Business Case Study

Proposal to the Board of Directors

of

General Industries Corporation

For Approval of

Solar Powered Electrical Generation Project

October 29, 2015

OSU Leadership Academy

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The following business case is prepared for the OSU Leadership Academy.

The case is presented in a manner to introduce the participants to a method of financing a project, called Project Finance. In addition, participants will be exposed to a board of directors meeting setting during which a proposal for an investment is made to the board. The participants of the class will each assume the role of a board member and after considering the proposal and having the opportunity to ask questions, will then be asked to vote to approve or disapprove the project and to provide the rationale for their decision.

The business case is to distributed before the class and is intended to be read by the attendees prior to their participation in the class session. During the session, which will be conducted in the format of a board meeting, the author/presenter will briefly overview the business case providing some additional color and/or detail as further background to the case. Then, there will be a question and answer session during which the class participants can clarify or further understand any of the information presented.

When that portion of the class is complete, there will be a simulated vote, during which a motion to approve will be considered, discussion of the motion will occur and finally, a poll of the directors will be taken to approve or disapprove the project.

This business case is creative non-fiction. It is fact based but the people and places are fictional. Any relation the case has to any actual occurrence is purely coincidental. While the people and places are fictional, the facts cited as far as the business concepts, the technology descriptions, and the methods in which the meetings are conducted, are, to the best of my knowledge, true.
Antonio saw the number on his phone when it rang and knew this was one he was waiting for. “Good morning, Donte”, he said as he answered the call. “I have been hoping we could connect.” Donte answered, “Good morning to you, too, Antonio. And I think I have news that will make you and your team very happy. I know I am pleased with what I am going to tell you. The board agenda for next month has been approved and we have your Solar Project on it. The meeting normally starts at about 9 and we have you slated for an 11:30 time slot. So, get the presentation ready and we will want to review it a week before the meeting because it needs to go to the board 4 business days before the meeting.”

“Perfect,” Antonio said. And, “Donte, we certainly appreciate your help in getting our project to the decision makers. We will put together the draft in the next couple of weeks and send it to you. Then, we will do a full presentation for you a week later before the package goes to the full board.”

“I will wait to hear from you on next steps. Have a good day.”

“We will have a great day. I’ll get with the team now and tell them of the plan”

Antonio walked out of his office and past the west wall of glassed in offices. “Let’s meet up in the Library”, he said several times as he walked down the hall.

As he waited for people to gather, he thought about the 18 months it had taken to get to this point. The division had been set up 4 years ago with the idea that it would look at new technologies for use within the corporate mission. General Industries was a manufacturer of various high end electronic control devices. The industry had been changing dramatically over the last 10 years as digital equipment replaced electro-mechanical devices that had been the standard for motor controls and switchgear for over 50 years. The company employed nearly 3500 people, and had about 250 engineers in various departments, including product design, facilities maintenance, sales engineering, etc. The special products division was set up so that the company could develop ideas that came up thru the interaction of the company with its customers, vendors, etc.

Even though the room they were assembling in was called the library, it did not look like it now. When they moved into the space 4 years ago, the internal room with its 6’ by 10” table surrounded by bookshelves from floor to ceiling, was little used. The lawyers that had moved out of the office space took all their books with them. Consequently, the room looked more like an empty storage closet. Over the next 6 months the shelves gradually filled with computing hardware, new, used, and spares. It also became the space where there were “no titles” for the management and employee meetings as the group worked its way thru the early days of the start-up activities.

When the other 3 had arrived, Antonio grinned. “We are on the board agenda to get the solar project approved. Donte Peterson just called and said we were good to go for the October Meeting. He wants to have a briefing 2 weeks ahead of time and the materials go to the board the week before the meeting. So, let’s lay out the plan for getting a go ahead!”
Kingsley was the first to speak. “Finally, this project has been ready for months. What finally happened, Antonio?”

“As best as I can tell, the board is getting comfortable with the idea that the factory unit using the power has a 10 year operating likelihood, that they will be making their components for that period and so there is little risk the power will go unused.” Antonio continued, “and that is a good point and a differentiation with this project. Let’s outline what this project is all about and how the presentation would look. Over the next hour, it came together quickly:

The Board Presentation Game Plan:
Section 1: Executive Summary – the last piece to be put together
Section 2: Description of the Project, technology, tracking system, interconnect with the factory.
Section 3: Financial Proforma – NPV, Cash on Cash payback, Capital requirement, Earnings impact
Section 4: Financing Plan
Section 5: Construction Plan – Engineer, Purchase, Construct (EPC) contract
Section 6: Summaries from technical advisors

After the presentation book was outlined and it was decided who was going to do what, Beth asked, “So, have we concluded what kind of financing we are going to use for the project? I know Kingsley thinks everything is done from an engineering standpoint, but from my standpoint, we have not bottomed out on how this is going to get paid for.”

“Another good point”, Antonio said. “Let’s go get our teams started on the pieces of the presentation and then let’s get back together at 2:30 this afternoon and review the status of the decisions on the financing for the project.”

When Antonio got back to his office, he penciled out a summary of the project to make sure there was a framework for the discussion with his team at the mid afternoon meeting.

A. Solar generated electricity was fast becoming a major part of the power generated for the US homes and businesses.
B. Prices had dropped as the manufacturing capabilities improved and the conversion technologies had become more efficient.
C. The largest installations sold electricity directly to the utilities who combined the resource with other sources of power, be it coal (the predominate source of fuel for electricity generation), hydro, natural gas, and other renewables such as wind and biomass.
D. The residential market had also become a major component of the solar market with roof top installations being marketed and sold thru out the country. Power generated in residential applications were typically done on a ‘net-back’ basis with the serving utility. That is, when the solar system was generating electricity, if the homeowner needed the power, it went to that load. If the home was not using any or as much power as being
generated, the excess goes to the serving utility and reduces the amount of the monthly sale to the homeowner, thereby lowering the electric bill.

E. One of the more recent applications was in commercial applications where, similar to residential, when the solar system was generating, it reduced the commercial load. However, these commercial applications did not rely on sales back to the utility. The economics of the systems were based on the cost benefit of solar over utility supplied power.

F. Most commercial utility tariff schedules (and recently even residential tariffs) allow for ‘time of day’ pricing. When demand is high, the price goes up in order to incent reduced consumption. Mid day is typically the peak period and fortunately, that is when the solar systems were at their peak. So, commercial applications of solar systems depended on the fact that, during peak hours, when averaged over 10 or more years, solar was less expensive than utility power. And with the recent reductions in the cost of solar installations, the cost differential resulted in an attractive return on investment for the people spending the upfront capital for the solar systems.

G. Therein was the rational for the installation of the 10 mw solar project at the factory. With a projected lifespan of 20 years for the products being made, there was a high confidence the project would achieve the return on investment objectives.

H. This is precisely the kind of project envisioned when the division was set up. Early adaptor of technology, strong financial returns, potential for similar projects within the company and with third parties.

With that status in mind and the board presentation coming together, Antonio went over to Kingsley’s office to confirm the engineering package was complete, so that the finance discussion to be held later in the day would not get hung up on the status of the engineering work.

Kingsley was his usual firm and confident self: “We’ve got it. Antonio, you know we have been working on this project for a couple of years, and we have it completely engineered. Remember that although it was a marginal project when we started, we have been redesigning the project to take advantage of the latest technology improvements for photovoltaic efficiency and racking/tracking methods. And, as you know, the tax incentives and the policy support for renewables remain strong . . . Our biggest issue has been the increasing cost of construction. We went thru a very thorough and competitive bidding process but we have had to delay the start of the project due to the inability to get the board’s agreement to move ahead with the project.”

Antonio could feel Kingsley’s frustration at the delays rising. Over the last couple of quarters, when they thought they would be on the board agenda, and did not make it, Kingsley was the first to express his impatience. Kingsley knew Antonio had been working hard to get senior management consensus for the project, but the factory people had made the production processes the 800 lb gorilla. No one was willing to say the new installation would not cause some disruption to the manufacturing processes in the facility. Kingsley was very confident his team had contingencies for all real or perceived issues. He sometimes thought Antonio should have been more assertive in pushing the project thru the decision
making process. After all, the performance bonuses of the Special Projects Division were tied to the success of their work.

Antonio shared Kingsley's frustration over the delays, but things were not as easy to engineer in the corporate offices as they were in the project design process. Antonio's first job was as a startup engineer out of school, then into sales engineering and quickly into a management role. When the Special Products Division was put together, he was selected as the General Manager. The great part of the role was the interaction with the teams of people working on various ideas for technology demonstration. The tough part had been the constant stream of questions from the corporate office about progress – and the same stream of questions from the team he had assembled over the last few years. Although, they had made some projects work out, most notably, a standby power project that had saved the company significant costs by providing backup power so the company could go to a lower cost, but interruptible, electricity tariff, the project used conventional technology and did not achieve the buzz, the visibility or notoriety the division needed.

"Ok, Kingsley, got it and agreed. I just wanted to make sure we can get to a conclusion on the financing discussion this afternoon."

"Antonio, worry not. We've got it”

Back in the Library at 2:30, Beth took the lead. "Here are the options we have considered in the Finance group. As the project has been being put together, we have discussed each of them from time to time, but I thought it might be good to recap the various approaches and then we have a recommendation.”

He put a one page summary up on the screen.

Financing Methods:

Equity – General Industries has a strong balance sheet and adequate cash on hand to fund the project.

Conventional Debt – Working with General Industries’ relationship banks, a 50/50 debt/equity deal could be done easily. General Industries would need to guarantee the debt, but the leverage would increase the return on equity.

Project Financing – Commonly used when the cash flows from a project were highly predictable. Lenders then take risk for project performance because they rely only on the projects cash flows for debt payments. For example, many power plants are built with Project Debt because the output is sold at contracted prices with well qualified, i.e., credit worthy, customers/counterparties.

Leasing – Most often used when the company's capital is better put to work in the core business activities.

Renting – least attractive form of financing because the returns generally go to the owner for taking the ownership risk.
As the team looked at the summary, Beth concluded, “We are recommending the Project Financing approach because it provides the highest return on investment.”

Antonio asked Beth, “Where do you think Henrik (General Industries’ CFO) is on the question of the source of capital?”

“I have spoken with him and while he says he is familiar with the type of debt, he said there had not been a recent project financing at General Industries. In fact, he said it had not occurred to his knowledge in his 6 years in his position.”

“Then,” Antonio said, “We are going to need to educate the entire board on the reasons for our recommendation. We will not be able to relay on Henrik to push it through for us.

Beth had anticipated the situation. “Ready for you on that question, Antonio. I have a couple of slides that summarize the pros and cons of the recommendation. Here they are and let’s vet them with the idea this is what we will take to the board meeting.”

Slide 1:

Project Financing Pros:

Conserves corporate cash

Increases return on cash investment

Projected cash flows from the project are the sole source of debt repayment

A “Project Company” enables parent company to move debt off the parent balance sheet

Project risk is typically shared amongst several lenders

Slide 2:

Project Financing Cons:

Complex – all cash flows and risks are documented through contracts to Lender’s satisfaction

Expensive – third party expertise, i.e., advisors, opinion providers, appraisers

Time consuming – documentation takes months to coordinate
“In addition, we can add some links in the presentation that goes to the Board so they can refresh their knowledge on the subject. It would look like Slide 3 below.”

Slide 3:


http://finance.wharton.upenn.edu/~bodnarg/ml/projfinance.pdf


https://www.youtube.com/watch?v=ZFH9DhC4HpA

As the meeting started to draw to a close, Antonio summarized:

“Ok, we have the pieces put together. Over the next week, let’s finalize the draft presentation and get ready to go over the document with Donte. Kingsley and Beth, I will presume we are good for a meeting with him a week for today. Then, it will go to the board on Friday in preparation for the board meeting the following Thursday. I think the three of us should plan on attending. I will do an overview. Kingsley, you describe the project and Rory, you go through the financing recommendation.”

The following week, the team met with Donte Peterson in his office. As the Special Products Division management team waited for the meeting with the CEO to start, they had the chance to visit with another team from the research department that had just concluded a meeting with the CEO.

Kingsley had worked in research and asked Dimitri, one of his past cubicle mates, “Do you have a project on the board agenda for next week.”

Dimitri looked at his team and then turned back to Kingsley. “Well, we thought we did, but we were just told that all the available capital is going to go into the core business activities. The manufacturing guys have made a very strong pitch for modernization of equipment for next year and that seems to have put a constraint on the ability to fund added R&D over what is already in the budget.”
Kingsley looked at the R&D team as they walked away. “It is a good thing we have taken the Project Finance approach.” Just then, they were called into the CEO’s office.

He was busy, seemed a little preoccupied and spent less than 5 minutes doing a quick page turn through the document. He had no questions on the presentation other than to pick up on one misspelled word on the page showing the project schedule.

Donte looked up at the team across the conference table from him. “I am very sure there will be lots of questions. So, remember to keep your answers crisp. This is a board meeting, not a seminar. Always try to answer the question with a ‘yes’ or ‘no’ and then give some support if needed to the answer. Finally, if you are not sure about an answer, the best answer is ‘Good question. Let me get back to you on that.’”

And then he concluded, “I know your team has worked hard on this project. It seems to me to be a very good fit. We will probably get some questions on the financing, but it seems from my conversation with Henrik that he is okay with the project financing approach, but we will need to sell it in the board meeting.”

“See you next week at the board meeting.”

To the class participants:

With the above described business case in mind, please come to class prepared to take the role as a member of the board of directors.

Like many board members, you may or may not have the time or interest in studying the information in the links provided.

The class on October 29th will be conducted in the format of a board meeting. The item will be introduced for decision and a brief overview of the proposal will be given. Then you, as a member of the board of directors, will be given the opportunity to ask questions about the proposal. Finally, a motion will be made and a vote taken, yea or nay, on whether to proceed or not.

You will be asked to vote and provide the rationale for your vote.