

Case 1-Team: The Boeing 767

Project Group - 1

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1. How would you describe Boeing's approach to project management? What are its basic elements? Strengths and weaknesses?

Boeing's approach is a well-planned and thorough to manage the project. The stages are clearly defined and accordingly carried out in a sequential manner. The first stage is project definition, second stage is cost definition, the third stage is production and supply management, and the final phase is the establishment of flight committee.

Boeing had a clear project scope and had a primary focus on catering to the airline requirements prior to the design process. Boeing has picked experienced managers personnel who had complete understanding of how the industry operates. As a result of rapid communication and frequent meetings, problems are timely solved and team members are informed of any trouble promptly.

Since some project members and assembly line are located in different countries it might cause problems. There was no additional or buffer time in final deadline to make changes in case of any glitch.

2. How does Boeing manage risk? List and consider all risks. Are these risks independent?

Boeing mitigates risks based on its industry experience by conducting a thorough marketing analysis for the need of its several airline models. The company also analyzes development and production costs prior to commencing manufacturing its products. The company implements a Master phasing plan that outlines program milestones – design, cost phase, manufacturing, and selling to existing or new customers. With many tools developed to mitigate risks – specific workstations, stand up meetings with first line supervisors and management visibility study. Risks faced by Boeing are Competitive rivalry, Threats of new entrants, Threats of substitute, bargaining power of suppliers, Bargaining power of customers, Airframe manufacturing, pricing, supply Chain Issues, development cost, technological risk, safety risk, loss of configuration.

3. What is your evaluation of the parametric estimating technique?

The parametric approach helps Boeing efficiently to calculate costs with projects from beginning to end. However, the technique is without flaws, mostly human reliance on previous benchmarking of other projects to calculate costs, not taking into account that each project is unique in its own way. Thus, making Dennis Wilson's argument of "an airplane is an airplane" somewhat "risky – taking short cuts". Although, parametric techniques are usually fine-tuned to account for differences among projects.

4. Which method should Boeing use to convert the first 30 Boeing 767s from 3-person to 2-person cockpits? Why?

Using in-line conversion was more efficient, as it prevented having to take the plane apart to modify and convert to two-persons from three-person cockpit. Obviously, this process saves time, and money.

In my opinion, from an operational and financial point using the off-line approach requires much more time to take plane apart and convert to a two-person cockpit. Additionally, any adjustments or future accommodation on the part of Boeing to remedy modifications would not have much impact compared to using an off-line approach that will require modification to be done separately, which could be costly and result in delays.

5. Three most important things you learned from this case? Instructions: each team member to come up with three things, list them below.

- Proper project planning is important with a clear and comprehensible project scope
- Manufacturing process and the subsequent modification should be carried out separately
- Project should be implemented in phases and reviewed accordingly
- Proper communication and frequent meetings are required to rectify the problems
- There should be some buffer time in final stage to rectify in case of glitches
- Customer surveys should be carried out pre hand and this might lead to significant improvements
- One should hire experienced management professionals with in-depth knowledge of the industry
- If the modification was not executed properly, the plane's operating system might be disrupted
- There should not be any geographical differences between project members and production line location as it may cause problems
- Labor hour can be saved if completion of production and subsequent modification
- All the risks should be forecasted, and effective risk mitigation technique should be implemented
- When modification is done during production problems might go undetected