

stakeholders to check the estimates and to brainstorm for alternative solutions; the cost and time estimates appeared to be reasonable. 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

### Post Graduation Adventure

Josh and Mike met each other as roommates during freshmen 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 some place 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 to decide what to do?” Josh and Mike looked at each other and agreed that made perfect sense.

1. Assume you are either Mike or Josh; how would you go about making a decision using project management methodology?