## **Iskall Case Study**

Iskall is a food producer with different products, its flagship being their ice cream. Through their sales surplus, 80M has been authorized for projects over the next three years. From a list of projects supplied, a conclusion can be drawn on what best set of projects could be funded with the 80M. The key questions needed to answer are: Is the project reasonable for the company, what synergies, and dependencies exist between projects, what discount rate is being used to calculate NPV, and is the cash flows given for the project reasonable?

When performing an analysis of the individual projects a discount rate has to be decided on. Exhibit 5, we are presented with some possible discount rates for the projects, those being: the corporate hurdle 10.6%, corporate WACC for each project, industry WACC for each project, and a 50/50 D/E WACC. Each of these, except the corporate hurdle, varies between projects. For example, corporate WACC and 60/60 D/E WACC vary between projects due to differences in their betas while industry WACC varies due to not only beta differences but also the capital structure of the type of industries in which the project is involved. Because industry WACC varies along with capital structure for each industry, it becomes a good risk-adjusted return minimum measure to use as a discount rate, allowing us to count returns while balancing for the project's industry risk. From here on this will be used as a project discount rate for calculating NPV.

When making a comparison of the individual projects I am comparing them by only one metric, Positive NPV as this is the added value that the project will contribute to the organization. The alternative of IRR is not being used because it is biased against larger multi-project collections scaling poorly. The projects that fail this NPV adequacy benchmark are projects expanding the truck fleet(1) and conveyor system(6). But this isn't true when accounting for synergies between projects can lead to higher NPV. This is particularly true for expanding the truck fleet, which has synergies between projects, and with those, it can become a positive NPV in some project groupings.

A significant note to Exhibit 5 from which the above conclusions were made is that the pollution trap (6) is not included in Exhibit 5 for analysis. A quick examination of this assumes that EPA mandates must be followed and so a pollution trap must be put in, now or later, choosing between paying 10M in four years or 4M now. The effective interest rate of waiting to put in a pollution trap is 37.6% annually. This is calculated by dividing the future cost by the present cost minus one, getting us the overall interest over waiting four years. dividing this value by four gets us the annual effective interest rate of 37.6%. Knowing this, it makes it vital that this project be included in our 80M project budget.

Continuing on vital projects, are projects that are vital to other projects. The two expansion projects (7,8) are expanding the distribution network into new regions. Within these projects however are no notes on expanding production capacity that would arise

from opening in a new market, only using current unfilled capacity. Project 2 is necessary for both expansions as this will expand capacity, and prevent the exacerbation of current problems in production and delivery in current market regions. On top of this is the necessity of Project 1 which earlier as stated did not alone pass the hurdle rate, but when adding it to other projects does. Even more so is the fact that it serves a vital role in the expansion. It can not be expected that the current truck fleet can service an expansion east(7) or south(8) or increase in volume with new and expanded plants without first increasing in size. Depending on the confidence of storming the eastern market, Project 10 for an ad campaign may be necessary for a high competition environment where the quality of Iskall can't be fully relized.

In a total analysis of groups of projects, I'm going to present two which I think are the best set of projects to pursue with an 80M budget depending on the context it is viewed in. These are sets 7,10,11 and 1,2,7.

Off the paper, Projects 7,10,11 are the absolute best having the highest NPV of ~55.9M, and all projects within this set pass their respective hurdle rates by almost double. But why is this so? A large proportion of the value is coming from the theme park which at this time is not reasonably strategic and carries with it a large risk. First, The risk-adjusted discount rate for this project is from its respective industry, which is concentrated in better theme park areas with larger population bases and longer yearly operations, which can be believed to be a deflated value for this project. Second, It can be believed that the cash flows given are inflated, they are almost too good to be true and these projections could be wildly optimistic with a peculiar cash flow amount at year 10.

It should be noted other theme parks do exist in Minnesota. Theme parks built off food companies have been done before. Hershey Park, on the east coast and having 6 months of non-operating days, is wildly successful. A fraction of such success could prove lucrative in a low competition area such as Minnesota/Michigan. This theme park would be on average be 10 F degrees colder than Hershey's Park, which would limit traditional theme parks operations. However, It could be conceived that this Arnopark would have summer operations akin to an outdoor adventure park that doubles as a winter skiing resort given Minnesota's eastern hilly terrain and high snowfall that keeps throughout the winter season. Even if a traditional theme park was pursued, there would be potential for dual seasonal operations, winters containing Nordic cultural activities, centered around Iskall's brand. Iskall should further investigate the cash flows potential of this project as the return potential is high enough to justify a deeper analysis. However, not at this time, there is a risk of uncertainty around this project's cash flows given its particular situation. More thought and planning should be dog eared for this project.

Projects 1,2,7 are a more certain set of projects that build on Iskall's primary area of service. It has an NPV of 23.6M and all projects within this set pass their respective

NPV requirements when including synergies. This set of projects are fundamentally the best projects to pursue as many of the other groupings of projects are flawed in how they are collected. This set does not have those flaws. It carries forward the Idea that NPV is as high as it can be, and that projects that are vital to other projects are included to support them. Project 7 is the expansion eastwards, a high return project that is supported by Projects 1,2, the expansion of the truck fleet, and increased capacity by having a new plant. These three together have synergies with one another where common savings are possible. As shown before, a set like this is strategically a singular mega project where each project is linked to the others for a singular purpose.

How could this mega project (1,2,7) be improved? For one, adding in more projects that provide value. Project 6 should be included in the company's overall budget but not necessarily as a capital budget item. With a year zero cost of 4M, and shown above savings at present installation, it is more than reasonable that this is pursued, but this project is a necessary expense of the business. Looking for a Capital Budget Item to add, Project 10 would be an excellent addition. As stated before, Project 10 could be nessesary to compete in the eastern market if there is not enough confidence in the product in this new market. This risk of competition is reflected in the two expansion project's differing beta values, but Project 10 will help it gain the market, and improve NPV through the synergies that it produces between the products being chosen. However, it would make necessary the expansion of the budget by 7M to accommodate this additional project.

In conclusion, Iskall has a lot of options that it can pursue when it comes to project groupings, but many of them are red herrings. Many of the created sets are strategically poorly constructed, and a number are not reasonable to pursue without further investigations. Projects 1,2,7 and possibly 10 are the best to choose at this time under current restraints with the solemn belief that expanding the current budget to pursue positive NPV projects is good business. The ease of entry into the nursery industry is largely determined by the targeted market segment. Horniman Horticulture, a wholesale nursery business, specializes in supplying small nurseries with specialty plants, positioning itself within the diverse horticulture industry that comprises both small, niche-serving businesses and large companies catering to extensive landscape management groups. The segment Horniman is venturing into, specialty mature plants, is not typically explored by large industrial players. While legal and regulatory barriers to entry are minimal, the multi-year cultivation period before sales poses a significant barrier. This strategic move to target the specialty plant submarket is a key differentiator for Horniman as a smaller player.