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### Case 5.1

## Sharp Printing, AG

Three years ago the Sharp Printing (SP) strategic management group set a goal of having a color laser printer available for the consumer and small business market for less than \$200. A few months later the senior management met off-site to discuss the new product. The results of this meeting were a set of general technical specifications along with major deliverables, a product launch date, and a cost estimate based on prior experience.

Shortly afterward, a meeting was arranged for middle management explaining the project goals, major responsibilities, the project start date, and importance of meeting the product launch date within the cost estimate. Members of all departments involved attended the meeting. Excitement was high. Although everyone saw the risks as high, the promised rewards for the company and the personnel were emblazoned in their minds. A few participants questioned the legitimacy of the project duration and cost estimates. A couple of R&D people were worried about the technology required to produce the high-quality product for less than \$200. But given the excitement of the moment, everyone agreed the project was worth doing and doable. The color laser printer project was to have the highest project priority in the company.

Lauren was selected to be the project manager. She had 15 years of experience in printer design and manufacture, which included successful management of several projects related to printers for commercial markets. Since she was one of those uncomfortable with the project cost and time estimates, she felt getting good bottom-up time and cost estimates for the deliverables was her first concern. She quickly had a meeting with the significant stakeholders to create a WBS identifying the work packages and organizational unit responsible for implementing the work packages. Lauren stressed

she wanted time and cost estimates from those who would do the work or were the most knowledgeable, if possible. Getting estimates from more than one source was encouraged. Estimates were due in two weeks.

The compiled estimates were placed in the WBS/OBS. The corresponding cost estimate seemed to be in error. The cost estimate was \$1,250,000 over the top-down senior management estimate; this represented about a 20 percent overrun! Furthermore the bottom-up time estimate based on the project network was four months longer than the top management time estimate. Another meeting was scheduled with the significant stakeholders to check the estimates and to brainstorm for alternative solutions. At this meeting everyone agreed the bottom-up cost and time estimates appeared to be accurate. Some of the suggestions for the brainstorming session are listed below.

- Change scope.
- Outsource technology design.
- Use the priority matrix (found in Chapter 4) to get top management to clarify their priorities.
- Partner with another organization or build a research consortium to share costs and to share the newly developed technology and production methods.
- Cancel the project.
- Commission a break-even study for the laser printer.

Very little in the way of concrete savings was identified, although there was consensus that time could be compressed to the market launch date, but at additional costs.

Lauren met with the marketing (Connor), production (Kim), and design (Gage) managers who yielded some ideas for cutting costs, but nothing significant enough to have a large impact. Gage remarked, “I wouldn’t want to be the one to deliver the message to top management that their cost estimate is \$1,250,000 off! Good luck, Lauren.”

1. At this point, what would you do if you were the project manager?
2. Was top management acting correctly in developing an estimate?
3. What estimating techniques should be used for a mission critical project such as this?



## Case 5.2

### Post Graduation Adventure

Josh and Mike met each other as roommates during freshman year at MacAlister College in St. Paul, Minnesota. Despite a rocky start they became best friends. They are planning on going on a two-week adventure together to celebrate their graduation in June. Josh has never been to Europe and wants to visit France or Spain. Mike spent a semester abroad in Aarhus, Denmark, and traveled extensively in northern Europe. Even though he never went to France or Spain, Mike wants to go to someplace more exotic like South Africa or Vietnam. For the past week they have been arguing back and forth over where they should go. Josh argues that it will cost too much to fly to South Africa or Vietnam, while Mike counters that it will be much cheaper to travel in Vietnam or South Africa once they are there. Each of them agreed that they can spend no more than \$3,500 each on the trip and could be gone for only two weeks.

One evening when they were arguing with each other over beers with friends, Sara said, “Why don’t you use what you learned in your project management class