**ISMG 6820\_Investment\_Analysis**

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Net present value is the difference between the cash outflow and the cash inflow over a period.

Cash Outflow is the amount that is spent on the project. It consists of all the investments that are made on the project including fixed and variable costs and is always negative. Cash Inflow is the amount received in terms of revenue. It is the profit received by the company. A positive NPV value indicates that a project can be implemented and is worthy of investment. While a negative NPV value indicates that it is risky to invest on that project. The task asks us to compare two projects where the different investment costs are given. The Revenue is also predicted using the historical sales data. By mathematically comparing the cash inflow and cash outflow if the two projects, **Project 1 is a better investment decision.**

Why? By assuming the Inflation Rate to be 0.0244%, the NPV value for project 1 is $3,905,168.79. Here the NPV is positive. Considering the same inflation rate i.e. 0.0244% the NPV value for project 2 turns out to be ($102,941,585.48) which is a negative value. If we keenly observe the calculations, we can see that in the Project 2 that the cash outflow from the project is too high. After the release of the Product 2 i.e. “777”, The effect of the new product release, decreases the sales of the currently existing phones. This in turn affects the revenue. Hence the cash inflow is very less as compared to the cash outflow of the project. Hence it is highly risky to implement Product 2. We can also see the maintenance and revenue variations in graph1 and graph2.

If we generally observe the market trends of phones in the current market, we see that the companies make it a point to keep upgrading their existing phones. With each new upgrade, the existing customer base is retained, and the new customer base is attracted towards company’s product line. By the release of the Goloxy Note 10, the company will attract a lot of customers who have previously used Goloxy phones and the customers who want to try Goloxy Note 10. This is one point to be considered which makes Project 1 successful. Also, the company is adopting the concept of “Complete on Cost” by setting the price of the product nominal. If we compare the project 2 product “777”, the price of the product is double the price of product 1, which all users cannot afford. The price of product 2 is $2500 which may not be acceptable by the market. There may be many products in the market which provides enhanced features with a lower cost. Hence the product 2 – “777”, will not attract many customers.

Also, product 2 is a combination of a tablet and a phone. Though it is a radical thought and a unique product, it is not handy enough for all sorts of users to accept it. The customers ask for “ease of use”, where the products are portable and easy to use. Assuming that, the product “777” is an entirely new product, no one has the estimate of how the product would perform. Hence, the company had to target a skeptical market. Hence, more costs must be invested in marketing and introductory offers to attract customers. All these are additional costs to be borne by the company and will decrease the net profit received by the company. We can see it in graph2, the data given clearly shows that the product 2 i.e. “777” has the net NPV value to be negative for every year. This means that the inflow is very less as compared to the outflow.

For project 1. I.e. Goloxy Note 10, only the third year returns less profits as the NPV value is negative. The overall performance of the product is much better than product 2.

The graphs below show the comparison between the Maintenance and Revenue Costs for project 1 and project 2. I have done the 5-year forecasting using the moving averages method.

The graph1 also show that the cash outflow for project 1 is steady and the cash inflow fluctuates from high to low and then remains constant. So, with the initial revenue received itself the product 1 provides the complete return of investment. The rest of the cash inflow turns out to be the profit.

For product 2, the cash inflow or the revenue received is very less as seen in graph2. It is around 10 Million for all five years. This means neither initially at the release nor after giving enough time, product 2 gives a good return on investment. There are conditions in the case where, there are additional offers of lenses that are being given out by the company. Even then, due to the high manufacturing and maintenance costs, Product -2 does not turn out to be profitable. The company should consider launching a unique product with less manufacturing costs. Studying the market, response from the customers, the company’s financial positions, the losses regarding old phones etc. which are all the factors that need to be considered.

If we need to invest on product 2, either we should increase the product costs from $2500 to $4000 or more, increase the sales, improving on marketing strategies might be beneficial too, to the company. A major hit in product 2 is folding tech cost, software maintenance cost and manufacturing costs. Hence the company should concentrate on using the inhouse resources and materials rather than investing a very large amount outside. Or the company should be performing well with its range of other products, that it can use profits from other products to invest on product 2.

The graph3 below, shows the comparison between the project 1 and project 2 revenues, helping detection the better performing product out of the two.

We can observe that the total revenue from project 1 is greater than project2. Hence the investment decision is to invest on PROJECT 1.

**GRAPHS**

Graph1

Graph2

Graph3