BUS401E

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Candidate number:

20

Question 1

Task a)

In this first task we will use the information provided in the task in order to structure the information and decision process of this investment. In order to create such a structure, we need to use a relevant framework which can give us insight into the investment opportunity whilst also giving us context for the information provided. There are many frameworks which is relevant to this investment, such as VRIO (for looking at the strategic resources of the whole company), Categorizing decision relevant costs (in order to look at the potential results from investing or not investing) or Porters Five Forces (analyze the competitive landscape). In context of the task at hand, which inherently is a response to a market change, we will use a simple version of Porters Five Forces to structure the market of the cinema, in light of the investment opportunity.

Porters five forces is a model used to analyze the competitive landscape of, in this case, Oasis Cinema. It identifies five key forces that can determine the level of competition in the market. In our case we will use this structure in order to get a better understanding of the underlying issues of the company, and if creating an app will help mediate some of these market challenges the cinema is facing. The five forces are as follows:

1. Threat of new entrants: This is the likelihood that new competitors will enter the market and compete with existing firms. This can be influenced by factors such as economies of scale, product differentiation, and the strength of existing brand loyalty. Cinemas are quite expensive to start, but in this market many streaming services are extracting much screen time from viewers who previously went to the cinemas. The threat of entry is therefore relatively high, especially for substitutes.

2. Bargaining power of suppliers: This is the ability of suppliers to influence the prices of inputs and the terms of trade. This can be influenced by factors such as the number of suppliers in the market, the availability of substitute inputs, and the relative importance of the input to the buyer. In this case the bargaining power of suppliers (film studios and distributors) is significant, but not high as most of their income still comes from cinemas.

3. Bargaining power of buyers: This is the ability of customers to influence the prices of goods and services and the terms of trade. This can be influenced by factors such as the number of buyers in the market, the availability of substitute products, and the switching costs for customers. The currency of the cinemas and other substitutes are attention and interest. The buyers are the generators of this, and if the cinemas cannot spark the interest of the buyers/viewers then they cannot operate. Although this power does not come from any market forces, more the nature of the business.

4. Threat of substitute products or services: This is the likelihood that customers will switch to substitute products or services that offer similar benefits at a lower cost. This can be influenced by factors such as the availability of substitute products, the relative price and quality of the substitutes, and the switching costs for customers. This is the main fear in the market as evident from the task description. Streaming services are by many regarded as a substitute for cinemas, although they offer vastly different products. The threat of substitution is therefore high in this market.

5. Intensity of competitive rivalry: This is the level of competition among existing firms in the market. This can be influenced by factors such as the number of competitors, the size and market share of competitors, and the level of differentiation among competing products or services. Even though there is a competitive market most places in Norway, the level of differentiation is low, which in turn means that it is hard for other cinemas to price them selves much higher than competitors as their strategic resources are not lasting competitive advantages (VRIO).

From here we can create a short VRIO analysis of the app as a strategic resource in order to judge the investment opportunity in light of the market analysis done with porters Five Forces.

Resource	Valuable?	Rare?	Not imitable?	Organized?	Competitive implication
App	Yes	No	No	Yes	Competitive parity

From this we can see that this app will not become a lasting competitive advantage but could become necessary to uphold the current market position, which could prove vital given the threat of entry and substitutions in the market.

With this framework established, it is evident that the market faces threats of substitutions, and difficulties with differentiations within the market. The investment opportunity, which involves gathering data from the customers and offering them deals and sparks attention seems like a good response to the market conditions given the presented structure.

Task b)

The capital cost of an asset (in this case the app) is intended to provide a realistic real cost of owning and operating the asset over time. There are several methods of calculating this cost, and I will go through some of them in this task and come up with a recommendation as to what method could be a good choice for this investment. The five methods presented in the course will be framework for calculating these capital costs. In general terms, capital cost is a financial term that refers to the expenses incurred by a business when acquiring or improving a fixed asset, such as a building or piece of equipment. These costs are typically significant and are often spread out over the lifetime of the asset, with the aim of reducing the impact on the business's profitability in any given year. Capital costs are typically considered part of a company's long-term investments, as opposed to its operating expenses, which are incurred on a regular basis to maintain the business's operations. In other words, they are meant to represent the combined cost of tying up capital in that asset and the decrease in value of that asset over time.

In mathematical terms it can be written as:

$$Total\ Capital\ cost = Depreaciation + Calculated\ interest$$

The various methods which will be presented are based on two factors:

Nominal or Real value:

When an asset is depreciated in a nominal way, the amount of depreciation is based on the asset's original purchase price, which is typically inflated over time due to inflation. In contrast, when an asset is depreciated in a real way, the amount of depreciation is based on

the asset's current value, which takes into account any changes in the asset's value due to inflation or price increases.

Linear or Annuity:

The difference between linear and annuity models is the way in which depreciation is calculated. A linear model assumes that the asset loses roughly the same amount of value for year period/year, which results in stable depreciation over time based on either the acquisition cost, or re-acquisition cost. Annuity models on the other hand intend to keep the total capital cost stable and assume that the asset loses more value annually towards the end of its economic life cycle than at the beginning of it.

Calculation:

When it comes to calculating the capital cost of the app, we must first establish how we want to handle the service costs, as they might seem like an operating cost at first glance. Capital cost is meant to cover the real cost of owning the asset, and therefore it should cover all real costs. There are therefore two ways of interpreting the service costs:

1. They are included in the existing capital cost, as per definition the capital cost is a measure that is implemented in order to cover the running costs of owning the asset. In this case we would have to make sure that the capital cost corresponds with the true cost of owning the assets, which in this case includes a service fee which rises each year.
2. Another perspective is to assume that the service cost is an addition to the depreciation and calculated interest of the asset. In this case the service costs would have to be added on top of the existing capital costs.

Both of these interpretations are presented below. I have chosen a higher inflation rate than usual because of the current macroeconomic situation (I assume this situation takes place in 2022). Therefore, the inflation is set at 4%. The calculations can be seen in Figure 1.

Perspective 1

Where service costs are assumed to be a part of the existing capital cost

Nominal annuity	
Economic lifespan	8
Acquisition cost	500 000
Selling price	-
Inflation rate	4 %
WACC (Nominal)	15 %
WACC (Real)	10,6 %
Exp. Price decrease	-4,0 %

*Note decrease. If increase, then negative number

Nominal Linear (NL)

Year	1	2	3	4	5	6	7	8	9	10
Aquisition cost	500 000	500 000	500 000	500 000	500 000	500 000	500 000	500 000		
Depreciation	62 500	62 500	62 500	62 500	62 500	62 500	62 500	62 500		
Capital Cost	75 000	65 625	56 250	46 875	37 500	28 125	18 750	9 375		
Capital Base (IB)	500 000	437 500	375 000	312 500	250 000	187 500	125 000	62 500	-	
Total capital cost	137 500	128 125	118 750	109 375	100 000	90 625	81 250	71 875		

Nominal Annuity (NA)

Year	1	2	3	4	5	6	7	8	9	10
Aquisition cost	500 000	500 000	500 000	500 000	500 000	500 000	500 000	500 000		
Depreciation	36 425	41 889	48 172	55 398	63 708	73 263,8	84 253,3	96 891,3		
Capital Cost	75 000	69 536	63 253	56 027	47 717	38 161	27 172	14 534		
Capital Base (IB)	500 000	463 575	421 686	373 514	318 116	254 408	181 145	96 891	0	
Total capital cost	111 425	111 425	111 425	111 425	111 425	111 425	111 425	111 425		

Real Linear (RL)

Year	1	2	3	4	5	6	7	8	9	10
Replacement cost	500 000	520 000	540 800	562 432	584 929	608 326	632 660	657 966		
Depreciation	62 500	65 000	67 600	70 304	73 116	76 041	79 082	82 246		
Capital Cost	52 885	48 125	42 900	37 180	30 934	24 128	16 729	8 699		
Capital Base (IB)	500 000	455 000	405 600	351 520	292 465	228 122	158 165	82 246	-	
Total capital cost	115 385	113 125	110 500	107 484	104 050	100 169	95 811	90 945		

Real Annuity (RA) Specific Price Change

Year	1	2	3	4	5	
Replacement cost	500 000	520 000	540 800	562 432	584 929	
Depreciation	42 815	49 237	56 622	65 116	74 883	
Capital Cost	52 885	50 290	46 886	42 533	37 071	
Capital Base (IB)	500 000	475 473	443 285	402 129	350 494	275 611
Total capital cost	95 699	99 527	103 508	107 649	111 955	

RA (Specific) for a given year	
Year	8
Replacement year 8	657 966
Total capital cost	125 934

Real Annuity (RA) Inflation

Year	1	2	3	4	5	
Replacement cost	500 000	520 000	540 800	562 432	584 929	
Depreciation	42 815	49 237	56 622	65 116	74 883	
Capital Cost	52 885	50 290	46 886	42 533	37 071	
Capital Base (IB)	500 000	475 473	443 285	402 129	350 494	275 611
Total capital cost	95 699	99 527	103 508	107 649	111 955	

RA (Inflation) for a given year	
Year	8
Replacement year 8	657 966
Total capital cost	125 934

Perspective 2

Where service costs are added on top of the existing capital cost

Nominal annuity	
Economic lifespan	8
Acquisition cost	500 000
Selling price	-
Inflation rate	4 %
WACC (Nominal)	15 %
WACC (Real)	10,6 %
Exp. Price decrease	-4,0 %

Maintenance	20000
Price increase	10 %

*Note decrease. If increase, then negative number

Nominal Linear (NL)

Year	1	2	3	4	5	6	7	8	9	10
Aquisition cost	500 000	500 000	500 000	500 000	500 000	500 000	500 000	500 000		
Maintenance cost		20 000	22 000	24 200	26 620	29 282	32 210	35 431		
Depreciation	62 500	62 500	62 500	62 500	62 500	62 500	62 500	62 500		
Capital Cost	75 000	65 625	56 250	46 875	37 500	28 125	18 750	9 375		
Capital Base (IB)	500 000	437 500	375 000	312 500	250 000	187 500	125 000	62 500	-	
Total capital cost	137 500	148 125	140 750	133 575	126 620	119 907	113 460	107 306		

Nominal Annuity (NA)

Year	1	2	3	4	5	6	7	8	9	10
Maintenance cost	500 000	500 000	500 000	500 000	500 000	500 000	500 000	500 000		
Maintenance cost		20 000	22 000	24 200	26 620	29 282	32 210	35 431		
Depreciation	36 425	41 889	48 172	55 398	63 708	73 263,8	84 253,3	96 891,3		
Capital Cost	75 000	69 536	63 253	56 027	47 717	38 161	27 172	14 534		
Capital Base (IB)	500 000	463 575	421 686	373 514	318 116	254 408	181 145	96 891	0	
Total capital cost	111 425	111 425	111 425	111 425	111 425	111 425	111 425	111 425		
Maintenance cost		20 000	22 000	24 200	26 620	29 282	32 210	35 431		
Sum	111 425	131 425	133 425	135 625	138 045	140 707	143 635	146 856		

Real Linear (RL)

Year	1	2	3	4	5	6	7	8	9	10
Replacement cost	500 000	520 000	540 800	562 432	584 929	608 326	632 660	657 966		
Maintenance cost		20 000	22 000	24 200	26 620	29 282	32 210	35 431		
Depreciation	62 500	65 000	67 600	70 304	73 116	76 041	79 082	82 246		
Capital Cost	52 885	48 125	42 900	37 180	30 934	24 128	16 729	8 699		
Capital Base (IB)	500 000	455 000	405 600	351 520	292 465	228 122	158 165	82 246	-	
Total capital cost	115 385	133 125	132 500	131 684	130 670	129 451	128 022	126 376		

Real Annuity (RA) Specific Price Change

Year	1	2	3	4	5	
Replacement cost	500 000	520 000	540 800	562 432	584 929	
Maintenance cost		20 000	22 000	24 200	26 620	
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RA (Specific) for a given year	
Year	8
Replacement year 8	657 966
Maintenance	35 431
Total capital cost	125 934

Real Annuity (RA) Inflation

Year	1	2	3	4	5	
Replacement cost	500 000	520 000	540 800	562 432	584 929	
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Total capital cost	95 699	99 527	103 508	107 649	111 955	
Maintenance cost		20 000	22 000	24 200	26 620	
Sum	95 699	119 527	125 508	131 849	138 575	

RA (Inflation) for a given year	
Year	8
Replacement year 8	657 966
Maintenance	35 431
Total capital cost	125 934

Figure 1 - Capital cost calculations

These calculations can seem quite overwhelming, so I will try to structure my argumentation in a sensible way. Perspective 1 is about assuming that the service cost is included in the already established capital cost. As the capital cost rises with around 2000 each year (compounded over time) it is important to choose a model which captures this rise in price. In this case that would be a real annuity model (either inflation or specific, I would recommend the specific because of the possibility of a higher price increase). This model is the only model in which the capital cost grows with the increasing service costs, which is why this could be a good model to represent the capital costs.

In the second perspective, Perspective 2, the service cost is separated out on its own. This could be the best option if one considers the service costs to be a big expenditure and that it is not covered in the standard model for estimating capital cost. In this case I would choose the nominal linear model, which has a constant depreciation. Because of the short time frame and the fact that the service costs are taken out of the capital cost, it is a good model to estimate how much income the cinema would need in order to cover the costs of the app.

Overall, the choice of whether to use a real or nominal model to determine the capital cost of an asset depends on the specific needs and goals of the cinema. A real model may be more useful in cases where the cinema wants to accurately reflect the current value of the asset, while a nominal model may be more useful in cases where the cinema wants to simplify the calculation or focus on the original cost of the app.

Task c)

Collecting customer data can be used in pricing decisions in several ways. For example, by analyzing customer behavior data, a movie theatre like Oasis Cinema can identify the most popular showtimes and adjust prices accordingly. For instance, if the data shows that there is high demand for certain showtimes, the theatre could increase the price of tickets for those showtimes. This could help the theatre maximize revenue and improve profitability. (Although the ethical implications of this would have to be considered separately)

Additionally, collecting customer data can also be used to offer personalized pricing. For example, the data could be used to identify customer preferences and offer them customized discounts or promotions. This could help the theatre retain loyal customers and attract new ones, ultimately leading to an increase in revenue and profitability.

It's important to note that these examples are based on the assumption that Oasis Cinema has a robust data analysis team in place and is able to effectively utilize the customer data that it collects. Without the ability to analyze and act on the data, collecting it would not be useful.

Task d)

The inverse elasticity rule states that when the price of a good or service increases, the quantity demanded of that good or service will decrease. This is because, as the price of a good or service increases, consumers will be less willing to purchase it, as they will view it as less affordable. The elasticity of the price (ε) is determined by how much the demand falls or rises with a given price reduction or increase. If the price reduction is 2% and elasticity is -3, then the demand increase would be 6%. This idea can be applied to the supply and demand of a product and in theory find the “optimal price”.

The optimal price based on this rule is found by using this formula:

$$p = \frac{1}{1 + \frac{1}{\varepsilon}} MC$$

With certain assumptions in place this might be the case, but in reality, it is difficult to assert the optimal price using these calculations. Here are some reasons as to why:

1. The marginal cost of the product is often unknown, as according to Zimmerman (1979) there are often “hard to observe”-opportunity costs involved in distributing the true cost of a unit or product, which leaves us with a wrong marginal cost most of the time.
2. This pricing function using elasticity assumes **linear** elasticity over the course of the demand curve which is rarely the case in the real world.
3. The p_i of the function does not determine the optimal price for any given elasticity, but it provided a room of opportunity in which the optimal price is located in. For example, a range like this could be written as $\{p_i, current\ price\}$ and the optimal price would lie in this range.

There are also some other errors in the group members’ assumptions about how the app could determine these parameters. For example, it assumes that the number of clicks on the app is a reliable indicator of demand elasticity, which may not always be the case. It also assumes that the demand elasticity and marginal cost of a movie remain constant over time, which may not be true in practice. Additionally, this approach does not consider other factors

that may affect demand and pricing, such as competition from other movie theatres or the availability of alternative sources of entertainment.

In conclusion, this application could provide some insight into which price range the movie tickets could be priced at, although one should be careful in trusting in its results uncritically, and there might be better alternatives to determining price.

Question 2

Task a)

A Customer profitability analysis is a business analysis technique that involves identifying and understanding the profitability of a company's individual customers. The goal of a customer profitability analysis is to identify which customers are contributing the most to the company's overall profitability and which are not, in order to inform strategic decision-making.

To conduct a customer profitability analysis, a company typically collects data on its customers, including information on their spending habits, purchase history, and any relevant cost data. This data is then used to calculate the net profit generated by each customer over a given period of time. This calculation typically involves taking into account the revenue generated by each customer and subtracting any direct costs associated with serving that customer, such as the cost of goods sold, customer acquisition costs and customer discounts.

The resulting customer profitability analysis can provide valuable insights into the overall performance of the company's customer base. For example, it can help the company identify which customers are the most profitable, which are the least profitable, and which are at risk of becoming unprofitable. This information can be used to inform a variety of strategic decisions, such as pricing, investment, and customer service strategies.

Additionally, a customer profitability analysis can also help a company identify areas for improvement. For example, if the analysis reveals that certain customers are not profitable, the company can take steps to improve their profitability, such as by using price discrimination techniques, or by finding ways to reduce the costs associated with serving those customers.

There are several types of customer profitability analyses, of which some of them have been gone through in this course. Examples of these are setting up specific customer accounts for each customer, or graphically using the Lorentz- or Stobachoff curve.

Task b)

A graphical illustration of the above analysis can be created using several methods. Many of them require more than one observation to give any meaningful results, such as the Lorentz- and Stobachoff curve. In this task we are presented with one specific customer, Stobachoff-coefficient, and vulnerability factor of the total customer base. With these figures we can make a Stobachoff curve which could resemble the actual curves from the customers revenue and profitability, although it will not be accurate in the distribution of the customer, only the VFP will be correct. From these we make assumptions

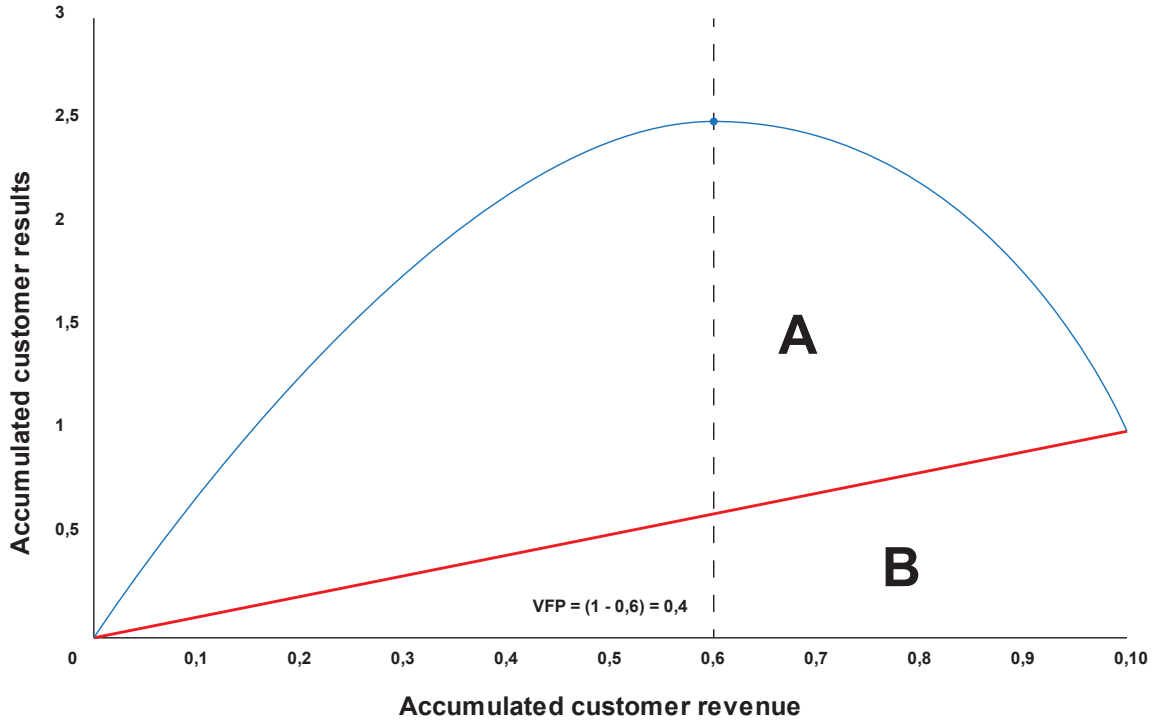

Figure 2 - Stobachoff-curve

We know from the theory behind the Stobachoff coefficient that it is defined as:

$$Stobachoff\ coefficient = \frac{A}{A+B}$$

We know that $B = 0.5$ as the line crosses 0 and 1 in the graphical representation, and the area under that line is always 0.5. We have also been presented with the Stobachoff coefficient, which is 0.75. With this we can find the area A:

$$0.75 = \frac{A}{A+0.5}$$

$$A = 1.5$$

It is not unreasonable that the area defined as A in the graphical interpretation is around 3x larger than the area B. In this case, this would seem about right for the customer base presented.

Lastly, I would like to note that this graphical illustration does not include the figures from the customer profitability of the customer with ID: 15332. This is a deliberate choice, but one could graphically present those figures, it would not give us any insight as it is just one observation.

Task c)

In general terms one could say that around 40% of the customers at the cinema have a higher variable cost and distributed indirect customer costs than revenue, which is evident from the Stobachoff curve. Gina can take a few insights away from this analysis.

First of all, we can use the “Willie Sutton”-rule (Bjørnenak, 2019) in order to determine the most important cost factors for the customer given to us, in order to determine which costs are the most relevant to analyze in the context of the illustration provided.

Customer revenue	*NOK*		*%*
◦ Tickets	kr	840	65,6 %
◦ Concession spending	kr	490	38,3 %
◦ Sales reductions	-kr	49	-3,8 %
Net customer revenue	kr	1 281	100,0 %
◦ Variable cost	kr	605	47,2 %
◦ Indirect customer cost	kr	552	43,1 %
Customer result	kr	124	9,7 %

Figure 3 - Willie Sutton-analysis

From this we can take away the fact that the indirect customer cost, which is distributed by the cost of tickets, stands for a very large part of the customer costs, which can help explain why 40% of the cinema's customers are considered unprofitable. It is natural that variable costs such as costs of goods and movie royalties take up much of the cost of the ticket, but there might be some insight to be gained from investigating the distribution of the indirect costs.

The indirect costs are distributed on the basis of ticket sales. This assumes that all of the indirect costs are driven by the sale of a movie ticket. In a cinema this might not be such an unreasonable assumption, as the most expensive part of operating a cinema is the property renting and technical features. There are however some things that may distort the view of customer profitability.

First of all, with this system the costs are distributed on the basis of sold tickets, not on the practical capacity of the cinema. This leads the model to distribute the costs of unused capacity to the customers that actually buy a ticket. This is somewhat counterintuitive, as one can assume that the cost of operating an empty cinema and a full cinema is somewhat similar in the short run in aspects such as rent and administrative staff. Distributing the costs of the free capacity to the customers distorts the analysis and makes the customers seem less profitable than they are in this situation.

Determining the practical capacity out of theoretical capacity on the other hand can also be an important factor in calculation. If they are to switch to a system in which they divide the indirect costs on the practical capacity, how do they determine what is practical and what is theoretical? We can use the framework presented in class to answer this question.

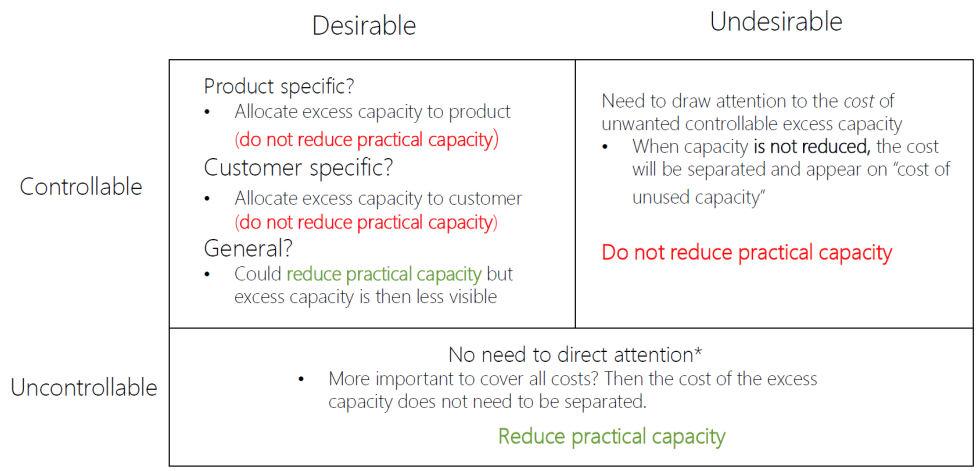

Figure 4 - Determining practical capacity (Lecture 5)

With this framework we can see that even though theoretically the cinema could fill up every seat in the cinema *every time* they play a movie, this would be practically uncontrollable (without lowering the price to almost zero). Therefore, not selling tickets might be classified as uncontrollable, undesirable. They could switch their method of distributing the indirect costs to a cost per seat based on practical capacity, where practical capacity is the expected number of tickets sold to any given showing of a movie.

Another insight Gina can gain from this graphical interpretation is the fact that 40% of her customers are unprofitable. We have discussed earlier how the distribution of the indirect cost might affect this, but there is also a different element which can be discussed. We have been shown a customer who have used around 38% of their total expenditures at the cinema on concessions (drinks, popcorn, chocolate) which is a significant number. We also see that this customer is considered profitable. Therefore, it is reasonable to assume that the unprofitable customers in this interpretation of profitability are the customers who do not buy any concessions. This is an area for improvement for the cinema, as 40% of their customers do not buy *enough* concessions in order to be considered profitable.

Task d)

In the previous task we went over some of the ways in which Gina could interpret the results given to her by the illustration presented. In this task we will try to make an assessment of the situation and discuss areas in which Oasis Cinema can improve the accuracy of their customer profitability analysis. I will use theory related to Activity based costing in discussing how Oasis Cinema could improve its accuracy.

An ABC (activity-based costing) system is a method of analyzing and assigning costs to specific activities within an organization. In the context of Oasis Cinema, this could involve identifying and analyzing the various activities involved in providing movie tickets and concessions to customers, such as ticket sales, concession stand operations, and customer service. By assigning costs to these individual activities, the ABC system can provide a more accurate picture of the profitability of each customer, allowing Oasis Cinema to better understand which customers are most valuable and how to target their marketing efforts to maximize profitability.

For example, the ABC system might reveal that customers who pre-order concessions online are more profitable than those who purchase concessions at the concession stand, or that certain customer demographics are more likely to purchase higher-priced tickets or concessions. By using this information, Oasis Cinema can target its marketing efforts to these profitable customer segments and focus on improving the profitability of its core activities. Additionally, the ABC system can help Oasis Cinema identify areas where costs can be reduced or eliminated, leading to increased profitability overall.

By providing more accurate information about the costs of production, an ABC-system can help the cinema make more informed decisions about pricing, production levels, and resource allocation. It can also help identify areas where costs can be reduced and provide a more accurate basis for comparing the profitability of different products, services, or activities.

As mentioned previously, the accuracy of their customer profitability was hampered by their use of ticket sales, whilst it may not be the true cost driver behind those costs. One other aspect to consider is the cost hierarchy. Sold movie tickets might be useful when determining a cost driver for unit level indirect costs, but the cost of licensing a movie could be classified

as product or series level. It would therefore not be accurate to list ticket sales as the cost driver in an ABC calculation and changing their method of distributing the cost might lead to a more accurate customer profitability analysis.

Question 3

Task a)

Gina is arguing that many of the fixed costs from the overhead organization Paradise Film have been unfairly distributed to Oasis Cinema. In this task I will try to uncover some of the reasoning behind distributing such costs and the benefits/disadvantages of distributing such costs. Zimmerman's (1979) theory of agency suggests that when there is a separation of ownership and control in a firm, there can be a potential agency problem. In this case, Gina is proposing an investment that she believes will increase profitability for Oasis Cinema. However, the management has responded by saying that the investment can only be made using the profits from this year. This creates an agency problem because Gina, as the individual proposing the investment, has an incentive to make the investment in order to increase profitability and benefit herself.

However, the management has the ultimate control over the allocation of profits and may not have the same incentive to make the investment. Building these chairs might be beneficial to Gina as she has a budget she can allocate as manager, but she might have different preferences for nice technology than the leadership at Paradise Film. In order to keep their Agent in line with their thinking, they have therefore overallocated fixed costs in order to inadvertently lower the available cash to make such investments which do not benefit the organization. This misalignment of incentives between Gina and the management can lead to suboptimal decision making and potentially harm the profitability of the firm.

Additionally, the fixed costs that Gina is mentioning might not be best described as fixed costs. If Paradise film uses ABC-calculation in order to distribute their costs (this is an assumption) or similar systems, then the fixed costs would be distributed according to usage of certain actions which drives these costs (cost drivers). Even though the costs may be fixed in the short term, in the long term these costs need to be accounted for with revenue, and as the cinemas are the income centers in the organization it would not be unreasonable for them to take on some of the costs associated with the overhead needed for all the cinemas in the organization.

Task b)

Friedman’s (1970) theory of corporate responsibility suggests that the primary responsibility of a corporation is to maximize profits for its shareholders within the ruleset set by the government or other instances. Profit can therefore be seen as an optimization problem, where the profit function is the objective function, and the ruleset of the government is the constraints in the model. We define this as the viewpoint of seeing morality as constraining. In this case, the new two-legged strategy proposed by the group management at Paradise Film appears to be focused on increasing profitability by increasing attendance and concession margins, as well as the average concession spending per customer. This aligns with Friedman's theory because the strategy is focused on increasing profits for the shareholders of the company.

However, there are potential ethical concerns with this strategy. The use of artificial ingredients in the most popular concession products is believed to increase the risk of obesity and diabetes if consumed frequently. While there is currently no law or regulation prohibiting its use, this raises questions about the ethical responsibility of the corporation to

protect the health of its customers. According to Friedman's theory, the corporation's primary responsibility is to maximize profits for its shareholders, so the use of the artificial ingredient could be justified if it is believed to increase profits. However, from a broader ethical perspective, the potential negative health effects of the artificial ingredient could be seen as a negative consequence of the corporation's pursuit of profits.

Within the perspective of Friedmans paper we can use the relevant cost framework in order to conclude whether or not this strategy can justifiably be implemented (Bjørnenak, 2019). This framework can be summarized as:

$$Relevant\ costs = specific\ costs + opportunity\ costs \pm externalities$$

This tells us another story than Friedman, which tells us to maximize profits where profits are defined as specific costs + opportunity costs. This leaves out the externalities of the relevant costs to a decision. Even though the cinema will improve its margins in the short run by making their snacks unhealthy, and by making people visit more frequently with the subscription service will inherently guide customers into eating more of the unhealthy snacks, it might not be profitable because of externalities. Let's say this scheme is implemented, but people catch on to the ingredients list, and is informed by the company's practices, this might cause negative press about the cinema, and cinemas in general. This would lead to lower attendance overall, and especially less profits in the kiosk which sells these unhealthy snacks.

If we want to calculate the "cost" of this externality we can look at the increased profits by implementing this scheme times the probability of it not being known to the public, plus the losses incurred by people getting to know this information times the probability of the customers getting to know this scheme. From my intuition I would guess that the incurred losses from the scenario where the public gets to know that the cinema knowingly made a choice in worsening their health is very high, and likely not profitable for the company. According to the lecture slides from L13, adherence to social responsibility has paid off in the long run for many companies, which indicates that this analysis of the externalities holds true for many companies.

With this expanded analysis of the relevant costs of the analysis, on top of the ethical concerns of the new strategy I would conclude that this is not a step in the right direction for the company, although the first part of increasing frequency (without introducing unhealthy snacks) might be an interesting proposal which could be analyzed further.

References

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