Module 1: Assignment 1 -- Phases of the Decision-Making Process

For the intelligence phase, I want to first define what the goal is. Is this facility stand alone, creating food products by itself? Will we assign and/or divide the work load between these two facilities, or will this facility venture into experimental/new products? For this example, I'm going to say that our goal is to secure a raw material at a cheaper cost. As I know my goal, my next question will be why. Why do I want cheaper goods in the long term at the expense of a greater upfront cost? Why do I want it in Mexico? A quick search revealed that produce (both vegetables and fruits) held two slots in a list of the top 10 Mexican trade surpluses (Workman, n.d.). As a food production facility, Mexico appears to be a logical choice.

If we’re absolutely sure it must be in Mexico, my next move will be data collection. I want to know everything there is to know about the country. Where is the optimum soil and conditions for my particular crop to grow, what is the status of the local populous (qualification, abilities, and meets requirements), and will there be any extra costs to the care and transportation of goods between facilities. I would like all this information for both the past, current, and potential outlook. As crops needs specific conditions, both environmental (water, light, etc.) and soil to grow, I would like to know the history of the land and what was grown prior. As well as any facilities/factories that may be a possible source of contamination.

Lastly, I would figure out the cost. How much this would cost both upfront and overtime due to loan interest, and general liabilities generated through this transaction. As Mexico is rather large, how much will it cost to transport the materials across the border. The cost to build the new business, the hiring and training of workers, operational costs, and then transportation costs, all of these will need to be figured. At the end of the day, what are my profit margins, and how long will those margins be negative? If the profits overshadow the cost, and all my data points to solving a priority issue for the company, we can move onto the next phase.

For the design phase, I take everything I’ve learned from the intelligence phase and begin building models to provide an intricate analysis of the purposed plan. Depending on who I am presenting this model to would dictate what model I use. If I was pitching to sponsors, I would create normative models. If to the company, then I would lean more towards descriptive models, that showcase both optimized and suboptimized layouts of the potential investment.

The primary goal for this phase would be to establish two main model paths: quantitative and a normative model(s). The quantitative model will show in detail the upfront cost as well as normal operating costs. This model would also provide a loan repayment plan (if one was taken) and reveal the time value of the loans and money generated per year as well as the time it would take to fully pay the loan off. As for the normative model, this model would be used to showcase the most efficient methods for carrying out this project with the goal of maximizing profit. From travel routes to crop rotations, this module would show the most optimized routes the company could take.

Once the who, what, when, where, and why have been established, I would move onto the choice phase. For this phase, I would take into account the models that were generated and compare and contrast them until an optimum solution can be reached. While this phase may be rather simplistic, as you simply pick a model and say yay or nay, I would spend the majority of time here. Gathering data and generating a model or two are vastly different than evaluating and comparing said data and models.

A deep analysis of each model would have to be made, and flaws would have to come out early on so that the models can be re-evaluated. My go-to analysis will most likely be “what-if” and “blind search” analyses as I believe the greatest method for probing for a solution and/or fault would be to throw chaos in every manner of direction at an ideal. Whichever module survives the bombardment of chaos will be my go-to solution.

Once the data has been collected and generated, and a solution has been chosen, I would then move onto the final step: the implementation phase. For this phase, while I wouldn’t charge forward no holds barred, I would begin the slow and steady process of implementation the proposed plan. The first step would be hiring real-estate agents, contractors, and lawyers (going to have a lot of legal paperwork). Ensuring the red tape doesn’t impede progress will be the primary goal. From here, while the plan is in motion, I would begin again the process from the intelligence phase to the implementation phase anew as the data will never stop being collected nor will models cease to update. This phase isn’t a stamp and forget phase, the process will continue to be inspected and evaluated to ensure the greatest return on investment.

# References

Workman, D. (n.d.). *Mexico’s Top 10 Exports*. Retrieved from World's Top Exports: https://www.worldstopexports.com/mexicos-top-exports/