



**Market Analysis for product selection. A case study of the eCommerce
business, Zertta**

Thanh Nguyen

2021 Laurea



Laurea University of Applied Sciences

**Market Analysis for product selection: A case study of the
eCommerce business, Zertta**

Thanh Nguyen
Business Administration
Thesis
May 2021

This thesis project was to introduce a market analysis model named Booz, Allen, and Hamilton (BAH) model that is used to generate, assess and evaluate the feasibility of a physical product when a business needs to decide on what product to sell. This BAH model is referred to as the theoretical framework which will be applied to Zertta, an eCommerce business currently selling on Amazon.com and expanding to other sale channels.

Quantitative methods were used in the empirical research for forecasting purposes namely the average method and the naïve method. These were used to forecast estimated sales of the selected product for study. Other analysis and development methods were applied during the phases of applying the BAH model.

By applying the BAH model to the case study brand Zertta, product is selected and evaluated as the outcome of this thesis, specifically a table lamp with a Nordic style and design. The product is well thought through with the researcher understanding multiple factors and contextual elements around the product including the market competitiveness, estimated sales, and how the product helps achieve the company's goals.

The product proves to be a good option for selling on the eCommerce site Amazon.com through many analysis and development stages. The BAH method is also justified to be an efficient model to be deployed when a business needs to expand its product lines and in search of a good product.

Keywords: Market analysis, product analysis, BAH model, Zertta, Ecommerce

Contents

1	Introduction	8
1.1	Importance of the thesis topic.....	8
1.1.1	Research problem.....	8
1.1.2	Research questions.....	9
1.1.3	Research objectives	9
1.2	Researcher's background and personal interest.....	9
1.3	Structure of the thesis	10
2	Theoretical framework: BAH model.....	10
2.1	Objectives and missions	11
2.2	Idea generation	12
2.3	Screening and Evaluation.....	13
2.4	Business analysis.....	16
2.5	Development	21
2.6	Testing	22
2.7	Commercialization.....	26
3	Case study introduction.....	31
3.1	Introduction to the company.....	31
3.2	Market evaluation	31
3.3	Competitor analysis	33
3.4	Methodology.....	34
3.4.1	Methodology on data collection.....	34
3.4.2	Reliability of the data	34
3.4.3	Evaluation of the methods used.....	34
3.4.4	Limitations	34
4	BAH model application with research findings, and forecasting	35
4.1	Applying BAH model	35
4.1.1	Objectives and missions.....	35
4.1.2	Ideas generation.....	36
4.1.3	Screening and evaluation	39
4.1.4	Business analysis	40
4.1.5	Development.....	42
4.1.6	Testing.....	42
4.1.7	Commercialization.....	43
4.2	Forecasting	44
4.2.1	Average forecasting.....	44
4.2.2	Näive forecasting.....	46

	Forecasting summary.....	48
5	Results.....	48
	5.1 Zertta on product selection	48
	5.2 BAH model evaluation.....	48
6	Conclusions	49
	References	50
	Figures.....	52
	Table.....	52

1 Introduction

When a business wants to increase its revenue, an intuitive common practice is to increase the sales volume of the existing product. This could be an efficient way with manageable costs thanks to the available processes, especially supply chain management. The key strategy is perhaps to invest in marketing and advertisement to raise customers' awareness of the product. However, despite the advantages, there will only be a limited number of people interested in the product after they have become aware of it. Another method is to expand the product catalog by selling different products. In other words, this is done by expanding their market.

Expanding the product line is a general action taken by most businesses. The problem, however, is how to identify and define a good product to be added to the catalog for selling. As will be mentioned in this thesis, most of the newly launched products result in a loss. A proposed solution by the thesis researcher is to apply a systematic process to generate ideas and evaluate the potential of any given product. The suggested framework is Booz, Allen, and Hamilton (BAH) model. This is also the core theoretical knowledge that will be applied to the case study of Zertta, an eCommerce brand selling on Amazon.com.

This thesis first introduces the readers to the theoretical framework of the BAH model, then an introduction of the case company is given together with some analysis and mentions of the methodologies applied. Next is the application of the BAH model to the case study. Lastly, results and conclusions from the thesis are presented.

1.1 Importance of the thesis topic

1.1.1 Research problem

It is a common problem for businesses to answer the question of whether or not to expand their product line because, despite the upsides, it always involves an inherent risk. This is because most businesses fail to recoup their investment on newly launched products with a failure rate of up to 80% (Crawford, 1977).

There are numerous reasons why a new product first introduced to the public would fail. The first hypothesis is that humans are a creature of habit and we tend to do the things we are used to and familiar with. This means something new would require change and it is risky to try. Thus, customers feel more uncertain and conservative about purchasing new products that they have not had experience with, and this hinders sales.

On the other hand, if businesses successfully launch new products, it is a great way to increase their sales revenue and profitability. The problem, therefore, is how to identify profitable products which will be liked, loved, and trusted by the customers.

1.1.2 Research questions

As mentioned above, a business faces risks when trying to expand its product catalogs as most of the new products result in a loss. The questions, therefore, are:

- How to find a new product using the BAH model? And
- What is a good product for the case study company Zertta as the outcome of applying this model?

1.1.3 Research objectives

This thesis strives to select a well-functioning system with structured steps that answers many essential questions for deciding on what product to sell. It helps eliminate risks and gives businesses a clear vision of their actions.

Another aim of the thesis is to generate and justify a good product for the case study brand Zertta to sell.

1.2 Researcher's background and personal interest

The researcher of this thesis is a soon-to-be business graduate. He is interested in the eCommerce business as he believes this is becoming a more and more common way to shop. It is convenient and has many advantages over brick-and-mortar businesses such as it is opened 24/7 and it is available for purchases by customers worldwide. He has been building a brand for himself that sells household products on Amazon.com. The second product is under manufacturing process while the third product is under development.

From the researcher's own experience in the online business of selling physical products, product sourcing or choosing products to sell is one of the most, if not the most, important factors contributing to success or failure. Anyone can buy a product and resell it. However, it is difficult to identify a profitable product and/or to build a brand with products speaking for its values. Products that align with the brand's image are an efficient way to high profitability in the long term.

Therefore, research questions are what the researcher is longing to answer for himself. This thesis is also an opportunity for the researcher to reflect on his brand and its values; about how the strategic plans should be in the long-term future and how it wants to be perceived by the customers.

1.3 Structure of the thesis

The thesis *first introduces readers to the Booz, Allen, and Hamilton New Product Development (NPD) model*. This model is believed to be an efficient and somewhat thorough process to identify and assess the feasibility of a physical product. It includes a series of action steps starting from idea generation to commercialization.

The next section is the *introduction to the case study company, Zertta Ltd.*, which is an eCommerce business currently selling on Amazon.com and is owned by the researcher. This section also covers relevant topics such as analysis of the market the brand is selling in and evaluation of the competitors. As the relevant information goes, the methodology for data collection in the case study for analysis is also mentioned.

The following part is the *application of the BAH model to the Zertta brand*. The whole process with a series of development steps is reflected and applied to the brand to determine good products for selling. Methods for forecasting, mainly on sales revenues, are embodied.

The fourth section is the results from the application of the BAH model to the Zertta brand that should include at least one product as a desired outcome from the process. The product would ideally meet as many requirements in the BAH model as possible.

Lastly, conclusions are drawn from the thesis. It will evaluate the practicality of the theoretical framework and the results produced from it.

2 Theoretical framework: BAH model

BAH concept was created in 1982 by Booz, Allen, and Hamilton, hence the name BAH. This is the best-known model because it underlies the New Product Development (NPD) systems that have been put forward later (Bruiyan, Nadia, 2011). There have been numerous changes to the subsequent models but many of them can be linked to the BAH model.

The process first starts with identifying an opportunity in the market and understanding the points for improvement on the to-be-launched products. It is not a process of creating something completely new like an invention. However, a **new product development (NPD) process** is considered to be used when developing a product.

There are numerous NPD methods to deploy, and they all require an understanding of the customers' needs, wants, and desires to an extent. Regardless of which model, the common stages of an NDP include product ideation, product design, and market introduction. BAH model was found to be applicable and feasible, thus, it is chosen to be applied.

In their journal, Allen et al. focus on the importance of the BAH model to be applied to a nonprofit organization. However, this model can be easily and appropriately suitable for other product development processes as well. The BAH model comprises of six steps:

- New product strategy
- Idea generation
- Screening and evaluation
- Business analysis
- Development
- Testing and commercialization.

Booz, Allen, and Hamilton propose the idea that every product has a limited life span, and in the nonprofit context, executives need to continuously develop new products to ensure growth and prosperity (Allen & Hamilton, Booz, 1980s). These new products are the result of dedicated and hard work, potentially expensive and bureaucratic to finally make available to the public.

Besides, risks are inherent in almost any business context, especially when introducing a new product to the market. However, these risks can be minimized by adopting a systematic framework, for example, such as the BAH model.

2.1 Objectives and missions

The process begins with stage 1 of **new product strategy development**. Booz, Allen, and Hamilton suggest that an organization should *review its objectives and missions* and lay down the product development process accordingly so that the newly developed products may satisfy those goals (Allen et al.)

Product strategy is associated with the vision of a company or organization. It projects the big picture of what the organization is trying to achieve. Stakeholders would find it unclear and confused about the direction of the company without its mission and mission objectives. Product strategy is executed through a product roadmap, which outlines the elements of the products and the targeted market. These elements include:

Design: how the products can be made to stand out from the others? An attractive and appealing-looking product or packaging can draw in more customers. It's important to keep the designs consistent with the image the organization wants to project.

Features: what are the added features to the product for differentiation? Providing extra benefits through change is essential in today's business world as a distinguishing factor.

Quality: customers expect consistent quality from the company, this is a unique selling point itself and is recommended to not be taken lightly.

Branding: brand projects confidence and its message to the buyers. It has the power of instant sales and trust once it's known (James Heaton, 2011). Thereby, it's a robust tool for any organization wanting to win the market.

Target market: who are the customers buying the products? What are wants, needs, and desires? It's a common practice in marketing to create a persona representing the customer buying products from the company with as realistic characteristics as possible.

Positioning: how the company wants to be perceived by its audience? An organization can either try to be a niche serving a small number of highly targeted customers or strive to serve a mass audience.

2.2 Idea generation

Ideation generation is the second stage of the BAH model. Allen et al.(1984) propose the search for product ideas at this phase with the conditions that the products are compatible with the goals and objectives determined from the new product strategy development.

Ideation generation is a creative process of generating and developing new ideas. These ideas could be either abstract, concrete, or visual. All stages of a thought cycle from innovation, development to actualization are embedded. (Graham and Bachmann, 2004).

Graham and Bachmann (2004) propose in their book *Ideation: The Birth and Death of Ideas*, a varied number of methods for innovation:

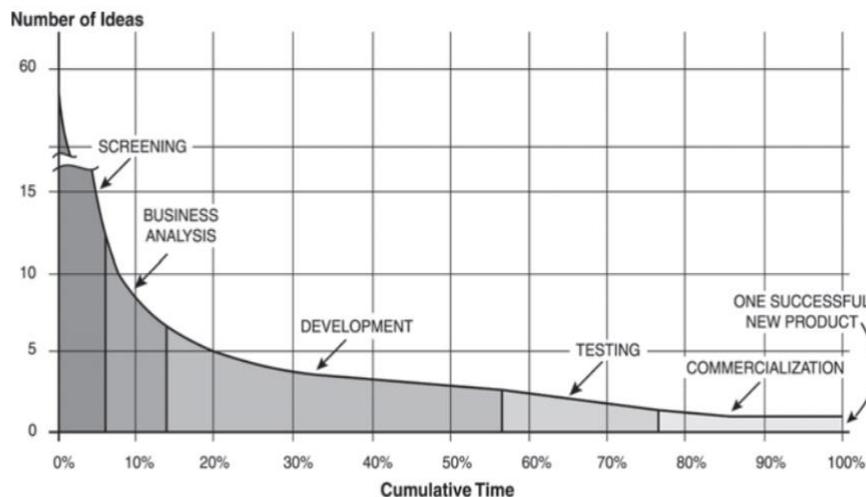
- **Problem solution:** this is commonly known as the most basic and simple method where a solution is introduced to solve a problem.
- **Derivative idea:** This involves ideas that have been iterated with changes from the existing ideas.
- **Symbiotic idea:** Multiple ideas are comprised make a symbiotic idea. It is not necessarily new but different.
- **Revolutionary idea:** Ideas that break through traditional thoughts and give complete new perspectives are revolutionary ideas.
- **Computer-assisted discovery:** The possibilities of research and numeric are supported by the use of a computer.
- Other ideation methods for reference are **Serendipitous discovery, Targeted innovation, Artistic innovation, and Philosophical idea.**

The list of ideation methods by Gramham and Bachmann is not necessarily accurate or comprehensive. It is rather an evolutionary framework to be developed further and upon.

The limitation of ideation is that it is criticized as meaningless jargon (Berkun and Scott, 2008). It is, therefore, important to understand and use ideation in the proper way.

2.3 Screening and Evaluation

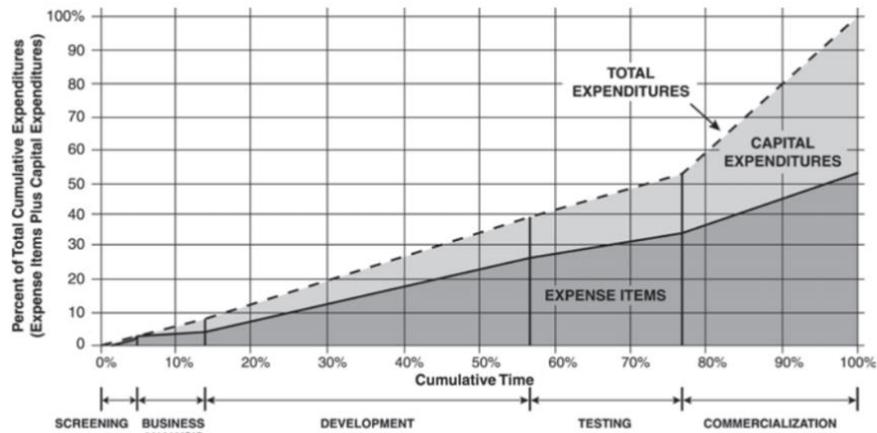
Stage 3 in the model is **Screening and Evaluation**. Ideas from the ideation stage are now analyzed and narrowed down to only ones with the greatest potential. (Booz, 1984). The number of ideas naturally decreases during this phase. However, the costs associated with the selected ideas, in contrast, increase as pointed out in Figure 1 and Figure 2. This is understandable because more resources - time, money, and efforts - are dedicated to these ideas as they move closer to the analysis, development, and deployment stage.



From Management of New Products by Booz & Company. Copyright © 1968 by Booz & Company. Reprinted by permission of Booz & Company.

Figure 1: Mortality of new product ideas

The number of ideas gradually decreases starting from Screening and Evaluation as not every idea can be successful. A careful selection process is necessary.



From Management of New Products by Booz & Company. Copyright © 1968 by Booz & Company. Reprinted by permission of Booz & Company.

Figure 2: Cumulative New Product Expenditure

The ideas become more expensive as they shift towards development, testing, and commercialization. Thus, only the most promising ideas are chosen for the business analysis stage.

Kucsmarski (1992) suggests 6 types of screening including:

- growth role
- category
- strategic role
- new product type
- internal strength
- financial risk.

Each type concerns different aspects of the idea of how it may impact the business.

A *growth role* screen is encouraged when the product can help add newness to the company's portfolio in a way that it enters a new category, provides a price advantage over the competitors, expands the business's global market share, or creates a whole new market category. (Michael and Susan, 2007)

There are numerous examples of this type. Dairy-free foods grew popular and Danone, a dairy giant, developed several soy-based products to capture the market movement. (Marketing, January 2006, p. 3).

Category screening is used to examine the suitability of the idea or product with the company's capabilities. A large organization can support most of the projects even when it is unprofitable in the beginning that it suffers a loss to gain market share. This is the case when the product idea has a high sale volume but a low profit margin.

However, this does not apply to every other company. It is a generally good guideline that the product category has an existing demand, is not dominated by only a few giant competitors, does not require a massive marketing budget that is not afforded by the company, and demonstrates a growth potential.

In the *strategic role screen*, the product ideas are demanded to be technologically superior to the available products, utilizing the existing logistics system including distributing and delivery, targeting towards a growth market, leveraging the existing storage, and allowing the company to develop marketing or technical skills in a new domain. These strategies will vary from industry to industry, but they should satisfy the company's objectives and requirements.

Screen for a *new product type* can be considered a double-edged sword where it can either be highly effective and profitable or it can pose lots of risks. A new product type with "modifications" is different from a "radically" new product. The latter case has a higher level of uncertainty, but also potentially more profitable for inventing something completely new to the market and has the first-mover advantage. It is pivotal to balance between risk and reward for this screening type.

Internal strength is exercised to assess the possibility of how difficult the product can be developed, made, and commercialized. Kucsmarski (1992) makes the point that this type is not to prevent the company from developing and executing ideas and but to at least cause reconsideration. Internal strength examines whether the ideas capitalize on the patented ideas, utilize the existing marketing and sales, technology, engineering, or design resources.

This is somewhat similar to category screening. However, category screening focuses more on the competitiveness position while internal strength evaluates ideas against strengths within the company.

Financial risk screening is pivotal assuming that a company operates and develops new products to make money. However, it is a difficult task to evaluate the new ideas will perform and their payback possibility. Regardless, Kucsmarski (1992) reports financial screen usage criteria as revenue size, pre-tax profit contribution, ROI, payback period, gross margin, and return on net assets. And he goes on to suggest that financial screening should be placed further down in the assessment process.

To sum up, there are plenty of criteria that can be used to assess a product idea. They differ from company to company, industry to industry. However, this screening and evaluation process is essential as it provides constructive guidance and a clear picture of how one might perform. Product ideas that have been screened and evaluated successfully will be analyzed further in the next section.

2.4 Business analysis

The next stage of the BAH model is **Business Analysis**. Ideas that have been screened and evaluated for elimination from the previous stage are now further under intense scrutiny. The purpose is to determine their true potential for feasible and viable offerings in the next stages.

It is first important to analyze multiple business aspects such as the operating market environment, competitors, supply chain including logistics. There are numerous models to help excuse these analyses. Some popular and common practices are as the following:

- SWOT method (Strength, Weakness, Opportunity, and Threat) is perceived as a preferred tool for strategic analysis (Dess and Gregory, 2018). Using this model we can expect to identify whether the business venture or project satisfies the organizations' goals and objectives.



Figure 3: SWOT analysis framework

- **Business Model Canvas** is a popular framework for strategic management and lean startup template. Barquet, Ana Paula B., et al (2011) state that this model has been applied and tested in many organizations (e.g IBM and Ericsson). It is a visual chart that consists of 9 blocks concerning various aspects of a business or product including its cost structure, value proposition, and customer segmentation. It is an effective

tool to evaluate the feasibility of a product or service by providing a clear picture of several elements.

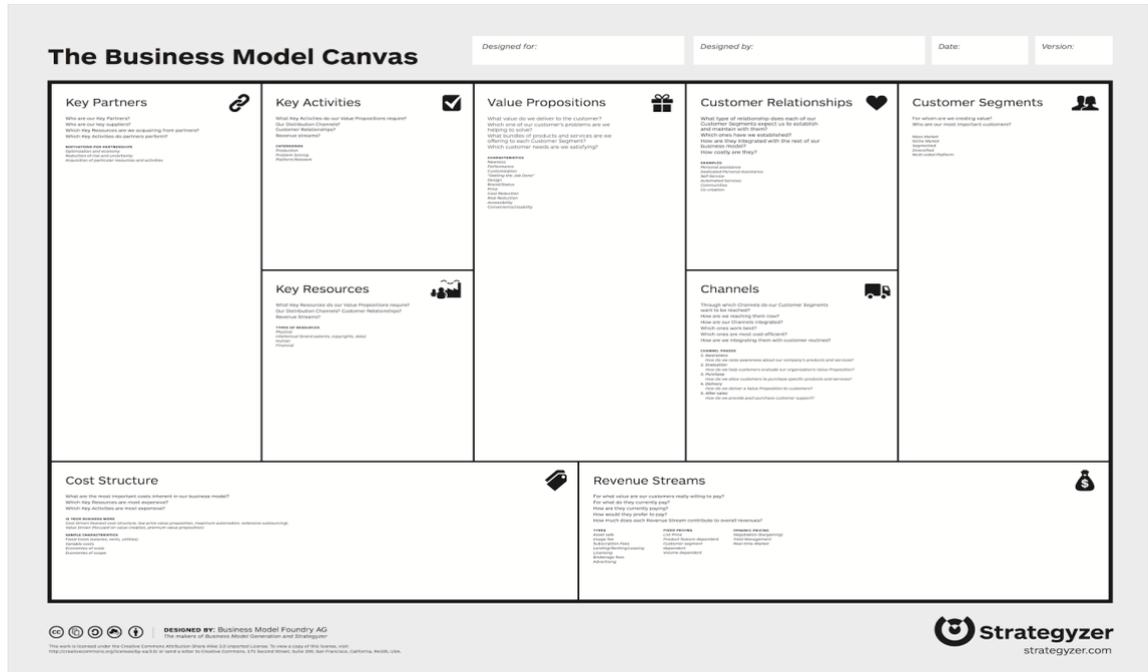


Figure 4: Business Model Canvas: nine business model building blocks, Osterwalder, Pigneur & al. 2010

- Heptalysis
- SCRS (Strategy, Current State, Requirement, Solution)

Besides the fundamental analysis using the models mentioned above, it is essential to perform at least an analysis on sales volume and costs. It is time to be specific on production costs, unit costs, pricing, overheads, and the effect of new products on the existing market once multiple aspects of the business regarding the theoretical and fundamental needs are satisfied (Michael and Susan, 2007). This is by no mean an easy task, but it is necessary.

Howell (2006) states in PRTM’s Insight magazine that conventional financial methods need to be coupled with other analyses such as a market opportunity, internal fit, and technology.

Michael and Susan (2007) propose that a business analysis at its simplest should include the following:

- unit sales
- revenues
- production costs (fixed and variable)
- direct marketing costs

- incremental profit.

Before launching a product, the company should at least have an idea of *how many* units are likely to be sold. The estimation could be made based on the competitors' sales numbers and the market size. This is ultimately done after some sales forecasts have been calculated earlier.

Revenues, or net sales value, are calculated after taking into account the discounts. These discounts are not to be taken lightly because it is common for a newly launched product to offer discounts to attract new customers. This can certainly affect the bottom line of the company, and it is expected to rise with the sales volume. This calculation is made with the estimated numbers of units sold and price.

Fixed and variable costs are what construct *production costs*. Fixed costs are costs that are not subject to sales volume, these are typically referred to as plants, factories, offices, and equipment. New products may likely require special acquisitions that increase the fixed costs. Variable costs, on the other hand, are those costs that vary according to the quantity produced.

Direct marketing costs could take up a large portion of the cost structure when launching a new product. As the product is not known to the public and it needs new customer acquisition. These involve the above and below-the-line marketing, sales-related promotional items, and online advertisements to name a few.

Incremental profit can be carried once the previous information has been compiled. It demonstrates the percentage growth period over the period.

Michael and Susan (2007) suggest further analysis with more focus on financial metrics such as payback, discounted cash flow (DCF), sales forecasting, sensitivity analysis, cannibalization assessment, and break-even analysis. Although all techniques have their advantages and benefits of additional information, only the following topics will be examined and explained within the scope of this thesis based on the researcher's interest and belief in its significance.

- Payback
- Sales forecasting
- Break-even analysis

Payback refers to the time it takes for the revenues of investment to break even on the spendings. This is not a tool for the measurement of profitability, but rather an instrument to identify where the company should place an investment to recoup fast in an environment in which new product ideas compete with each other for funds (Susan and Michael, 2007).

Development	Year 1	Year 2	Year 3	Year 4	Year 5
50 000	17 000	25 000	45 000	55 000	70 000

Table 1: Payback example

$$(\text{Cost} - (\text{year 1} + \text{year 2})) / \text{year 3} = 0.17$$

In the example table above, the project would take 2.17 years to reclaim its investment with a part of year 3. The development costs are fixed and only spent when starting. This concept is somewhat similar to break-even analysis. The difference is *payback* concerns the *time* while break-even analysis examines other aspects such as revenues or units sold which will be explained further below.

Sales forecasting can fall into 2 categories either before testing marketing or before testing marketing. NPD often indicates that the analysis is pre-market testing, even pre-product testing. It is calculated based on the data collected from the previous stages, especially from the screening and evaluation phases. These would account for market size, market growth rate, market share of a current product, market segments.

Sales volume = (Market size)

× (% of the market who are aware of the product)

× (% of those who try the product) × (% of those who like the product to re-buy)

× (number of repeat purchases per year)

× (unit cost)

Break-even level is the point where the sales amount either in unit or revenue can cover the total costs including fixed and variable costs. This means the profit at break-even is zero, only above this line company can start to make a profit.

The formula for calculating break-even (X) is:

$$\begin{aligned} \text{TR} &= \text{TC} \\ P \times X &= \text{TFC} + V \times X \\ P \times X - V \times X &= \text{TFC} \\ (P - V) \times X &= \text{TFC} \\ X &= \frac{\text{TFC}}{P - V} \end{aligned}$$

TR = Total Revenue

TC = Total Costs

P = selling Price

TFC = Total Fixed Costs

V = unit Variable cost

X = Unit Sales

The quantity $(P - V)$ can also be referred to as contribution per unit, which is the marginal profit per unit. Thus, the formula can be simplified as:

$$\text{Number of units to break even} = \frac{\text{Total fixed costs}}{\text{Contribution per unit}}$$

An alternative concept of the break-even point is to identify the revenues instead of the number of units.

$$\frac{\text{Total fixed costs}}{\text{Contribution margins}} = \text{Break-even turnover}$$

A given example is shown as below:

Total fixed costs (TFC) = \$10 000

Selling price (P) = 25\$

Unit variable cost (V) = 10

Contribution margins = $(P - V) / P = ((25 - 10) / 25) * 100 = 60\% = 0.6$

Number of units to break even = $10\ 000 / (25 - 10) = 667$ units

Break-even turnover = $10\ 000 / 0.6 = \$16\ 666$

Despite the benefits, break-even analysis has its limitations in that it assumes fixed costs are constant and unchanged while this is only true in the short term. As a business scales, costs generally raise including fixed costs. Similarly, it assumes variable cost per unit stays the same although it may be linear in reality. Neither there are considerations of the difference

between the number of units produced vs units sold. The assumption is that all units produced are sold and there is no change in the number of goods held in inventory at the beginning of the period and the number of goods held in inventory at the end of the period, while this is not necessarily true.

Regardless of the mentioned drawbacks, break-even analysis is a valuable tool for a rough estimation of when a business can start to recoup the funds invested and start to make a profit. The business can either decide to increase the price of an item for less quantity of units to be sold or vice versa. This is only a simple demonstration for reference, for more accurate estimations, additional complex formulas and calculations such as sensitivity analysis are required.

2.5 Development

The development and testing phases can be viewed as further and in-depth steps of idea generation and screening before the company committing substantial funds to its physical development. This is to identify and confirm that the product ideas are feasible and which specifications have a great appeal to the customers. The more commitment is invested into this stage, the higher chances that the products will match and align with customers' needs and preferences. Also, fewer modifications and costs are required later on.

Booz, Allen, and Hamilton (1982) suggest that the actual products are offered at this point, either physical offerings or services. For services, there should be at least a minimum viable product (MVP), and there should be tangible products to be held on hand for material products. Alterations of the products could be considered as a normal occurrence when transforming an on-paper idea into a real-world offer.

During the product development phase, it is critical that the business incorporates the needs of the product features to be included that will satisfy its users. King (1987) categorizes needs into three types:

- **Basic needs:** the minimum requirements that customers expect the product to satisfy. For example, a heater is supposed to heat the spaces.
- **Articulated needs:** those that can be expressed readily. It is a further step of the basic needs that fulfill the customers' expectations. For example, one might imagine the heater to have a fan to direct the heat.
- **Exciting needs:** the factors that will delight and surprise its users. These include the elements usually not anticipated such as the heater would have voice control besides touch control, and it has light to be used as placement of bed lamp.

A new product project is encouraged or even required to include all of these needs. *Basic needs always require* to be fulfilled as nobody will buy a vacuum machine that cannot vacuum. *Articulated needs* in another way can help gain advantages against the competitors. *Exciting needs* can be used as a secret sauce factor to differentiate from available offers in the market; it can attract new customers, and increase customer loyalty.

These needs perception can change over time, especially the basic needs and articulated needs in which they can slip in status. A product concept when launches can satisfy both basic needs and articulated needs but those articulated needs will eventually become basic needs as such a GPS is one of the minimum requirements for cars nowadays. This idea is even more true to tech products where they advance at a fast pace.

In an attempt of adding features to the products to satisfy these needs, it is worth taking into account how easy or difficult for the customers to use the products. Although each product has a different complex level, it is always a good idea to have an easy-to-use design. The more functional a product, the more instructions it needs to be given.

There are many cases a product is integrated with several additional features. While these attributes might be loved by the customers, they can sometimes cause unnecessary distractions from the core value of the product and reduces its overall quality as the costs are distributed to too many additional elements. Such as when a bed lamp is integrated with phone charging, Bluetooth speaker, and voice control. These could tremendously drive the costs and thus the price of the product. The problem arises when the charging feature is not fast enough compared to normal chargers, hence, it is not often used, or the speaker delivers terrible sound; or a voice control is bad at listening or understanding the sentences. At worst, the lamp would often have problems with light and does not turn on. As many exciting elements added to the bed lamp as they are, it is a challenging task to execute everything well due to the limited resources including money and time.

Including the needs of the customers when designing a product is a must. And while it is attempting to innovate a product to something different and new, it is elemental that the company keeps its products simple to use and most importantly that it functions well. This requires a high-quality control process with qualified testings that will be elaborated further below.

2.6 Testing

As analyses and the criteria have been satisfied, actual products can start to be in production, and the costs will begin to rise dramatically. In many cases, only at this stage do businesses start to incur expenses.

Booz, Allen, and Hamilton (1982) suggest that physical products are ready at this stage to be introduced to the public with the purpose is to validate the earlier projections. An example is given such as when a foundation introducing a comic book educating the youth to abstain from smoking, extensive testing is executed with many stakeholders involved to be consulted including antismoking advocates, educators, researchers, and graphic artists to ensure the message is delivered clearly.

Similarly, services with intangible products need to undergo an equivalent intensive testing process. A planetarium is required to withstand intensive battery tests to ensure that their equipment working properly and safely, and the place always has available and qualified employees.

These testings intend to confirm the promised attributes and characteristics of the product are delivered. Engine claimed to have a design with high fuel efficiency needs to prove that it has low energy consumption per mileage. Aircraft claimed to be low noise needs to take flight tests with noise volume measured under a certain level to prove its point. Susan and Michael (2007) point out that the testing process is key to prevent risks during the final phase before launching the product to the public. This is done by:

- Compare the product with what's available in the market
- Investigate whether the product delivers what it promises in the concept statement
- Evaluate how it can exceed the customers' expectations
- Inspect whether the changes in materials, design, or price can affect consumers' preferences
- Assess the advertising and packaging of the product

While performing the tests, Susan and Michael (2007) suggest a set of systematic decisions to be made, namely:

- Objective setting: what is the goal of the test?
- Product-related decisions
- Selecting samples
- Choosing test location
- Data collection
- Measurement technique

Objective testing is meant to provide information for specific decisions including positioning of the new product, what we want to achieve and examine as the results of the test.

Product-related decisions are concerned with mainly three broad categories: presentation of the product, disclosure of the product (blinded or folded), and explanation and supervision on

usage. Either a single best sample product can be presented or several variants can be presented to the audience; despite having more information when presenting variations, it can become more expensive and complex. The product(s) can also be presented with or without brands. Penny, Hunt, and Twyman (1972) discovered that branded products are more favored in tests than unbranded samples. Another test was carried on different toothpaste brands with the following conditions: both blind; correctly branded, and with one branded incorrectly and the other correctly.

	Formulation A over formulation B	Brand A over brand B	Formulation A (branded A) over formulation A (branded B)
Total sample	+12 ¹ / ₂ %	+6%	-2%
Exclusive users of A	+6%	+42%	+28%
Exclusive users of B	+22%	-29%	-22%
Users of A and B	+18%	+2%	-12%
Users of neither	+8%	+2%	-4%
% giving preference	(80%)	(83%)	(74%)

Source: Penny et al. (1972) p. 53.

Figure 5: Product-related decisions testing

Sample selection first features the *identification of testers* of five potential groups: distribution experts, customers, employees, and development personnel. Some of these groups overlap that development personnel are by definition employees and are often experts, thus, they have different perspectives on the development. *The sample size* is another aspect when deciding on testers. By default, fewer experts are required than normal consumers. Michael and Susan (2007) propose a sample of 30 as a rule of thumb when tests are carried on employees. However, when the tests are quantitative to measure purchasing intent, the sample sizes will rarely fall below 100. Panel ad hoc is an alternative with the sample sizes as many as 2500 or above; as they can be easily executed through questionnaires and sent out with convenience.

Locations of the product test can be accomplished in different places such as laboratory, central location, and location of use. Laboratory tests would provide more control over sensitivity for the developer, but it would miss the realism nature. Central locations such as shopping malls and trade shows are suited for comestible products with the advantages of the sample being held constant by the testers. The last but not least location for testing is the location of use where the product is in natural usage context which could be consumers' home or workplaces.

The *data collection method* is either quantitative or qualitative. In product testing, however, often requires face to face data collection method. The questionnaire may have an advantage over the face-to-face interviews in a way that it has less or no subtle pressure when testers express their preferences.

Penny et al. (1972) suggest key differences when choosing *measurement techniques* of either nomadic or comparative testing.

	Monadic presentation	Comparative presentation
Realism	<p>More like real life where products are usually used one at a time</p> <p>Can be used realistically with an absolute rating (uninfluenced by other test products) which reflects marketplace performance. Can additionally ask for a comparative judgement against a known brand</p>	<p>Products are sometimes used in parallel or overlap in real life. If more appropriate, can always present the products one at a time</p> <p>Comparative judgement against another possibility sometimes corresponds to marketing decisions. Otherwise one of the test products can be one in the marketplace giving a known reference point for the test product. Ratings can always be asked additionally to ranking</p>
Sensitivity	<p>Sensitivity believed to be more like market sensitivity (i.e. more directly valid) and this is more useful for some marketing decisions</p>	<p>Sensitivity believed to be magnified and therefore more readily detectable with smaller samples (i.e. indirectly valid for some decisions)</p>
Validity	<p>On the <i>a priori</i> grounds of greater realism, assumed more like the marketplace in direction and extent of portraying product differences</p>	<p>Validity of size of differences questioned. Also, possible doubts as to whether direction of preferences could be distorted sometimes</p>

Source: Adapted from Penny et al. [1972].

Figure 6: Measurement techniques in product testing

The results of these tests provide the developers' information to make decisions on:

- The appeal of the new product to the market
- Comparison between the new product versus the existing products
- What to improve
- Interest in the product and the market size

In summary, a product testing phase should include clear goals for the tests and it is important to identify potential risks interfered during the process. Besides, many decisions have to be made when carrying out these tests. A simplified process is as in the diagram below as suggested by Michael and Susan (2007).

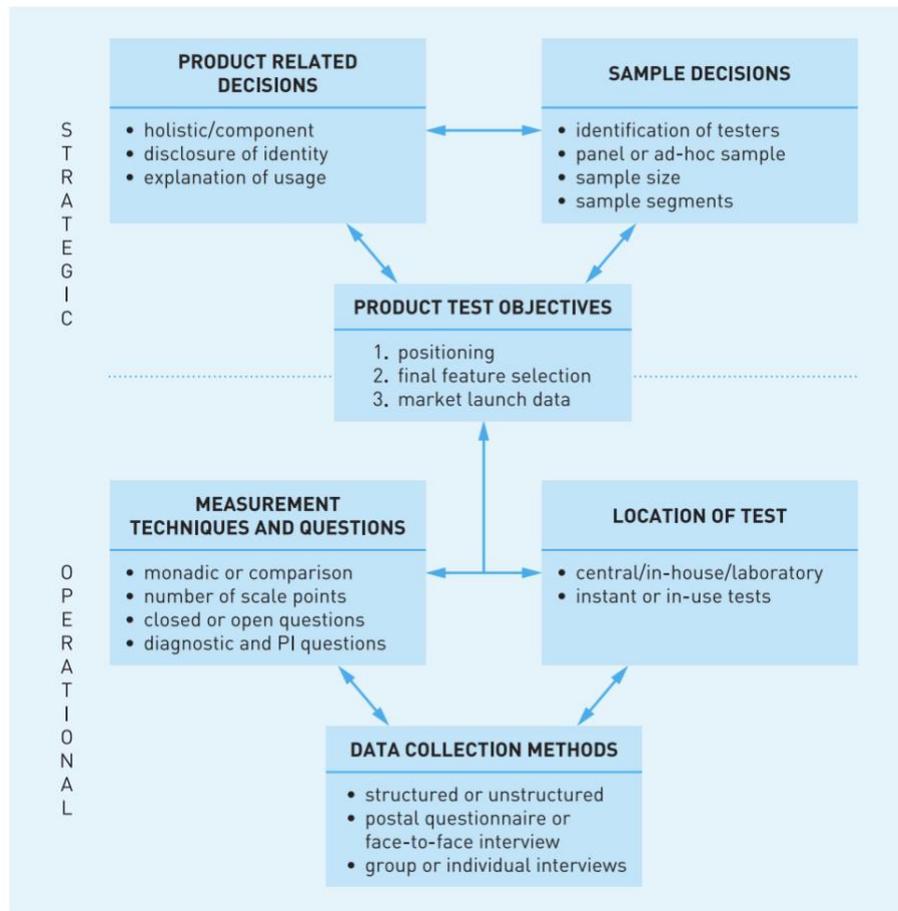


Figure 7: Product testing process summary. Susan & Michael (2007)

Product testing is advised to be done carefully and correctly before the final stage of the product development process: commercialization.

2.7 Commercialization

Booz, Allen, and Hamilton (1982) suggest that fully ready products are introduced at this stage. Ongoing feedback from customers should constantly be monitored to ensure that the products meet the expectation, or better to exceed. Likewise, if there is any fault or “bug” in the product, it should be quickly identified and fixed.

As discussed in the early stages, the costs of new products increase as they go further down closer to the launch phase. Especially for completely new products where marketing costs may well exceed the costs of development to secure the customers and market distribution and inform the public.

It is a general case that tangible products would require more investment for manufacturing facilities, inventory, selling, after-sales service, but could be fewer advertising costs. And vice versa, intangible products or services would require less investment in physical facilities

but more on advertising and sales promotion to increase awareness and educate customers about the product. Despite this rule of thumb, either product launch type will demand significant investment. (Micheal and Susan, 2017)

Although there have been extensive researches before the launch, there might be faults discovered and it could be hard for the company or owner to abandon the whole process and costs invested due to the concept of *sunk cost*. The *sunk-cost* effect is defined as persisting in a course of action based on the prior commitment of resources, despite the negative long-term outcomes of that action (Arkes&Blumer, 1985). This concept needs to be taken into account when launching a new product. Despite as much money as having been invested, especially in later stages such as launch, the company or owner must always be able to call off the plan when necessary. If the firm cannot expect to recoup the past losses and even the future's investment, they should not proceed with any further investment (Micheal and Susan, 2017). However, one can argue that no one can predict the future, only judgments and discussions are made about it. Thus, it is the psychological involvement and investment into the products that are difficult to overcome.

Susan and Micheal (2017) suggest three steps of actions and questions to evaluate the success of the product at this final phase; first is to review and revisit the assumption of why there was the market opportunity in the first place; second is to examine the possibility of to what extent the company's offer can satisfy those needs; lastly, the launch has to be planned and executed effectively.

C. Anthony (1999) argues that successful launches are a combination of market research, salesforce, distribution, promotion, R&D, and engineering. He goes on to stress the importance of a cross-functional team in being one of the key factors marketing, manufacturing, and logistics decisions. The importance of product distribution is also reaffirmed by Biggadike (1979) and Lambkin (1988) in their recommended launch model besides decisions on the product line and pricing.

During the market launch, one aspect to be concerned with is *product positioning*. Cooper(1998) defines product positioning as "how the product will be perceived by customers" (p.240). The product has to meet customers' expectations which emphasizes on not only the product quality itself but also how it's advertised and, thus, perceived. One way the products' value can be reflected and recognized is through *pricing*. Pricing is often and by default an indicator for the quality measure. A higher price compared to competitors is a signal for a better, more durable, or functional product, and vice versa. To make the offer more attractive, discounts, promotions, and coupons are examples of a variety of pricing strategies the company can execute.

Product launch mix strategies continue with *communication* decisions. Communication for a new product launch involves several activities including PR, advertising, sales promotion, and personal selling (Hart, et al., 2000). It is suggested that for a relatively new and low-awareness product, a pull, rather than a push, strategy for advertising and promotion is required (Hisrich and Peters, 1991). A sheer amount of money may be spent on a new product launch. For example, Unilever spent \$200 on the development of the new OMO detergent, while up to \$330 million were spent during the new product launch (Riesbos and Waarts, 1994). Such investments can be made sense by the argument that the company will recoup its losses in the long term with recurring revenues; and early in the process, their primary goal is to acquire a large amount of market share.

For successful communication to occur, Schramm (1955) argues that four basic conditions must be fulfilled, namely:

- Well-designed message.
- The message is easy to understand and relatable to the audience.
- Arouse the audience's emotions.
- Suggest a way to satisfy customers' needs.

Distribution is another aspect not to be overlooked. Selection of distribution channels is recommended that it matches the customers' buying behavior. A retail store is a traditional method for distributing products. A significant advantage of this method is the credibility of having a physical location. However, this also has many disadvantages and hinders growth potential by only offering to the local customers'; that it is limited to the restrained geography. An alternative or additional model is eCommerce. In this digital age, almost any product should be available for purchase online, either via its website or through a reliable third-party marketplace such as Amazon. This approach has several benefits such as the customer base can now be global, and the sales activity can be conducted 24/7.

To round up, commercialization is associated with multiple market launch strategies and elements including advertising (product positioning), pricing, communication, and distribution. This is the final but not less important than any previous step of the new product launch process. In addition, although the products should well be ready at this stage through many tests, flaws can be identified and one must be willing to call off or delay the launch and not falling for the sunk cost fallacy.

- Risk and failure

An additional consideration for a new product development process is the assessment of risk and failure.

Booz, Allen, and Hamilton (1984) point out that risk is an underlying part of an NPD. These risks are prevalent across all industries and sectors. It is for a good reason that up to between 33 percent and 60 percent of all new products made available to the public fail to generate a good return on investment (Schilling et al. 1998). However, companies must take the calculated risks and engage in NPD if they wish to grow and thrive.

They went on suggesting a framework for managing risks by identifying causes of a new product failure:

1. Market/ marketing failure
 - The proportionally small size of the market
 - No clear product differentiation (no unique selling point)
2. Fail to position
 - Misunderstanding of customer needs
 - Insufficient channel support
 - Competitive response
3. Financial failure
 - Poor return on investment (ROI)
4. Timing failure
 - Late in the market
 - Too early to the market - customer base is not yet developed
5. Technical failure
 - Not functional product
 - Bad design
 - Organizational failure
 - Does not match with company culture
 - Lack of organizational support
 - Environmental failure
 - Government regulations
 - Macroeconomic factors

A classic product life cycle (PLC) concept signifies that new products on the first introduction will initially make slow progress in penetrating a market. However, if survived this early stage, it then can look forward to a rapid growth period - an increased competition (Michael and Susan, 2007). This can be justified that customers' behavior is resistant to change, continuous purchases from previous brands are less risky as expectations of the products are

known. In the case of a new product; however, it is unknown to the customers whether their purchase matches the expectation and if it is the right decision.

Based on the idea that there is no new need, but only new ways to satisfy those needs (q.v. 'Marketing myopia', Levitt, 1960), it is crucial for companies to innovate their products, increase benefits and improvements, and offer unique selling propositions (e.x: thoughtful and exclusive after-sales services) to differentiate themselves from the competitors. "Me too" products, which almost the same as what's already available to the public, imply a significant risk of failure. For instance, a new computer model first introduced has to be either faster, smaller, more energy-efficient, more light weight, cheaper, or all these features included to stay competitive and succeed in winning the customers.

Despite the efforts of companies to constantly innovate and come up with new and competitive products, they can lose their competitive advantage and differentiation point as quickly as when their competitors offer similar or improved versions of the products. An example is such as when a new gaming laptop differentiating itself as the first 144 Hz, thin-bezel screen, will forfeit its unique selling point as soon as another brand introducing another 144 Hz, or even 200 Hz ultra-thin bezel gaming laptop. Customers then need other criteria to base on to make a purchasing decision, such as lower price or other features such as keyboard responsiveness or speaker quality. Thus, it is encouraged that the products should include as many new features and benefits as they can. And firms have to regardless take the risk of competing with their rivals. This will foster innovation and creativity, and this will ultimately benefit the consumers.

To sum up, there always exists a probability for product failures, especially for newly developed products, and there is almost no exception to this. These could be the results of a marketing failure, financial failure, timing failure, technical failure, organizational failure, or environmental failure. The products would also face the risk of not being accepted by the mass consumers due to people's nature of resistance to change. Lastly, as well prepared and planned as one firm can be, there are risks of being dominated by the competitors with improved versions of the products. However, regardless of these risks involved in the product development process, one must calculate the risks and act accordingly. It is generally accepted that it is impossible to do business without the risks involved. But the key is being that they have to be calculated and well thought out.

3 Case study introduction

3.1 Introduction to the company

Zertta ltd. was founded with the objectives to provide household products differentiated from the competitors, instead of just another me-too product. This is achieved through either the products have a distinctive nordic, modern, and elegant style, or ideally all are included. The first selling products are bath rugs with an estimated sales revenue in quarters 3 and 4 in 2021 is \$25 000 - \$30 000. The second product is under development and planning as suggested in this thesis.

These aims often require customizations of the products from the ideation to the manufacturing stage. Although the products are selected based on existing demand, not by creating new ones, there are many changes to the original versions offered by the suppliers. These modifications could be the features of how the products work or how they look.

Major market the brand selling to is the U.S consumers that makes the “nordic” selling point more appealing to the brand for being a foreign factor. However, the goods are still available for global customers. Previously, the goods are only available in the Amazon warehouses for purchases and making it the only sale channel. But the brand has recently partnered with third-party warehouses (3PL) to make it independent and available for purchases through other eCommerce platforms such as Shopify, Woocommerce, as well as its webpage.

The definition of a product for Zertta at this point only includes physical and tangible offers to the customers, something intangible (services or experience) is not its business model.

3.2 Market evaluation

“Market” in this context refers to the bed lamp market where businesses selling table lamps on Amazon.com. There are several concepts to be used for analysis that will be mentioned and explained below.

A keyword is defined as a word or phrase that represents a concept or idea that is memorable and used as the basis to form a complex thought. Our thoughts when searching for something, especially in an online environment, will break down into a small set of words known as a *keyword phrase or search query*. We then use these keywords to look up in a book or a search engine to index and finds more relevant information. (Jones, Ron, 2011)

One of the key fundamentals, if not the most important component in Search Engine Optimization (SEO) is keyword research. Search engines such as Google operates base on this primary idea that it will index websites and blogs based on the keywords within those sites. This has resulted in website and eCommerce businesses starting to find suitable keywords to

be used on their sites to be ranked high on Google or similar search engines tools such as Bing, or even Amazon.

Keyword search is also used in pay-per-click (PPC) campaigns in which a business will bid in an online auction to show up their advertisement for certain keywords. This form of marketing is referred to as direct marketing, and the online auction occurs automatically among bidders. The budget for the campaigns will be set in advance including how much a bidder is willing to pay for each click, thus having the name “pay per click”.

This knowledge, especially keywords, is fundamental to understand to be used as base knowledge when analyzing a market potential using online tools. It is believed to be unreliable, ineffective, and costly to go and ask potential customers for ideas and confirmation. It is usually better to analyze past behaviors such as base on keyword research to know what people are looking for, and businesses will try to fulfill those needs accordingly.

An evaluation of the keyword search volume to know how many people are searching for a specific keyword on Amazon.com can demonstrate the potential of the market; such as when there is a high search volume, it shows high interest in a product. Although there are multiple search engines, customers on Amazon.com have a very high buy intention when looking for something on the site. Another search engine such as Google, on the other hand, is where people are mainly looking for information that they don't necessarily have an intention in purchasing just yet.

The main keywords that are used in this case study for the table lamp product are “*lamp, table lamp, and bedside lamp*”

An average of 50k exact searches per month is commonly considered in the industry to be a sufficient and potentially profitable market. Assuming 70% of these searches lead to a sale as customers on Amazon.com have a very buying intention as mentioned earlier, meaning $50\,000 \times 0.7 = 35\,000$ people are buying. If a business appears for these searches with a conversion rate of 1% of the market share, this would result in $35\,000 \times 0.01 = 350$ units sold per month. This is the case of only 1 keyword. If a listing shows up for multiple keywords, this means there will be more traffic and lead to more sales which is what usually happens.

The search volumes for each keyword for the last 2 years period on Amazon.com are as the followings:

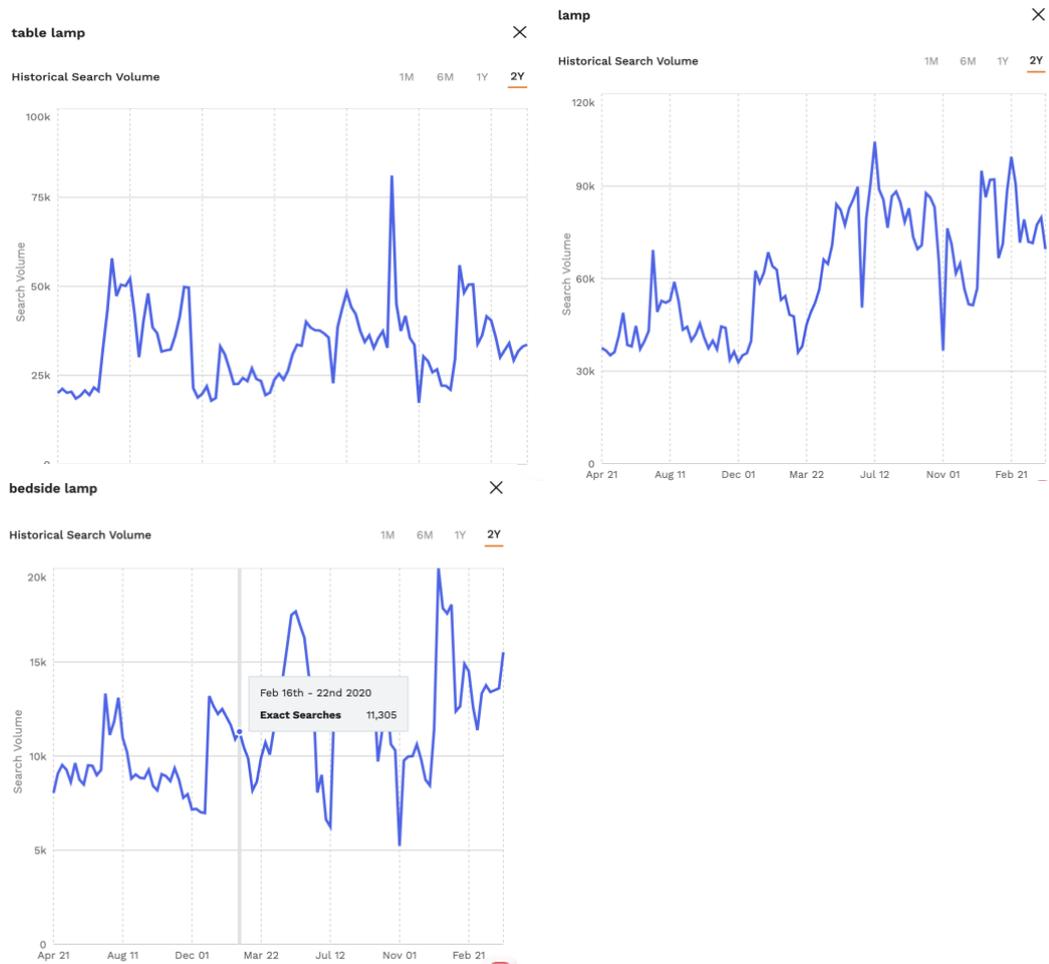


Figure 8: Keyword search volume

These keywords' search volumes can be evaluated to be decent or good, especially when combined. It can be observed that the keyword “lamp” has a relatively high search volume with an average of 60K/month while “bedside lamp” which is more specific has a low average of around 10K/month

3.3 Competitor analysis

Competitor analysis refers to the analysis of strengths and weaknesses of the current and potential business competitors; it gives information to identify both threats and opportunities (Wikipedia)

There is more than one way to categorize competitors on an eCommerce platform as there are different standards to compete with. However, the typical and commonly used metric is the number of reviews count and their rating.

A review count of how many reviews have been done for the product by the customer reflects much information such as sales velocity and/or how long the business has been selling the item. It is an industry-standard expected by many businesses to have a review rate of 5-10% meaning 5-10 out of 100 on average would leave reviews on a product.

3.4 Methodology

The methods applied for analysis are both quantitative and qualitative, with more emphasis and preferences on quantitative analysis.

3.4.1 Methodology on data collection

Data were collected by a third-party paired software tool named Jungle Scout that is exclusively used by Amazon sellers and businesses to search for data.

3.4.2 Reliability of the data

The data is highly reliable as it is collected through a paid tool (\$49 per month or \$589 annually) that requires high accuracy for its customers. However, it is acknowledged that the market is dynamic with constant changes; thus, there are possibilities for errors and lagging data. This, regardless, should not have any significant impact on the final results.

3.4.3 Evaluation of the methods used

The quantitative analysis method is mostly used because data can be collected and reliable enough to be used which similar results are produced under the same settings. There is not enough time or resources within the research scope to focus on qualitative analysis through audience surveys or other methods. Quantitative methods are also preferred and trusted by the thesis researcher to deploy.

3.4.4 Limitations

Although the data collected is reliable, it does not give an accurate sales forecast or consider many environmental factors, such as changes in customers' behavior and preferences by the time product is available to the public.

The researcher could spend a large amount of time analyzing every other factor of the market to increase the probability of success in the product launch. However, it usually results in being late to the market and it is easy to be in an "analysis paralysis" state in which a person is paralyzed to take action due to excessive analysis that prevents them to act.

The limitations, therefore, are the possibility of not having accurate data or imprecise forecastings.

4 BAH model application with research findings, and forecasting

4.1 Applying BAH model

4.1.1 Objectives and missions

As Zertta brand was founded to be a Nordic company selling household items with their distinctive styles of being minimalistic, modern, and elegant, the products to be included for selling should include these features in one way or another. This means every product has to align with the company's values. It is also a goal for the company that any customer can immediately recognize the brand as a company selling Nordic household items with the above characteristics. These goals can be achieved through the following elements:

- **Design:** The products should have a simple design as possible, but not necessarily notorious and dull. The preferred colors would be neutral with shades of gray, black, and white that have high contrasts; other colors with a neutral tone and feel light would be acceptable.

The philosophy is not to have everything included, such as a table lamp with USB charging, a speaker, a thermal meter, a clock, etc. But only things that are considered essential and should function well. A product should not have a feature just for the sake of having it.

- **Features:** Every product should do its job well. its main function should be as good as the best-selling product in its category as possible; such as a table lamp should then have a durable operating time.

what are the added features to the product for differentiation? Providing extra benefits through change is essential in today's business world as a distinguishing factor.

- **Quality:** Although the concept of quality can be loosely defined and perceived, Zertta wants its product to be durable and meet the high standards expected by the customers. For example, a table wood lamp should be made from highly polished and sturdy wood such as Oak or Walnut, these also have aesthetic appeal. Other characteristics such as long operating time and are a must.
- **Branding:** Zertta wants to project its image as being a reliable nordic brand selling household products that have high quality and standards with distinctive designs.
- **Target market:** Major market and platform the brand is selling to are the U.S customers. However, customers worldwide can still make purchases despite likely high shipping costs outside the U.S.

In terms of customer persona, the products are most appealing to the audience who prefer the nordic and minimalistic style. And since they are household items, the main demographic are adults who have to take care of and improve their homes.

Positioning: The idea is somewhat similar to the branding concept in addition to the fact that the company is small and family-owned. Therefore, it can only serve several small groups of customers at the moment who have a specific lifestyle preference.

4.1.2 Ideas generation

It was previously mentioned that there are no new needs, only new ways to satisfy those needs by Levitt (1960). This idea is of course is not absolute. But it is believed by the researcher that it is true to some extent in which most of the basic needs can be satisfied in today's world. The light needs are fulfilled by millions of different types of lighting devices, the transport needs are met by hundreds of thousands of different vehicles, and so on.

One way to decide on or invent a product is to apply problem-solution thinking. The approach stresses the importance of coming up with a product to solve a specific problem; such as a problem of fast transport is solved by inventing and improving faster trains or planes. This idea is undoubtedly practical and true. However, the researcher believes that whatever product or thing has its function that will solve a problem or need in one way or another. Thus, most of the common problems or needs have already been solved. Although knowing and understanding this concept is essential, it is not the main focus or way of thinking when Zertta coming with a product.

Derivative ideas and symbiotic ideas are otherwise the preferred methods. Derivative idea emphasizes the iterations of a product, to try to improve something to be better rather than inventing something completely new. This is also the commonly known philosophy in Japanese culture in which they favor fixing and improving what they currently have over replacing or creating something entirely different. In addition, creating new demand by introducing an utterly new product often results in high costs in marketing to educate the customers. For these reasons, Zertta believes a derivative idea is a good approach when generating product ideas.

A symbiotic idea is another selected method by Zertta for coming up with something different to differentiate and create more value for the customers. This somewhat resembles a derivative idea in the sense that it is developed based on the currently available ideas. For any physical product offered by Zertta, it always tries to bundle things together that combine relevant items for a better experience. For example, a lamp would need a bulb to work. Thus, it is a good idea to have a bulb included in the package when selling a lamp. This creates extra and expected value for the customers.

There are many methods to generate product ideas and one typical way is to use the Jungle Scout feature named “product research”. Within the product research feature of the program, there is data collected from the Amazon.com site that contains a lot of information on any available product. These include how many units are being sold daily, monthly, and yearly, its price and costs, its revenues, the first date of availability, review rating and several reviews, and so on. The user can set certain requirements to scan for product opportunities such as a product pricing over \$20, selling at least 100 units per month, competitors’ review rating is below 4 on average, and it is in the kitchen & dining category. Once criteria are set, results of the products matching those requirements will appear to the user. Further analyses such as competitor analysis, keywords analysis, and costs analysis are needed before the brand decides to study a product further and eventually launch it. A real use case of the tool is shown as following:

The screenshot displays the Jungle Scout product research interface. At the top, there is a dropdown menu for "United States". Below this, the interface is divided into several sections:

- Select one or multiple categories:** A list of categories with checkboxes. "Kitchen & Dining" is selected.
- Product Tier:** Options for "Standard" and "Oversize".
- Seller Type:** Options for "Amazon", "FBA", and "FBM".
- Filters:** A section with various filter inputs:
 - Min Price: 20
 - Max Price: (empty)
 - Min Net: (empty)
 - Max Net: (empty)
 - Min Rank: (empty)
 - Max Rank: (empty)
 - Min Revenue: 100
 - Max Revenue: (empty)
 - Min Reviews: (empty)
 - Max Reviews: (empty)
 - Min Rating: 4
 - Max Rating: (empty)
 - Min Weight: (empty)
 - Max Weight: (empty)
 - Min Sellers: (empty)
 - Max Sellers: (empty)
 - Min LQS: (empty)
 - Max LQS: (empty)
- Date First Available:** A dropdown menu set to "All".
- Include Keywords:** A text input field with the placeholder "Enter words separated by commas".
- Exclude Keywords:** A text input field with the placeholder "Enter words separated by commas".
- Exclude Top Brands:** An unchecked checkbox.
- Exclude Unavailable Products:** A checked checkbox.

At the bottom of the interface, there is a "Download CSV" link, a "Reset Filters" button, and a "Search" button.

Another method for coming up with product ideas is to look for inspiration and ideas on websites like Kichstarter.com and Indiegogo.com. These are crowdfunding sites on which investors support businesses with breakthrough products while they are not yet available to the public. These products are often different and/or immensely improved from traditional products that are already available in the market. In other words, they are usually utterly new and exciting that appeal to investors to back up the project before it is available for selling. These early investors are incentivized by getting a lower price than the launch price together with other benefits which vary. One example of a product being trendy on the Kickstarter site at the point of writing is a coffee brewing straw that introduces itself as being highly portable, flavorful, multipurpose, teeth-friendly, and 100% sustainable. The straw is used as a filter to drink coffee or tea as a replacement for other traditional filtering methods.

In this way, ground coffee or tea is put directly in hot water, the other side of the straw will act as a filter that prevents particles when we drink. This is perceived as more convenient than a coffee machine, or paper filter, and especially useful when someone is on a trip such as a hike that needs compact packing and values convenience. This type of product is either not yet available or not made popular by any other brand but first appears on these crowdfunding sites. A photo of the product is shown below:



Aliexpress.com is considered to be Amazon.com of China and it is another valuable platform to generate product ideas. A wide range of products can be found on this giant online retailer from household and stationery products to heavy industrial machines such as a forklift and mini excavator. There are lists of trendy products that a researcher can look up for preferences of what being loved by the customers at that moment.

Although product ideas can come from multiple sources, the main tool to collect reliable data being used by the researcher is Jungle Scout. The reason is that it has trustworthy data directly from Amazon.com of current products with proven past sales data. And based on the specific requirements of products selling over 300 units per month, pricing over \$20 average, low seasonality, competitors with 150 reviews count or below, simple logistics, and belong to the home improvement category, Zertta has developed a list of potential products to sell including *toothbrush holder, table lamp, garden light, air purifier, and area rugs*.

Product sourcing, or deciding what product to sell is one of the most, if not the most pivotal element contributing to the success of an eCommerce business selling on Amazon.com. Thus, this step is a worthy investment of time and resources. As simple as it may seem, this process often takes the most effort and is arduous as it involves lots of product screening, evaluation, and elimination. It needs a lot of practice and experience to be competent at this skill, especially for new businesses first starting.

4.1.3 Screening and evaluation

Among the 6 suggested idea screening methods namely growth role, category screening, strategic role, new product type, internal strength, and financial risk, the brand fully embraces the *growth role* strategy.

As the company is relatively new, it seeks to explore the market to discover opportunities and possibilities. It is encouraged to experiment and test new ideas to find out what works and what does not. The purpose is to expand the brand's portfolio with many different products offered to the customers, as long as the quality is assured during the process. For example, the brand first started with selling chenille bathroom rugs, the second product is a table lamp, and the third product under planning is a toothbrush holder. There is always a list of products for the brand to consider selling and different product categories are encouraged with the condition that they are household products and have Nordic features to them.

A *new product type* is also a preferred product screening method for the brand, but only products with modifications instead of radically new products. As a customer on Amazon has a habit of buying familiar products; something new is more suitable to be advertised and sold on crowdfunding sites like Kickstarter.com and Indiegogo.com. Zertta is open to selling new types of products as long as they are categorized as household items.

Pareto principle, also known as the 80/20 rule, asserts that 80% of outcomes (or outputs) result from 20% of causes (or inputs) (Carla, 2020, Investopedia). When applying this rule to business, it would mean 1 out of 5 products would result in 80% revenues. This can be taken into consideration when choosing a product to assess whether it will generate significant revenues and profits for the brand in the future.

Although almost all product ideas generated from the previous phase can match the brand's objectives, the table lamp is the selected product for the case study and further analysis. The product is shown as below:

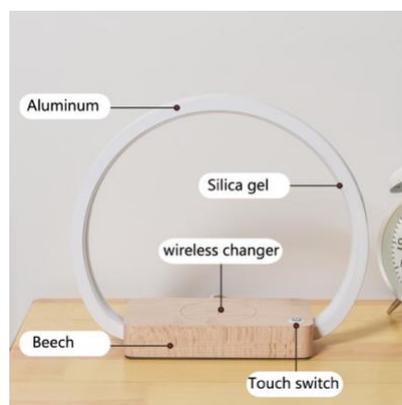


Figure 9: Zertta's bed lamp

4.1.4 Business analysis

To understand the company better and clarify its strategic goals, SWOT analysis is applied as follows:

Strengths	Weaknesses
<ul style="list-style-type: none"> - Flexibility: Zertta can make changes easily as it is a one-person operation at the moment - Less bureaucracy: there is no complex hierarchy system needed when making a decision 	<ul style="list-style-type: none"> - Resources: The brand does not have abundant resources such as money or people compared to other large companies. - Slow growth: this is due to a cash flow problem that hinders business's growth
Opportunities	Threats
<ul style="list-style-type: none"> - Amazon is the biggest and most trusted eCommerce platform available - Customers are more open to try new ideas and products 	<ul style="list-style-type: none"> - Other companies with bigger advertising budget to dominate market niches - Being dependent on Amazon makes a business in a total shutdown if Amazon decides to

Table 2: Zertta's SWOT analysis

The SWOT analysis method demonstrated above is to explore and understand internal and external factors within the business context. There are other analyses needed to be applied to evaluate the select product namely the estimations of:

- Unit sales: 275 units/month. This is calculated in forecasting methods in the later section
- Revenues: $275 \times \$49 = \$13,475$ / month
- Production costs: $4000 \text{ units} \times \$10 \text{ each} = \$40,000$
These production costs only include the manufacturing activities
- Direct marketing costs: $4000 \text{ units} \times \$2 = \$8,000$
Direct marketing is associated with PPC campaigns on Amazon.com or any other advertising platform such as Facebook or Google. \$2 is distributed as advertising cost for each unit sold, the budget, therefore, is \$4,000 total for 2000 selling units.
- Incremental profits:

Month	1	2	3	4	5	6
Net sales value	13475	21119	28763	36407	44051	51695
Fixed costs	4500					
Variable costs	4950	7758	10566	13374	16182	18990
Marketing costs	550	862	1174	1486	1798	2110
Incremental profit	3475	12499	17023	21547	26071	30595

Table 3: Zertta's product financial analysis

The number of unit sales per month is based on the naïve sales forecasting in the later section. The first 6 months of forecasting are used for the above table.

Fixed costs include the freight shipping cost in the beginning.

Variable costs include shipping cost per item, commission charge by Amazon of 15% each sale unit, and Amazon's storage fee.

- Payback:

Development	Month 1	Month 2	Month 3	Month 4	Month 5
44 500	13475	21119	28763	36407	44051

Table 4: Table lamp payback calculation

$$(\text{Costs} - (\text{month 1} + \text{month 2}) / \text{month 3}) = 0.34 \text{ month}$$

This project would take 2.34 months to recoup its investment in revenue if the sales forecast is accurate based on the naïve forecasting method.

Development cost is referred to as initial costs that are paid from the beginning.

- Break-even analysis:

The number of units needs to be sold to break even on the investment in revenue is:

$$4500 / (49 - 18) = 145 \text{ units}$$

4.1.5 Development

The basic need of a lamp is, unarguably, to give light. This is what is most expected when a customer buying a lamp. However, beyond this basic requirement is the need for the product to be aesthetic, good-looking, and perhaps easy to function. The selected table lamp by Zertta is believed to fulfill all these requirements. The design looks simple but still elegant. There is only one button to run, no complex operation is required.

The articulated need for this table lamp is the ability to change the light brightness. The color brightness adjustment can satisfy different customers' uses; at its brightest, it can be used to read books. On the contrary, the lamp can be turned on at deem light for sleeping. Another articulated need of the light is changing in color temperature which gives different colors ranging from yellow to white. This is included as some customers may prefer the color white over yellow and vice versa. This table lamp product will satisfy all of these customers' needs.

An exciting need, in this case, is the wireless phone charging feature. At its simplest, any phone with a wireless charging feature can be used. There won't be more hassle of wiring needed. And as people are already having the habit of leaving their phone on the bedside table. This is the ideal situation to include the wireless charging functionality so that customers can charge their phone overnight, which is also a common habit according to a poll surveying 1900 people (Jimmy Westernberg, 2020). Additionally, another exciting element of the lamp is the touch control button meaning no hard physical pressing is needed.

Besides these needs, purchasing a product from Zertta is a statement of customer's lifestyle preferences. Any customer buying the brand's product is expressing that they prefer the Nordic style, design, and quality products; and Zertta is trying to best serve these goals for their customers.

4.1.6 Testing

The testing framework is done as suggested by Susan and Michael (2007):

- Objective setting: the test is to explore if the customers welcome and like the product and if the sales velocity meets the brand's expectations.
- Product relation decisions: the product will be offered to be available on the Amazon marketplace with only a small number of 300-500 units. Pictures and descriptions of the product will be done properly. This test requires work similar to official product

launching with the only difference is that there will be not too many available selling units.

- Location of the product test: any customer searching and purchasing through Amazon.com. The product will be stored in Amazon and a third party warehouse.
- Data collection method: Amazon will provide all data for analysis including sales velocity changing month over month, and other financial reports.
- Measurement technique: The success of the product largely depends on the sales velocity and the responses from the customers. Sales velocity should meet the expectation, for example, an average of 275 units sold per month; and the feedback for the product measured by reviews and review rating should be positive and high such as the average rating of above 4 out of 5. These reviews metric is generally considered important when selling on the Amazon marketplace because customers will not believe in a product with a too low rating.

4.1.7 Commercialization

Commercialization in this Amazon Ecommerce case will start at the same time as testing the product. As mentioned above, every aspect of the product launching will be completed properly and applied to the first testing order including optimizing product pictures, descriptions, and keywords.

In addition, Amazon's PPC campaign is considered especially important when launching a new product. It is an unknown factor without proper research but a general fact in the industry based on observations that Amazon will give new products a ranking boost which means new products would receive more impressions and it is easier to rank. The explanation is because Amazon wants to know how well the new products could sell and if customers like them. This would even perform better with PPC campaigns with a reasonable ad budget.

Distribution is not a problem to be concerned about as Amazon will be responsible for handling the product being sent to each customer. Their Amazon prime program ensures customers will receive their package within 1-3 business days. Should there be any problem, Amazon will inform the customers and business owners about it, and compensation is offered when necessary.

- Risks

These testing and commercialization are also the opportunity to identify potential or unknown problems before the brand manufacturing bigger orders in the future. Following are anticipated risk which needs confirmation:

- Market/ marketing failure: customers may not like the wireless charging feature, it could be too slow with only 10W, or the light is not bright enough.
- Financial failure: advertising costs are too high that leaves a thin profit margin. Large return orders.
- Timing failure: the market could be already saturated, or exciting feature such as wireless charging has already become an articulated or basic need.
- Technical failure: the product does not work after falling, the power button breaks easily, touch control becomes not responsive, light is broken, overheating
- Organizational failure: The product is not perceived to be “Nordic” to align with the brand’s positioning
- Environmental failure: Product is not completely recyclable, production is not green enough

Should any of these risks become serious, especially regarding the technical failures, Zertta will investigate and address the issues immediately. The whole production or launching process could be revoked or adjusted regardless of the initial investment.

4.2 Forecasting

The goal of using forecasting methods in this thesis is to predict the sales revenue as accurately as possible for the soon-to-be-launched products. The forecasted sales for a new product without historical sales will be based on similar products sold by the current sellers despite some variations.

The quantitative method is chosen as past data is available for analysis. And most up-to-date data will be used to reflect dynamic changes in the market environment. Historical data ideally range from 12-24 months to assess the possibility of the seasonality of the products. If the data are consistent month over month or year over year without exceptional or unusual spikes or drops, it is reasonable to assume that the pattern will be continuous in the future.

The two main forecast methods for analysis are the average approach and the naïve approach.

4.2.1 Average forecasting

As mentioned in the previous section, specifically in the market evaluation, the main keywords of the selected product competing for sales are the *lamp*, *table lamp*, and *bedside lamp*. With requirements of price over \$50, competitors with 150 reviews count at most, and rating below 4.5 out of 5, the sales of the top 20 sellers on Amazon.com are as below:

JungleScout

Average Monthly Sales: **298**

Average Sales Rank: **84,083**

Average Price: **\$81.84**

Average Reviews: **48**

Opportunity Score: **3** High Demand with high comp.

Product Name	Brand	Price	Mo. Sales	D. Sales	Mo. Revenue	Date First Available	Net	Reviews	Rating
2-Pack Touch Control Bedside L... B08R85T25F	WIHTU	\$69.99	396	15	\$27,716	03/31/2021	\$48.89	29	4.3
Set of 2 Touch Control 3-Way Di... B08XYTX6PD	RORIANO	\$79.99	161	2	\$12,878	03/04/2021	\$56.81	11	3.2
Touch Control Bedside Lamps w... B08S3587MT	Opoway	\$69.99	120	5	\$8,399	01/31/2020	\$49.56	12	4.2
OASO Set of 2 Touch Control 3-... B08YJ93CX8	OASO	\$99.99	194	12	\$19,398	03/10/2021	--/	16	4.4
Set of 2 Touch Control 3-Way Di... B08PVM99RS	LITOSKY	\$89.99	720	36	\$64,793	12/07/2020	\$66.1	107	4.1
Bedside Table Lamps with 2 US... B08YFF7TDC	JS NOVA J...	\$59.99	153	1	\$9,178	06/09/2020	\$42.35	31	4.4
Ganiude Modern 3-Way Dimmab... B08N4N7989	Ganiude	\$65.99	178	6	\$11,746	11/10/2020	\$46.5	9	4.1
Bedside Touch Control Table La... B08L3DZ44T	Lakumu	\$59.99	1,149	16	\$68,929	10/12/2020	\$42.18	141	4.4

Showing Results 1 - 14 [Load More Results](#)

Figure 10: Sales of keyword "lamp"

JungleScout

Average Monthly Sales: **233**

Average Sales Rank: **128,221**

Average Price: **\$77.57**

Average Reviews: **35**

Opportunity Score: **4** High Demand with high comp.

#	Actions	Product Name	Brand	Price	Mo. Sales	D. Sales	Mo. Revenue	Date First Available	Net
41		OASO Set of 2 Touch Control 3-... B08YJ93CX8	OASO	\$99.99	194	12	\$19,398	03/10/2021	--/
87		End Table lamp for Living Room ... B08NT932LT	Weiters	\$89.99	465	16	\$41,845	01/28/2021	\$64.85
101		JONATHAN Y JYL4012D Madeline... B07BFIRC3W	JONATHAN Y	\$64.17	30	1	\$1,925	03/12/2018	\$42.92
106		Set of 2 Touch Control 3-Way Di... B08PVM99RS	LITOSKY	\$89.99	719	36	\$64,703	12/07/2020	\$66.1
109		Addlon Floor Lamp with End Ta... B08QMCRHV4	addlon	\$99.99	334	5	\$33,397	03/15/2021	\$69.42
151		Catalina Lighting 18842-002 Tra... B06Y1FKTS5	Catalina Lig...	\$58.27	0	0	\$0	04/01/2017	\$38.88
162		Touch Control Traditional Table ... B08SCDJH82	PARTPHON...	\$89.99	353	15	\$31,766	01/07/2021	\$66.75
195		Bedside Touch Control Table La... B08L3DZ44T	Lakumu	\$59.99	1,149	16	\$68,929	10/12/2020	\$42.18

Showing Results 1 - 19 [Load More Results](#)

Figure 11: Sales of keyword "table lamp"

The screenshot shows the JungleScout dashboard with the following summary metrics:

- Average Monthly Sales: 294
- Average Sales Rank: 38,748
- Average Price: \$73.12
- Average Reviews: 41
- Opportunity Score: 4 (High Demand with high comp.)

The main table lists the following products:

Product Name	Brand	Price	Mo. Sales	D. Sales	Mo. Revenue	Date First Available	Net	Reviews	Rating
Set of 2 Touch Control 3-Way Di... B08PVM99RS	LITOSKY	\$89.99	721	37	\$64,883	12/07/2020	\$66.1	107	4.1
Floor Lamp for Living Room, Sta... B08SLZSK76	Otdair	\$47.99	516	19	\$24,763	01/11/2021	\$28.83	41	4.4
End Table Lamp for Living Room ... B08NT932LT	Weiters	\$89.99	464	16	\$41,755	01/28/2021	\$64.85	70	4.4
Dream Color LED Floor Lamp, Z... B08XZKVNLG	Zanwuz	\$74.99	411	12	\$30,821	03/04/2021	\$54.35	18	4
Corner Floor Lamp RGB Color C... B08TWR36JJ	Tacopet	\$69.99	315	22	\$22,047	01/25/2021	\$50.07	34	4
Led Floor Lamp, 61" RGBIC Colo... B08Y6MLSSM	Gowee	\$74.95	206	12	\$15,440	03/10/2021	\$54.35	123	4.3
IIQ Desk Lamps for Home Office... B08XPYRHZG	IIQ	\$49.99	318	11	\$15,897	03/01/2021	\$34.25	17	4.4
2-Pack Touch Control Bedside L... B08R85T25F	WIHTU	\$69.99	397	16	\$27,786	03/31/2021	\$48.89	29	4.3

Showing Results 1 - 19 [Load More Results](#)

Figure 12: Sales of keyword "Bedside lamp"

The average sales of competitors for each keyword are 298, 233, and 294. In reality, one product would include multiple relevant keywords to optimize its SEO. By calculating the average sales of these different but relevant keywords, we can have a somewhat reliable sales forecast. The formula for calculating the average is as follows:

$$\text{Average} = (X_1 + X_2 + X_3, + \dots + X_n) / n$$

By applying the formula, we have the result of *average estimated unit sales per month* = $(298 + 233 + 294) / 3 = 275$ units

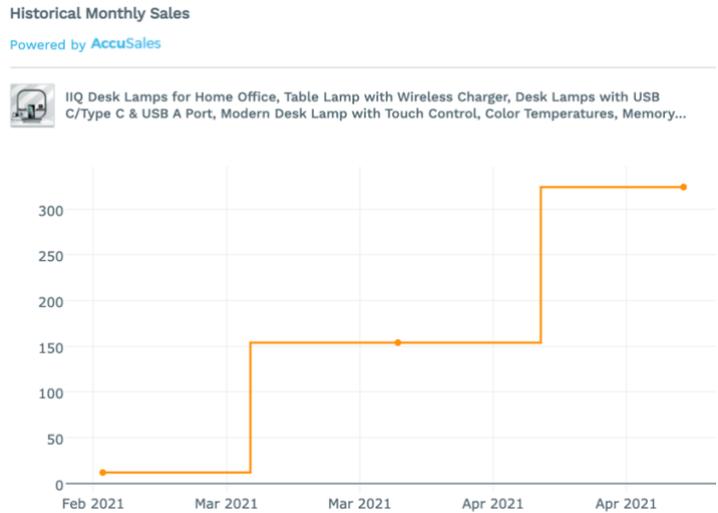
4.2.2 Naïve forecasting

$$\hat{y}_{T+h|T} = y_T$$

The naïve method of forecasting is used to forecast the next period based on the previous period (avercast.com). In other words, this method assumes the financial or sales pattern would repeat itself in the future.

This method of forecasting is applied because time series data is available. Although economic and financial data often have complicated patterns to interpret and predict reliably, this can help simplify the calculations, especially in this early stage without the availability of other historical data.

The average forecasting suggests that an estimation of 275 product units could be sold per month. This leads to the idea of finding a competitor with similar sales history for further analysis. A suggested competitor is a desk lamp product selling 324 units in May 2021:



This product has only been available for purchase since February 2021. The number of units sold in March, Apr, il, and May are 12, 15, and 324 respectively. This shows the growth rate of:

- March - April: $154 - 12 = 142$ units increased
- April - March: $324 - 154 = 170$ units increased, $(170 / 154) \times 100 = 110\%$ growth rate

By applying the g average method, $(142 + 170) / 2 = 156$ units could be sold more per month.

Assuming the selected table lamp would be available for purchases on Amazon.com starting August 2021, by applying naïve forecasting, we can have a sales forecasting for the first year as follows:

Month	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.
Units/month	275	431	587	743	899	1055	1211	1367	1523	1679	1835	1991
Growth/month (%)	100	57%	36%	27%	21%	17%	15%	13%	11%	10%	9%	9%

Table 5: Naïve sales forecasting

Units / month is calculated as: current month = previous month + 156

Growth/ month (%) is calculated as: $(\text{current month} - \text{previous month}) / \text{previous month} \times 100$

Forecasting summary

The average forecasting method suggests 275 units of the selected table lamp could be sold per month, or in the first months, while the naïve forecasting method suggests 156 units could be sold more in the following months.

The forecast data is a good guideline for references. However, it is important to be aware that not all other market conditions are taken into account. Thus, the results are only to be used as references. For the forecast to be reliable, it needs complex analysis and factors in every other market circumstance. This is believed to be too challenging to achieve and unnecessary work for this project.

There are more elaborated and sophisticated calculation methods such as scaled-dependent errors, percentage errors, scaled errors. However, the company is young and at a trial period, somewhat reliable forecast data is sufficient to get started and there will be changes to be made in the future.

With these justifications, it is assumed that the average forecasting and naïve forecasting methods are sufficient. Further and more accurate forecasting methods could be applied in the future once the product has its historical data which could be used to base on.

5 Results

5.1 Zertta on product selection

A table lamp with Nordic designed and style is the outcome of applying the BAH model to Zertta, an eCommerce business selling on Amazon.com.

Although there are other alternative products to select based on research in the ideas generation phase, this product is chosen as a case study and it proves to be profitable and can help achieve the company's goals.

5.2 BAH model evaluation

Despite having been created over three decades ago in 1982 by Booz, Allen, and Hamilton, the market analysis model for product selection named BAH proves itself to be an effective tool for businesses to this date. This has been demonstrated in its application to the case study brand Zertta, and a product has been selected for launching as the outcome of the process.

It is undoubtedly that there are substitute and newer models, but the core principles and phases in this BAH system namely objectives and missions setting, idea generation, idea evaluation and screening, business analysis, business development, testing, and commercialization will remain to be effective steps of actions for a business to take when they need to perform market analysis for product selection.

6 Conclusions

There are many ways for a business to fail, as Changing Times press has suggested in their article in 1986, there could be as many as 10 different causes such as picking the wrong business, lack of managerial experience, too many debts, lack of working capital, poor salesmanship, bad location, failure to keep records, loose credit policies, lack of insurance, or poor judgment of people. It is for a good reason that “picking the wrong business” is on top of the list. When translating this into the Ecommerce business, specifically when selling on Amazon.com, it would be equal to picking the wrong product to sell. A good product with high sales velocity and a high-profit margin can help the company thrive even in a short period, and vice versa, a lot of money would be lost to a bad product due to advertising cost, logistics such as storage, and customer compensations when it breaks or malfunctions. Thus, this reinforces the importance for a business to select a good product to sell; which refers back to the research problem.

Businesses need a systematic method to solve this problem. A suggested framework has been introduced in this thesis named BAH developed in 1982 by Booz, Allen, and Hamilton has proved itself to be an effective market analysis model for the product selection process. All seven action steps of this model have been outlined, clarified, and applied to the case study company Zertta; and a table lamp has been selected as the outcome of this process. The product has been analyzed thoroughly and justified as a good product for the brand to sell in their next product launch.

With results and findings in the previous chapters, the thesis researcher believes that this thesis has satisfied the research questions.

References

Printed

Allen & Hamilton, Booz. "New products management for the 1980s". Booz, Allen & Hamilton - original from Indiana University.

Bruiyana, Nadia (2011). "A framework for successful new product development". *Journal of Industrial Engineering and Management*. 4 (4): 746-770.

Graham and Bachmann (2004). *Ideation: The Birth and Death of Ideas*.

Barquet, Ana Paula B., et al. "Business model elements for product-service system". *Functional Thinking for Value Creation*. Springer Berlin Heidelberg, 2011. 332-337

Dess, Gregory (2018). *Strategic Management*. United States: McGraw-Hill. p. 73.

Electronic

Michael Baker and Susan Hart (2007). *Product Strategy and Management*, second edition. Accessed 25 May 2021.
<http://www.mim.ac.mw/books/Michael%20Baker,%20Susan%20Hart%20Product%20Strategy%20and%20Management.pdf>

Hart S, Tzokas N. New product launch "mix" in growth and mature product markets. *Benchmarking*. 2000;7(5):389-405. Accessed 25 May 2021.
<https://search-proquest-com.nelli.laurea.fi/scholarly-journals/new-product-launch-mix-growth-mature-markets/docview/217361709/se-2?accountid=12003>. doi:
<http://dx.doi.org.nelli.laurea.fi/10.1108/14635770010359874>.

C. Anthony Di Benedetto, 1999, Identifying the Key Success Factors in New Product Launch. Accessed 25 May 2021.
<http://www.dep.ufmg.br/old/disciplinas/epd034/artigo04.pdf>

Schilling MA, Hill CWL. Managing the new product development process: Strategic imperatives. *The Academy of Management Executive*. 1998;12(3):67-81. Accessed 25 May 2021.
<https://www-proquest-com.nelli.laurea.fi/scholarly-journals/managing-new-product-development-process/docview/210530183/se-2?accountid=12003>. doi:
<http://dx.doi.org.nelli.laurea.fi/10.5465/ame.1998.1109051>

Jain, D. (2001). Managing new product development for strategic competitive advantage. In D. Iacobucci (Ed.), *Kellogg on marketing* (pp. 130-150). Accessed 25 May.
https://books.google.fi/books?hl=en&lr=&id=W-9LvI2vB5oC&oi=fnd&pg=PR9&dq=Kellogg+on+marketing+Dawn+Iacobucci&ots=jF8fA3Wx5P&sig=icGr72QukK67iOmlRVyzIFK5aKI&redir_esc=y#v=onepage&q=Kellogg%20on%20marketing%20Dawn%20Iacobucci&f=false

Jones, Ron. *Keyword Intelligence : Keyword Research for Search, Social, and Beyond*, John Wiley & Sons, Incorporated, 2011. ProQuest Ebook Central. Accessed 25 May.
<https://ebookcentral.proquest.com/lib/laurea/detail.action?docID=817897>.

TEN WAYS TO GO BBOKE: -HERE ARE THE MOST COMMON CAUSES OF FAILURE AMONG NEW BUSINESSES. *Changing Times (pre-1986)*. 1952;6(9):43. Accessed 25 May.
<https://www-proquest-com.nelli.laurea.fi/trade-journals/ten-ways-go-bboke/docview/199145102/se-2?accountid=12003>.

John C. Chambers, Satinder K. Mullick, and Donald D. Smith, How to Choose the Right Forecasting Technique. *Magazine*. 1971. Accessed 25 May.
<https://hbr.org/1971/07/how-to-choose-the-right-forecasting-technique>

Aha.io, Introduction to product strategy. Accessed 25 May.
<https://www.aha.io/roadmapping/guide/product-strategy>

Businessmodelsinc.com, business model canvas. Accessed 25 May.
<https://www.businessmodelsinc.com/about-bmi/tools/business-model-canvas/>

pestlanalysis.com, what is business analysis and 8 steps you should follow. Accessed 25 May.
<https://pestlanalysis.com/what-is-business-analysis/>

James Heaton, 2011, "The Difference Between Marketing and Branding". *www.tronviggroup.com*. Retrieved 22.01.2021. Accessed 25 May.
<https://www.tronviggroup.com/the-difference-between-marketing-and-branding/>

Berkun, Scott (2008). "Why Jargon Feeds on Lazy Minds". *Harvard Business Review*. Retrieved 22 January 2021. Accessed 25 May.
<https://hbr.org/2008/08/why-jargon-feeds-on-lazy-minds.html>

Figures

Figure 1: Mortality of new product ideas	13
Figure 2: Cumulative New Product Expenditure	14
Figure 3: SWOT analysis framework	16
Figure 4: Business Model Canvas: nine business model building blocks, Osterwalder, Pigneur & al. 2010.....	17
Figure 5: Product-related decisions testing	24
Figure 6: Measurement techniques in product testing	25
Figure 7: Product testing process summary. Susan & Michael (2007)	26
Figure 8: Keyword search volume.....	33
Figure 9: Zertta's bed lamp	40
Figure 10: Sales of keyword "lamp"	45
Figure 11: Sales of keyword "table lamp"	45
Figure 12: Sales of keyword "Bedside lamp"	46

Table

Table 1: Payback example	19
Table 2: Zertta's SWOT analysis	40
Table 3: Zertta's product financial analysis	41
Table 4: Table lamp payback calculation.....	41
Table 5: Näive sales forecasting	47