

**Product pricing process implementation in gaming industry for a mobile application**

**Case: Niemijärvi Oy**

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Abstract  <p>Nowadays many businesses face the problem of pricing their products properly, mainly due to the fact that existing theoretical knowledge is complicated to employ for a particular product, nevertheless, pricing should be treated sincerely, as it handles a deep research on intercompany collaboration, classifies product's competitive advantages, moreover, reveals and manages issues for further product development. Mobile application gaming industry is changing rapidly nowadays, appending more difficulties to pricing model implementation, therefore, two research questions were formulated, where (a) was to scrutinize pricing models for a gaming industry, and (b) was to determine a pragmatic way for implementing pricing model for a case company.</p> <p>The theoretical base as a secondary data encompassed key concepts and previous research findings of pricing process generally and from the mobile application field perspective. Primary data was assembled though 6 semi-structured interviews with local companies and online feedback survey with 50 respondents in total. After the saturation point of the interviews was reached and the surveys were conducted; results were manuscript, inspected and reported according to guidelines.</p> <p>Action research was used as an approach for answering the research questions, moreover, the triangulation of data analysis merged qualitative and quantitative research method for reliable and versatile results. Mixed method authorized a relevant way of particular pricing model implementation in a case company. What is more, suggestions for future product improvements were specified and portrayed, in order to arise growth potential and customer satisfaction. The findings provided support to disparate earlier theories and employed previous theoretical studies for the case company pricing model. As a result, a pragmatic and germane implementation of pricing process into the case company was delivered.</p>		
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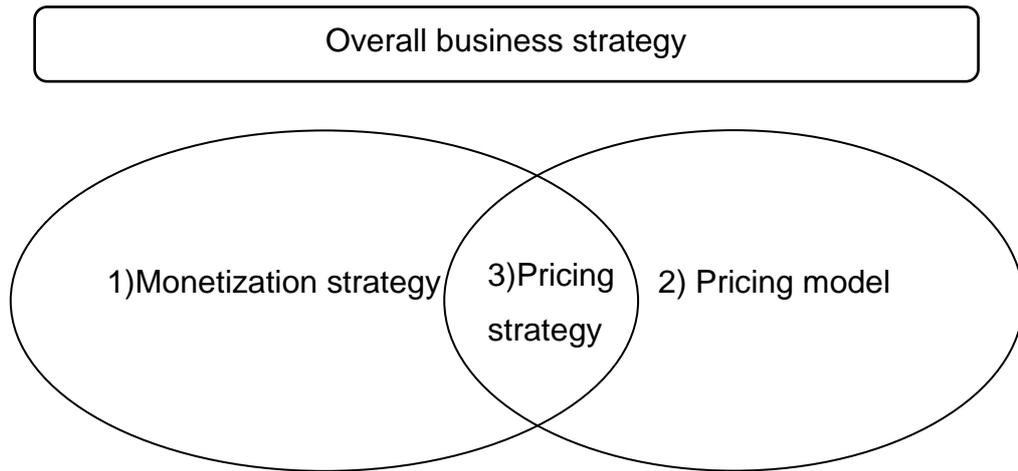
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## 1 Introduction

Creating pricing process for a product is an essential part in every business, as on one hand, a company's economic efficiency arises, on the other hand, an enterprise is not burden with inappropriate actions and activities. The process of a company's product price creation allows to conduct a wider research on intercompany cooperation, identify competitive advantages of the product, disclose barriers and problems of future development and accomplish recommendation elimination.

There is a lack of theoretical knowledge about choice criteria, evaluation index and the absence of practical methodology for various industries, including gaming and mobile app. Efficient evaluation and strategic activities of product price creation are still obscure. Admitting that many professors spend their entire career on pricing philosophy (balancing the cost of items, brand perception, customer needs and competitive landscape), nowadays it is significant to estimate the product in an appropriate way, for the sake of having the growth potential, stupendous sales and customer predisposition. Every entrepreneur and businessman encounters an issue of how much does a particular product cost, how to benefit from the product and how much should customers pay.

Monetization is a vital concept of converting something into money. This process was, is and will be changing by virtue of the global megatrends, which impact businesses constantly. Nevertheless, in gaming industry literature related to monetization is limited: there is a minority of business articles, researches and interviews in various internet platforms, moreover, many related books are rare for this research. This research focal point is on product pricing procedures, which are included into a company's overall business strategy. Pricing model and strategies for a specific product provoke pricing process to be distinct. This thesis was formulated according to figure 1.



- 1) Chosen by a company. Presented in Introduction chapter;
- 2) Created in a research. Theory is stated in Literature review, while practical knowledge could be found in results part;
- 3) Is highlighted theoretically in literature review for stronger model development.

Figure 1. Taxonomy of strategies and models related to pricing

Monetization strategy is presented as a broad concept that could be observed at the general level of the research. Pricing models and strategies are supported by antecedent researches as a theory base. This process is formulated by activities mentioned in the theoretical part, in this research such a process was tested by action research as methodology. Research area in this study is to price the product by contrasting with competitors and therefore to implement both pricing strategy and model in a case company.

It is essential to discern how pricing process is created nowadays, in spite of to position the product in a proper way and, moreover, to predict what will competitors do and in what manner. Mobile apps usage is growing rapidly every day, thus, companies should be able to market their products accurately, and therefore ensure that their income and audience number either remain the same or keep increasing. Mobile monetization is an ability for companies to deploy product in the marketplace. This process stimulates the company to enlarge its added revenue, in case of proper usage.

## 1.1 Assignor company and their industry

This research was conducted for Finnish company Niemijärvi Oy, which was founded in 2008 and is situated in Jyväskylä, Finland. Niemijärvi Oy is accentuating social impact, nevertheless, the product that was used in this research is a pre-launch startup. It is an educational mobile game for immigrants, which focuses on developing an e-learning game called «How to be a Finn». The game teaches all the essentials about Finland and activates players to reach for the community. "How to Be a Finn" is a mobile application that is searching for ways on how immigrants and newcomers can adapt faster to their host country. The product is an innovative and novel way to support integration and furthermore is helping to accept multiculturalism through gamification in education. Moreover, the game is based on hyper-localization, crowdsourcing and user activation by peer-support and gamification.

«How to Be a Finn» business values imply the creation of a product with:

- high shared value and social impact;
- global impact with global potential;
- local awareness.

Rajput (2016, 9) found out that in 2015 Google Play consisted of 1.8 million apps, and Apple Store contained 1.5 million apps, while consumer expenditure in 2016 was 50\$ billion. This is challenging and also has abundant opportunities, due to the fact that the mobile game markets are flooded, and are providing games for every possible audience. The fact that the company is desperately trying to diversify from competitors is minuscule as a constant rival will keep them motivated to entice the same target audience (Julkunen, 2016, 6).

The topic was found by the assignor and research author collectively during the project. The author was participating in focus group meetings, game content creations and totality of project development meetings within the firm. The idea of turning the project work into thesis research materialized from the author's enthusiasm towards the pricing model during the project, thus throughout this study a specific and straightforward plan of actions was expected to be produced.

## 1.2 Research questions

This research tends to find a coherent pricing process for a new product in furtherance of its usage by entrepreneurs (including the assigning entrepreneur) especially in gaming industry, in the future. Two research questions were formulated, in order to meet the objective:

1. What are the pricing model options for a gaming company?
2. What is the relevant and pragmatic way to implement the pricing model in the case company?

Taking everything into consideration, the purpose of this work was not barely to answer research questions on a concrete level, but also to enable the case company to possess and use the model by offering pragmatic process steps that the company could handle.

## Structure of the thesis

This research is started with theory base, as the critical review from preceding researchers is needed for a deeper understanding of the topic. After that methodology chapter is described, in such a manner that every single decision and action that was done during the research was clarified and explained, moreover, the sources of information are additionally covered at that part. The results of the contrived research are displaced furthermore illustratively, nevertheless, for this research the most essential part is discussion over the results, in behalf of the pricing model and recommendations for the company.

## 2 Theory and Knowledge Base

This chapter is dedicated to a prior research that has already been undertaken; basic processes, conceptual foundation and different opinions about the phenomenon will be distinguished.

Money making process will furthermore be opened in this chapter, in order to realize how to get most out of the product. Pricing strategies and models are presented and critically reviewed, moreover, this chapter will have many concepts that are argued by different scientists, in furtherance for assigner and research author to choose the proper features for the case product: pricing process, pricing strategies and pricing model.

### 2.1 Development of value chain thinking

Andreeva (2013) postulates that the history of product value chain is short and it has no conspicuous research approaches, what is more, this problem was firstly discussed in 1990s by Institute of Development Studies, Great Britain (72-73). The anterior fundamental research in this sphere was made by Harvard Business School's professor Porter (2004), who, as a result, wrote a book about competitiveness. The author had an intention to enroot a concept, which would allow the public to enquire about company's structure, mechanisms and rivalry advantages. The book describes how to function efficiently and successfully heighten a company's competitiveness.

The magnitude of the apprehension "value chain" was firstly emphasized by G. Gereffi in 1994, where he aimed to analyze leading international companies' activities. Gereffi proposed the term "global goods production chain" in order to reach his intentions. (Gereffi 1994, 158.) Moreover, a book was written by Kaplinsky & Morris and it constrained a dramatic impact on further value chain development. (Kaplinsky & Morris 2003, 2.)

Nevertheless, scientists were trying to explore the pricing question in business, for instance, Ladany and Sternleib (1974, 7) studied the effect of price variations on demand and economic ordering quantity, but the advertising impact was not included. The only researcher that studied the impact of the advertisement on price were Goyal

and Gunasekaran (1995,15). Subsequent research identified that cooperation in advertising investment can increase the profit of the whole supply chain.

The idea of traditional product concept as a value chain for the consumers was expounded by such scientists as: Drucker in 2000, Mintzberg in 2003, Thompson in 2000, where it was identified that value chain is an important tool for strategic costs analysis and these works were based on Porter's observations. McConnell uses a term "value chain" for business efficiency analyses, which were based on Activity Based Performance Analyses. One of the important contribution of this work was the description of a term "chain efficiency", which also was based on Porter's works, with exception on included expenses. Efficiency chain starts with business processes and ends with expenses, added value for consumers and company's financial evaluation (Mintzberg 2003, 74). Efficiency chain by McConnell was reviewed using the case of global corporation. Nowadays value chain concept is used in different spheres of management: marketing, strategic management, logistics, financial management and others.

## 2.2 Value chain concept

Value chain creation analyses is a stupendous way to look at company's competitive advantages. It is an adequate tool for company's efficiency raise, on account of relations consideration between manufacturer and external counterparties, thus value chain product effectiveness is determined by activities' effectiveness.

Drucker in his work "Management goals in XXI century" emphasised, that in order to be competitive in the market the company is obliged to:

- Identify all the costs in every part of the value chain;
- Together with others value chain participants control these costs and achieve an optimal outcome (Drucker 2000, 154).

Simchi-Levi and Kaminsky (2009) demonstrates that in the supply chain, the retailers are able to determine the retail price and advertising investments according to their own market environments to maximize their own profit. The manufacturer has the means for the determining of its own advertising investment, wholesale price, replenishment cycle for raw materials and the finished product, and backorder

quantity to maximize its own profit. (369 – 372.) Despite the fact that Kaminsky's results were importunate, Druker (2004) accentuated that one relevant precondition of effective value chain formulation is determination of consumers needs and elicitation of operations, which leads to customer's needs satisfaction. (121.) "Cost" – value of goods that is expressed in money, which are inquired to be compensated, in order to bargain a product, money spendings, cash outflow for product purchase and accomplish services & activities (Andreeva 2013, 117).

Talking from the competitiveness perspective, created value for consumers is a product cost, which consumers are ready to pay. Liker (2004) remarked that the company will be profitable, in case of product market value exceeds production and realization expenses (45). As every process, value chain consists of expected discrete links – activities, which are directed for final product cost creation. One of the most important places in value chain concept has purposefulness and all of the discrete activities have one aim that unites them – long-term profit maximization. (Andreeva 2013, 64.)

Value chain reveals how company's activities add value to the final product price, and how company's price structure correlates with the competitor's price structure.

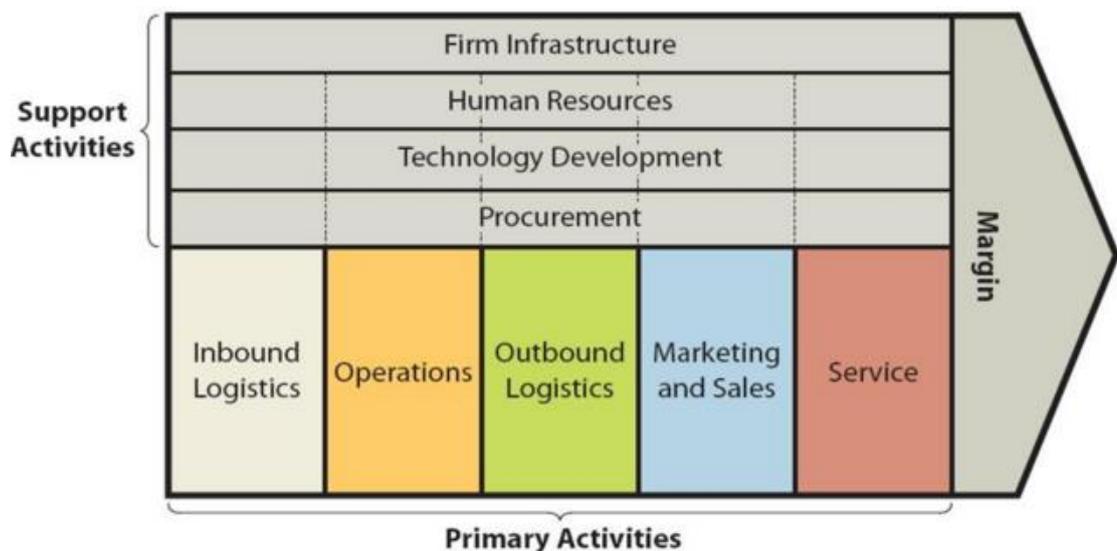


Figure 2. Michael Porter's value chain model (Singh Pratap 2009, 4)

In order to have an adequate understanding of value chain it is essential to know, that value chain process is describing company's activities on two different layers, which were presented by Walters (2004). He stated that the first one is micro layer, which consists of all activities that occur inside the company. Macrolayer is strategic and value chain is presented as a tool for understanding, where the product and company are in the market. (468.) Rainbird (2004) confirmed that on a microlayer value chain internal company's activities are demonstrated, while on the macrolayer value chain creation describes an industry structure, in which the company is living. (34.)

Every supply chain is a concept with many incomparable activities in it, each one is aiming to create a value to the product and company itself. Those actions are on companies' supply (raw materials, inbound logistics and production process) and demand side (outbound logistics, marketing and sales). (Rayport & Sviokla 1995, 76.)

Porter revealed 2 different groups of activities that are connected to the value chain concept:

- Basic activities that are connected with physical product creation, sales and product movement towards the consumer, along with service, such as internal and external logistics, marketing and sales;
- Ancillary activities that aimed at core activities support: logistical support, technological development, personnel development, company's infrastructure. (Porter 2004, 34.)

Scientist accentuates that all the activities are tightly interlinked and have an influence on expenses and efficiency, nevertheless, these activities are just a starting point. Porter asked every company to expand his list according to their product. (ibid., 37.) Description of value chain was exemplified by different authors. Three main concepts and definitions are summarized in table 1.

<b>The concept formulation</b>	<b>Author</b>
Value chain – related company’s activities, which are accomplishing the cost for consumers. The cost starts with raw materials for providers and ends with the final product/service, which are delivered to the consumers/client. Value chain – set of actions from the first production steps till the consumer’s delivery actions. Everything is made by company with providers, customers and business partners cooperationally.	Porter (2004, 126)
Chain cost savings covers a full range of activities, that are needed for product, in order to go through the cycle of product creation (from raw materials purchasing up to customer delivery and even recovery/recycle of the product).	Kaplinsky & Morris (2003, 59)
Chain that is producing a cost for company’s activities. It starts with provision of raw materials and continues with production components, assembly and product release, wholesale and retail sales or services for customers.	Thompson, (2000, 71)

Table 1. Value chain description

There are connections not between particular value creation activities inside the company, but also provider value chain and distribution value chain. If the company optimizes or coordinates these relations outside of its business, it will create a competitive advantage. Porter (2004) rejected any unified classification structure of value chain creation (47).

There are two groups of factors that are influencing product value chain: external and internal. Starting with external once, it should be mentioned that they also are divided into driving and local environment aspects. Driving factors consist of

summation of economical, political, social and technological causes, which are affecting the product value chain in economic industry. (Andreeva 2013, 43.)

### 2.3 Pricing process

According to Perreault and McCarthy (1996), price is influencing the number of sales a company makes and how much money it earns. While doing pricing company should understand how flexible the price will be, to whom and when discounts will be presented and how to handle transportation costs. (512-513.)

Process of pricing the product was introduced in 1994 by Charles Duke, which was called "Standard linear approach". He believed that this concept would conceive managers more confident in their decision-making process and also will give the company consistency and justification for its pricing approaches. (Duke 1994,16.)

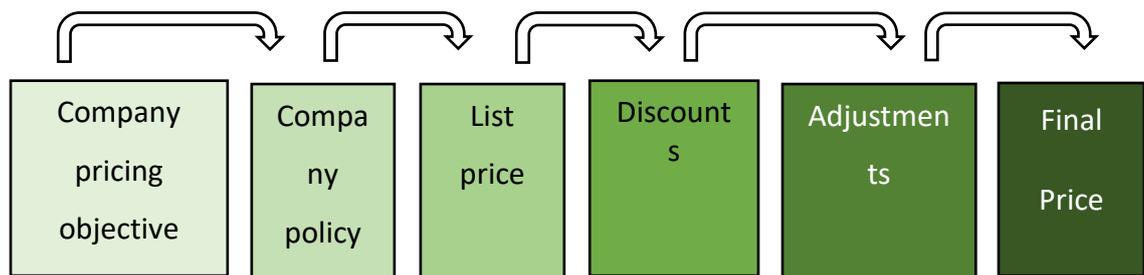


Figure 3. Pricing decision: Standard Linear Approach (*ibid.*, 18)

1. The first step of this approach is company's objectives, which basically are company philosophy on price determination. Profit maximization, market share, sales volume status quo and target return on investment level could be included into this category;
2. The second step is to have a clear plan of actions, in order pricing objectives to be achievable – pricing policies. Usually such policies consist of penetration pricing, customer value, skimming pricing and life-cycle pricing;
3. List of prices could be made only, when company's objectives and policies are clearly stated. Such list is developed by cost-based, competitive based or demand-based calculations methods;

4. Each product has a target group to reach, nevertheless, people in this group still should be treated differently – individual customer approach. Discounts are used in the interest of price list reductions. There are many possible discounts nowadays to use: seasonal, special sales, distribution channels, quantity, etc.;
5. Consideration of uniform pricing versus shipping zones as well as other distribution-related tactics are made by geographical considerations from adjustments. (Duke 1994, 20).
6. Data and knowledge from these 5 steps will help company to finalize product final price.

Pricing is a vital issue for the company, which deals with product positioning. There is a basic process of pricing a new product in the modern world, which consists of 7 equally important steps:

1. Marketing strategy should be developed, with a view to a company to know customer segmentation, target audience, product position in the market and perform marketing analysis;
2. Define the product, distribution and promotion tactics, which signifies that the company is creating a marketing mix decisions. This step is needed, owing that pricing will heavily depend on other product issues;
3. The impact of product pricing should be calculated by the demand curve. The unit cost of the product sets the lower limit of what the firm might charge, and determines the profit margin at higher prices;
4. Estimate all the costs that are connected with the product, such as fixed and variable costs;
5. Evaluate competitor's decisions and actions, understand legal constraints and environmental factors. The company should know that if the product is priced unpretentiously, it might initiate a war with competitors. On the other hand, setting the superlative price may attract a large number of competitors, who want to share in the profits;
6. Set the pricing objectives. There are many possible objectives for pricing process to consider: current profit and revenue maximization, the number of

units sold and profit margin, for example, should be maximized. It is also better to position the product as the quality leader. Company should avoid pricing wars, but aim at stable level of profit;

7. Finish the product pricing process by analyzing the information that was collected from previous steps, select the pricing methodology and define possible discounts. (Pricing Strategy 2017, 5.)

As the mobile application is one of the unique products in the market nowadays, it should be positioned, marketed and priced differently. According to (Pricing your app: trends & strategy 2017, 3), pricing process for mobile app is similar to the ones that are described above, but still it differentiate severally:

1. Competitive analysis should be taken into account, as the company should know the situation in the market, by virtue of if the product to be superior in some field, the app should be high-priced;
2. Choose the purpose of the app – find pricing model for it, but remember that “Users expect the app to be 0\$ or 0.99\$”. (Rajput 2016, 6). The company should keep it in mind, while undertaking an app pricing;
3. The company should be sure, how many customers are willing to pay for the product. It can be made in two ways: market trends and customer surveys;
4. Find out and calculate the cost of the app creation, in order to fulfil production costs and get profit out of the product. It is essential to include: amount of man-hours, purchase of any third-party license, testing the costs, marketing costs, remuneration paid to the developers, marketing personnel and infrastructure cost. Moreover, the fact that app stores might claim a share if the app is not free should be taken into account.
5. Pricing model can change according to product roadmap, by cause of the customer engagement and new features releases. (Pricing your app: trends & strategy 2017, 3; Babich 2016, 11)

Pricing process is used in every product development phase. Company should take this process absolutely seriously, by virtue of the fact that the product success will be heavily dependable on pricing. Primarily, pricing processes have similar structure,

nevertheless, unique pricing process should be identified for every company particularly, as it is up to the company to decide, which particular process to use and how to interpret it to the product.

## 2.4 Pricing strategies

People may purchase for the same basic purpose, but there are many variations how they buy and why they pick specific suppliers. It is important to know what, how much and why people buy. (Perreault & McCarthy 1998, 240.) The basic mean of influencing people's buying decisions is pricing. The aim of every business is to influence people's behavior in its favor. Wiegman (2000) postulates, the pricing model should not be complicated, it should be understandable for everyone: salespeople and retailers. (180.) Mistakes and misunderstandings in pricing model might lead to audience's disappointment and even anger. According to Duke (1994, 15), pricing is a daily challenge for brand and product managers since it is completely connected with product development and management issues.

Tacke (2016) remarked that nowadays the majority of products are expensed at a remarkably expensive price, although at the same time company spends a lot of time in Research and Development phase, which every time lead to the loss of uniqueness. (8.) Another example of the "bad pricing" is the situation, when the product is excessively estimated, however, there is no need of it in the market and no one is ready to pay for this invention or it has a wrong answer to the problem that the product was solving.

From the past companies mostly did not use optimum pricing methods even if they had a competent command of data collection. Such a theory was established by Kotler, however, Armstrong (2006) contradicted this statement, considering that it was proposed that many companies tracked product sales levels, although they still were successful at premium pricing for unique offerings that met customer needs (74).

Nowadays there are different pricing models that entrepreneurs are using. It is essentially important to price the product in a proper way, because competition in modern world is very high in every industry. Maguire (2015) accentuated that pricing

strategy is one of the factors that influence product's revenue potential. Pricing strategy should set the price considering production and distribution costs, competitor offerings, positioning strategies and the business target customer base. (3.) Nevertheless, many scientists (Kotler, Druker, Maguire) stated that it is important to remember that customers will not buy product with an extreme cost, at the same time having a lower price will not cover all the business costs and company might become bankrupt. Tacke (2016) advises that every company before developing the product should answer the question whether the product will be bringing the value to the customers or not. For every product it should also be known what portion of that value can the company take for themselves? (5.)

There are 6 main pricing strategies in today's business world. The first one is pricing at a premium – make costs higher than the competitors. This pricing method suits unique and novel products. Premium strategy is usually used in the first days after the product launch, when the demand for the product is indisputably high. (Maguire, 2015, 7.)

Pricing for market penetration is the second pricing method, which is completely different from the "pricing at a premium". The main concept is to offer a lower price than competitors. It could help small businesses to increase awareness and reflect the state of company's position within the market. (ibid., 2015, 7.) The demand of this strategy is elastic; it was examined by Babich (2016) that in the modern economy, the product price will decrease, while the quantity demanded will be gradually improving. (4.) This strategy should be taken seriously, but at the same time should be reevaluated after some period of time, because demand curve and costs changes might occur in the product lifecycle.

The next pricing strategy that Maguire (2015) was underscored – economy pricing, which is one of the most popular ones nowadays. Businesses minimize the costs associated with marketing and production in order to keep product prices down. (7.) This strategy is widely used in large organizations, while the small businesses might face problems with generating a profit when the prices are remarkably low.

Another pricing strategy is price skimming. In times when the product is just going to be launched, the price is the highest, but it is gradually decreasing as competitors are

starting to appear in the market. It creates an illusion of exclusivity, when the product is first introduced to the consumers. As a result of such strategy the product will rapidly gain market share, but there might not be supply when the demand far exceeded projections (Holtz 1996, 173). According to Viswanathan (2016, 3), the company is expected demand to be inelastic and on the contrary it is understandable that large cost savings will not be at high volumes. Companies that are using this pricing strategy have no ability to finance large capital expenditures that are needed for high quantity production with low profit margins.

Psychology pricing strategy can be found everywhere in the modern world.

Marketers make people react according to their emotions rather than logic. It was proven that setting the price for the product at 99\$ than 100\$, will attract more people. The main concept is to create a false belief of enhanced value for the consumer. (Perreault & McCarthy 1998, 482.)

The last, but not the least pricing strategy is bundle pricing. Maguire (2015) claimed that the main idea is to sell multiple products, thus it will be beneficial for consumer to buy all the items together, rather than separately. It is an effective way of moving unsold items and sell complementary products. (6.)

According to Tacke (2016), one of the most crucial elements in pricing strategy is having in-depth willingness-to-pay discussions with the audience. This step should be taken before the engineering plans or production resources for new the product. It was proven that in 2014 80% of 1,600 companies from more than 40 countries did not have such a discussion with the target customers and, as a result, these companies had no idea whether a customer would pay for the product and nowadays there are lots of items in the market that have no real monetization evidence to succeed. (9-18.) Asking customers early in the product development phase about how much they are willing to pay for company's invention will help to avoid mistakes - and reducing the new-product failure rate across the board.

Discounts is another pricing strategy that every company should preferably have.

They are needed in order to hold the customers and keep an advantage of competitors. There are different kinds of discounts, which are used in various cases and for divergent companies. Womack (1996) explained that with larger orders both

the buyer and the supplier should be able to reduce their order processing costs. (157-164.)

The concept of discount process is described in the «Pricing strategy» article (2017), where one of the first discounts that many companies are using today is the **quantity discount**. If a customer is buying a product in large quantities, he or she will get a discount for it.

Another one is **cumulative quantity discount**. Such a discount is usually offered to resellers, who are consuming products in large quantities over a long period of time, but at the same time they do not want to place large individual orders. The reason for this discount increase is the growth of cumulative quantity.

The third option for the companies will be to propose **seasonal discount**, which is based on particular period of the year, week or day. For example, travel agencies are giving a lot of seasonable discount, thus they also have decreased off-season rates.

**Trade discount** is also important to consider. The main idea of it is to offer a discount to the important channel member. He or she might not consume particular product in quantity, nevertheless, as a person is an important member of the audience. For the company it will be wise to offer a discount for him.

**Promotional discount** is one of the strategies that every company in the modern world is providing. The main idea is to commit a short-term discount, in consideration of stimulate sales. (9-13).

## 2.5 Pricing models

Georgion (2017) reported different groups of app in the modern market. There is no doubt that some apps are essential, by reason of their functionality. In this case, companies will make the expensive price, as it is clear that this product is worth a higher price and customers are partial to pay for it. There is a sublime example for such an app – Shazam.

The second group of product is “addictive game”. If the app is bewitching customers and they are returning to the game several times per day, it will be wise to offer

commendable elements with small prices. The trick here might be that there will be lots of limited characteristics. As the result, the customer will not understand how much money he spent, because each price will be inconsiderable, plus the person will be addicted to the game. One of the best examples of such method – ClusterTruck.

The third group is apps that are willing to be more social-oriented. In this case the product might serve as an additional promotion campaign. It will lead to the bigger audience that will avail mobile monetization options of the app.

Many companies decided that the product will be free for users and this tendency is growing rapidly nowadays. The monetization method for these products will be to display the mobile advertisements. It will help the company to cover costs on product development. (4-12.)

According to Dholakia (2016, 2 ), **value-based pricing** is the method of setting a price by which a company calculates and tries to earn the differentiated worth of its product for a particular customer segment when compared to its competitor. This pricing method is used nowadays in virtually every industry. There are some rules which help to succeed in this pricing model.

For better explanation, an example was taken into account: a company would like to be informed about the price of a new launched television. The closest competitor has the same characteristics, but the screen is diminutive. As the competitor antecedently has the product in the market and it is priced already, the company would like to use value-based pricing.

First of all, marketers should know and focus on a single and specific segment. In this particular case it will be people, who are looking for a big screen television. Secondly, next best alternative should be compared, because this comparison is the most essential part in value-based pricing. The next step will be to find out unique and differentiated features from the competitor. Finally the last, but not the least action will be to place a dollar amount on the differentiation, which basically explains how much consumers are going to pay for product differences.

Despite the method popularity and effectiveness, Grant (2010) argues about this model, by cause of its misapprehension. Firstly, the company should evaluate every

product feature and consumer's ability to pay for it, which will take a lot of effort and time. Another problem that the company might face is a case that competitors will price their product wrongly, in such manner that at the end company's product will also be priced improperly. (6-10.)

## 2.6 Specifics of mobile application pricing

Mobile app industry is experiencing an expansion in contemporary world. (Sharma 2016, 5.) Shestakova (2015) stated that there is a minority of key elements that a marvelous mobile app has. It should be smooth to approach, offering the user access to playing the game with minimal effort (3).

Pricing strategy in this industry is identical to Kotler's idea: the company that is launching an app should find a balance between production costs and money that users desire to pay. The research handled in "Pricing your app: trends & strategy" article shows that all the apps could be divided into 2 groups: free and paid ones. The choice between these 2 options was argued a lot by a number of researches in their works. Raising the **free apps** features, it is clear that they are not generating a lot of revenue. At the same time Rajput (2016) believes that free app is an advantageous solution for the beginners. Nevertheless, he suggested "to go paid" in the future, when the threshold will be reached. (2.)

As the app market is growing rapidly each year, the competition is also dramatically increasing. It was evaluated that there have been 1.8 million apps in Google Play Market in 2015, at the same time, Apple Store had 1.5 million app, and what is more, in 2016 the numbers were doubled in both platforms. (Sharma 2016, 7). Viswanathan (2016) deliberates that the most straightforward model is **paid apps**: the consumer pays once and then he or she can use the product without any added sales. (2.) Roslow, Laskey and Nicholls (1993) hypothesizes that operation of a model has decreased nowadays, due to the fact that people inclinate to acquire a free app that will include ads, rather than buying an app itself. (5.) It is understandable, that a paid app, which has several free alternatives will not presumably prosper, as long as people who are passionate to download a free version.

Nowadays there are 4 app pricing models:

1. **Freemium** – the app is free, but it has two different versions, which means that the user is playing for free, but at the same point he or she will need to pay for game continuation. As Georgion explores (2017), this is one of the best pricing tactics for game app, because the customer will start at a basic level and will have to pay for the following level, in pursuance of his skills to be evolved. (8.) This strategy has been developed in 2009 by Apple, when it was announced that companies are able to charge users for extra lives, levels, game speed up, and other features. An app marketing consultant, called Distimo, studied that selling price of game apps has decreased by 28% from the 2015, at the same time the revenue generated by premium games increased almost 10 times. (Rajput 2016, 6.) Babich (2016) reasonably agrees with Georgion and stated that it is the most advantageous model for game apps, by virtue of the transition from free to paid version will be just another step in game's path. (3-4.)
2. **In-App purchases** –Distimo's study revealed that in 2015 8% of all top-grossing games received their revenues from in-app purchases, and in 2016 this strategy was used by 52% of all game companies. (Rajput 2016, 5.) Similar claim was proposed by Sharma (2016), he specified that 80% of all apps are employing such strategy as a main revenue income. (6-7.) According to Pricing your app: trends & strategy (2017), this strategy is used by companies that are providing a service or support their product with this app. In 2014 app's revenue increased by 72% with this model (4). There are three most eminent games, which revenues mostly consist of in-app purchases: Clash of Clans, Puzzle & Dragons and Candy Crush Saga. Georgion (2017) proposed that revenue from this model is estimated to reach \$28.9 billion in 2017, which is 48.2% of the total revenue that mobile apps will generate. In-app purchases are successful in today's market, on the grounds that people prefer freebie products. (7.) Nevertheless, as soon as person acquaints to something she or he will have a desire to pay.

3. **In-app Advertising** – this is a way to get a consistent revenue from the app. Consumers are convinced that intense ads will be inhabited to a free app. Nevertheless, it is complicated to find a balance between diverse app’s ads, considering that small banners or video ads might annoy users. (Banerjee 1994, 8.) On the other hand, Viswanathan (2016) debates that if ads are connected to the game content, it will not be so irritating for consumers. He believes that in this case users appreciate ads more. This can be used for generating the surpassing revenue by charging more. (6-9.) In 2015 such a tactic was studied and displayed what is the revenue of the companies that were handling in-app advertising strategy. (Viswanathan 2016, 8.)

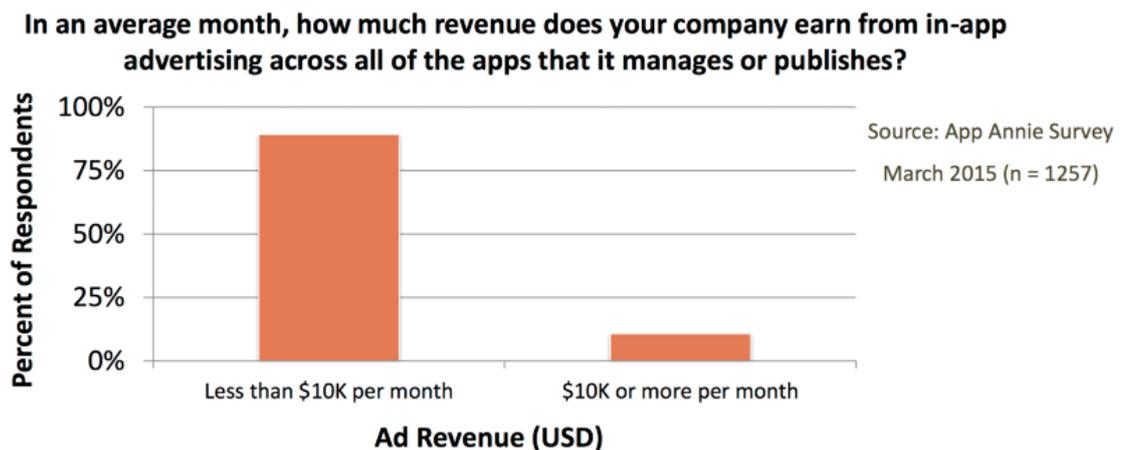


Figure 4. Revenue average from in-app advertisement across all the applications (adopted from Babich 2016,3)

It is reasonable that companies should not aim at getting \$10k revenue per month applying such method, unless the app is astounding and valuable in the market. What is more, it is also essential to know, what kinds of ads companies are implementing and , what is more dominant, which one of them is generating augmented revenue. The discovery was also composed by App Annie Survey. (ibid., 5.)

**Which of the following in-app ad formats earns the most revenue across all of your company's apps?**

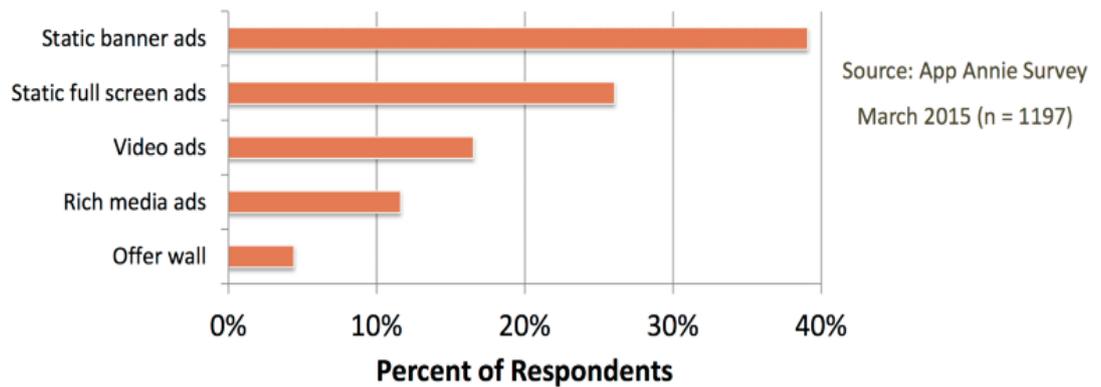


Figure 5. Most popular in-app ad formats (adopted from Babich 2016, 3)

The interest towards this model has increased, despite a strong detriment, such as the fact that the company designating this pricing strategy should have substantial number of users, in order for third party to get cost-per-impression ads.

## 2.7 Secondary data review summary

The size of the global mobile game market is \$36.9 billion in value, which means that it is complicated nowadays to position yourself in the market and agonizingly difficult to generate a worthwhile revenue out of the product. (Newzoo, 2016). The theory suggests that looking at a value chain of the product is an essential step in the developmental product phase. Pricing the app in a proper way will guide the company to be successful in the market.

Value chain is used for enhancing competitive advantage of the product. Company's activities should be revised and presented as an added value to the product. Value chain explains how the price structure interact with the competitor's one. This concept is dominated by multiple factors, such as economical growth of the country or industry, political decisions, environmental issues and many others.

Literature review of this study suggested to observe 3 pricing processes: Duke's Linear approach, pricing process for mobile applications and general process for every product in modern world. Similarities can be found easily from them, for instance, every process suggested to implement competitive analysis, consumer interest and cost calculation in such a process. Unexceptionally it was asked to identify a purpose

of the product and its need in the market. Notwithstanding, there are discrepancies, due to the fact that one of the processes was made specially for mobile application and that is the reason why it has analysis over customer engagement and new features releases. Target audience and market position could change rapidly and there should be a step in a pricing process for changes.

Pricing strategies should be understandable for retailers and salespeople, in virtue of avoiding mistakes. There are 4 options: price at premium (make costs higher than competitors), pricing for market penetration (lower price than in the market), economy pricing (reducing pricing by production and marketing costs minimization), psychology pricing (making people think that they are paying less). Discounts should likewise be borne in mind that it is a strong influential issue in pricing.

Pricing in mobile application market should be taken specifically and precisely, as a consequence of the industry uniqueness. Three possible pricing models are used in this industry. Freemium models practiced when the application is free, but additional option is paid. In-app purchases model is treated, when additional levels or features are paid in a game, and the last model is in-app advertisements – having video and pictures inside the game.

### 3 Methodology

#### 3.1 Action research

In furtherance of answering the research questions and developing an actual tool, action research was chosen as a method for the study. According to Hopkins (2002, 42), action research merges together substantive act and the research practice; it is an action, which enquiry a personal engagement in a process of enhancing and modifying something. People who are affected by the change should be involved in the research process, due to the fact that it will arrange them with wider understanding and stronger commitment, moreover, the research impact will be considerably increased. Simplifying the term of action research it should be acknowledged that it is “learning by doing” - the problem should be distinguished first, solutions should be classified and implemented, afterward resolution should be estimated and in case of frustration, the process procedures again. (O’Brien, 2001, 45). Kemmis and McTaggart (1998, 158) conducted that action research structure should be: **“Plan -> Act -> Observe -> Reflect”**, for the reason that it will be straightforward for the researcher to interpose prompt actions in times of need (see Figure 3). Each and every cycle has an action to take and a critical reflection to implement at the end, which inspect what happened earlier and design future actions.

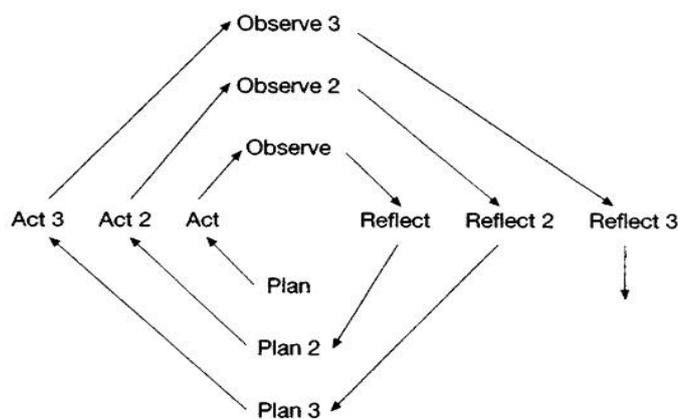


Figure 6. Action research scheme (adopted from Costello 2003, 283)

According to Riel (2010), action research is an iterative, cyclical process of reflecting on practice, taking actions, reflecting and taking further actions. Such method involves learning from the actions that were taken in a research mechanism. Improvements could be seen in a process of cycles reflection, when interpretation of cycle indicates the path for actions in development (4.) Above mentioned model was determined and endorsed for particular research questions. However, the purpose of the reflection stage of every cycle was shifted from individual action process analysis into a results analysis and indication of further work advancement.

As an substantive tool was expected to be assembled, research was aimed to be solution oriented and forthright. By actualizing action research workable, sustainable and equitable outcomes could be attained. For the sake of answering research questions, compatible books and articles was reviewed as a secondary data and qualitative method was used as primary data (interviews and developmental discussions). Interviews were accomplished with six local companies from two business fields: sport and HoReCa. These particular interviews were scrutinized as actions in the research taken and they assisted the author for purpose of the study to be reached, which was establishing an actual model.

## 3.2 Data collection

### **Secondary data**

Empirical data that existed before and was assembled by other researches is designated secondary data ( Eriksson & Kovalainen 2008, 77). Antecedent publications and articles about the topic should be inspected to assist the actual research. According to Saunders, Lewis, & Thornhill (2009), secondary data could be categorized into three main groups - documentary (company's reports, media accounts, etc.), multiple source (government publications, books, etc.) and survey. (238) As this particular research was organized for a company, an author had access to internal company data, such as marketing plans, competitors and financial analysis and data about customers, thus while comprehending company's internal data confidentiality should be taken into account. External data, such as books and

articles, is accessible through libraries or Internet. For this study internal data sources were a primary source of data while constructing a pricing model for the mobile application. Pricing model combines company's developmental details and customer's wishes, thus the pricing model creation would have been impossible without internal data. In addition, in furtherance of pricing process and model prehension Internet was mainly used as a fundamental source of secondary data, for instance, e-books and articles were used from such platforms as Nelli-portal and Google Scholar. Moreover, books from Jamk University Library and Russian National Library assisted author with needed books about pricing primarily. What is more, in favor of getting an idea of how the thesis should be written in an appropriate way, few suggested thesis examples were analyzed.

### **Primary data**

Due to the fact that there was a lack of secondary data for solving the research problem, it was determined to assemble primary data. Data that is collected by the researcher is named primary data and the way it is gathered mainly depends on the research approach, researcher preferences and problem solving (Saunders, Lewis, & Thornhill, 2009, 253.) There are dispartated ways of collecting primary data, such as questionnaires, surveys, interviews, focus group discussions, researcher's observation, drawings, diaries, etc.

As action research was chosen for this study, the author was interacting a lot with project development team and local companies. It was the cause why primary data was decided to be compiled by interviewing local companies and at the same time, developmental discussions with a project team were conducted for the sake of answering the research question. Semi-structured interview were chosen, because interviewers could state their opinions on raised questions. Eriksson and Kovalainen (2013, 82) believed that semi-structured interview is advantageous as the manner of the discussion will be informal, because of the apprehensible question and structure. Such an approach admits that the person could go deeper into its experience during the interview, rather than plainly replying the questions; which lead to deeper responses and results that was initially expected. The interviews consisted of 3 parts

(Appendix 1, Interview Questions): first one asks about generic opinion on the game, strengths and weaknesses of this product; second part focused on interviewing company's advertisement strategy and the way they market their products; the third part was aimed to get an opinion on further cooperation, pricing model feedback and negotiations in the future.

One of the rigorous factors that influenced this study was a constant interaction with the project members. Having weekly meetings helped the author to have disparate perceptions and assumptions on a few questions; also problems that occurred were viewed from different perspectives and angles. Personal communication with the game users were unnecessary, thus the questionnaire in Google form was produced and the data from them were a part of the research. There were 50 respondents in a feedback survey, which were asked to express their thoughts on game content and design, what is more, with the help of this survey, the author got an understanding of how open people are for the advertisements in the game.

### 3.3 Data analysis

Data analysis could be conducted using deductive or inductive research approach. Saunders (2009, 124) declares that in deductive approach a researcher takes an existed theory and hypothesis and during the research proves such a theory, while an inductive approach is formulated separately, the researcher collects data and establishes a theory according to the research results. Simplifying these terms, researchers using deductive approach usually are moving from theory to data, while inductive approaches are accomplished from collected data to existed theory. This study conducts the deductive approach, since the knowledge about mobile application pricing, pricing models and strategies were gained through previous researchers and subsequently the developed pricing model was examined by customers, who were asked to participate in a semi-structured interview.

In this research triangulation of data analysis was used, which incorporates qualitative and quantitative methods at the same time. Nevertheless, Saunders (2009) emphasises that despite the fact that during the mixed method analysis both methods are used, they are not combined and are used parallel (at the same time) or sequential (one after another) (152.) Data assembled from the user's feedback form and games KPI's were analysed using quantitative analysis method. There have been 50 users that were experimenting the game content, usability and functionality. As the game was aimed at immigrants and exchange students, all of the pilot usage users were people from the target audience. Google form questionnaire was generated in order to understand user's feelings and thoughts towards the game, while KPI's analysis displays such features as the number of active users or retention rate. Those analysis were formed mainly for interview with local companies to show product metrics and users engagement. For better analysis many charts and graphs were made with the help of excel.

After these data was gathered and examined, the interview with the companies were conducted. Six local companies were chosen for the interview process of this research. All the respondents were thoroughly selected, because they had to be connected with the game content. Moreover, these companies were needed to be locally based that was the reason why all the interviews were face-to-face. Duration of an interview was different, by reason of having different companies had wider experience in the market, what is more, ones that were more interested in the product spent more time with the researcher. The average time for a single interview was made to be 45 minutes. The results of the interviews were analysed by qualitative research method: the data from the interviews was transferred into qualitative tables, where similarities and differences of the respondents were demonstrated. As the research aimed at customers opinion towards the model, every respondent assessment were beared in mind seriously.

### 3.4 Research cycles

As this research had various cycles and actions that were implemented, it was decided to create a figure for whole process clarification. This explanation shows

process of this study from the very beginning, nevertheless, the main focus is on the research implementation cycles. The scheme for this particular research could be seen in the Appendix 2.

**Target 1:** Identifying pricing model for the product and idealizing how to implement it into this start-up project

**Action 1:** At the beginning pricing process was ambiguous and there were many sources to study, thus to understand the differences in pricing models and strategies, the author scrutinized tens of mobile app pricing models and different researchers conclusions. It became clearer what is pricing in application gaming industry after some time period.

- The first concrete task was to learn how to price the product in a logical way. For making a concrete pricing model it was needed to research different mobile app pricing model.
- After discovering the problem, gathering the needed information and analysing previous researches, practical preparation for the actual research started.
- As the study is made on start-up project, firstly product development was needed to be finished; as soon as content development and marketing campaign were accomplished, the potential pricing models were discussed with CEO and project group members.

**Development discussion 1:** The development discussion 1 was held after finishing 3 pricing models for the product. Participants in this meeting were the pilot company owner and owner of the Niemijärvi Oy. They assessed the 3 possible pricing models created by the author and offered a constructive feedback. Some changes in the models were agreed for immense effectiveness. The results of this discussion was the preferred pricing model that ensembles this mobile game industry.

**Target 2:** Testing the pricing model by product launching in Jyvaskyla with a pilot company as a future partner company.

**Action 2:** The development discussion 1 ended up with the agreement on which pricing model will have the game.

- The product was launched, in order to figure out how successful chosen pricing model was according to customer recognition, number of users and many other factors.
- The data for next developmental discussion was prepared, thus the second discussion was going to be held with game coders and other project members.
- As the research appeals to acquire as many trail users as possible, marketing campaign was made, concerning game awareness growth. According to target audience the focus was on exchange students and refugees, that is why campus content marketing was made together with social media advertisements.

**Development discussion 2:** This development discussion was held with 2 game coders, 2 project members (marketing person and content developer person), game's company CEO. Meeting purpose was to consider the launching success and reveal experienced problems and future developmental steps, according to the company's values.

**Target 3:** Reviewing launching results by key performance indicators, in order to change pricing model of the game if needed.

**Action 3:**

- KPI's were analysed in this research parts and all required data was collected and declared for pilot company evaluation.
- Analysis of the received information with CEO and explanation on how the situation could be improved.
- At this stage the author inaugurated to prepare future meeting with a pilot company, because her task was to convince pilot company to approve pricing model for future contract.

**Development discussion 3:** Development discussion was similar to the first, because of the meeting members: pilot company owner and game company owner. The aim of the discussion was to establish the pricing model for the game. The author displayed KPI's to the pilot company owner and lead the discussion. The main objectives of the development discussion were to:

- A. Announce KPI's after the first launching and game's advantages, in order both the company and pilot company concur about the game prosperity.
- B. Introduce future changes that would be composed, in order to develop the game. As the result of third development discussion both parties agree on final pricing model.

**Target 4:** Second product launching with final pricing model.

**Action 4:** The final limited changes were made and the product was launched in second time.

- The final product was a 5 minutes educational game for newcomers/refugees to integrate faster to the finnish society.
- Feedback from CEO was addicted about the pricing process itself.
- The last step in this research was the company's interview with future cooperation and agreement making. The interviews will be covered in the results part in this study.

## 4 Research results

As this research was combined with different activities for the problem solving, it was decided to divide results into three main parts, where firstly pricing process is implemented for the case company, secondly the qualitative part was done (user's feedback survey) and thirdly, semi-structured interviews with local companies as a quantitative part of the study was conducted.

### 4.1 Pricing model implementation

Value chain was used for improving competitive advantage of the product, thus consumer needs were examined and the company had a better idea, where to move forward with the product and how to make an impact on the market. Nevertheless, as company's value is to make a social impact, it was decided that value chain is not the main thing to focus on, thus it was taken into account only from the perspective of customer satisfaction and needs. Activities that were made, were not emphasized as an added value to the product, but as activities that will help to make a bigger impact. Despite all the above mentioned facts, price was still needed to be formulated. It was decided not to go deep into value chain concept, but to focus on pricing models, strategies and process itself.

In-App advertising was chosen from three options of mobile pricing models, because the assignor believes that it will make a bigger impact on the audience, for example, while playing the game the user might get such information as: «Finns like to sign in a karaoke bar» and in order to activate users, the game will have a link to partner karaoke bars in Jyvaskyla, which will lead to the increased people integration.

For pricing strategy marketing penetration was chosen mainly because of the three reasons mentioned by the assignor. First of all, the game relies on social aspect and needs a big user base. It is a psychology: person uses the app or game if his friends are satisfied with it, but if friends have not tried this product, a person will not download it either, even if it's free. Secondly, the company do not have the

resources (from product development and marketing point of view) to create huge buzz around the product, moreover, there is no credibility that users would pay for this game. And last, but not least, making money is not a company's main priority, as «How to Be a Finn» main mission is to create social value by making integration faster and helping newcomers. The company genuinely believes that it has a good mission, and if the game has valuable information, it should be available for all. Blocking users with price is thus against company's values.

From the three pricing process that are presented in a theoretical part of the study the second one was chosen, formulated according to the product and followed until the end of the research. The plan that was made by the author and proved by the assignor could be found in Appendix 3.

While author was implementing theoretical knowledge for the case company, the attitude towards the discount as a pricing strategy was asked from the company's CEO:

*« Discounts are for more mature companies that are well known and customers know the price-levels and know when the price is really a discount. The company is launching a novel product, so giving discount sounds a bit vague»*

CEO was wondering from where customers will be able to compare prices for discounts at this stage of product development. Nevertheless, the assignor believes that discounts might become a pricing strategy later, but firstly the product should find the suitable price level (through supply and demand).

## 4.2 Quantitative phase

As the product is an educational game it is also important to understand what the users think about it, thus the game user feedback survey was conducted as a quantitative part of this study. Survey respondents were corresponded with target audience – newcomers in Jyvaskyla or exchange students – and was conducted by 50 people, as the assignor believed that having a limited group of people for the first

product testing is more beneficial than collecting an enormous data, because the product is still in the developmental stage. To sum up, only developmental focus group of the product and few more people were asked to submit the survey.

#### 4.2.1 General findings

It was decided not to request from the users to which age group they are related, because it was not the most compatible information for the study at this period of time, thus there is no geographical analysis of the respondent group. Primarily the feedback form was generated for the company to have an idea of how actual users assume the product, considering that it is understandable that without a weighty users population, it will be more convoluted to sell the product to the companies, as they will not gain any profit from such cooperation. This graph below shows the willingness of users to recommend this game to their friends and spread the positive feedback about it, the average rate of which is 7,62 out of 10. From the chart it is definite that the majority of users would be glad to recommend the game to a friend, which is beneficial and prosperous for the company at this early point of product existence. The most popular answers for the first question were «8» and «10» as it could be seen from the chart.

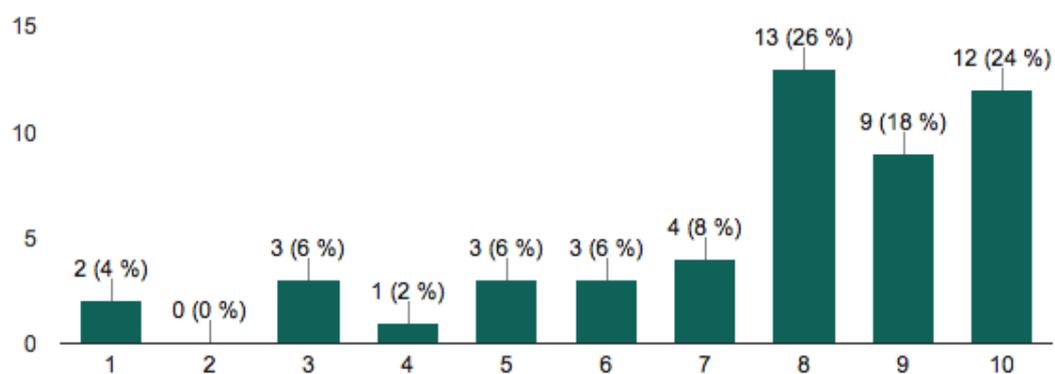


Figure 7. Possibility rate of game recommendation to a friend

With the second question it was attempted to get an understanding of what the users enjoy or condemn about the product, such an information was needed for finding weakness product features and making changes before the next launching, in order customer engagement and satisfaction to be increased.

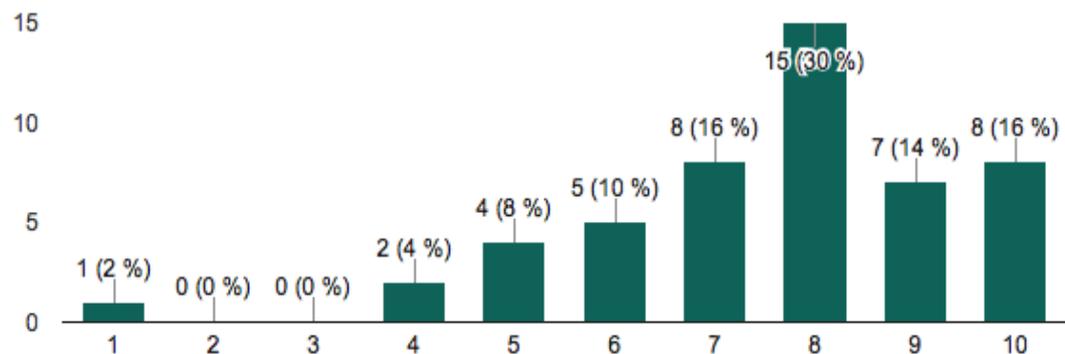


Figure 8. User's attitude towards game graphics

Generally, users were satisfied with the game design, pictures and icons in the game, nevertheless, the company would like to designate the product even more enticing for the audience. The average rate for this question is 7,56 out of 10, while the company was aiming to have 8,5. Users were suggesting possible improvements for the design and it was determined to specify some of them in this particular part of the study.

«I enjoyed the overall simplicity of the game and its characters. Maybe adding a few details could help but without any major changes to the current style»

« More animation is needed. Changed pictures in food topic for example. Sometimes I automatically moved to the next topic, sometimes not. Should be some kind of moving point between topics to remember which you passed before»

«I would like more moving parts. As it is now feels like reading a guide not playing a game»

As the game is based on learning cards about Finland and Finnish daily life, it was crucial to get user's feelings on content pleasure, moreover, recommended changes may deliver something novel to the game. As the users have a fresh impression of the game, possible improvements came to their minds constantly during the testing period.

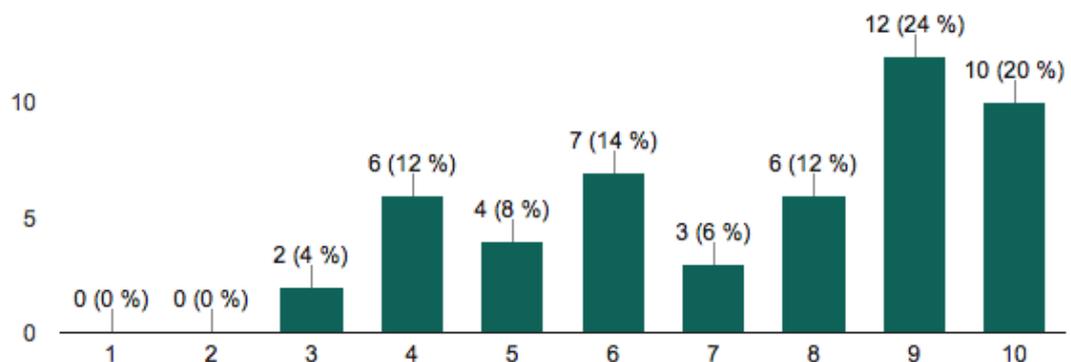


Figure 9. Positivity towards the game content and learning cards

The average grade for users learning cards' enjoyment is 7,38, which implies that users prefer more design than content. Suggestions that people classified about content changes will be advantageous for the second game launching.

«People are too lazy to read such an amount of text. It's better to find more engaging ways of learning information»

«I think that in the next lessons (deeper into the game) the information could be presented in a less general way. Maybe give more facts, examples and so on»

«Quizzes are too simple, make different level of difficulty»

#### 4.2.2 Data to support semi-structured interview

As the aim of the research was to develop an actual pricing model, it was resolved that semi-structured interview with the local companies will be required and in order to support entrepreneurs with the information that was collected from the users. Thus, the last part of the user's survey was the most essential for this particular study, because it collects data on the game play frequency and attitude towards advertisements in a game. First of all, the desire towards recurrence of use was arised, as it was crucial to discern whether the game users will play the game for a long period of time, or they would be interested precisely in testing the product. There is no doubt, that the higher the user engagement rate of the product is, the more desire the companies will have towards the collaboration with such a product.

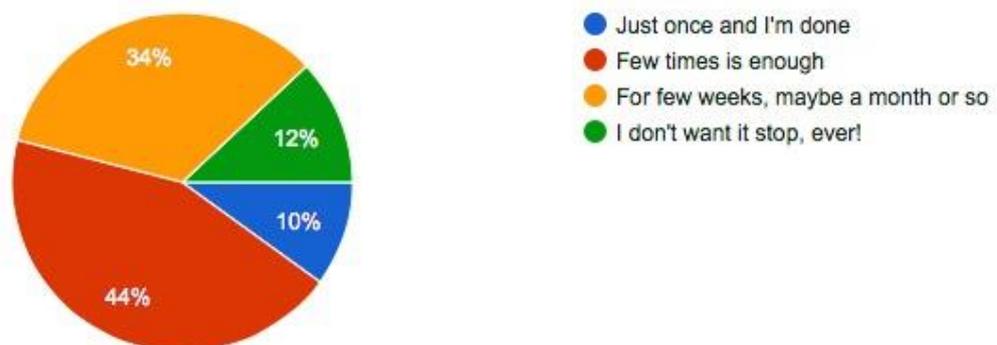


Figure 10. User's desire towards the game usage frequency

It could be effortlessly seen from the pie chart above, that 44% of respondents would be interested in playing this game for a few times and at the same time 17 out of 50 respondents would prefer to play this game for a few weeks or a month, which is other 34%. The game occurred to be highly attractive for 12% of the respondents, which is 6 people out of total respondent's sample. Nevertheless, there were people who were not so engaged in a product, perhaps because of the design or content imperfections, but there were only 5 people (10%) with such an attitude.

For the pilot usage Sebastian Bar was chosen and the link to its website was placed in a food section of the game. As the bar owner from the very beginning was result-oriented, it was resolved that according to the user's feedback he will make a decision towards the existing pricing model. The graph below shows how many users saw and clicked the link of the pilot company.



Figure 11. Results of the pilot usage advertisement

This question was not mandatory to answer, thus there is only 35 answers from 50 users and 77,1% of them noticed the link to the bar, while 54,3% actually clicked the link. The number could be confusing mainly and as a result the person could choose both options for this question.

Nevertheless, it was essential to gather the data about users opinion towards the advertisements in a game. As in-app advertisement was decided to be a pricing strategy for this app, this information was compeled for further interviews with entrepreneurs. From the pie chart below it is apparent that only 10% of respondents do not prefer to see any advertisements in a game.

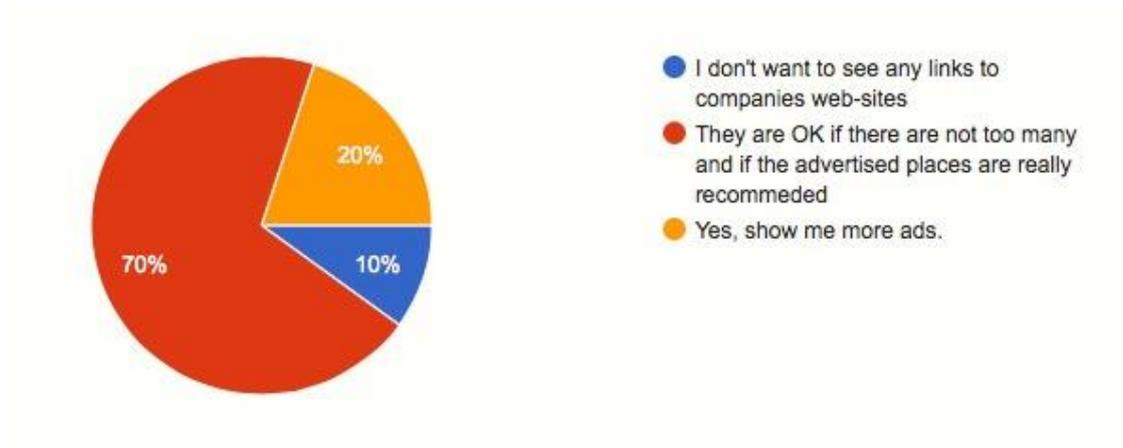


Figure 12. User's desire towards advertisements in a game

The rest of the group was positively biased, 35 users answered that they would be glad to see more advertisements of recommended places in the town, and other 20% have a strong desire to be involved into more advertisements during the product play.

### 4.3 Qualitative phase

Action research was conscript as a methodology approach for this study, hence semi-structured interviews were implemented by the author in order to confirm that companies are contented with product and price. The author was interviewing customers of this particular product – small local businesses that could be advertised in the game. The respondents were carefully chosen according to the business that they were running in town, moreover, it was essential for companies to be connected with the game content.

#### 4.3.1 General Findings

It is alluring that all of the respondents found the product a great way to integrate newcomers and even kindly force the integration in Finland, which fully answers the company's values:

*«99.9% of newcomers will try this game, because they would like to integrate faster to the new country»*

One of the entrepreneurs detected it analogous with the travel guide, where some places are advertised; at this stage more explanation towards the product was required as travel guide is not the path that this particular game was planning to go. Generally the respondents of qualitative phase of this study had a reasonable opinion about the product, but also were actively giving their suggestions for future improvements. It was decided that qualitative findings will be better summarized as a template, thus the first one that was generated, is showing respondent's thoughts towards product advantages and disadvantages. (see table 2)

Table 2. Company's opinion on advantages and disadvantages of the product

Product advantages	Product disadvantages
<ul style="list-style-type: none"> <li>· has a strongly narrowed focus group</li> <li>· includes a real integration</li> <li>· has a practical «action» part</li> <li>· free for users</li> <li>· easy to use</li> <li>· has couple of advertising companies for one feature, which leads for smaller competition between companies</li> </ul>	<ul style="list-style-type: none"> <li>· It will be hard to make it work smoothly and simply</li> <li>· has no people's/user's recommendations of the places</li> <li>· has no language choice</li> <li>· has a lack of Finnish language</li> <li>· from the beginning has no iOS version</li> </ul>

Although all of the respondents assented that the product is unique in the market, many of them have seen some challenges for further cooperation. The following quotes are summarizing respondents' attitude on issues that they may encounter as customers of the game.

*«The biggest challenge that I see here, is of course no possibility of tracking whether your app is bringing customers to me or not»*

*« From my perspective the challenge is how to keep users active for a long period of time. They will be interested at the beginning for sure, but a week later they already could be bored. You should find a solution for this issue or the game will start to gradually lose target audience»*

*«There is no proof to customers of how many clients you bring to them. I do not want to spend my money on people's clicking as I am a result-oriented person, but every company that you are advertising should be sure of how many customers came to them because of your app»*

Jyvaskylan companies were also appealed about which social media channel they are using, how often they post content there and how they measure advertisements effectiveness. According to the respondents, Facebook and Instagram was mentioned by mostly every entrepreneur for being the most relevant and paramount advertising channels for them, nevertheless, some companies are making advertisement posts more regularly than others.

*«We are using social media channels according to the target audience age. For example, we advertise in Facebook for 40-50 years old, while Instagram is used for 20 years old people. We also seldomly use Snapchat, when we would like to target 15-20 years old schoolers and teenagers»*

*«Today we only pay for the newspaper advertisements. We of course have our website and Facebook page, but no paid advertisement in social media, mainly because we are 18 years in the market and we have a good reputation that is working for us today. Customers share their opinion about the brand with friends and that is the best advertisement in my view»*

*«We are trying to be as visible as possible: Facebook, Instagram, Google ads, local newspaper, buses and taxis ads»*

Collected information of this stage was very valuable for the researcher, because it displays respondents' attitude towards the product and future suggestions for enhancements. Besides accustomed information of the product, these interviews provided the author an insight into the problems that the product might face in the future.

#### 4.3.2 Pricing expectations and future cooperation

The respondents of the qualitative phase of this study shared their opinion on whether further cooperation with them is achievable and what is their price expectation according to main competitor – Facebook. For better results visualization the template with positive and negative thoughts was conducted.

Table 3. Local entrepreneurs desire to collaborate

Willing to collaborate	Do not find the offer attractive
<ul style="list-style-type: none"> <li>· "We would like to be a part of this game mainly because it has a focus target audience, but we would like to pay less than for Facebook"</li> <li>· " I believe it is a great product with high potential and I am ready to pay from 0.8 cents up to 1 euro per click for it"</li> <li>· " As the products answers our values (friendly customer service and helping students) we would be interested in further work together, but price though will not be so high"</li> </ul>	<ul style="list-style-type: none"> <li>· " I would not pay for people clicking my website, because I see it as money spending on nothing"</li> <li>· "Try to make a system that I could see whether the customers are coming from you and I will be open for cooperation"</li> </ul>

## 5 Discussion

This study was made for a Finnish company, which was looking for ways to price an educational game for newcomers into Jyvaskyla. Answers to the research questions were obtained through this particular study and as a result helped the author to produce an actual pricing model, which was evaluated by local entrepreneurial companies.

The first research question was to examine pricing model options for a gaming industry. First of all, the answer was supported theoretically through the review of the secondary data, where many scientific studies were characterized and different researchers' opinions were critically viewed. It was disclosed that for pricing the product the company should analyze the market first, secondly define competitors and most essentially resolve which pricing model, strategy and process the product will follow. The biggest discovery that was made at this stage was that pricing process, models and strategies are connected and linked with each other, thus the theoretical base of the study consisted of several options for each category: process, strategy, model. Due to the gaming industry novelty and rapid changes, there is a lack of sources to examine and studies to rely on, nevertheless, the author was able to adequately detect the secondary data on pricing the mobile game application. Taking everything into consideration, it could be affirmed without any doubt, that this study thoroughly answered the first research question.

The second research question of this study was made to be practical, as it claims to provide the case company with a relevant and pragmatic way of chosen pricing model implementation. For answering this question, the research was divided into three part, where firstly a particular pricing process was chosen and followed, then the game user's attitude towards the product and internal advertisement was discovered, and lately the interviews with local companies on pricing model evaluation and

future cooperation were conducted. It is apparent from the research results that at the end of this study market and competitor analysis were conducted, product price was distinguished and customer thoughts about it were collected. On the point of actual pricing model was implemented into the case company in a concrete and applicable way, the second research question could be contemplated as solved.

### 5.1 Suggestions for the case company

At the moment company is planning the next launching this summer with all the suggested changes and improvements.

Theoretically the pricing process was distinguished on paper by the author and approved by the case company CEO later on, but for providing the company with a pragmatic way of pricing implementation, this study was required to be handled as a face-to-face interaction with customers. At the beginning it was discovered that a produced pricing process will be constant and unaltered, while in practice it occurred to differentiate according to customers needs and desires. It is conspicuous from the results of this study that price for the product should be adopted to every customer separately. For instance, one restaurant in the town gave the positive feedback about the product and expressed a strong desire towards future cooperation, but it suggested the price to be 0,05 euros per company's website click from the user. At the same time, there is another restaurant that also was defining the game as a unique and efficient product in the market, therefore, this restaurant CEO proposed price to be 0,8 euros per click. For further customer base expansion, the company should select companies even more scrupulously and, what is more, should scrutinize its feasible price suggestion.

One of the action research phases was to conduct a feedback survey from the game users, which as a result turned to be helpful and productive. Users not only advocated many changes that they would like to see in the product in the future, but also supported this study with their attitude towards the advertisements inside the game.

In the future the significant amount of user's feedback forms could assist the company during the negotiations with the local companies about the pricing issues. For example, a store could enlarge its eagerness for being advertised by this game, because of the humongous amount of users and their openness towards the advertisements in a game, accordingly, the company should expand the number of users. For solving this issue, the company could more openly communicate with local universities and represent the brand in various local centers for foreigners, immigrants and newcomers.

During the interviews with the local entrepreneurial companies, it became unambiguous that it is beneficial for entrepreneurs to advertise their businesses in systems, which they can track and supervise constantly by themselves. The target audience for this game advertisements is small locally-based companies, which are regularly more result-oriented; therefore, CEOs of such companies prefer to be familiar with where and how they allocate their resources. The findings of the present study encourage the Niemijärvi Oy to generate the tracking system; thus the companies will openly gather data on whether the game is bringing actual clients to the advertised places. Such an improvement in a product could also significantly magnify the number of companies that would be contented to sign the contract in the future.

## 5.2 Quality of the research

### **Validity of the study**

Ridenour and Newman (2008) postulate that validity is valuable in every research and it should be approached earnestly, because every reader of the study should be confident about the research findings. What is more, the research methodology should be elected depending on research questions and research purpose. (94.) In this study action research was chosen as a methodology approach, which maintained the author with the right answers to the research questions. This method allowed

the writer to make constant changes during the research in times of a need, moreover, it suggested a tight collaboration with the project development team and company's CEO, which significantly improved the study results.

### **Reliability of the study**

Talking about reliability, Ridenour and Newman (2008) suggest that the research that targets to the reliable should minimize errors together with the biases. Moreover, it is essential that the study can repeat all the actions that were implemented during the research and results will be consistent. (65.) For a particular research reliability was taken as a crucial research feature, therefore, conduction of semi-structured interviews with open ended questions in the questionnaire helped the author to strive for obtaining reliable and unbiased results of the research, as respondents could candidly express their thoughts without any pressure from the questionnaire form.

### **5.3 Recommendations for further studies**

Taking everything into consideration, many important questions and issues are yet to be resolved for this particular product. First of all, the further research could be done not only from the business perspective, but, for example, a research on the mistakes in coding could be implemented. A student could examine the coding process that was made during this game creation, find problems in it and suggest improvements.

Moreover, as the company's global goal is to sell the product to Germany, another possible thesis could be connected with German market analysis together with problems that can occur.

Many students have a desire to write a thesis for a case company, but most of them do not estimate risks of such a study. Therefore, it might be interesting to distinguish such issue while writing the thesis for the start-up company particularly.

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## Appendices

### Appendix 1. Questions for the interview.

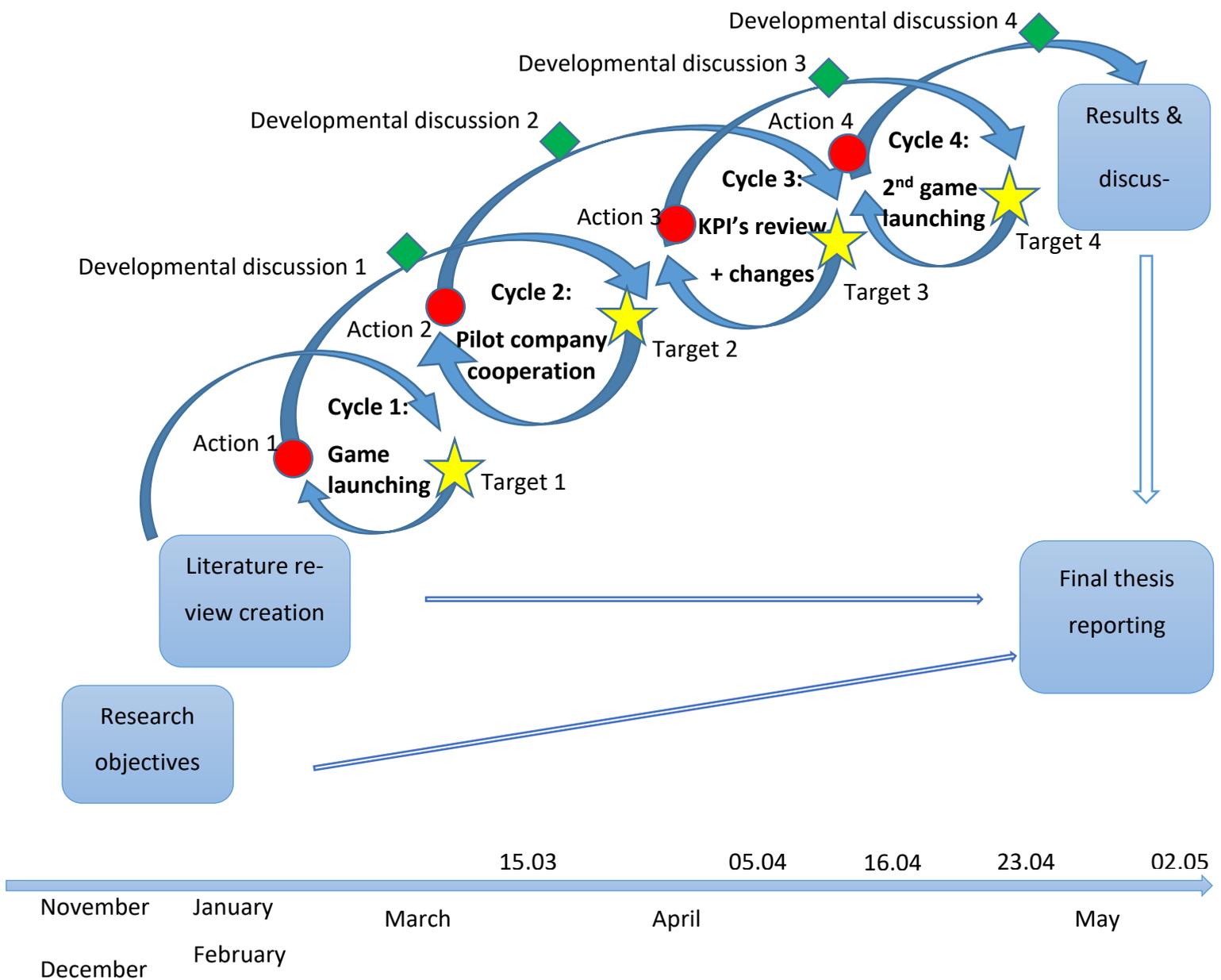
1. What do you think about this start-up?
2. What is the greatest weakness in the product from your perspective?
3. What is the biggest advantage for you as a customer?
4. What do you expect from such an app as a consumer?
5. What are your price expectations?
6. What challenges do you see here?
  
7. Which social media channels do you use for advertisement?
8. How much do you pay for it?
9. How do you measure its effectiveness?
10. How does it affect your business?
11. Are the results the most important aspect for you in the company's performance?
  
12. Do you agree with this pricing model? Why?
13. Would you like to work with us later on during the 2nd launch and onwards?
14. In your opinion, what changes should be made in your product and pricing model?

Appendix 2. Action research scheme for a particular research

Target = goals that should be achieved during the particular cycle

Action = activities that were done to reach the target

Developmental discussion = analysis of results versus target



### Appendix 3. Pricing model implementation

#### 1. Marketing strategy formulation:

**Target audience** (new comers/ immigrants) – 3% of JKL population = 3,700 (foreign students) + 4,200 (asylum granted) = **7,900**

**Customer segmentation** – new exchange students, immigrants, families

**Strategy** – use Instagram for daily updates about Finnish life (video, photo) and Facebook for longer posts and articles.

**Market situation** – hard to enter, because of the big amount of apps. The market already has some alternatives

#### 2. Marketing mix:

##### 1) **Product** – HowToBeAFinn.

Functionality – educational mobile game (app), which includes actions, facts, sharing; is social media oriented.

Quality –will be measured by app speed and bags amount.

##### 2) **Price** – according to customer interview and expectations

##### 3) **Place** – App store/ Play Market/ Google Play

##### 4) **Promotion** – Instagram (screens from the game), Facebook (customer opinions towards the game). Use leaflets in universities for students. Make a QR code for better and easier usage.

#### 3. Costs that were made: 500 euro for developmental issues. Time and salary estimations 10.000 euros.

#### 4. Competitors comparison:

**Facebook** cost per click (CPC) - 0,15e (entertainment industry)

**Instagram** CPC posts 0,41e

Video 0,009e

#### 5. Don't overestimate the product/ avoid pricing wars/ remember still to make money

#### 6. 3 possible packages:

- 1 option = CPC 0,2e ; CPM 0,4e (is not penetration strategy)
- 2 option = CPC 0,1e; CPM 0,2e (penetration strategy)
- 3 option = CPC 0,05e; CPM 0,1e (the cheapest)