Francis 2005). Since children roughly spend one third of their time in school, educational institutions have one third of the responsibility of child’s nutritional intake.

Furthermore, recent studies have revealed that in addition to food nutrition and taste, the social, emotional, and peer-related aspects of school mealtimes are important for students (Janhonen 2017, 2). According to Janhonen, Mäkelä & Palojoki (2016, 299) not only children emphasize the school lunch situation as a social event of their own, also the food itself played an important role for the pupils; pupils discuss the offerings before and after the lunch hour and regularly check the menu displayed on the information board at the school dining room. Baines & Macintyre (2019, 14) findings show that school mealtimes are highly social times which are meaningful for and enjoyed by children and provide important opportunities for them to interact and discuss the issues that matter to them. These interactions and discussions facilitate for the sharing of children’s culture, values,

norms and provides important opportunities to discuss social lessons and to resolve social problems (Baines & Macintyre 2019, 14).

3.2.4 National level implementation of School Meal Program (SMP) in Nepal.

The present Constitution has mandated most of the Food Security and Nutrition (FSN) related functions to sub-national level governments; provincial and local levels (Government of Nepal 2018, 9). The Constitution has two clear implications for the governance of the food and nutrition sector: (1) devolution of authority and autonomy to the seven provincial governments as well as to the local levels and (2) local level governments functioning under elected executives, who will be able to determine their own policy priorities and plan, implement, supervise, monitor, and evaluate development activities in their areas (Right to food act, 13/2018). A prospective proposal is to establish a provincial level Food and Nutrition Security Steering Committee (PFNSSC) represented in each of the seven provinces with representation from the government, cooperatives, farmers' organisations, private sector, and academia, as a coordinating body (Towards zero hunger Nepal 2018, 9). The UN, international and local NGOs and Civil Society Organisations (CSOs), academia and researchers, and private sector actors are essential partners in the design, planning, and implementation of Nepal's various Food Security and Nutrition plans body (Government of Nepal 2018, 11).

The Nepal SMP serves a midday meal to over 600,000 children according to data for 2017 (Global Child Nutrition Foundation, 2019). In highly food insecure districts it is implemented as food transfers and provides children from pre-primary to grade 8 a ration of nutritionally enhanced food for 200 days a year. In other districts it is implemented as a cash transfer program, which supplies meals for 180 days a year. Schools located in the hills and plains receive Nepalese rupees (NPR) 15 per child per meal (~ 0,11 €) and schools in the mountains receive NPR 20 (~ 0,16 €) to serve a midday meal for children from pre-primary to grade 5 (Willitts & Upadhyaya 2013).

Development partners such as NGOs, donor communities and the UN also play a big role in funding these expenses through various projects, direct monetary and food supply contributions. These bodies also help the Government of Nepal to understand how to reach the most in need, which means understanding how to make things work collectively at the local levels. (Government of Nepal 2018, 13.)

Municipalities and other providers of education has vast amount of independence in arranging school feeding. The resulting services vary in various different forms. However,

the municipalities are bound by the legislations regarding the nutritional content, age groups and minimum cost allocation per child (Amnesty International, 2018). School meals programs are commonly implemented either through direct food provision or through cash transfers to schools. Cash-based school meals give more autonomy to schools, but sometimes face challenges such as varying meal quality, misuse of funds, delays in the cash flows disrupting meal provision, and may distract teachers from classroom teaching (Shrestha & al 2016).

In the direct food provision, schools are provided with food supplies and school provides warm cooked meals to students with the help of the teachers and other staffs of the school. The school meal program is only applicable to the public schools, as students who attend the public schools are the one from the poor families. Therefore, for some children attending public schools, school meal is the only warm meal of their day and is a substantial part of their daily nutrition (Government of Nepal 2018, 9).

3.3 Trends (Menu planning principles and factors to consider).

Traditionally, factors affecting menu planning can be organized into two main areas: customer satisfaction and management decisions. However, the trends have shifted during the last decade the customers food purchase decisions are no longer based only on just the taste and health. The traditional drivers of customers value remain intact but a series of evolving drivers as a significant part of the purchase decision has grown substantially (Ringquist & al 2016). These evolved drivers of the customers purchase decisions reflects the market of economically developed regions like Europe and United Stated. Nevertheless, these insights are of immense value to an underdeveloped country like Nepal. Therefore, purchase decision drivers suggested by Ringquist & al (2016) in the report “Capitalizing on the shifting consumer food value equation” will be considered as a strategy to make food menu decisions in Terveys. Following are the factors to be considered.

3.3.1 Health and wellness:

“Consumer’s perception of “good for you” has shifted; when considering health and wellness, they now take a more holistic perspective by weighing more product attributes, qualitative product claims, and longer-term considerations” (Ringquist & al 2016, 14). Historically, consumers focused on nutritional elements such as carbohydrates, protein, or sugar as nutritional content was often one of the most important factors of purchase decisions based on Health and Wellness. However, resent data suggests the occurrence

of shift in these purchase decisions: A 2015 Data monitor Consumer report predicts that diets focusing on a single element of nutritional content will be scarce within five years (Candy and Snack TODAY, 2015). In fact, today's consumer considers many Health & Wellness attributes simultaneously. FMI's 2015 U.S. Grocery Shopper Trends report depicted as in Figure 8 illustrates that consumer now look at multiple nutritional and health related values (FMI, 2015).

Among the 20 pieces of nutrition information (whole grain, low sodium, low sugar, high fibre, etc.) shown in the figure below this report suggests the following information:

- An average customer wants to know 15,3 pieces of information related to Health & Wellness.
- The average consumer seeks 5,4 claims on the front of the package
- They consider 9,9 nutritional content facts on the back as important. (Ringquist & al 2016, 14.)

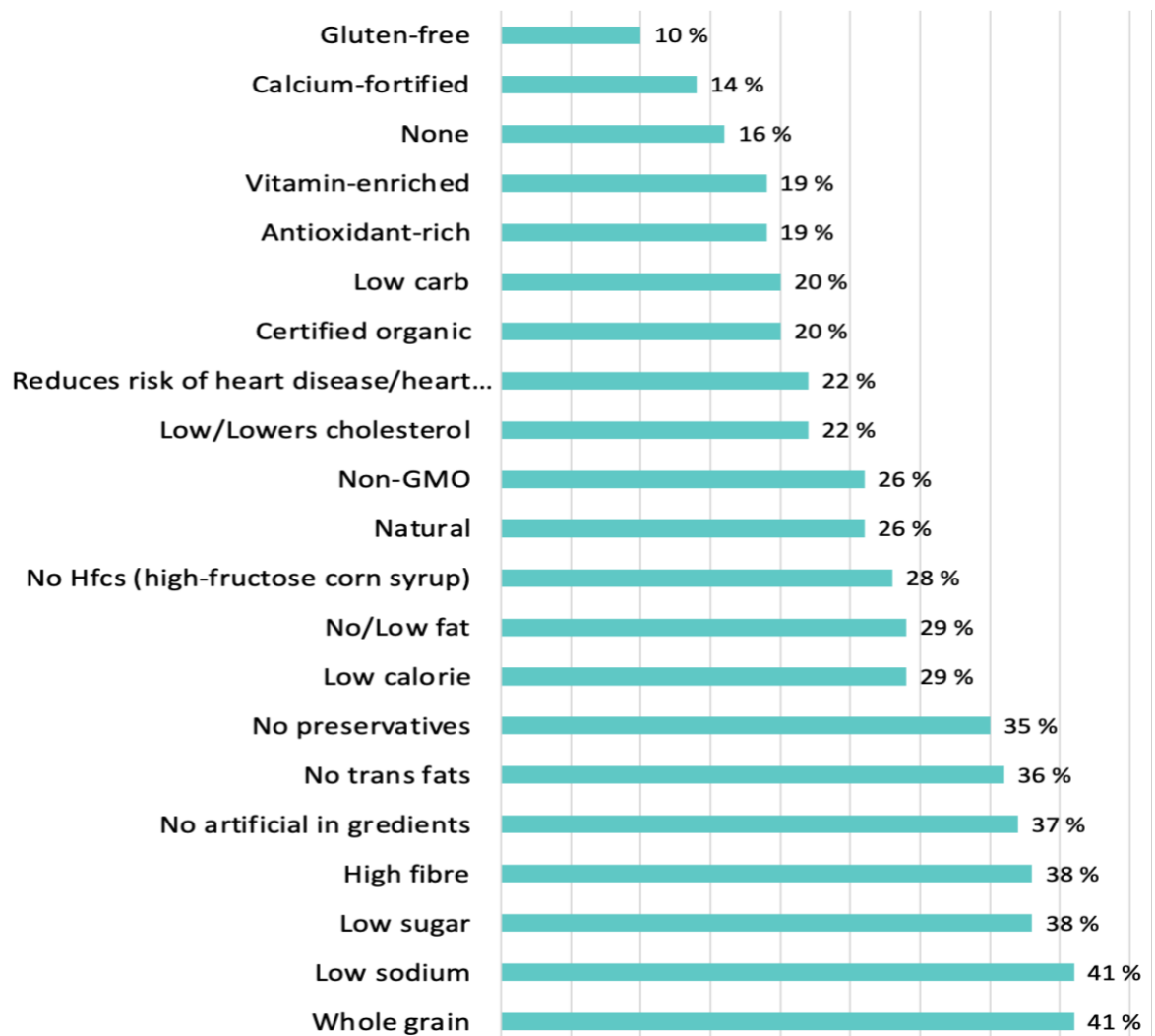


Figure 8: Percentage of surveyed consumers seeking each claim when looking at package front (based on FMI, 2015).

With so many factors to consider it can be said that Health & Wellness is a multidimensional concept and consumers perspectives on Health & Wellness are evolving constantly. This can be reflected through the trend that the consumers are even looking for potato chips and sodas with better nutrition and willing to pay premium for health and wellness attributes. According to Ringquist & al (2016, 16) “Deloitte’s American Pantry Study, found that 81 percent of consumers surveyed expressed such a willingness to pay more for existing and new products that were healthier” or contained organic or natural ingredients”.

One of the causes of this shift in consumers perspective is that consumers now take a longer-term perspective on Health & Wellness, as they shift from thinking about “What impacts my body today?” to “What might impact my body in five, ten, or twenty years?” says Renner & Ringquist (2016, 14.)

3.3.2 Safety

How today’s consumers define food safety, have reached beyond industry’s traditional narrow focus. Rather than an immediate safety concerns, the idea of food safety has expanded into longer-term concerns and attributes associated with Health & Wellness. Safety is no longer just a concern on near-term risks and is not just related to food hygiene. The **figure 9** below depicts the Deloitte's 2015 consumer food value equation survey about the definition of food safety.

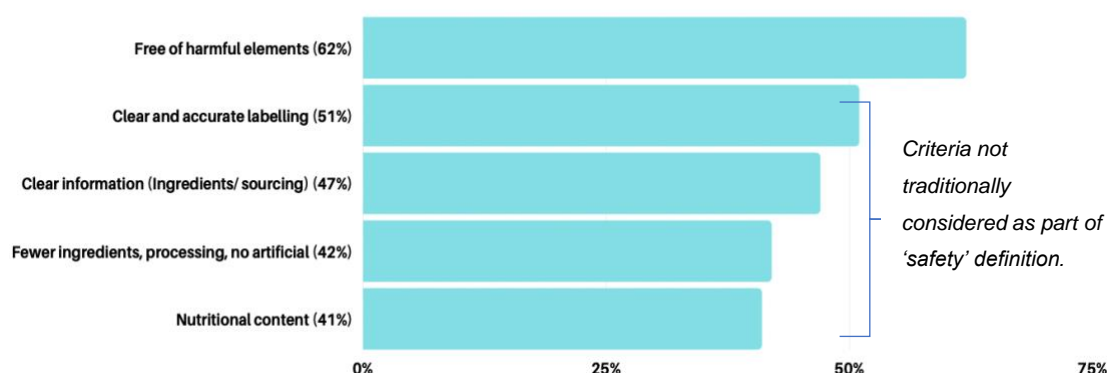


Figure 9: Attributes of consumers’ definition of Safety regarding food (based on Deloitte consumer food value equation survey, 2015).

The study showed a shift in the way people think about food safety. Nearly 7 percent of consumers in survey disagree with the definition of food safety limited to "one that will not

cause any immediate, physical harm". An additional 15 percent disagree with part of the definition, and over 52 percent agree, but think something is still missing from the definition. Renner & Ringquist (2016, 17.)

Consumers now link health, wellness and transparency with their definition of safety, and include factors such as free from harmful ingredients (62 percent), clear and accurate labeling (51 percent) and fewer ingredients, processing, and nothing artificial (42 percent) (Deloitte consumer food value equation survey, 2015).

But it does not mean that people don't have concerns about the short-term safety consequences, safety issues remain prevalent. Even though this study is based on retail foods. This study is very much applicable in developing strategies for restaurant menu. For example, customers concern over "clear and accurate labelling" in food products can be directly reflected in menu designing. This gives the direction that restaurant menus should be very explanatory, and ingredients used in a particular dish should be listed properly and in details. As consumer demand to know more about the food they eat has intensified. All the more so, today's consumers want access to relevant information of the food products when they want it, and in a clear, comprehensive, and understandable way to make conscious choices (Renner & Ringquist 2016, 21).

3.3.3 Social impact

Many consumers have become increasingly interested in the ways companies operate. They are concerned about how a company impacts on natural environment, social environment and cultural environment. In another world, customers are seeking out the products and companies operate in a responsible way. But what does "being responsible" exactly mean? The **figure 10** below depicts the Deloitte's 2015 consumer food value equation survey about the several attributes contribute to the definition of being responsible.

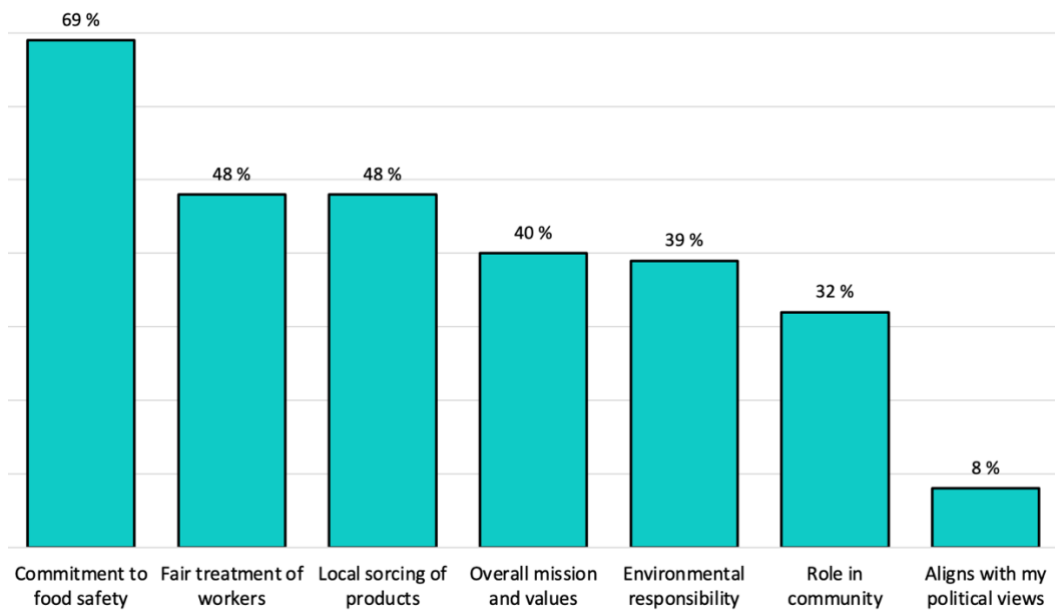


Figure 10: Attributes of consumers' definition of social impact (based on Deloitte consumer food value equation survey, 2015).

According to the survey the attributes of social impacts include, in descending order, commitment to food safety, fair treatment of workers, local sourcing of products, overall mission and values, environmental responsibility, and role in the community (Renner & Ringquist 2016, 14). As depicted in the **figure 10**, “commitment to food safety” attributes 69 percent to the definition of social impact, followed by the “Fair treatment of the workers” and “Local sourcing of the product” at 48 percent. The attributes like “Overall mission and values & “Environmental responsibility” accounts for around 40 percent. The figure also shows that the company’s role in the community is fairly associated with social impact.

This survey sheds the light on how the consumers purchase decision has shifted. It is no longer feasible for a company to separate itself from its products. As the consumers no longer seek the utilitarian value of a product but rather associate environmental, social and cultural impact with their purchase decisions.

3.3.4 United Nations dietary recommendation on school meal program.

It is best to use the Nepal government’s dietary recommendation on school meal program. However, it is unclear whether the government has put forward a proper implacable dietary guideline. Most of the available sources don’t have a specific guideline for schools that can provide specifications for menu design or indicate categories of foods to encourage and discourage. Therefore, “Nutrition Guidelines and Standards for School

Meals: A Report from 33 Low and Middle-Income Countries” published by United Nations (2019) will be used as a guideline to food nutrition while creating menu.

Some high-income countries, such as Finland, the United Kingdom and the United States, have already significantly improved the quality of their school meals and children’s in-school consumption patterns. However, the context of school meal programmes can be very different from one country or region to another, especially from high-income economies to low and middle-income ones (Food and Agriculture Organization of the United Nations, 2019, 51).

To its core, the most basic function of nutrition guidelines and standards is to ensure that foods provided in schools are of quality and in line with the nutritional needs of the targeted children. Moreover, nutrition guidelines have been interpreted in different ways around the world due to a variety of factors, including: the complexity of modern nutritional and educational issues; the varying contexts and beneficiaries; the different programmatic, resource and cost considerations; and the influence of many factors on children’s diets and habits (Food and Agriculture Organization of the United Nations, 2019, 51).

“Nutrition Guidelines and Standards for School Meals: A Report from 33 Low and Middle-Income Countries” published by United Nations (2019) is a study conducted among thirteen countries; Bolivia, Brazil, Cabo Verde, Colombia, Costa Rica, El Salvador, Grenada, Republic of Moldova, Paraguay, Peru, South Africa and Sri Lanka. Appendix 3 (table) attached in this report depicts the data summary of nutrient-based standards for school meals in respondent countries concerning primary schoolchildren (Food and Agriculture Organization of the United Nations, 2019, 58).

The number of age groups used to establish the nutrient-based standards differed among the countries, ranging from no age distinction to two age groups for primary level. However, the target age groups can be averaged to 6 to 12 years old. Energy-based standards are the most frequent, followed by those detailing target protein, fat and carbohydrate content of meals. Iron and vitamin A were the most common micronutrients with existing standards. The majority of the (daily) energy standards for lunch were set at around 30% of the child’s total requirement.

For snacks and breakfast, the range of the energy requirements to be provided varied from 20 to 25 percent. For majority of countries except Colombia, the standards for lunch

are expressed in proportion to total protein requirement, ranging from 20 to 35 percent. Similarly, values for carbohydrates range from 20 to 35 percent of total requirement and from 55 to 65 percent of meal energy content, while those for fat range from 20 to 35 percent of total requirement and from 25 to 32 percent of meal calories. Brazil provides an additional value of 15 to 30 percent of total calories from fat.

Only Brazil, Grenada and Mexico provide upper limits for saturated fat, sugar and sodium. All three countries set target values of less than 10 percent of total energy from saturated fat. Brazil sets a value of less than 10 percent of total calories from sugar, while Mexico sets a maximum of 5 grams of sugar for breakfast.

Iron, vitamin A and zinc values are commonly set at 30 percent of the requirements for lunch and 20 percent for snacks. A few countries are explicit in specifying acceptable variations from proposed standards; for instance, Colombia and Paraguay allow for variation of plus or minus 10 percent on stipulated standards.

Since nutrition guidelines and standards are limited to setting nutrient targets, it is difficult for Terveys to devise menu plans or preparations to meet these targets. Apart from lack of resources, the approaches possible may be constrained by lack of capacities, absence of information on individual food consumption of schoolchildren, lack of data on optimal food composition and in this case complete absence of national (Nepali) food based dietary guidelines.

Therefore, food based dietary guidelines (FBDGs) presents its own difficulties, because the nutrient-based approach is more complex for meal planning and may also result in meals that are not consistent with FBDGs, sufficiently varied or over dependant on fortified products (Institute of Medicine, 2010). Moreover, development of menus must take into consideration of the region's dietary habits, the school system and procedures for the procurement and management of raw ingredients, food preparation and serving. Any decision to adopt this approach should take into consideration the possibility to adapt menus and substitute foods based on knowledge of local food composition, without jeopardizing the nutritional value. (Food and Agriculture Organization of the United Nations, 2019, 56.).

3.4 User persona

As discussed in the theory section, this report uses the proto persona instead of a traditional persona which is based on qualitative and quantitative research. The personas created are depicted in figure 11, 12 and 13. Since these are proto personas, these have

not emerged from research but from the experience of the creator, these personas are assumptions based upon past interactions, imagination and assumptions. However, all three personas created are based on reality to some extent, Personas 1 and 2 are close to the author himself and persona 3 is the principal of the school where the author himself studied during his childhood.

Persona 1 in the figure 11 is Amit Kunwar, he is 32 years old male person born in Butwal, Nepal. He is married and lives in Butwal. He is a founder and principal of a school named Junkiri planet. He loves to read books and listen to music. Being a person who loves and cares children he wants to create a school that can provide great education to the local children. Since he spent a significant time of his life pursuing education in Finland, his concept of good education is very much influenced by Finnish education system. Adaptation of various elements of Finnish school system has helped his school to stand out in market and he wants to provide distinct services in school which will help him stand out furthermore.

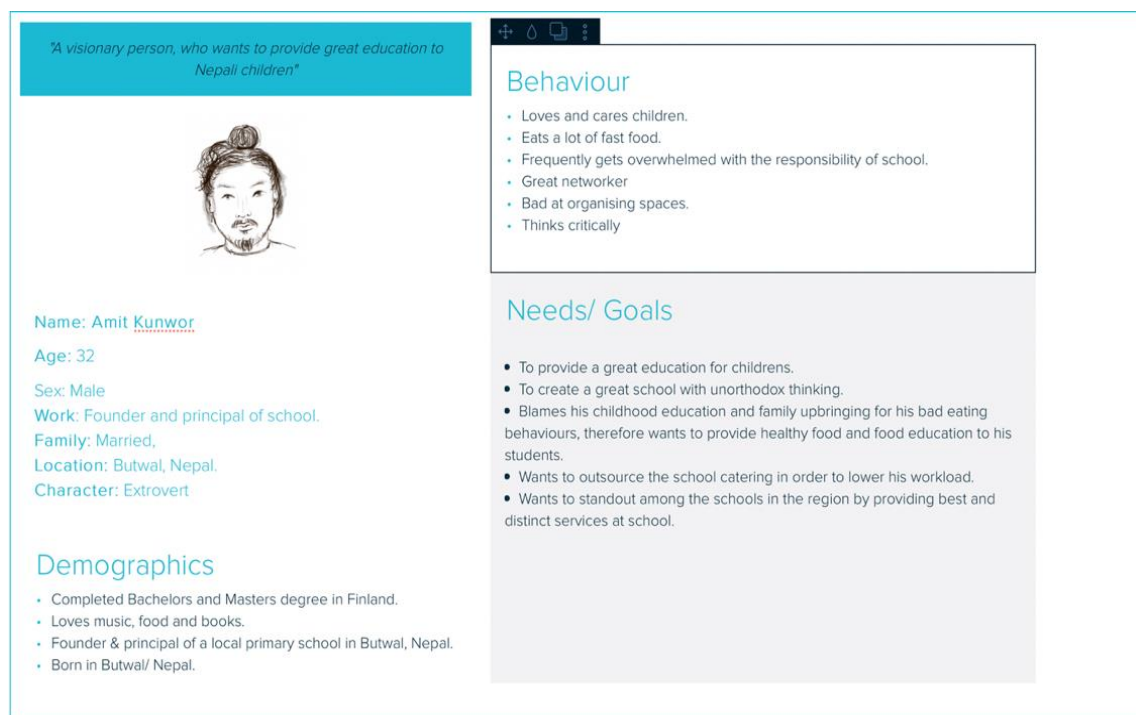


Figure 11: Persona 1

His has a very charming personality. He has traits of an extrovert, and he is great at networking. Therefore, he proves to be a very good leader time and again. As good as he is at managing people, his weakness lies in managing physical spaces and his eating behaviour. Which makes him a messy person and unhealthy eater. He is also good at

critical thinking. Perhaps this is why he blames his childhood education and bad family upbringing for his bad food behaviour which he struggles to overcome. Due to this reason, he strong believes it is very important to provide healthy food to children and also to educate them about food nutrition and healthy eating both in school and at home.

Persona 2 is a Swiss person named Jeanine Eberle. She is 28 years old married female person. Since she has founded a non-profit organization in Butwal, she has been residing in Butwal since year 2018. Her organization provides food, shelter and education for homeless orphan children in Butwal. Her organization works closely with Junkiri planet to provide education to her children.

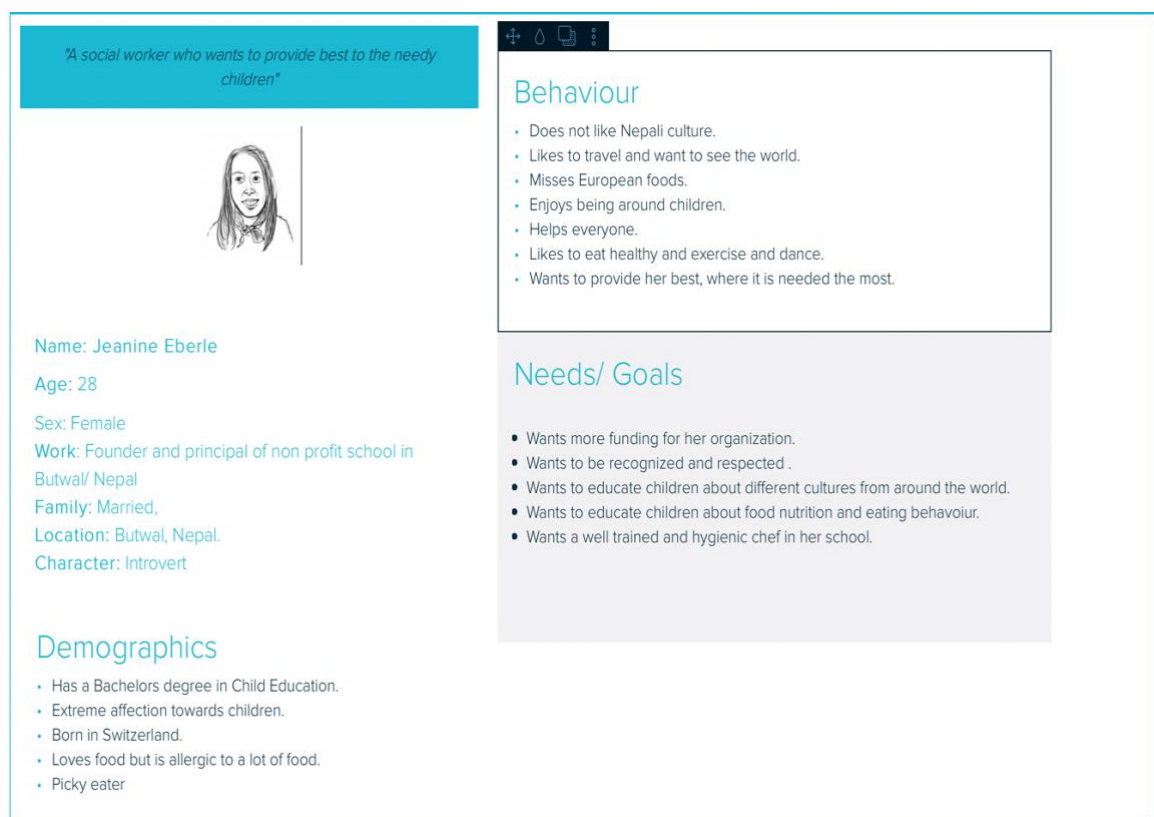


Figure 12: Persona 2.

Jeanine is a shy person and is extremely affectionate towards children. She has a bachelor's degree in child education from a Swiss university. Apart from her professional life, she truly loves being around children and take care of them. She is a caring and helpful person to anyone regardless of the age, but she thinks children are the one who truly needs help. Before she decided to stay in Nepal and help needy children, she had a dream to travel the world. She still does, in fact she has travelled to a lot of places around the world. Experienced different culture and their food. Therefore, teaching children about

different culture from around world is also her values. Also, exercising and eating healthy food is a priority in her life and also wants her children to learn it from her.

Jeanine loves food, but since she is allergic to many food ingredients, she is a picky eater. She does not like Nepali culture in general and the Nepali food adds more to dislikes. Maybe because Nepali food in general is spicy and hot. She truly misses the food from back home, European cuisine of all types in general.

Jeanine's priority in her life is to collect more fund for her organization. She wants to build a professional kitchen and hire a professionally trained chef in her organization. She believes providing good food and food education is an important aspect of education system.

Persona 3 depicted in figure 13 is a 56-year-old male person Lok Nath Upadhyay. He is a founder and principal of the best recognized and biggest school of the region. He is a married extrovert man and also is grandfather of three.



Figure 13: Persona 3.

Mr. Upadhyay has a master's degree in English literature. Like most old Nepali generations, he is proud of Nepali culture. He can be positioned as a traditional thinker and also is less critical thinker. He sees the students at his school as the product of the

school. Therefore, his main goal is to create students with brilliant academic background. For the reason being, this will also help to sustain the image of his school as a brilliant student producing school in the country. It will increase the number of students enrolling in his school hence, generating more revenue.

Mr. Upadhyay is not a food enthusiast. He has medium amount of interest and knowledge in food. Since the news has been spread about the Government of Nepal prohibiting sale of junk foods in schools, his primary goal has been to remove the junk foods from school cafeteria.

3.5 Value proposition

After understanding the user/client persona, value proposition canvas is used as the tool for product development. As value proposition canvas demands an insight into the pains that our client faces in trying to accomplish their task, it helps to understand what kind of products or services are needed to address their pain.

According to our client persona, Mr. Kunwar, Mrs. Eberle and Mr. Upadhyay has a common goal of removing the consumption of junk food in the school as suggested by Government of Nepal. The personas not only want to remove junk food from school but also wants best quality food service in their school since they believe promotion of good health and good eating behaviour is an integral part of education.

Therefore, the customer's job has been listed as follows:

- To provide meals to the children during school.
- To provide best quality service in their school.
- To promote good health and food behaviour in school.
- To follow governments nutrition guidelines and suggestions regarding school meal.

By accomplishing the task, the target clients have following expectations, so-called gains:

- Don't have to worry about food service as school's management team can focus on their relative task.
- Great food and service that helps to enhance the schools brand image.
- Food service that aligns with the governments policy..
- Healthy children.

However, at the same time there lies problems for the personas before, during and after trying to accomplish the task. For instance, before accomplishing the tasks they have a problem of food poisoning due to poor handling of the food in the existing cafeteria.

In the similar manner, following are the problems that annoys Kunwar, Eberle and Upadhyay before during and after getting their job done:

- Food poisoning of the students.
- Childrens consuming junk food in school.
- Lack of skilled and well trained kitchen workers in market.
- Lack of knowledge regarding nutrition and food operation.
- Lack of implicable guidelines of the government regarding school meal.
- Healthy food options being more expensive in the market.

The customer's job, pains and gains complete the customer's profile. This allows to access the products and services in relation to the customer's pains and gains. After listing the products and services, it is required to reflect on how the listed products and services relieve client's pain and creates the gains. Multiple review is being done and explored whether all pains and gains of the client is being addressed by the pain reliever and gain creator of the offered products and services.

Terveys provides catering services to schools. Focuses on providing fresh nutritious foods from prepared with high food safety standards. Terveys offers to manage every aspect related to food in an educational environment. The service includes helping schools to integrate food education in the curriculum. And creating events and training programs to parents regarding foods and its importance in child development. Terveys understand the importance of child health in creating a healthy society. Therefore, Terveys operates in relatively low profit margin to provide healthy and fresh food to children in an affordable price. Figure 14 depicts different aspect of the value proposition of Terveys food services.

Following are the most valuable pain relievers that suggested products and services provide:

- Production of food following industry food safety standard.
- Delecious, attractive and nutritious food.
- Training and accessing kitchen workers regularly to meet the company's standard.
- Total controll over food service operation: an independantly functioning management.
- Services and foods based on inspirational global practices.
- Relatively lower profit margin.

As shown in the gain creator section of figure 14, Terveys chef has extensive experience in food service in best hotels in Scandinavian region. While the operation manager has been working with multiple INGO, s in child health programs. Furthermore, our revenue manager is a graduate in finance management from Finnish university. The clients can gain significantly through a competitive team taking total responsibility of food operation.

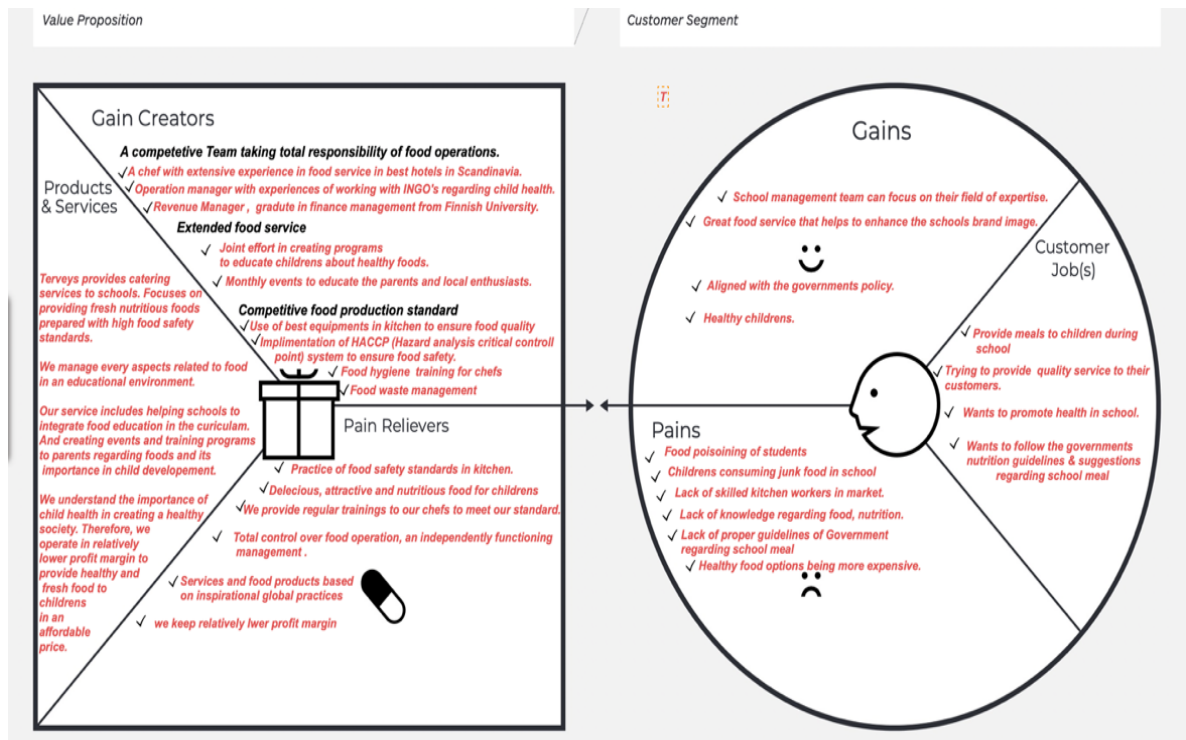


Figure 14: Value proposition canvas.

In addition to the competitive team, Terveys offers competitive food production standard. Use of best equipment in the kitchen ensures the optimum food quality. Implementation of HACCP (Hazard analysis critical control point) system ensures food safety. Food hygiene training and food waste management training for kitchen workers is provided to ensure the clients overall wellbeing.

Terveys services are not limited in the kitchen and cafeteria. Terveys also assists schools in creating programs to educate children about healthy foods and monthly events to educate the parents about the importance of healthy food in child development.

As mentioned earlier, it is important to synchronize the client's profile to value proposition map. As it can be seen in the figure 14, Value proposition Canvas has multiple fits in all areas. Customer jobs are addressed by the suggested products and service. The gains desired by the clients in customer profile find fits in gain creator section of value proposition. And Pains of the clients are alleviated by pain relievers of suggested value map.

3.6 Products and services.

3.6.1 Food menu principles.

The product principles aim to support schoolchildren consume adequate and nutritious school meal. These principle focuses primarily on children age group of 2 to 12 years old. Table 3, 4 and 5 shows the basic principles Terveys will follow in planning the school meal for children. As shown in the table, ultra-processed will not be sold or served by the company. While fried foods should be served as minimum as possible. However, there are traditional foods that are prepared by deep frying and this kind of food is to be served maximum of one time per 3 weeks. Children love to eat sweet foods, but ultra-processed desserts are to be prohibited. Instead, simple desserts like sweet yoghurt, puddings, cereals with milk and fruits-based desserts are to be served once every week.

It is also considered important to serve food diverse in culture. Therefore, foods influenced by different countries culture will be served once in every week. However, Indian, Pakistani, Bangladeshi and Chinese style of foods will not be considered as foreign food. It is because Nepal is already culturally close to these neighboring countries. Thus, the foods will not be adding much cultural knowledge through food. The food could be influenced by various cultures from around the world but will be prepared using locally available seasonal ingredients.

As important it is to provide culturally diverse food, it also important that the food is socially acceptable and respects the children's food habits and specific nutritional needs (coeliac disease, diabetes, anemia, allergies and others) at the same time.

Table 3: Food principle 1.

Processed foods	Fried foods	Sweets/ desserts	Foreign food	Balanced / Varied
Not part of the school meal.	Minimal serving	Simple desserts (yoghurt, pudding or cereals with milk) once a week	Should serve foreign meal once a week. Indian, Pakistani, Bangladeshi and Chinese mainstream food will not be considered as foreign food as these adds no cultural knowledge. While at the same time, should be socially acceptable.	The meal plan should respect children's food habits and culture, seasonality and regional agricultural diversification.
Ultra-processed foods are strictly prohibited.	Deep frying should be minimal. Deep fried food should be served maximum 1 meal per three-week cycle.	Ultra-processed desserts are prohibited.	Ingredients should be local/regional however the cooking technique, way of eating and stories behind it should be the additional cultural elements.	The meal plan should consider students with specific nutritional needs (coeliac disease, diabetes, anaemia, allergies and others)

Table 4 and 5 further breakdowns the food principles. Legumes are an important source of protein, dietary fibres and carbohydrate. Therefore, they are to be served 1-2 times per week with an approximate serving of 40 grams. Since legumes are high in protein content, they are to be seen as the replacement of animal protein such as meat and eggs.

Similarly, Cereals, grains and tubers are good source of healthy carbohydrates therefore they are to replace rice 2-3 times a week with approximately 40-60 grams of serving.

Unrefined sunflower oil is the preferred oil to be served in limited amount. Similarly, salt should be used in moderation and iodized salt should be used. As mentioned earlier, the amount of refined sugar is to be carefully moderated. Maximum of 65-80 grams of sugar is to be served per week in total. And adding sugar to enhance the taste of savoury foods should be avoided.

Table 4: Food principle 2.

Legumes	Cereals, Grains, Tubers	Fats & oil	Salt	Sugar
(40 g), 1–2 times a week.	(40- 60 g) 2–3 times a week.	1 teaspoon (5 ml)	use of iodized salt.	65–80 g sugar or unrefined cane sugar, total per week.
Must be seen as source of protein during menu development. (Hence, replacing meat products)	Must be seen as source of carbohydrate during menu development. (Hence, replacing the rice in meal)	Preference for unrefined sunflower oil for seasoning in limited amounts.	Should be used in moderation.	Avoid adding the sugar to enhance taste of savoury food.

Fresh and seasonal foods are to be provided everyday with an approximation of 80 to 100 grams. Regarding vegetables, at least one green and one red or yellow or orange colour vegetable is to be served. Vegetables such as carrot, tomato and cucumbers are also to be served in raw form every day. Meats and eggs are very expensive in Nepal. Therefore, it is best to wisely use the plant-based protein source. However, red meat, chicken, fish and eggs should be served 1 to 3 times a week. In case the price of meat is too high, at least 2 eggs are to be served every week. Finally, the dairy products are to be served 3 to 5 times a week. Cheese is not commonly consumed in Nepal. Therefore, 140 to 200 millilitres milk or yoghurt is to be served per servings. Milk and yoghurt can be served as beverage or can be used as cooking ingredient.

Table 5: Food principle 3.

Fruits	Vegetables	Meat and eggs	Dairy
(80- 100g) Everyday	(40- 60) g Everyday	Lunch = 1 portion red meat (70 g) or chicken (100 g) or fish (80 g) or 1 egg, 1–3 times a week	(140–200 ml) milk or yoghurt or 30 g of cheese, 3–5 times per week
Preference for fresh, local and seasonal fruit.	At least one green and one red or yellow or orange vegetable should be offered per meal. Vegetables should also be served in raw form everyday.	Meats provided should be offered without visible fat and skin, and in small pieces. If the price of meat is too high, at least 2 eggs must be provided every week.	Can be served as a beverage or cooked as part of the dish.

3.6.2 Food menu

Table 6, 7 and 8 are the menu that is to be implemented from the beginning of the operating month i.e., May 2021. Terveys will be serving various meals throughout the day to teachers, students and other staffs. But since this report's core is student meal, the presented menu is for the student's lunch focused on age group of two to 12 years old. Which will be served in a lunchbox/tiffin. These menus are carefully crafted with the application of the food menu principles discussed earlier. In addition to the food menu principles, the financial factors are also taken into consideration. The costing of the meals is further explained in detail under the financial projection, chapter 3.8.1.

Unlike in Finland and most other countries around the world, in Nepal students attend the schools 6 days per week (Sunday to Friday). As a result, a weekly menu consists of 6 meals for respective days. These menus are designed to follow a particular pattern to meet the needs of the students and cycles every 3 weeks as students eat in the school on a daily basis. This cycle is planned seasonally, this menu is planned for the summer season therefore it will last from May to July 2021.

In the tables 6, 7 and 8, the name of the meals is also mentioned in Nepali written in roman. These are written in roman Nepali form because they are typical Nepali dishes. Nevertheless, the menu can be clearly understood with the help of ingredients details.

Table 6: Food menu week 1.

Week 1	Meal name	Carbohydrate	Protein	Vegetables	Raw	Dairy
Sunday	Dahi chyura	Beaten rice	Yoghurt	Vegetable curry	Cucumber/ Carrot	Yoghurt
Monday	Egg roll	Wheat flour	Eggs	Spinach	Tomato/ cabbage	
Tuesday	Geda-gudi	Boiled potato	Mixed beans	Tomato salsa	Carrot	
Wednesday	Chicken Ratatouille	Potatoes	Chicken	Eggplant, zucchini & paprika	Carrot	
Thursday	Kheer	Oats	Millet, milk	Pickled cabbage, potato	Fruits	Milk
Friday	Daal, bhat	Rice	Lentil	Vegetable curry	Cabbage/ cucumber	

Table 7: Food menu week 2.

Week 2	Meal name	Carbohydrate	Protein	Vegetables/ meat/ egg	Raw	Dairy
Sunday	Roti saag & Raita	Wheat flour	Spinach	Green leaves	Tomato/ Carrot	Yoghurt
Monday	Boiled cruciferous	Boiled potato	Boiled egg	Cruciferous vegetables	Tomato	
Tuesday	Jawlo	Rice	Moong beans	Egg omelette	Tomato	
Wednesday	Chicken curry, roti	Wheat	Chicken	Green leaves	Cucumber	
Thursday	Kheer	Oats	Millet, milk	Pickled cabbage, potato	Fruits	Milk
Friday	Daal, bhat	Rice	Lentil	Vegetable curry	Cabbage/ cucumber	

Table 8: Food menu week 3.

Week 2	Meal name	Carbohydrate	Protein	Vegetables	Raw	Dairy
Sunday	Fruit salad	Oats	Peanuts	Boiled carrots	Banana, apple & kiwi	Yoghurt
Monday	Chicken fried rice	Rice	Soya bean, chicken	Diced vegetable	Tomato/ cabbage	
Tuesday	Haluwa tarkari	Wheat flour	Lentil	Vegetable curry	Cucumber	
Wednesday	Egg curry and corn polenta	Corn	Egg	Cabbage	Tomato cucumber	
Thursday	Kheer	Oats	Millet, milk	Pickled cabbage, potato	Fruits	Milk
Friday	Daal, bhat	Rice	Lentil	Vegetable curry	Cabbage/ cucumber	

The tables mention the carbohydrate, protein and dairy source of the meal. As can be seen that the source of carbohydrate, protein and vegetables are kept diverse throughout the week. The servings of animal source of protein and dairy ingredients are maintained at least twice a week. In addition, raw vegetables like carrot, cucumber, tomato, radish and cabbage are consistently provided with every meal.

In the menus, there are various days where vegetable curry is served it is not mentioned of what vegetables are to be used. It is done to be able to use the seasonally available

vegetables and also for the financial reasons. The open choices give company freedom to choose the ingredients of cheaper cost without having to promise a certain vegetable already in menu.

It can also be seen in the menu that (daal, bhaat) everyday Nepali meal is served on every Fridays of the week. And every week has a dish influenced from different country for instance, chicken ratatouille, boiled cruciferous vegetable, corn polenta and fruit salad with oats and peanut butter. These dishes either represents different way of eating, cooking or different ingredients. Furthermore, kheer is served every Thursdays of the week. Kheer is a traditional rice pudding sweetened lots of sugar. But the servings will be mildly sweetened keeping the added sugar content below 60 grams.

The menus should be very explanatory, and ingredients used in a particular dish should be listed properly and in details. The above listed format of the menu is a basic reference for three weeks period. A sample of detailed menu from 1st week Sunday and Monday is presented in figure 15 below:



TERVEYS LUNCHBOX

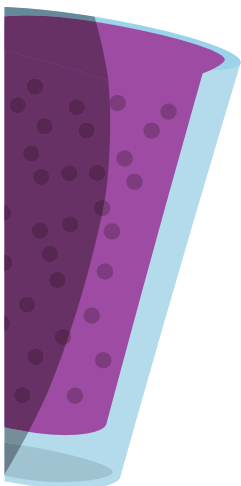


Sunday

Dahi-chyura: Beaten rice & Yoghurt.

Broccoli curry: Broccoli, Potato, Tomato, Onion, Garlic, Cumin, Ginger, Coriander, salt, oil, pepper.

Raw: Carrot Sticks & Cucumber ring.



Monday

Egg roll : Wheat flour, Egg, Onion, Garlic, Coriander, Lemon.

Spinach : Spinach, Potato, Tomato, Onion, Cumin, Ginger, Coriander.

Raw: Tomato slices & shredded cabbage

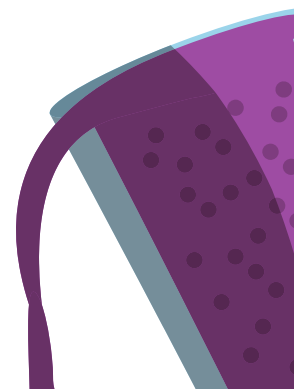


Figure 15: Sample menu.

3.7 Key resources and partners

The key resources for establishing the Terveys food service are kitchen and cafeteria premises in the school which in this case is provided by Junkiri planet. Followed by cash capital, the required estimation of the cash capital is the owner's equity itself. This capital is used to purchase other key resources in the form of service and assets. These include lawyer for the documentations needed for the registration of the company and assets such as kitchen equipment's and fixtures. The detailed elaboration of this topic can be found under chapter 3.9.2 (investment and funding projection). A webpage developer is also company's key resources, but it is not included in the plan for first few operational months.

The most important partners for Terveys are kitchen equipment suppliers, cleaning equipment suppliers, the school itself food ingredient suppliers and business communication platform providers.

Among many kitchen equipment suppliers in the town, PnP kitchen wares and Chef line kitchen wares are chosen to be partnered with. They are the fastest and most reliable suppliers. PnP mostly has the Chinese and Taiwanese made equipment while Chef line supplies Indian products. According to the nature of the product, necessary equipment has been purchased from both suppliers. The machinery products are purchased from Chef line, as Indian products has better availability of spare parts for service and maintenance and also customer support in Nepal. While equipment's like tables, furniture, fixtures, cutlery and cooking utensils are purchased from PnP, as Chinese and Taiwanese products were cheaper and offers variety of choices.

Purva Mart is an online supplier of cleaning products and equipment's. Having a close relationship with the owner of the company lead to the development of the partnership. On top of it, Purva mart has variety of selections and has a very reliable service and products.

Food suppliers has been chosen mostly based on the proximity with the partner school (Junkiri planet). It is necessary for the suppliers to be close to the school so the products can be delivered quickly. Bashyal food suppliers is chosen as a partner to supply all the food ingredients except the fresh vegetables as those will be purchased directly from local farmers in the farmer's market. Similarly, Xtensio has been chosen as the partner to provide business communication platform. The key partners of Terveys are listed below in Table 9:

Table 9: Key partners

Products	Supplier	Address
Kitchen equipment	PnP Kitchen wares	https://www.facebook.com/P-P-Kitchen-Ware-PvtLtd-535956693523396/
Kitchen machinery	Chef line kitchen wares	(https://www.facebook.com/chefline.np/)
Cleaning equipment	Purva Mart	https://purvamart.com
Client school	Junkiri planet	https://www.facebook.com/enteringjunkiriplanetschool
Dry food ingredient	Bashyal food suppliers	
Fresh food	Local farmers	
business communication Platform	Xtensio	https://xtensio.com/?fpr=a12931

3.8 Customer relationship and channels.

It is important to understand that Terveys provides B2B services in order to properly strategize how the company reaches to its clients to deliver the proposed values and how will the interaction be executed. Figure 16 attached below lists the company's customer relationship and channels.



Figure 16: Channels and customer relationships.

Since, Terveys operates within the facility of the school itself the most cost-efficient channels to reach our client is through personal meetings. Monthly meeting will be organized in between the Terveys and Junkiri planet to assure that our products and services meet the proposed value. The invoicing is to be done through the company's email and banking systems.

However, the channel we reach to our potential future clients will be through company's website. Furthermore, meetings, organized events and proposal to visit our ongoing operation (Junkiri planet cafeteria) will also be necessary. Terveys does not plan have its presence on social media but after the website is ready search engine optimization would be necessary. To ensure our clients satisfaction and to make sure that the Terveys is adding value to the school's service, various feedback sessions with the clients and their customers and employees will be organized. Visual material such as the food menu are also the important channels for Terveys.

3.9 Financial projection

3.9.1 Meal costing

The recipe cost breakdowns are a big part of food business. It is unlikely to have the exact same food costs throughout the time due to the price fluctuation caused by seasons, economy, suppliers, etc., Nevertheless, it is essential to know the how each ingredient can impact the overall cost of the food servings.

Table 10 and table 11 below are the assembly of the food ingredients according to the recipe. The recipe is first tested while simultaneously being measured, adjusted and documented in order to map the cost as precisely as possible. There are various steps and process involved in creating a final portion. The calculations related to the earlier stages of the preparation of breakfast and meal has been attached as appendix 5 and 6 respectively. Furthermore, the cost of raw material as agreed by our supplier (Bashyal food suppliers) are also attached as in the appendix 4.

Table 10: Cost calculation of breakfast.

Ingredients	Amount (gram) Per Portion	Percentage	Cost
Porridge mix	50	28 %	3,97
Marmalade	15	8 %	2,40
milk	25	14 %	2,00
Water	50	28 %	0,00
Banana	36	20 %	1,67
Sugar	2	1 %	0,75
Total	178	100 %	10,78
Price fluctation			1,22
Total cost			12,00

Porridge will be served every morning in the school. However, banana will be replaced by other fruits according to season, price and market availability. The table 10 is the costing of the breakfast. As can be seen, the total quantity served is 178 grams which costs Rs 10,78. Further Rs 1,22 is added to adjust the foreseen price increase in dairy product. Thus, the total cost amounts to Rs 12,00 per serving.

As mentioned in the theoretical section chapter 2.1, Dhal, bhaat and tarkari (Rice, Lentil and vegetable) is the regular Nepali meal consumed twice a day as lunch and dinner. This Table 11 is the cost calculation of the final assembled meal in addition to chutney. Chutney can be translated as sauce in English.

As mentioned earlier, a detailed recipe including the ingredient cost and quantity is attached as appendix 5 and 6. Table 11 shows that the total serving quantity is 500 grams, which costs Rs 19,08. Of which, rice amounts to 60%, lentil 25%, vegetable curry (12%) and chutney (3%). The serving of 500 grams is an estimated average of the adult's and children's consumption. This meal is called

Table 11: Cost calculation of daal, bhat and tarkari (lunch, dinner and tiffin box).

Items	Per Kilo Price	% Per portion	Amount (Grams) Per Portion	Cost per Portion
Rice	20,40	60 %	300	6,12
Lentil	41,70	25 %	125	5,21
Vegetable curry	106,20	12 %	60	6,37
Chutney	91,70	3 %	15	1,38
Total		100 %	500	19,08

Apart from breakfast, lunch and dinner, Khaja (snacks) and tiffin box (Student's lunch subscription) are also served in school. Dhal, bhat and tarkari is served every Fridays as a school meal and its food ingredient constitutes, associated cost and serving portions of the snacks and tiffin box are maintained to be similar of similar costing. This is done to keep the price consistent and inventory manageable while making the food production easier. Therefore, the costing of daal, bhat and tarkari gives us the approximate cost of all the meals except breakfast. Hence, the same cost is applied to the lunch, dinner and snacks as well. However additional Rs 5 is applied to the student subscription, this is clearly shown in table 12 below:

Table 12: Cost of meals.

Meal	Ingredient Cost per portion
Breakfast	12
Lunch	20
Tiffin box + Fruits	25
Khaja	20
Dinner	20

3.9.2 Investment and funding projection

The initial total investment (shareholder's equity) in Terveys is Rs 5,00,000 and table 13 below presents how need for that sum of money arose.

Table 13: Calculation of needed amount.

INVESTMENTS	If applicable, purchase price of the business	425 000
	Initial expenses	15 000
	Means of production/IT	
	Contributions in kind (already existing tools etc.)	
	Mobile phone	
	Installation work	
	Car	
	Furniture	
	Renovation	
	Office material	5 000
WORKING CAPITAL 1-3 MONTHS	Website, brochures	
	Office rent/rent deposit	
	Apparatus / leasing	
	Entrepreneur's own income	
	Employees' wages	12 000
	Other working capital expenditure	3 000
CURRENT AND LIQUID ASSETS	Initial stock	
	Cash reserve	40 000
MONEY NEED IN ALL		500 000

As can be seen above, Rs.4,25,000 is the major investment required to purchase of new kitchen equipment and also the one's currently available in canteen of Junkiri Planet (Client). These are equipment such as Kitchen workstations, tables, cold storage, freezer, stoves, food containers and more. Furthermore, out of Rs 5,00,000, Rs 15000 will be spent on lawyer's fee and legal charges to register a company in Nepal. Furthermore, 5000 will be spent on office materials. The remaining 55000 will be used in many things over the month of May such as initial expenses (Variable and fixed costs), such as office material, employee wages, and purchase of food ingredients.

Table 14: Source of money (Financing the initial costs).

PAID-UP CAPITAL	Own apparatus	
	own investment	250 000
	Share capital	250 000
BORROWED CAPITAL	Bank loan	
	Other loan(from friend, family etc.)	
	Others (for example credit limits etc)	
Money sources in all		500 000

The table 14 verifies that the need for money is addressed by various sources. When starting up a business activity, it is essential that "Need for money = Money source". As can be seen in the table, the company is financed by equity instead of debt, the source of the required money is own investment. Hence, difference between the need for the money and money source is Rs. 0.

3.9.3 Cost accounting

Table 14: Calculation of fixed cost

Chef's salary	12000
Water	500
Electricity	2000
Rent	3000
Micellenious	3000
Current Fixed cost	20500

The Fixed cost for May is forecasted to be Rs 20,500 which is sum of cost such as Chef's salary for May, water, electricity rent and miscellaneous cost for a month (May).

Food being a perishable item and the market price of food ingredients being unstable, it is difficult to estimate the exact amount of ingredients costs for the forecasted amount of meal to be served. Therefore, the variable cost is calculated by multiplying ingredient cost per portion of the meal and projected unit sales in May of the same meal. The total variable cost is sum of all the variable cost of meals making it Rs 42,000 in May.

Table 15: Calculation of Variable cost

Meal	Ingredient Cost per portion	Unit sales per month(May)	Variable cost (May)
Breakfast	12	210	2520
Lunch	20	300	6000
Tiffin box + Fruits	25	624	15600
Khaja	20	624	12480
Dinner	20	270	5400
			42000

3.9.4 Pricing of the meal.

Table 16: Meal pricing.

Meal	Ingredient Cost per portion	Added Fixed cost (May)	Added profit margin (15%)
Breakfast	12	15,94	18,33
Staff Lunch	20	26,56	30,54
Student Lunch + Fruits (Rs 5)	25	33,20	38,18
Staff snacks	20	26,56	30,54
Dinner	20	26,56	30,54

After the costing per portion of different meals which is variable cost per portion, first step is to add fixed cost ratio to the variable cost.

This calculation is performed as follows:

- Fixed cost= Rs 20500
- Variable cost= Rs 42000
- Total cost= Rs 62,500
- Fixed cost ratio out of total cost = $(20500/62500) * 100 = 32.8\%$

32.8% is added to the cost per portion. As shown in the table 16 Rs. 12 (Ingredient cost per portion of breakfast) * 132.8% = 15,94 (Added fixed cost price of breakfast). Finally,

the price of the meal is calculated by adding profit margin of 15% i.e., $15,94 \times 115\% = 18,33$ (Final price of breakfast). Pricing of all the meals is calculated in the similar manner.

3.9.5 Revenue and income statement

In order to make income statement, expected revenue of the month (May) is required which can be seen calculated in table 17. Unit sales per day is the expected amount of meal sales per day during the first operational month. These expectations are based on the previous consumptions of meals in Junkiri Planet (Client).

Table 17: Calculation of revenue.

Meal	Unit sale per day	Unit sales per month (May)	Selling price	Revenue
Breakfast	7	210	18,3264	3848,544
Staff Lunch	10	300	30,544	9163,2
Student Lunch + Fruits/Snacks (Rs 5)	24	624	38,18	23824,32
Staff snacks	24	624	30,544	19059,456
Dinner	9	270	30,544	8246,88
Total	74	2028		64142,4

Unit sales per month is calculated by multiplying expected number of days staff/student will eat the meal. For instance, breakfast and dinner will be consumed everyday by four school staff and three boarding students as they live in the school, hence, 7 portion per day * 30 days a week = 210 breakfast sales in a month. Similarly, student lunch will be consumed 26 days in a month since school days are 6 days per week in Nepal, hence, 24 portion * 26 days = 624 school lunch. Thus, Unit sales per month * selling price = Revenue.

The revenue in May is expected to be Rs 64142,40.

Table 18: Forecasted income statement for the first operational month (1st May to 31st May 2021).

Sale/revenue	64142,40	100 %
COGS (-)	42000,00	65 %
Gross margin	22142,40	35 %
Operational expenses (-)		0 %
Chef's salary	12000	19 %
Rent	3000	5 %
Water and electricity	2500	4 %
Micellenious expenses	3000	5 %
	20500,00	32 %
Income before tax	1642,40	3 %
Tax (-)	229,94	0 %
Net Income	1412,46	2 %

Table 18 is a forecasted income statement or profit and loss statement; it shows company's net income or loss and all the expenses during a particular period. According to this income statement, Terveys is expected to have Rs 1412,46 net income in May. In context to Terveys, the cost of goods sold (COGS) and operational expenses are variable and fixed cost respectively.

As can be seen in the table 18, the Cost of goods sold is the biggest expense of the company, rounding up to 65% of the total revenue. Followed by operational expenses accounting to approximately 32% of the total revenue. And the income tax accounts to less than 1%. Resulting total net income to 2.20% of the total revenue.

3.9.6 Balance sheet

Table 19: Forecasted balance sheet (31st May 2021)

Assets		Liability	
Current Assets		Liability	0,00
Opening inventory	0,00		
Bank account	56412,46		
Inventory	8587,54	Shareholder equity	500000,00
Non-current Assets(Fixed Assets)			
Machinery and equipment	420000,00		
License	15000,00		
Total Assets	500000,00	Total Shareholder equity and liability	500000,00

Balance Sheet above shows the financial position of Terveys. Since, Terveys is a new company, there is no opening inventory in the balance. Hence, under current assets, there is bank account and inventory. The Net income of Rs 1412,46 shown in income statement will be reinvested and hence will be deposit into bank account making it Rs 56412,46 at the end of the month. It is common to have left with the closing inventory in a food business. However, the sells amount forecasted in this report is based on precise calculation of the require ingredients. Thus, this leaves no closing inventory amount.

The non-current assets (fixed assets) are comprised of machinery and equipment worth of Rs 4,20,000. As mentioned earlier during the calculation of needed amount, the lawyer's fee and the legal fee for the company registration equivalents to Rs 15000. This sum is represented as "Licence" under the non-current assets as well due to the fact that license adds value to the company. Regarding the liability and equity side, since the company in

financed by equity, it only has Rs 5,00,000 as shareholder equity and no liability is expected to be incurred by company.

3.9.7 Cost volume profit (CVP) and break-even point

The process of CVP analysis and calculation of breakeven point has been broken down into 4 steps.

Table 20: Calculation of weighted average contribution margin.

Step1: Calculating weighted average contribution margin						
	Breakfast	Staff Lunch	Student Lunch+Fruit	Staff snacks	Dinner	Total
sales price per unit	18,33	30,54	38,18	30,54	30,54	148,14
variable cost per unit	12	20	25	20	20	97
Contribution margin per unit	6,33	10,54	13,18	10,54	10,54	51
Contribution margin ratio	35 %	35 %	35 %	35 %	35 %	35 %
sales mix in unit	10 %	15 %	31 %	31 %	13 %	100 %
Weighted-average contribution margin per unit.	0,66	1,56	4,06	3,24	1,40	10,92
Weighted-average contribution margin per ratio	4 %	5 %	11 %	11 %	5 %	35 %

The first step/the table 20 shows the calculation of weighted-average contribution margin. As it was explained in theoretical framework, to do the CVP and breakeven point analysis, one must first calculate contribution margin per unit, subtracting variable cost per unit to sales price/unit. However, in case of companies like Terveys who offer various sales-mix with different price range and different variable cost, the first step would be to calculate weighted-average contribution margin of all different product. It is the initial calculation performed to acquire the break-even point and required sells in unit to achieve the target profit.

As can be seen in the table 20, there are different sales price and variable cost of different meals offered by Terveys; Breakfast, Staff Lunch, Student lunch + fruit, Staff snacks and Dinner. Henceforth, each meal generates different contribution margin and ration. For instance, the contribution margin generated by one portion of breakfast is Rs 6,33 whereas one portion of staff lunch generate Rs 10,54 and so on. And sale-mix in unit is the ratio of a particular meal out of total meal served. For example, the estimated total meal serve in May is 2028 units, breakfast served will be 10% out of total.

Finally, the weighted average contribution margin per unit and ratio is generated. This is achieved by the equation: "Weighted-average contribution margin per unit = Contribution margin per unit/sales mix in unit "and "Weighted-average contribution margin ratio = Contribution margin ratio/sales mix in unit".

Table 21: Breakeven point for package of the meal.

Step 2: calculating the breakeven point in unit for package of the product	
Required sales in unit	Fixed cost+targetprofit/Weighted-average contribution margin per unit. 1877,57
Required sales in Rupees	Fixed cost+target profit/ weighted-average contribution marfin ration 59384,67

The second calculation presented in the table 21 will answer the question; If Terveys sales its product in for the calculated price, how much should it sale to achieve breakeven point? The required sales in unit to achieve break-even point by company is 1877,57 unit. It is the breakeven point in unit for package of the product. As can be seen in revenue and income statement topic, the expected sales of the company for first operating month are 2028 units in total. Hence, the net income of Rs 1412,46 in income statement. During the calculation of breakeven point, the target profit is always kept zero since there is no profit in breakeven. Therefore, in above formula the target profit is Rs 0. Hence the required sales in Rs 59384,67. Meaning that Terveys should sell 1877,57 units or should make a revenue of Rs 59384,67 to achieve breakeven.

Table 22: Breakeven point for individual meal.

Step 3: Calculate the breakeven point in units for each product in the sales mix "package."	
Breakeven sales for Breakfast	194,42
Breakeven sales for Staff Lunch	277,75
Breakeven sales for Student Lunch	577,72
Break even sales for Staff Snacks	577,72
Breakeven sales for Dinner	249,97
	1877,57

This required total unit sales is broken down to the individual meal respectively by using the sales mix percentage (Table : Calculation of weighted average contribution margin). The step 3 presented as table 22 shows the unit sale for each product to achieve breakeven point.

Table 23: Required sales when with target profit.

Required sales in unit	Fixed cost+targetprofit/Weighted-average contribution margin per unit.
	2793,46
Required sales in Rupees	Fixed cost+target profit/ weighted-average contribution marfin ration
	88352,81

Finally, the intended calculation can be achieved i.e., how much sales in unit and revenue must be made to make the intended net profit. Assuming that Terveys wants to make Rs. 10,000 as net profit during the first operating month, the total of 2793,46 unit of sales is required. Similarly, revenue of Rs 88352,81 should be generated in order to make the net profit of Rs 10,000.

Table 24: Sales mix operating income

Step 4: sales mix operating income							
	Breakfast	Lunch	Tiffin box	Khaja	Dinner	total	
Sales revenue	5301,17	12621,83	32816,76	26253,41	11359,65	88352,81	
variable cost	3471,17	8264,69	21488,19	17190,55	7438,22	57852,81	
Contribution margin	1830,00	4357,14	11328,57	9062,86	3921,43	30500,00	
Fixed cost						20500,00	
Operating income						0,00	

The above table 24, presents the sales mix/breakeven operating income. Achieving breakeven suggest that after the deduction of variable cost and fixed cost from sales revenue, company have neither profit not loss i.e., operating income = Rs 0,00.

3.10 Swot Analysis

As depicted in the figure 17, the main strength of the company is its skilled management team. Both founders of the company have experiences in their relative fields covering the food operation management to a project team leadership role in child-oriented programs. This experience has helped in creation of company's values covering the food production and team management aspects of the business. One of the main values "promoting health through schools" properly aligns with the goals of Government of Nepal. Therefore, the business has a social and impactful selling point in market. The services and products offered by Terveys provides the solution to the unaddressed problem or pain of the community. The hospitality, service and food market are growing in Nepal and is very

competitive. However, due to the lack of profit margin in serving school meal the potentiality of this area has been untapped.

The operation of the Terveys is in Butwal, Nepal, which is also the hometown of both the founders. Therefore, partners and clients chosen to work with are friends or family. This adds as a perk to the company. Beside current partners and clients, the founders of the company have a very good personal relationships in the town. Another strength of the business is that the company will have no debt during the start-up as the need for money is financed by the founder's equity itself.

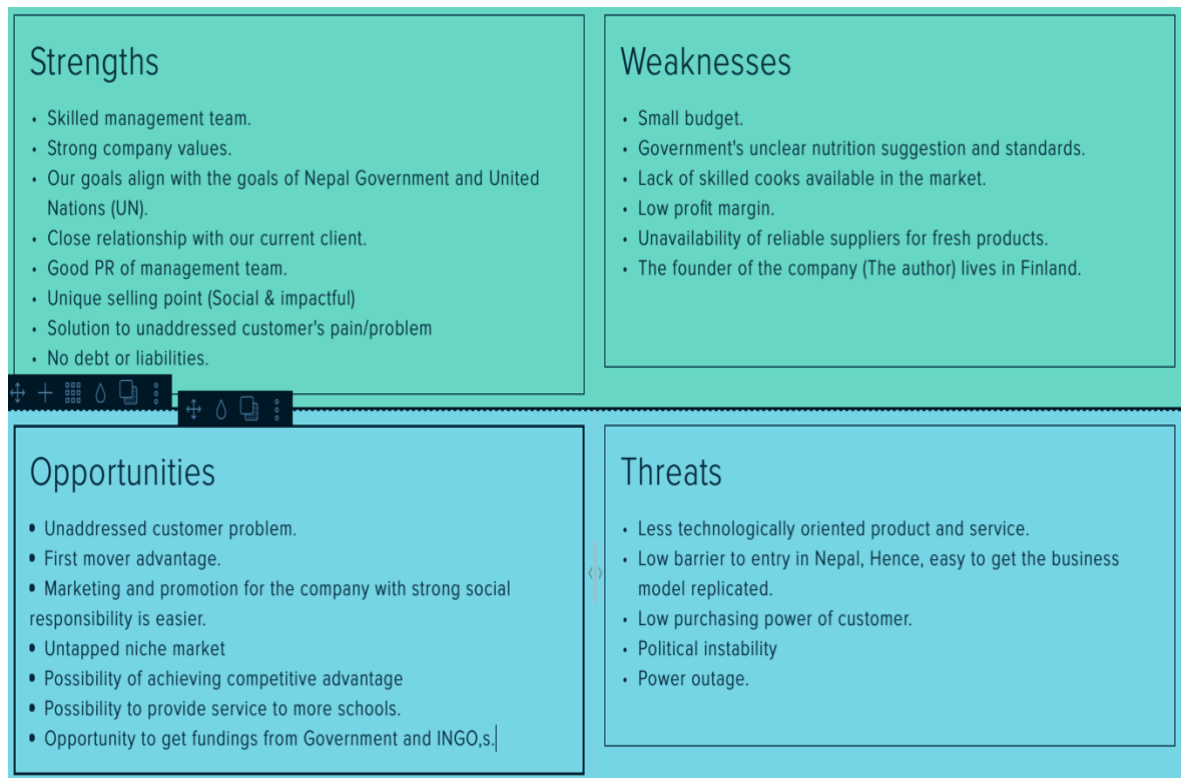


Figure 17: SWOT analysis of Terveys.

The main weakness of the business is the small budget. This limited budget might not allow for proper development and designing of aesthetic aspects of the cafeteria. The lack of Nepal government's clearly applicable nutrition suggestions and standers makes it difficult to create menus. This created a need for the company to refer to the guidelines of other countries which might cause difficulties in the future to apply into a practical menu due to the differences in food culture and food ingredients. To overcome this challenge, hiring a food nutritionist is set as a priority goal.

The lack of skilled cooks in the local market is also a weakness of the company. Terveys requires the cooks to have a knowledge of proper food handling and hygiene maintenance. To fill this gap, Terveys will have to provide a training itself or outsource the training. Either way, this will require more time and resources. This problem is more impactful because the products and services of Terveys have relatively low profit margin in compared to other food businesses such as restaurants, clubs, bars and hotels.

Terveys staff will have to go to the farmers market for the purchase of fresh vegetables. Therefore, the possible weakness also could be the lack of reliable suppliers of the fresh products. Another weakness is that one of the founders of the company (the author of this report) lives in Finland. This can cause many problems like miscommunication and overall disruption in execution of the plans and projects. Therefore, the author has a rough plan to move back to Nepal within a year.

The main opportunity of the business is the agreement signed with the client (Junkiri planet). The business concept of the Terveys offers to address the unaddressed customer's problem. Therefore, the "first movers' advantage" is the perceived opportunity for the company.

Child health and wellbeing is a global concern. Even though Nepal is on the road to addressing this, the actions are not fast enough. Therefore, marketing and promotion for the Terveys with the sense of strong social responsibility is easier. This also provides the opportunity to receive the funding from the government of Nepal and international non-governmental organizations working for child welfare. Even though the child wellbeing is important for Nepal's economy as it is for any other countries in the world, addressing child health through food in an educational setting is an untapped niche market of Nepal. And this is a great opportunity for the company.

Despite the Nepali food service market being competitive, the school meal service has not yet been recognized as potential business opportunity possibly due to the lower profit margin. Having very few or no similar business at all provides Terveys a possibility of achieving competitive advantage. Therefore, the possibility of providing the services to other schools in the town in the near future is an important opportunity.

The barrier to entry for the businesses is low in Nepal, thus it is easy to get the business model and products and services of Terveys replicated easily. It is also a threat that the company's products and services are not technologically oriented. Furthermore,

purchasing power of the Nepali consumers is very low this can lead to the obstruction in purchase despite the need of the product and service. It is also the cause for the low profit margin.

The politics of the country is not stable even though it has had many political reforms in the recent years. There are frequent nationwide protests, some of which results to the partial or a complete lockdown very often. Schools are mostly vulnerable of these lockdowns. Therefore, the instability in politics of Nepal is a major threat to the business. Furthermore, there are also frequent power outages due to national shortage of the electricity. This can cause the problem in maintaining food standards as the cold storages for fresh products need frequent supply of electricity.

4 Planning and implementation of the project

The planning and implementation of the project's process will be reviewed in this chapter. The background of the project, its stages, schedule and limitations are the contents of this chapter. Being a product-oriented thesis, limitations and risks will be observed of the final product and also from the point of view of the project's process. Below the chart of the used tools and research area and their interconnections can be seen.

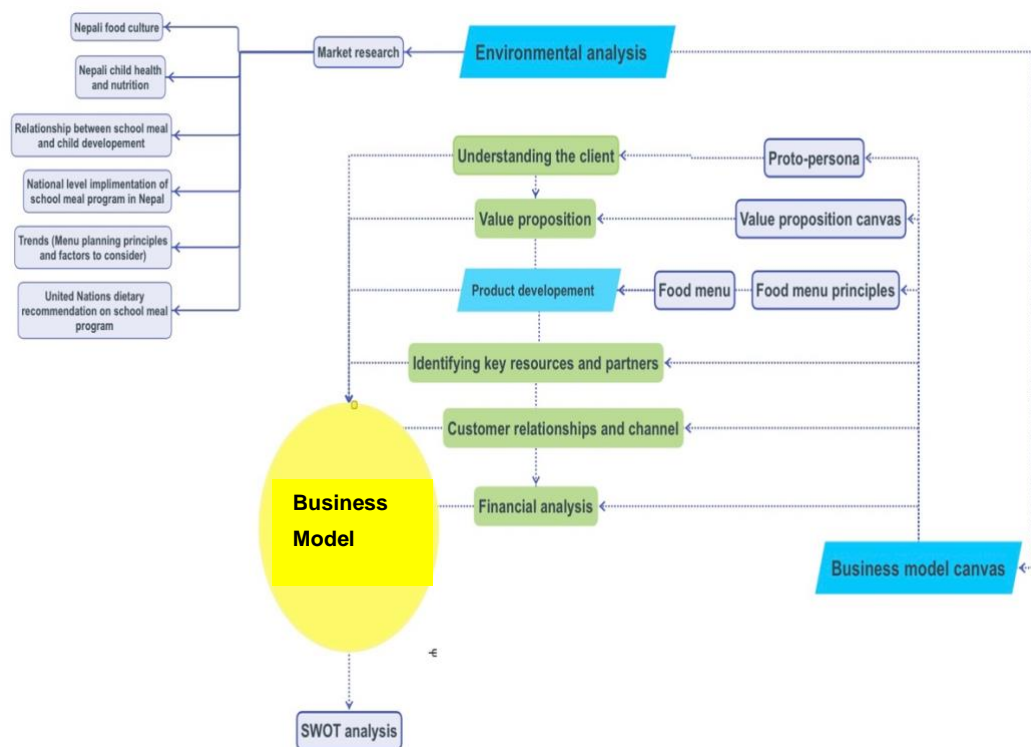


Figure 18. Product development map.

4.1 Background of the project

The motivation for the business has started during authors recent trip to Nepal. Author travelled to Nepal to help setup a newly established school by his brother. During three-month time period spent in a school environment, author realized the need of a proper cafeteria in the school. The attention towards the food service of school is gained due to the author's professional background. The author of this thesis has an educational background of food production and has worked in many hotels and restaurants since the year 2013.

Hence, the decision has been made to write a thesis on the business itself. This thesis provides the opportunity to look into various environmental and organizational factors to justify the need of the business that the author wants to establish. And also, to methodologically develop a business model and products.

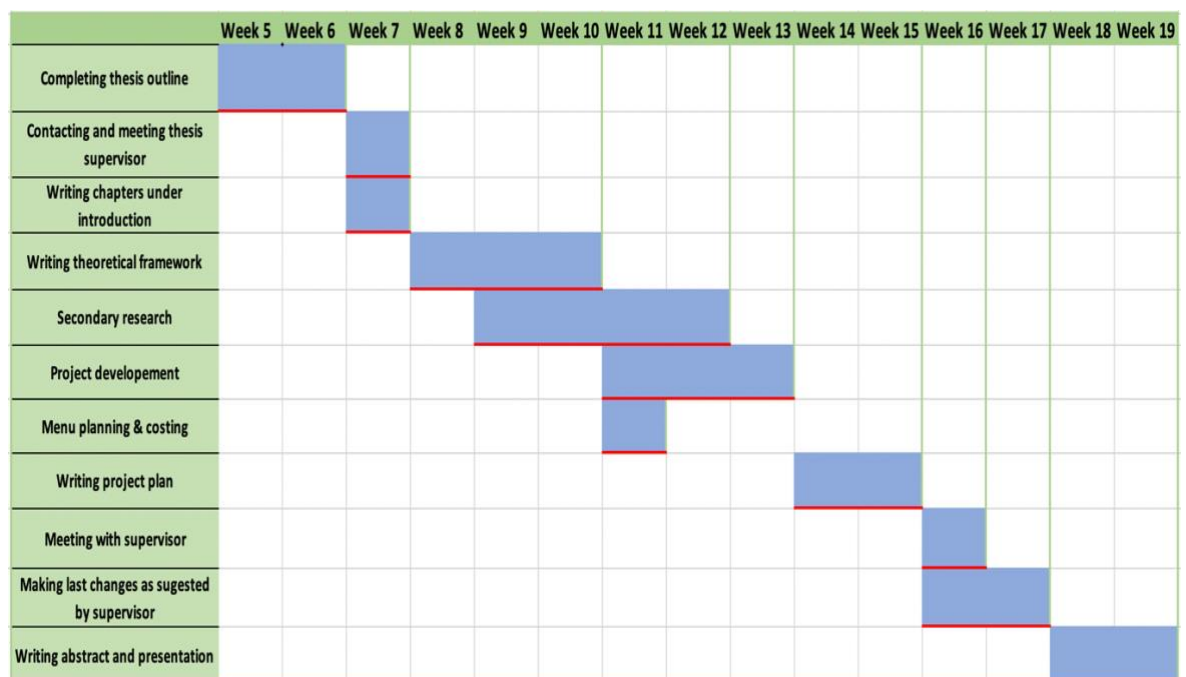
4.2 Project plan and process

The whole thesis process is divided into the four sections: introduction, theoretical framework, business plan and planning and implementation. The whole thesis process took about three months and half months. The authors did not face any major challenges during the thesis process, due to their well-planned schedule and a priority to graduate.

This thesis began with the secondary research for the gain of environmental insight. At the beginning the author's objective was to get insight into the Nepali food culture. However, during the research, lights were shed on various other factors that the author did not think of in the initial stage. A simple research of when, what and how Nepali people eat lead to deeper environmental analysis. This led to the deeper understanding on school meal and child health in context to Nepal and also in global context. Initially the decision was to use the PESTEL analysis tool to analyse the environment. However, during the development it was decided to approach the environmental analysis through child education, health, nutrition and food perspective. Nevertheless, this approach still covers most of the elements in PESTEL analysis tool. On the other hand, SWOT analysis tool was seen as a better fit to analyse the business model in the end.

After the insight into the environment, the first step for the product development is to understand the user/client, and so has been done. The customer target was very clear since the beginning of the thesis process. This has reduced the need to use various tools for market segmentation and identifying the target customers. The service is aimed towards the primary and pre-primary level schools. Since the case business is a b2b business model, a b2b user persona was needed to be created. However, it was understood that user persona can require a quantitative or qualitative research. Therefore, it was concluded to create a proto persona. The author used his imagination, past experience and interactions with the principals of schools he has known personally to create the Proto Person. The Proto Persona tool was used as a tool to gain the understanding of the client and their needs.

The Proto persona is followed by the value proposition, food menu strategy and business model canvas. The author mostly used the knowledge and experience received during the



4.3 Limitations and risks

One of the greatest limitations of this paper has been the medium of the thesis supervision. It is to be made clear that enough time, effort and support has been provided by the supervisor. In the authors opinion, the limitation lies in the medium of communication. In the author's opinion it would have been more productive in a normal circumstance; with a face-to-face meeting instead of online meetings.

Another limitation of this research process has been writing this report in accordance with the thesis guidelines. More than anything, the author's personal purpose of writing this paper is for the company's use itself. This paper is meant to be extended and further developed along with the company itself. Most importantly, this paper is meant to be used as a guide and tool for the future employees of the company. Having to write this paper in accordance with the thesis guidelines created a bias in the authors perception: "how he wants to do" versus the "how he has to do". In a different circumstance, this paper would have been more visual and graphical and would be able to report not only the people with academic background but also to the actual future team of the company who might not have similar background. On the other hand, having to comply with the thesis guidelines did facilitate the author with many different thought processes and ideas which is valuable in many ways.

Unavailability of research and relevant data of Nepali consumer market has been encountered during the research process. It is known that the Nepali consumer market is changing but finding the justifications to claim the changes were mostly ineffective. Therefore, studies like "purchase decision drivers" conducted by Deloitte in the American and European market has been used to understand the shifts in consumer's food value and divers of the purchase decision. The absence of sociocultural, geographical and economical relevance can compromise the validity of this study. However, despite these irrelevances, the outcomes of the Deloitte's study are applicable to create the food menu principles and menu of the Terveys. Besides, the application of this study can help to create a competitive and future oriented product in Nepali market.

It is understood through the market research that there are social, economic and educational dynamics to the problem of school meal in Nepal. Therefore, services like co-operating with the client to integrate the food education in the classroom and monthly events aimed towards the parent's awareness of healthy food has been proposed under chapter 3.5 (Value proposition). On the contrary, only the food products have been elaborated in detail under the chapter 3.6 "Products and services" and further, considering

that these services need a detailed work on its own and requires time and resource to develop. It is also noted that the value proposition canvas is a visual framework for brainstorming the value proposition of the company and it is not necessary that every outcome of its usage is meant to be further developed and implemented. Additionally, there would be certain costs associated with these services, therefore, it would impact the financial analysis to be less inaccurate. Furthermore, as mentioned, these services are to be developed in collaboration with the school itself which depends on whether or not the school management is interested.

Limitations also existed during the cost calculation of the product. The first and most important reason being the unstable market of Nepal; prices of food ingredients provided by the supplier can be hugely fluctuated already another day. With the profit margin on the products set low, inaccurate costing can either lead to the diminished value to the client or failure to retain any profit for the company. Longer period of service and experience will provide price data of ingredients which can be averaged to represent a more accurate cost of the food. Secondly, the costing of many meals (Lunch, dinner and snacks) is represented by one meal costing. This had to be done due the limited time to train the kitchen workers about the cost calculation. The cost calculation has been accomplished by online assistance by the author (Chef) while being in Finland and Terveys's chef executing the cooking in Nepal. This has been challenging yet a distinct experience in author's cooking career.

5 Discussion and conclusion.

This thesis helped to develop a business model and to create the product for the company to be established. The creation of the product was done through the process of deriving a business model. Therefore, thesis consists of different parts stages of creating business model. Through the help of various business tools, and secondary research the company and the environment of operation is analysed thoroughly. In the business development chapter tools like User Persona, value proposition canvas and business model canvas are introduced. This chapter also includes the basic theory on food menu strategy followed by the financial analysis and SWOT analysis. The chapter financial analysis explains how the cost calculation and pricing of the products directly affects the company's profitability.

The chapter 3.2 and 3.3 shows the result of the secondary research of market, this provides a deeper image on the markets the company is operating in. Market research into Nepal's child health, its relationship with the educational environment and the governments goals provides the information on scope, barriers and opportunities of the business. Also, the understanding of the consumers trends and various dietary recommendations helps in menu development.

The closer look at the environment has helped to see that there is a need for a business focused in serving children in school in Nepal. It has been in the interest of government of Nepal and its local bodies to provide qualitative and quantitative food to the children at the school. However, it has been challenging task to the government. This report shows that it equally challenging for Terveys as well, since the company will have to operate with significantly lower profit margin due to the low purchase power of the consumer. Under the cost-effective circumstances it is difficult to provide nutritional food without compromising the tastiness of the food. Specially, considering that the children are used to unhealthy snacks high in processed carbohydrates, sodium, sugar and fat, it is important that the meals served look attractive and taste attractive.

The financial analysis reveals that the business would not be very profitable in the beginning, but the breakeven point and certain amount of profit is easily achievable. Due to the low sales volume, it could be very hard to achieve growth of the company unless the company provides services to the other schools in town. The expansion of the business to other schools will increase the volume of the sales unit and thus, provide greater profit.

However, it is also to be noted that the cost associated the establishment of the company is very low. And these costs are financed by the author himself and his business partner. With significantly low amount of investment, it provides the author an opportunity to practice what has been learnt during the study at Haaga-Helia university of applied sciences. The author has looked at the business idea critically from all perspectives and from a purely professional point of view. This process has also educated the author in the size of the task required to create a business plan and create a product.

The essential aim of this thesis was to understand the Nepali market of school meal which will provide information to create the business model and right food product for children in Junkiri planet school. Then, make use of various business tools during this process. Most importantly, the aim of this thesis was to guide the company during the initial and in the future development. The author believes that theoretical part of the thesis proved itself to fit well for the development of the project. All tools and research methods that were discussed in the second chapter were useful and beneficial for creating the product.

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Appendices

Appendix 1: Company Logo.



Appendix 2: Business model canvas of Terveys food services.



Appendix 3: Summary of nutrient-based standards for school meals in respondent countries (Food and Agriculture Organization of the United Nations, 2019, 58).

	Energy	Protein	Fat	Sat fat	Carbohydrates
Bolivia (Plurinational State of) ^a	Lunch/snack = 30% of total requirement (6-12 y = approx. 455 kcal)	Lunch/snack = 30% of total requirement (6-12 y = approx. 8 g)	Lunch/snack = 30% of total requirement (6-12 y = approx. 16 g)	-	Lunch/snack = 30% of total requirement (6-12 y = approx. 69 g)
Brazil ^b	1 meal = 20% of total requirement (6-10 y = approx. 300 kcal 11-15 y = approx. 435 kcal) 2 meals = 30% of total requirement (6-10 y = approx. 450 kcal 11-15 y = approx. 650 kcal) 3 meals = 70% of total requirement (6-10 y = approx. 1000 kcal 11-15 y = approx. 1500 kcal)	1 meal = 20% of total requirement (6-10 y = approx. 9.4 g 11-15 y = approx. 13.6 g) 2 meals = 30% of total requirement (6-10 y = approx. 14 g 11-15 y = approx. 20.3 g) 3 meals = 70% of total requirement (6-10 y = approx. 31.2 g 11-15 y = approx. 46.9 g)	1 meal = 20% of total requirement (6-10 y = approx. 7.5 g 11-15 y = approx. 10.9 g) 2 meals = 30% of total requirement (6-10 y = approx. 11.3 g 11-15 y = approx. 16.3 g) 3 meals = 70% of total requirement (6-10 y = approx. 25 g 11-15 y = approx. 37.5 g) 15-30% of total calories	<10% of total energy	1 meal = 20% of total requirement (6-10 y = approx. 48.8 g 11-15 y = approx. 70.7 g) 2 meals = 30% of total requirement (6-10 y = approx. 73.1 g 11-15 y = approx. 105.6 g) 3 meals = 70% of total requirement (6-10 y = approx. 162.5 g 11-15 y = approx. 243.8 g)
Cabo Verde ^c	20% of total requirement	20% of total requirement	No information	No information	No information
Colombia ^d	Snack = 20% of total requirement (7-12 y = approx. 397 kcal) Lunch = 30% of total requirement (7-12 y = approx. 596 kcal)	Snack = 20% of total requirement (7-12 y = approx. 13.9 g) Lunch = 30% of total requirement (7-12 y = approx. 20.8 g) Per meal: 12-14% of calories	Snack = 20% of total requirement (7-12 y = approx. 13.2 g) Lunch = 30% of total requirement (7-12 y = approx. 19.8 g) Per meal: 28-32% of calories		Snack = 20% of total requirement (7-12 y = approx. 55.6 g) Lunch = 30% of total requirement (7-12 y = approx. 83.4 g) Per meal: 55-65% of calories
Costa Rica	-	-	-	-	-
El Salvador	-	-	-	-	-
Grenada ^e	Lunch = 1/3 of total requirement (7-9 y: M = approx. 690 kcal; F = approx. 608 kcal) 10-14y M = approx. 817 kcal F = approx. 688 kcal)	Lunch = 1/3 of total requirement (7-9 y = approx. 9 g 10-14 y = approx. 15 g)	Lunch = 8-10% of total calories	<10% of total calories	-
Mexico ^f	Breakfast (BF) = 25% of total requirement (approx. 395 kcal)	BF = 15% of calories	BF = 25% of calories	BF = <10% of calories	BF = 60% of calories
Republic of Moldova ^g	BF = 20% (7-10 y = approx. 470 kcal 11-17 y = approx. 550 kcal) Lunch = 35% (7-10 y = approx. 823 kcal 11-17 y = approx. 976 kcal)	BF = 20% (7-10y = approx. 15.4 g 11-17 y = approx. 18 g) Lunch = 35% (7-10 y = approx. 27 g 11-17 y = approx. 32 g)	BF = 20% (7-10 y = approx. 15.8 g 11-17 y = approx. 18.4 g) Lunch = 35% (7-10 y = approx. 28 g 11-17 y = approx. 32.2 g)	-	BF = 20% (7-10 y = approx. 67 g 11-17 y = approx. 78 g) Lunch = 35% (7-10 y = approx. 117 g 11-17 y = approx. 137 g)
Paraguay ^h	BF = 20% of total requirement (6-9 y = approx. 290 kcal 10-13 y = approx. 400 kcal) Lunch = 25-30% of total requirement (6-9 y = 360-435 kcal) 10-13y = 500-600 kcal)	Lunch = >10-15% of total meal calories	Lunch = <25-30% of total meal calories	-	Lunch = 50-55% of total meal calories
Peru ⁱ	BF = 20-25% of total requirement (368-460 kcal) Lunch = 35-40% of total requirement (644-736 kcal)	BF = 20-25% of total requirement (11-14 g) Lunch = 50-60% of total requirement (28-33 g)	BF = 15-30% of calories per meal (6-15 g) Lunch = 15-30% of calories per meal (11-25 g)	-	-
South Africa ^j	Lunch = 30% of total requirement	Lunch = 30% of total requirement			
Sri Lanka ^k	1/3 of total requirement (500-700 kcal)	1/3 of total requirement	-	-	-

Appendix 4: Cost of food ingredients as provided by Bashyal food suppliers.

Grains	RS/kg		Oil	RS/Liter		Common Vegetable	RS/kg
Makai	110		Soya	170		cauliflowrs	80
Jau	110		Sunflower	190		broccoli	100
Momphali	200		Mustard	250		capsicum	140
Aalas	200					beans	90
Bhatta	95					radish	40
Chana	110						
Gahun	40						
Basics	RS/kg		Basic Green	RS/kg			
Salt	20		Cucumber	80			
Onion	120		Carrot	170			
Ginger	140		Cabbage	75			
Garlic	200		Tomato	80			
Lemon/Lime	100		Potato	70			
Maida	60						
Aata	45						
Spices/Seeds	RS/kg		Fruits	RS/kg			
Cumin	400		Banana	70			
Corainder	300		Orange	80			
Turmeric	320		Apple	180			
Dried chili	350		kiwi	400			
Cloves	1000		pineapple	150			
Cardamun	4000		guava	70			
Sesamme	300		papaya	80			

Appendix 5: Cost calculation of different elements of breakfast (Porridge)

Cost of poridge ingredients per kilo				
Grains	Rs/kg	%per kg Satu	Amount (Gram)per kg	Price per kg satu
Corn kernel	50	8 %	80	4,00
Oats	100	15 %	150	15,00
Wheat grain	50	25 %	250	12,50
Rice	60	20 %	200	12,00
Soya bean	95	15 %	150	14,25
Chik pea	105	15 %	150	15,75
Peanuts	190	2 %	20	3,80
Cloves	1000		1	2,00
Cardamom	4000		1	2,00
Total		100 %	1002	79,30
Cost of Marmalade per kilo				
Ingredients	Rs/kg	amount per kg	price per kilo marmalde	
Apple	140,00	1kg	140,00	
Sugar	75,00	200g	14,80	
Cinnamon		1g	5,00	
Total	215,00		159,80	
Milk			Banana	
Ingredient	Rs/liter		Ingredient	Rs/kg
Milk	80,00		Banana	60,00
Total	80,00		Total	60,00

Appendix 6: Cost calculation of different elements of general meal (Daal, bhat, tarkari and chutney)

Cost of Vegetable curry Per Kg					Cost Of rice Per Kg				
Vegetable	Rs/Kg	% per kg Vegetable	Amount (Gram) per Kilo	Cost per kg	Ingrident	Rs/kg	% Per Kg Rice	Amount (Gra	Cost per Kg
Potato	70,00	20 %	200	14,00	Rice	60,00	34 %	340	20,40
vegetable	90,00	50 %	500	45,00	Water	0,00	66 %	660	0,00
Onion	120,00	5 %	50	6,00	Total			1000	20,40
Tomato	80,00	10 %	100	8,00					
Herbs									
Ginger	140,00	2 %	20	2,80					
Garlic	200,00	2 %	20	4,00					
Spices									
Turmeric	320,00	1 %	10	3,20					
Cumin	400,00	1 %	10	4,00					
Coriander	300,00	1 %	10	3,00					
Fenugreek	300,00	1 %	10	3,00					
Dried chili	350,00	1 %	10	3,50					
Oil	190,00	5 %	50	9,50					
Salt	20,00	1 %	10	0,20					
Total		100 %	1000	106,20					
Cost of perl Per kg					Cost of Chutney Per Kilo				
Ingridents	Rs/Kg	% per kg Daal	Amount (Gram) per Kilo	Cost Per litre	Ingridents	Rs/kg	% Per Kg Chut	Amount (Gra	Cost per Kg
Lentil	100,00	25 %	250	25,00	Tomato	80,00	90 %	900 ₹	72,00
Turmeric	320,00	1 %	10	3,20	Dried Chili	350,00	2 %	20 ₹	7,00
Water	0,00	70 %	700	0,00	Ginger	140,00	2 %	20 ₹	2,80
Salt	20,00	1 %	10	0,20	Garlic	200,00	2 %	20 ₹	4,00
Dried Chili	350,00	1 %	10	3,50	Oil	190,00	3 %	30 ₹	5,70
Cumin	400,00	1 %	10	4,00	Salt	20,00	1 %	10 ₹	0,20
Oil	190,00	2 %	20	3,80	Total		100 %	1000 ₹	91,70
Garlic	200,00	1 %	10	2,00					
Total		102 %	1020	41,70					
Loss		2 %	20,4	0,83					
Total Yelid			999,6	40,87					