

Educational tourism: A profitable business

Cost calculation and profitability prediction for a summer language camp in Finland, hosted by Finnish Academy Oy

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<p>Abstract:</p> <p>The thesis studies the potential of Finnish education export in the form of educational tourism and analyzes the profitability of Finnish Education Academy Oy's summer camp program in 2021 for international students by implementing the Cost-Volume-Profit method. The researcher conducts 2 qualitative interviews with 2 experts in the educational service industry. The 2 interviewees suggest the activities that should be included in the summer camp itinerary. Therefore, there are 2 different designs to be considered. The author makes cost calculations based on these 2 scenarios, then compares the total costs and the predicted profits between these tour designs. The researcher, as an administrative accounting assistant, utilizes CVP analysis while conducting the calculations and identifies the relationships between cost, volume and profit in an educational tour. The thesis uses several accounting formulas that are common and useful in most business fields. The conclusion evaluates the profitability of Finnish education export in general, and the profitability of Finnish Education Academy Oy's summer camp program in particular. Additionally, the thesis author also observes the functionality of CVP analysis and the impact on the profit from changes in the cost structure.</p>	
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TABLE OF CONTENTS

1 INTRODUCTION.....	6
1.1 Background and motivation.....	6
1.2 Research aim.....	7
1.3 Research questions	7
1.4 Demarcation.....	7
1.5 Structure.....	7
2 LITERATURE REVIEW.....	8
2.1 Education Export - a profitable business sector	8
2.1.2 <i>Exporting Finnish Education and Finnish Educational Travel Products</i>	9
2.1.3 <i>Finnish education export strategy by the government of Finland</i>	10
2.2 Cost accounting	11
2.2.1 <i>Cost-volume-profit analysis</i>	12
2.2.2 <i>Variable costs and fixed costs</i>	13
2.2.3 <i>Break-even analysis</i>	14
2.3 Pricing	16
2.3.1 <i>Cost-based pricing model: cost-plus pricing</i>	16
2.3.2 <i>Market-based pricing</i>	17
3 METHOD AND DATA	18
3.1 Introduction	18
3.2 Setting	18
3.3 Participants	19
3.4 Intervention and materials	19
3.5 Tools	19
3.6 Procedure	20
3.7 Data analysis	20
3.8 Validity and reliability	21
4 RESULTS	21

4.1 Interview summaries	21
4.2 Other findings	24
4.3 Calculation	26
4.3.1 Variable costs	27
4.3.2 Fixed costs	29
4.3.3 Total costs	30
4.3.4 Price	30
4.3.5 Profit	31
4.3.6 CVP charts	32
5 DISCUSSION	34
6 CONCLUSION	36
REFERENCES	37
APPENDICES	41

Figures

Figure 1: Accounting model of CVP analysis	12
Figure 2: Cost-based pricing model	16
Figure 3: Finnish Education Academy Oy's summer camp brochure	23
Figure 4: CVP chart for scenario 1	34
Figure 5: CVP chart for scenario 2	34

Tables

Table 1: Finnish education exportation's strengths and opportunities	10
Table 2: The 2 suggested scenarios for the summer camp tour design	23
Table 3: Detailed price information for cost calculation	25
Table 4: Summer camp's fixed costs and variable costs	26
Table 5: Employment costs calculation	27
Table 6: Materials and school supplies cost calculation	27
Table 7: Cost for accommodation	28
Table 8: Cost for meals	28
Table 9: Cost for excursion activities	29
Table 10: Summer camp project's fixed costs	29
Table 11: Total costs	30
Table 12: Summer camp's break-even prices	31
Table 13: Expected revenue and profit	32

1 INTRODUCTION

“Services are those separately identifiable, essentially intangible activities, which provide want satisfaction and are not necessarily tied to the sale of the product or another service. Education is a service which is geared primarily to the consumer market” (Raj, M.A. & Veerappan, R., 2013. pp. 436)

Along with the public schools which provide basic compulsory education, there has been a large number of private institutes and agencies going beyond education: from extensive language courses, international education, to educational tourism. This kind of service draws noticeable amounts of interest all around the world. As Finland has been well-known for the best education in the world, exporting Finnish education recently became increasingly desired. Summer language camps in Finland for international students is a form of exporting Finnish education. The summer camp is targeted at international students aged 13-18 who desire to experience a wonderful summer in Finland while improving their English speaking skills through daily classes and excursions. The project expects to succeed with at least 60 applicants in the summer of 2021.

This thesis analyzes the cost and the profitability of the project in the summer of 2021 by implementing Cost-Volume-Profit Analysis method.

1.1 Background and motivation

The idea is inspired by the thesis author’s related work experience at Finnish Education Academy Oy as an intern administrative assistant when the summer camp project idea is being planted. As a former intern, the thesis worker proposes to work freelance and unpaid for the company’s summer camp project in exchange for knowledge, data and information.

1.2 Research aim

This research aims to establish a profitable serviced educational program, which is a summer camp for international students. The cost of activities and service price are identified by collecting data from secondary sources and through interviews with two professionals in the educational service industry. The outcome determines which suggested tour design is applicable to maximize the profit.

1.3 Research questions

To answer the main research question “What are the activities of a serviced educational program that make up the cost?”, a set of sub-questions are generated: What are the activities in a summer language camp? What does our partner expect us to include in the service? What is the average price on the market? What is the most appropriate price to make this service both affordable and profitable?

1.4 Demarcation

The thesis is limited to the materials provided by Finnish Education Academy Oy regarding summer camps in Finland for the year 2021, its business’s requirements and agreements, and the similar services on the market.

1.5 Structure

The thesis firstly brings the readers through the theoretical framework, then secondly the method and data chapter. The result chapter covers the interviews, the cost and price calculation of the project. The final chapter is the conclusion, where the researcher contemplates the research results and expresses perspectives on the outcomes.

2 LITERATURE REVIEW

This chapter consists of 2 main grounds of knowledge: Education Export and Cost Accounting. The first part firstly defines Education Export, the opportunities and the strategies in exporting Finnish education. The second part focuses on accounting terms and the application of Cost-Volume-Profit analysis. Other relevant findings regarding Finnish Education Academy Oy's summer camps' similar services around Europe are also mentioned to support the topic.

2.1 Education Export - a profitable business sector

Education Export is a service sector where a national education expertise is introduced to abroad knowledge-seekers who also want to immerse themselves in a new culture. Exporting education takes place in different forms and activities, for instance, higher education courses for international students, or summer language camps. These activities are most of the time established with tuition fees or sponsored by the government (partially or fully).

In some countries, exporting education has been recognized as a crucial contributor to the national economy, for examples:

- The turnover of Finnish education exports was about 311 million US dollars in 2014 (Myklebust, University World News, 2017)
- Education is the third export category in Australia, with the total income generated by all educational activities of 28,6 billion US dollars in the 2016-2017 period (Department of Education and Training, Australian Government, 2017)
- Total education-related export as of 2017 in the United Kingdom is estimated to be 28,47 billion US dollars (Department of Education, UK, 2019).

The examples above indicate that education export is undeniably a profitable sector of the economy and it is still on the rise as the demand for abroad studies is increasing.

2.1.2 Exporting Finnish Education and Finnish Educational Travel Products

“In education, Finland has the lead according to many international comparisons” said Li Andersson - Minister of Education in a conference with the United Nations in 2019. She also declared that the Finnish education system is one of the top performing education systems in the world. It is true that Finland has been world-widely known for its reputation in education quality. Finnish education export is on the rise, which is indicated by many Finnish educational curriculum-adopting international schools around the world:

- FinlandWay Schools, established in 10 locations around the world.
- Vietnam-Finland International School in Vietnam.
- Colegio Finlandés School in Spain.
- Finnish International School in Doha, Qatar.
- Finnish international school in Erbil, Iraq.

What about the exporting of Finnish education in the form of touristic services? There have been some exciting programs which integrate tourism and education to attract international customers who desire to experience the quality of Finnish educational curriculum as well as the Finnish culture, atmosphere and nature. In 2019, Visit Finland organized a contest called “Authentic Finnish Educational Travel Product” which observed 26 participants (26 different programs) to choose the best winners. The jury consisted of experts from Visit Finland and Finnish National Agency for Education. Some of the 26 programs can be named below:

- VisitEduFinn’s short-term study tours for students and teachers. The participants get to attend Finnish public classrooms and visit the most wonderful sightseeings of the country.
- Adventure Apes’ tailor-made adventure camps connecting young adventures with Finnish nature and culture.
- Finnish Education Agency’s FINEA Camp for international students who desire to indulge in short-term English courses and Finnish culture.

- FinnOppi Oy's Hands-on learning and nature in Finland.

2.1.3 Finnish education export strategy by the government of Finland

In the publications of the Finnish Ministry of Education and Culture in 2010, a Finnish export strategy was proclaimed. The proclamation stated that *“Finland’s strengths in education export and in the field of education itself are a competitive education system and a good reputation internationally. There is an evident demand for Finnish know-how on the international education market”*, which is a beneficial advantage for language camp programs in Finland as the demand for Finnish education is undeniably promising. Finnish education exportation’s strengths and opportunities were also analyzed as below:

Strengths	Opportunities
<ul style="list-style-type: none"> • “The Finnish education system is internationally competitive. It is also known and has an excellent reputation in the world.” • “The results obtained by Finnish students in the OECD PISA review have created a large demand for Finnish education in the world.” • “Finnish operators have a good reputation as a cooperation partner in international projects.” • “The educational administration, educational institutions, and personnel in the field are used to, and largely prepared for international operation.” • “The foremost operators share a desire to develop educational know-how into a new export article.” • “Educational research and evaluation are of high quality in Finland.” • “The administration is flexible and it is easy to set up joint action.” 	<ul style="list-style-type: none"> • “The education market is growing and globalizing.” • “Many countries are investing strongly in the development of education and education systems.” • “Finland has taken measures to make it possible for higher education institutions to provide fee-paying services and amendments towards greater flexibility in the legislation will give more latitude for operation.” • “The higher education institutions provide a wide range of education in English and there are good services for international students.” • “The innovation system, teacher education, pedagogic knowledge and a culture of cooperation in Finland offer a good environment for developing and testing education innovations and processing them into products.”

Table 1: Finnish education exportation’s strengths and opportunities.

(Source: Finnish Ministry of Education and Culture in 2010)

From the contents above, it is clearly to see that the exportation of Finnish education is rich in strengths and opportunities. Finland holds an excellent reputation in the world's education industry. Therefore, the demand for Finnish education from international students is quite high. Which means, the chances of success for such educational services as Finnish Education Academy's international summer camp program for teenagers can be very promising.

2.2 Cost accounting

It is crucial that every business has a proper system for accounting information that consists of 2 segments: cost accounting and financial accounting. Financial accounting collects, stores and analyzes the business' financial statements and is practiced after the business has set to operate with realistic information and transactions. This particular thesis focuses on cost accounting, which is defined as *“a systematic set of procedures for recording and reporting measurements of the cost of manufacturing goods and performing services in the aggregate and in detail. It includes methods for recognizing, classifying, allocating, aggregating and reporting such costs and comparing them with standard costs.”* (Institute of Management Accounts). Horngren, Datar, and Rajan (2012) stated that the aim of cost accounting is to provide cost-related information for financial and management accounting to support product or service planning. Utilizing cost accounting helps businesses, especially new businesses analyze the possible outcome of a product or service after being launched. *“A prudent cost accountant can use different techniques of cost accounting and make it the best tool of decision making in business”* - Kumar (2015). In Kumar's eBook *“Cost Accounting Made Simple”* (2015), he also listed the purposes of cost accounting:

- Determining the cost,
- Analyzing the cost,
- Reducing the wastage,
- Providing cost data,
- Ascertaining the profitability,

- Controlling the cost.

2.2.1 Cost-volume-profit analysis

Cost-volume-profit analysis is a form of cost accounting. This model is simple and useful for short-run decisions. The thesis worker finds this method adaptable for the summer camps since it is currently also a short-term project (under 1 year). Cost-volume-profit analysis is also referred to as CVP analysis. From the name of the method, it is clear that CVP analysis studies the relationship between the cost, volume and profit of a product or service.

The CVP chart below illustrates the relationship between the total cost (TC), total revenue (TR), break-even point (BEP), profit and the total fixed cost (TFC). It shows that in a relevant range, the behaviour of cost and revenue is linear.

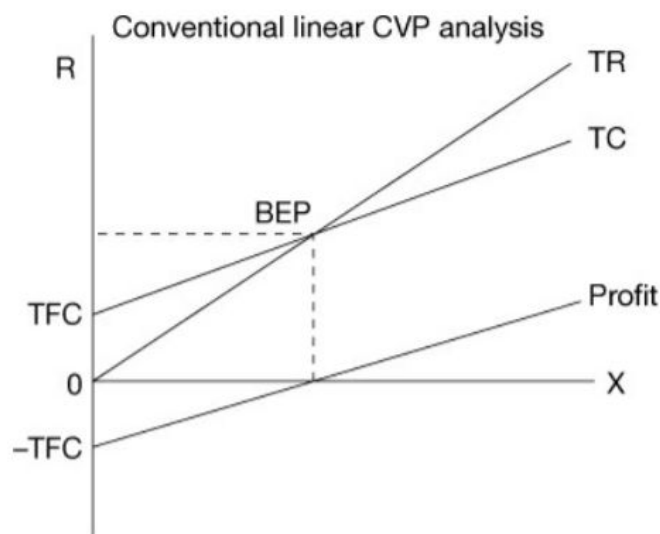


Figure 1. Accounting model of CVP analysis (Source: Principles of cost accounting, Oxford University Press, 2013)

CVP analysis allows business managers to predict the profitability based on predetermined sales revenue, volume, costs, prices, etc., thus, determine the changes to interfere in time in order to take more control of the outcome. In other words, applying CVP analysis helps the decision-makers get a predictable vision of the profitability before the product or service is launched. Every business should always ask themselves

these questions before or during the launch of a product or service: “How much do we need to sell to break even?”, “How many units must be sold to achieve a targeted profit?”, “What profit will be made at a given sales volume?”, “How will a change in sales volume affect profits?”, etc.,. The cost and management accountant should be able to answer those questions by the means of CVP analysis (Boersma et al, 2013). During the CVP analysis, the business may also make questions starting with “What if...”: “What if we increase the volume?”, “What if we lower the price?”, etc.,. Therefore, in the process of analyzing, several different possible scenarios can be predicted.

The components of CVP consist of:

- Variable costs
- Fixed costs
- Sales
- Sales mix
- Sales price.

The CVP analysis composer must understand well the cost structure as well as the above-mentioned components, acknowledging what they are and how they behave. These informations are also useful for many purposes within the business. The comprehension of how much the costs are from each action is fundamental to the planning and control of management decisions (Hansen, Mowen, 2006).

2.2.2 Variable costs and fixed costs

a. Variable costs

Variable costs are the costs that tend to fluctuate (increase or decrease) when the operating ratio changes. In other words, these costs are not fixed but dependent on the production volume. To calculate the variable costs, the accountant needs detailed information and data of the production volume, activities and cost drivers. Variable costs include direct labor costs, material cost, distribution cost and sales commission.

b. Fixed costs

Fixed costs are the fixed expenses the business needs to spend regardless of the production volume. Fixed costs include salaries, rent, insurance, depreciation, electricity, gas, etc.,.

2.2.3 Break-even analysis

After identifying the variable costs, fixed costs and the predetermined sales price, the analyst is able to find the break-even point, thus, calculate the number of units that need to be sold to achieve a certain target sales profit. Therefore, Cafferky and Wentworth (2010) labeled CVP as “break-even analysis” as it is “*the application of the break-even concept. It may include calculation of a break-even point, modification to allow for profit, and visual presentation of the results on a graph*”.

The break-even point is basically the number of products that need to be sold so the business does not face loss. It is also the point where there is no profit either. In other words, the break-even point is the minimum amount of sales, just enough the business needs in order to avoid loss. Which means, as the sales go above the break-even point, the business will receive profit.

The break-even point is calculated when the information of total fixed costs, selling price per unit and the variable cost per unit is known. Below is the formula to calculate the break-even point:

$$\frac{FC}{p - vc}$$

In which,

FC: Total fixed costs

p: selling price per unit

vc: variable cost per unit

(Source: Business encyclopedia)

The total cost formula is represented as below:

$$TC = FC + (V \times Q)$$

In which:

TC: Total cost

FC: Total Fixed cost

V: Variable cost per unit

Q: Quantity of units produced

(Source: Business encyclopedia)

After the total cost is estimated, the business has the perspective on the budget that they need to prepare and is able to calculate the break-even point, the possible lowest price, the expected revenue and the profitability.

The lowest price possible is the break-even price where the revenue equals the cost. This is the case where the number of units is fixed and pre-known. The formula for break-even price is represented as below:

$$bP = \frac{FC}{Q} + V$$

In which:

bP: Break-even price

FC: Fixed cost

Q: number of units produced

V: Variable cost per unit

(Source: Business encyclopedia)

In this thesis, in order to conduct a cost calculation/estimation, the researcher firstly needs to research the cost drivers and the activities that make up the cost for a summer

camp project. Subsequently, the service price is predetermined and the profit is expected for the summer of 2021.

2.3 Pricing

2.3.1 Cost-based pricing model: cost-plus pricing

Cost-based pricing is the calculation of the selling price based on the costs of producing, distributing and selling the product plus an expected rate of return for the effort spent with the risks incurred.

According to Nagle, T. and Holden, R. (2002), the cost-based pricing model can simply be illustrated as the diagram below:

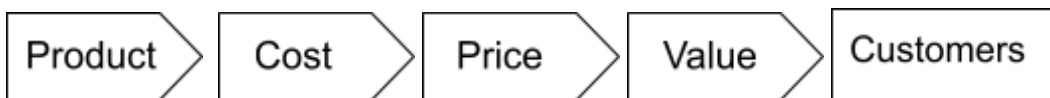


Figure 2. Cost-based pricing model (Nagle, T. and Holden, R., 2002)

This pricing approach is aimed at the cost and profitability of the business. Accordingly, one will add a standard rate of profit to the cost of a product.

The cost-plus pricing calculates the price using the following formula (Roland, 1978):

$$P = C + i$$

In which:

P: Price

C: Cost

i: profit margin or mark-up

For example, company X produces pens, each of which costs 1 euro, the business desires to earn 50% profit margin on every pen sold, so here is how the it calculates the price:

$$\text{Price} = 1 + (1 * 50\%) = 1 + 0.50 = 1.50 \text{ (eur)}$$

Bragg (2018) describes the advantages of cost-plus pricing method with the 3 following characteristics :

- It is simple: the calculation is done simply based on the previous cost calculation
- It assures profits: the profit rate is simply added on top of the cost rate to make the price, which means the profit rate is always positive.
- It is justifiable: For B2B businesses, in some cases, suppliers need to show their customers the changes in the costs that lead to the changes in the price.

2.3.2 Market-based pricing

Market-based pricing is one of the most traditional pricing methods in the history of retailing. With this method, businesses or retailers research the market prices of similar products to determine the most appropriate and competitive price for a product. Campbell (2020) defines market-based pricing as *“when prices are set according to current market prices for the same or similar products. When done right, a market-based pricing strategy allows a business to set prices higher when a product is initially introduced, and later on, align prices with market prices to remain competitive”*.

Enterprises can compete with each other by bringing products and services to the market at the same or “somewhat similar” prices if priced according to the cost-plus pricing method. In that case, the situation can be very precarious. On lucky days, the business can sell a lot but the next day the customers may turn their heads away. It is expected that some of the business’s competitors lower their profit margin to attract customers. However, some decision-makers sometimes increase their mark-up rate to increase profits from existing customers or see it as a way to make differences. In their logic, some or all of the other competitors may "follow" the new price. The price is not only calculated by adding to the cost a standard profit margin, but also determined based on other conditions. Every small or big business nowadays needs to set their own concepts of pricing and their own pricing strategies for each and every product or service they bring to the market.

3 METHOD AND DATA

3.1 Introduction

To achieve the desired results, qualitative research is carried out via one-on-one interviews with experts. In order to get the best insights and understandings, different points of view are taken into account. There are 2 interviews with 2 crucial parties in the business: the project manager and the business partner in Vietnam, who are experienced in the serviced educational industry. A set of questions is determined, however, adjusted accordingly for each and every individual since the interviewees come from different backgrounds. For instance, questions for parents must be somewhat different from the questions for the educators, but with the same expected purpose. The thesis also includes a sub-research on the prices on the market by other similar service providers.

The topic's content contains educational points of view as well as academic knowledge, therefore, open-ended and conversational interviews must be carried out in order to achieve the best results. The procedure includes conducting in-depth interviews, reading documents, and previous theses, analyzing similar programs, visiting the schools, contacting the agencies. Grounded-theory is the main methodology in this research.

3.2 Setting

Qualitative researches are carried out in natural settings, not except for this particular research. This means, the author studies the interviews, the information, the knowledge, the environment as they are. The tasks include interacting with people in the interviews and observing them. In natural settings, face-to-face interaction between the researchers and the participants is required. Listening, noting, analysing and understanding are the keys.

3.3 Participants

Due to the pandemic social distancing regulation, face-to-face meetings are avoided. The researcher uses Zoom as the tool for communication. The 2 participants invited to individual interviews via Zoom, are: Mr. Hector Grimaldo - founder of Dreamland Eco English, Finnish Education Academy's partner in Vietnam and Mr. Suleyman Pinarli - director of Finnish Education Academy Oy.

3.4 Intervention and materials

There is unlikely any intervention in this qualitative research, because this type of research focuses on a particular phenomenon of interest, which is the activities and the profitability of an international language camp. This is a non-intervention study, as the researcher seeks answers from the chosen experienced participants. However, face-to-face meetings are turned into online meetings due to the Covid19 pandemic social distancing policy.

Besides from the interviews, other studies, documents, and information are analyzed and referred to in this thesis.

3.5 Tools

The conversation analysis tool used in this thesis is adjacency pairs, where there are turn-taking dialogues between one participant and the interviewer. This is called a question-answer pair, which means a question is followed by an answer. However, interactions between the questions and answers is also necessary. For instance, the interviewer can clarify the questions, show compassion with the participant's answers, ask for clarification from the participant if needed.

As mentioned in 3.1, grounded-theory is the main methodology in this thesis, which focuses on building theory and creates meaning from data. New theories can emerge

from coding data into categories. Theoretical saturation and constant comparison are the tools for data assessment.

3.6 Procedure

The research follows these steps:

1. Identifying the topic.
2. Literature review.
3. Research questions.
4. Carrying out the interviews: one-on-one meetings via Zoom
5. Data analysis.
6. Conclusion.

3.7 Data analysis

The interviews are collected and recorded on Zoom with participants' consents. If the participants do not agree to be recorded, the researcher takes notes instead, carefully. After that, the recorded dialogues are transcribed and analyzed. The transcribed data is compared with each other and with other relevant documents, studies and information. The main approach in this qualitative data analysis is the inductive approach: Observation -> Pattern -> Theory. According to Lodico, Spaulding and Voegtle (2010), *“inductive reasoning is often referred to as a “bottom-up” approach to knowing, in which the researcher uses observations to build an abstraction or to describe a picture of the phenomenon that is being studied”*.

There are 3 steps in the data analysis of this thesis:

1. Arrange the data
2. Organize the data in a table
3. Compare

3.8 Validity and reliability

“Validity refers to the issue of whether an indicator (or set of indicators) that is devised to gauge a concept really measures that concept”, according to Bryman (2012). The type of validity chosen in this thesis is *face validity*, as the invited participants are experienced and expertised in education and business, and they give their opinions to the concept of the research.

4 RESULTS

4.1 Interview summaries

Mr. Hector Grimaldo, co-founder and the director of Dreamland Eco English Institute, takes part in the first interview via Zoom. The duration of the interview is 45 minutes. During the meeting, Mr. Grimaldo remains a positive attitude, calm voice and comfortable gestures. This indicates that he, as the director of Finnish Education Academy Oy’s business partner in Vietnam, is very optimistic and confident about the sales of the program in summer 2021. There are a few crucial extracts from the interview (Appendix 2) that must be taken into account when it comes to calculating the costs:

- The calculation should be ready for the scenario of receiving 60 students, which means 4 groups.
- They demand hotel rooms instead of dormitory rooms for accommodation, which makes a significant change in the costs.
- The costs and expenses must include: printed camp T-shirts, food and drinks, bus driver, vehicle rent, gasoline, insurance, 2 chaperones, teachers salaries, classroom rent, tour guide salary, farewell party, certificates and souvenirs.

- There is no cost for advertising since it is the company's partner's duty. The commission we have agreed on with Mr. Grimaldo's agency is 3000 euros per group of 15 students.
- On top of excursion and sightseeings within Finland, Mr. Grimaldo recommends a boat trip to Tallinn, Estonia on the tour to create more attractiveness to the customers.



Figure 3. Finnish Education Academy Oy's summer camp brochure.

The second interview takes place on the 25th of October, 2020 with Mr. Suleyman Pinarli - the project manager. He is the founder of the Finnish Education Academy Oy and in particular, Kielo International Primary School. He has got 7 years of experience in the education field and over 10 years in administration. He is in charge of the summer camp project's budget planning and tour designing process. The purpose of the interview is to clarify which activities he decides to keep in the program and the costs and expenses that are certainly expected according to his experience.

From the interview with the project manager Suleyman Pinarli (Appendix 3), as known as the director of Finnish Academy Oy, there are some key takeaways:

- Costs and expenses for the summer camps must include: Printed camp T-shirts and hats, rental school bus, certificates, souvenirs and farewell parties, 3 meals per day for each participant and employee, hotel rooms for participants and chaperones, salaries.
- The program does not cover travel insurance for the participants. Therefore it is not included in the cost calculation.
- The total employee expenses including pension contribution and insurances can be estimated using the cost calculator by businessfinland.fi
- The salary rates for employees the director suggests are as below:
 - + English teacher: varies from 18 to 20 euros per hour.
 - + Bus driver: 12 euros per hour (minimum)
 - + Chaperones and tour guide: 13 to 15 euros per hour.
- The expected profit from the project in the summer of 2021 is at least 20,000 euros.
- Cost-saving is possible by hiring interns as classroom assistants.

There are some differences between Mr. Grimaldo’s suggested activities and Mr. Pinarli’s preferred design. Therefore there are 2 scenarios that must be considered when conducting the cost calculation.

Scenario 1 - suggested by Mr. Grimaldo	Scenario 2 - suggested by Mr. Pinarli
<ul style="list-style-type: none"> ● The program covers hotel rooms. ● Excursion trips within Southern Finland and a boat trip to Tallinn on the weekend for each group. 	<ul style="list-style-type: none"> ● The students stay in the dormitory. ● Excursion trips within Southern Finland.

Table 2: The 2 suggested scenarios for the summer camp tour design.

4.2 Other findings

a. Employment costs

The total employee costs are estimated using Business Finland's calculator. The expenses the employer has to pay on top of the calculated salary include:

- Pension contribution (average 16.95%)
- Employment accident insurance according to risk and the size of the company (average 0.7%)
- Unemployment insurance (average 1.26%). For companies with total wages over € 2,125,500, unemployment insurance is 1.7%.
- Group life insurance (average 0.07%)
- Employer's social security contribution (1.34%)
- Monthly cost for annual bonus and holiday pay (average 15.9%)

b. Price range of similar services

The researcher, with the help of the project manager, does some research on the market prices for a similar service. There are a large number of similar international camp tours for teenage students worldwide, of which some are listed below:

- "Study & Live in your Teacher's Home" in Helsinki, Finland by Home Language International: 2,750 euros for 2 weeks.
- "English Language Camp" in Switzerland by Village Camps: 4,200 CHF (about 3.888 euros) for 2 weeks
- "Spanish and Leisure Summer Camp" in Spain, by ISC: 1,975 euros for 2 weeks.
- Summer camp in France, by Jeunes Diplomates: price starts from 3,990 euros for 2 weeks.
- "English Language Residential Camp" in Switzerland by Altitude: 4,975 CHF (about 4,605 euros) for 2 weeks.

All of the camps above cover food and drinks, accommodation, language courses and leisure activities. The business should consider an appropriate price range considering these competitors.

c. Data for cost calculation

In order to calculate the expenses, the conductor needs to collect other necessary data: prices, salary rates, rents and other bills. The findings are shown as the table below:

Item	Price or Rate
Notebook	2 euros per item (Prisma)
Pencil	1 euro per item (Prisma)
Crayons	3 euros per pack (Prisma)
Printed T-shirt	15 euros per item (Spreadshirt.fi)
Printed cap	10 euros per item (Vistaprint.fi)
Material	10 cents per page
Bus rental	1,750 euros for 14 days (Pirkanmaan Tilausliikenne Oy)
English Teacher salary rate	18 euros per hour
Chaperone salary rate	12 euros per hour
Tour guide salary rate	15 euros per hour
Bus Driver salary rate	12 euros per hour
Hotel room	975 euros per room (Booking.com)
Dormitory	4,446 euros for 14 days (Cheapsleep)
Souvenirs	200 euros per group of 15 students
Lunch	1,25 euros per meal (Servica)
Dinner	approximately 12 euros per meal
Breakfast	5 euros per person
2-way boat trip to Tallinn	30 euros per ticket (Tallink)
Moomin museum ticket	6 euros per ticket
Linnanmäki ticket	35 euros per ticket
Stand-up paddling ticket	10 euros per ticket

Table 3: Detailed price information for cost calculation.

4.3 Calculation

Based on requirements, suggestions and availabilities from both the camp organizer and the business partner in Vietnam, the researcher gathers the information and classifies the suggested activities into 2 categories:

Fixed costs	Variable costs
<ul style="list-style-type: none">● Commission● Office rent● Administration● Classroom rent (*)● Extra budget for unexpected expenses	<ul style="list-style-type: none">● Hotel rooms● Meals● Staff salaries (**)● Camp T-shirts● Camp hats● Souvenirs● Farewell parties● Classroom materials● School supplies● Excursion activities

Table 4: Summer camp's fixed costs and variable costs.

(*): The classrooms are rented for the whole summer regardless of the number of participants.

(**): The staff in this case includes english teachers, the bus driver, and chaperones. The salaries are hourly-based and the contracts are seasonal. As the course only operates when the number of students for each group equals 15, the cost for employees here is only calculated for each group and is multiplied by the number of groups that sign up for the summer of 2021. In other words, the staff salaries here are dependent on the number of students (products sold). In the case the staff is hired for a fixed period regardless of the number of registered participants (products sold), then it is perceived as a fixed cost.

4.3.1 Variable costs

The employee costs are calculated by multiplying the number of hours by hourly salary rate and the number of employees, with other employment costs (as mentioned in 4.2) added on top:

Employees						
Title	Hours per day	Salary per hour	Salary per group (14 days)	Number of employees	Total employee costs per group	Total salary cost in 2021
English Teacher	6	€18	€1,512	2	€3,024	€12,096
Chaperone	8	€12	€1,344	6	€8,064	€32,256
Tour Guide	5	€15	€1,050	1	€1,050	€4,200
Bus Driver	5	€12	€840	1	€840	€3,360
Total					€12,978	€51,912

Table 5: Employment costs calculation.

Costs for materials and supplies are calculated as below using the price data in table 2:

Item	Price per item	Quantity per group	Total cost per group	Total in 2021
Notebook	€2	30	€60	€240
Pencil	€1	30	€30	€120
Colored crayons	€3	15	€45	€180
Camp T-shirt (printed)	€15	30	€450	€1,800
Camp Hat	€10	15	€150	€600
Printed class material	€0.10	2,100	€210	€840
Souvenirs			€200	€800
Bus rental	€125	1	€1,750	€7,000
Total			€1,145	€4,580

Table 6: Materials and school supplies cost calculation.

By using the price data in table 2, the costs for accommodation and meals are respectively calculated as below:

ACCOMMODATION				
Activity	Price per room	Quantity per group	Total cost per group	Total in 2021
Hotel room	€975	9	€8,775	€43,875
Dormitory	€4,446	1	€4,446	€17,784

Table 7: Cost for accommodation.

MEALS					
Activity	Price per item	Quantity	Cost per day	Total cost per group	Total in 2021
Lunch	€1.25	21	€26	€368	€1,470
Dinner	€12	19	€228	€3,192	€12,768
Snacks	€2	15	€30	€420	€1,680
Farewell party				€250	€1,000
Total without breakfast meals				€4,230	€16,918
Breakfast meal	€5.00	17	€85.00	€1,190	€4,760
Total with breakfast meals					€21,678

Table 8: Cost for meals.

The food cost calculation covers 2 different scenarios in terms of accommodation. Mr. Grimaldo suggests hotel rooms for accommodation. In that case, breakfast is already covered in the hotel rent, therefore there is no cost for breakfast meals as the students and the chaperones have breakfast at the hotel. If the students and the chaperones stay at the Cheapsleep dormitory like Mr. Pinarli suggests, the organizer must add additional breakfast meals into the calculation. Therefore the total cost for food in 2021 for 4 groups (60 students) is either 16,918 euros or 21,678 euros, depending on the accommodation option.

Using the price data in table 2, the fees for excursion and activities are calculated as below:

EXCURSION	Price per unit	Quantity	Total per group	Total in 2021
1-day ticket to Linnanmäki	€35	15	€525	
Stand-up paddling ticket	€10	15	€150	
Moomin Museum ticket	€6	15	€90	
Total			€765	€3,060
2-way boat ticket to Tallinn	€30	18	€540	€2,160
Total with Tallinn trip			€1,305	€5,220

Table 9: Cost for excursion activities

As Mr. Grimaldo suggests that the tour should include a trip to Finland's neighbor country Estonia, the calculation must include the cost for the boat-trip ticket.

4.3.2 Fixed costs

Fixed costs include activities that take place over a period of 1 year planning, preparing and hosting the program regardless of the number of participants. The fixed costs are calculated as below:

Fixed Costs			
Activity	Cost per month	Period (months)	Total cost
Classroom rent	€1,000	3	€3,000
Secretary	€2,304	12	€27,648
Administrative employee	€2,304	12	€27,648
Office rent	€720	12	€8,640
Agency commission			€12,000
Extra budget for unexpected expenses			€4,000
Total			€78,936

Table 10: Summer camp project's fixed costs.

4.3.3 Total costs

Using the formula (2), the total cost is calculated as below:

		Scenario 1 (Grimaldo)	Scenario 2 (Pinarli)
Variable costs	Employee costs	€51,912	€51,912
	Supplies	€4,580	€4,580
	Accommodation	€35,100	€17,784
	Meals	€16,918	€21,678
	Excursion	€5,220	€3,060
Fixed costs		€78,936	€78,936
Total cost		€192,666	€177,950

Table 11: Total costs.

The difference between the 2 scenarios in terms of the total cost is quite significant.

4.3.4 Price

The “break-even price per student” here is basically the total cost per product with fixed costs (administration costs) and variable costs (meals, accommodation, supplies, etc.,) taken into account. Once this baseline price is identified, determination of the sales price is made simple by using the most appropriate pricing method. In this specific case, the business wants to avoid loss, be competitive and expect a profit of at least 20,000 euros for 4 groups of participants. Hence, both cost-based pricing and market-based pricing methods are applied.

The manager must consider both methods for determining the sales price: cost-based pricing and market-based pricing. To utilize cost-based pricing, the accountant must firstly find the break-even price, which is the sales price to meet the break-even point.

Using the break-even price formula in 2.2.3, the break-even price is calculated for 2 scenarios as below:

	Scenario 1	Scenario 2
Number of groups	4	4
Number of students per group	15	15
Total number of students	60	60
Total cost	€192,666	€177,950
Break-even price	€3,211	€2,966

Table 12: Summer camp's break-even prices.

From here on, the market prices must be considered. The prices found in 4.2.b vary from 2,750 euros to 4,600 euros. Therefore, the manager should consider a sales price between 3,211 euros to 4,000 euros to avoid loss and still be reasonable for customers. The conductor of this thesis aims to compare the profitability between the 2 scenarios based on the total costs, therefore, only one price rate should be chosen.

Assuming the business wants to generate 10% profit from sales, the price is calculated using the formula in 2.3.1:

$$3,211 + (3,211 * 10\%) = 3,521 \text{ (euros)}$$

The conductor chooses to use the break-even price of scenario 1 since it is higher, therefore the price can be applied for both scenarios to avoid loss in any case.

4.3.5 Profit

The thesis worker suggested a sales price of 3,521 euros (before VAT) after considering 10% mark-up, the market prices of summer camps in Europe and the positive promise from the partner in Vietnam. If at least 4 groups of participants sign up for the camps in 2021, the viability as well as profitability can be very promising.

Based on the assumed price of 3,521 euros for each slot in the summer camp tour, the expected profits generated from the 2 scenarios is easily calculated as below:

		Scenario 1 (Grimaldo)	Scenario 2 (Pinarli)
Expected Revenue		€211,260	€211,260
Variable costs	Employee costs	€51,912	€51,912
	Supplies	€4,580	€4,580
	Accommodation	€35,100	€17,784
	Meals	€16,918	€21,678
	Excursion	€5,220	€3,060
Fixed costs	Administration	€78,936	€78,936
Total costs		€192,666	€177,950
Variable cost per unit		€1,896	€1,650
Cost per group		€48,167	€44,488
Cost per unit		€3,211	€2,966
Suggested price		€3,521	€3,521
Profit/loss		€18,594	€33,310

Table 13: Expected revenue and profit.

There is a significant difference in the expected profits between the 2 different tour designs. The business must also prepare for loss (mostly from fixed costs for administration) since external risks might occur and interrupt the program.

4.3.6 CVP charts

To conduct a CVP chart, it is compulsory to know the data of total costs, production volume, profit, sales and the break-even point.

From the previous calculations, the break-even point in scenario 1 equals $78,936 / (3,521 - 1,896) = 49$ (units), which means if the program is designed with Mr. Grimaldo's suggestions, there must be at least 49 participants for the revenue to equal the total cost.

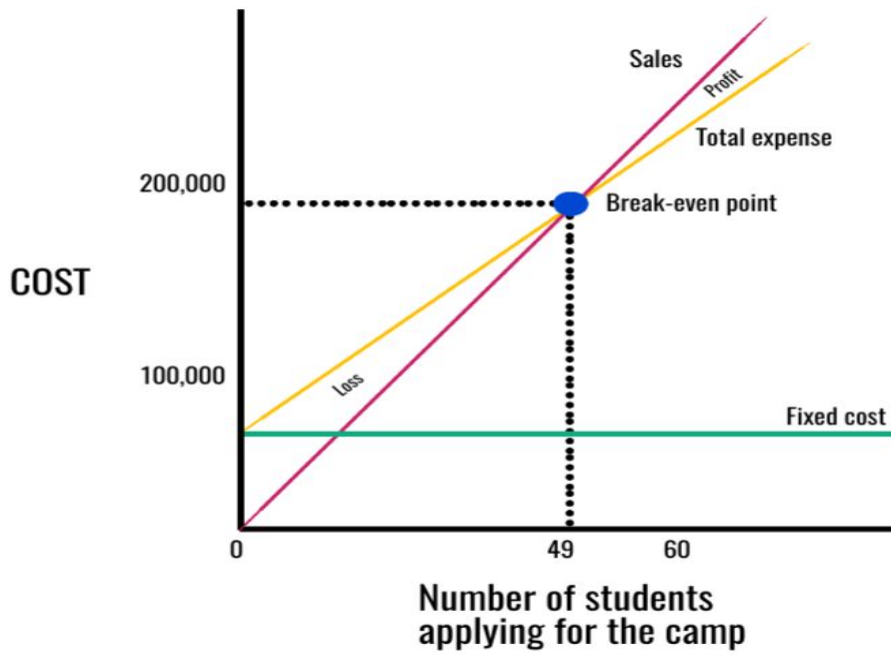


Figure 4: CVP chart for scenario 1.

The break-even point in scenario 2 equals $78,936 / (3,521 - 1,650) = 43$ (units), which means if the program is designed with Mr. Pinarli's suggestions, there must be at least 43 participants for the revenue to equal the total cost.

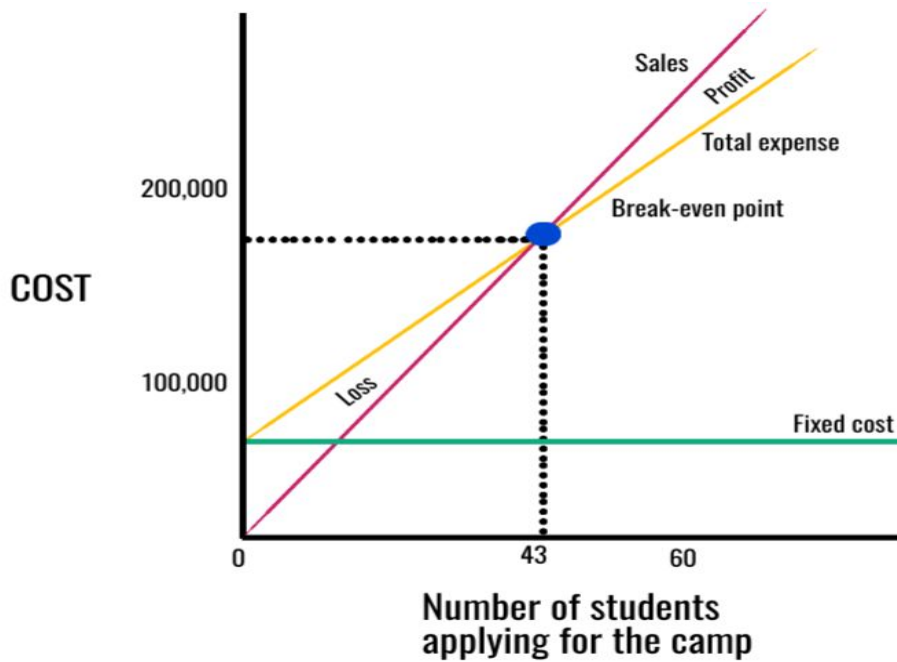


Figure 5: CVP chart for scenario 2.

5 DISCUSSION

It is not difficult to identify the cost drivers and the activities specifically for a summer language camp, since it depends on how the business and its partner want to design the program to attract customers. The most fundamental part is the fixed costs which include office rent, administrative employee salaries for the whole year preparing for the summer of 2021. Whether the project is set to run or not, these costs are already fixed and the business has to take the risks. The more registered participants, the lower “fixed costs per unit”, which means the profit can be significantly promising when the number of participants increases, even without upping the sales price. Even the variable cost per unit can be lower since the business can negotiate cost-saving deals for the outsources (restaurants, catering, hotels, etc.,) in case the number of students is large. Some of the variable costs may become semi-fixed costs if the camp runs even when the number of students per group is not exactly 15, but less, or more. However, the business and its partner decide to run a tour only if the number of participants is fixed at 15 to ensure the camp quality. Therefore, there is not extra hassle for the cost calculation. By comparing the outcome numbers of the profit calculation between the 2 suggested tour designs, the observed difference is quite significant. This means, changing one or two activities while producing a product can remarkably reduce the costs and maximize the profit. This does not mean the quality of the product has to decrease. The 2 scenarios of the 2 tour designs are both profitable. However, if the tour is designed to offer hotel rooms and a boat trip to Tallinn, Estonia as Mr. Grimaldo suggests, the profit will certainly be lower. The CVP charts when compared side-by-side show the difference between the 2 tour designs in terms of cost, loss and profit.

In the perfect condition, the program can easily be managed and predicted for the outcome. In this case, it is assumed that the program will receive 60 students, therefore, the calculation is carried out only based on that assumption. In reality, the business must

prepare for different scenarios including loss. There are many risk factors that may affect a summer language camp program, for example:

- Pandemics: lesson learned from Covid19 pandemic which occurred flight restrictions and social distancing. This has a huge impact on international camps.
- Sudden change in immigration policies: some countries are required valid travel visas to enter Finland and other European countries. This usually causes delay or cancellation in the arrival of participants. If Finland's government suddenly stops issuing visas for the participants' countries, it means the business needs to change its target markets.
- Shortage of staff: a sudden increase in the participants registering for the camps may cause hassles finding enough staff.

While preparing the program in the beginning of 2020, Finnish Education Academy Oy faced an interruption caused by the Covid-19 pandemic. The thesis worker along with the administrator decided to carry on the study for future references. From March to December 2020, the author encountered hesitation and the lack of experience facing such an unexpected situation. However, the thesis is finished properly with the help of the host company's administrator and the supervisor. The cost calculation in this thesis is considered useful for the company in the near future. The business should make more pre-assumptions to prepare itself for negative scenarios.

6 CONCLUSION

When it comes to tourism and particularly educational camps, the decision-makers must consider the most efficient and cost-saving activities while designing the itineraries. There are a wide range of alternative options that contribute to the cost structure. A tour that is smartly designed can minimize cost, attract customers and maximize the profit. Any small change in the cost structure may create a consequential impact on the profit or loss. This is also one of the key points of the CVP analysis. A CVP analysis shows the bonded relationship between cost, volume and profit and the consequences of changes in any of those elements. In this research, the volume of production is already predetermined by assuming the students applying is 60 in 2021, therefore, the thesis worker studies the outcomes of the profit by slightly adjusting the cost structure. The result shows that by alternating some of the activities, there is a significant change in the profit. In other words, if the volume of production and the sales price remain unchanged, a decrease in cost undeniably leads to an increase in the profit and vice versa, which means cost and profit have an inverse relationship. While conducting the cost calculations, the thesis worker also notices that some costs can both be fixed and variable.

Another conclusion is that the Finnish education export is potential in terms of profitability as the demands for quality serviced education are increasing. Mr. Grimaldo stated that in Vietnam, the desire for abroad courses in European countries has been on the rise. Finnish Education Academy Oy should consider this market and design more tours that are both attractive and cost-efficient. The profitability of educational tourism is very promising if organizers know how to make the right decisions .

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APPENDICES

1. Appendix 1

List of questions used in interviews

(1): How are you?

(2): What are your opinions on our program?

(3): What activities/features would you like to add into, or take out from the program?

(4): What are the most important activities you think should be included in the tour?

(5): How many participants can we expect to receive in 2021?

(6): What can be the obstacles that might affect the sales?

(7): What are the costs that we need to prepare for?

(8): What are the salary rates for the english teachers, bus driver, chaperones and tour guide? What makes up the employee expenses?

(9): How many English teachers do we hire for each group of 15 students? How about other staff?

(10): Do we cover participants' insurance?

(11): What is the expectation for the outcome?

2. [Appendix 2](#)

3. [Appendix 3](#)

4. Appendix 4

[Cost calculation on Excel](#)