Two Case Studies: #1: The case of the never ending scope creep #2: The case of the unidentified risks

Contributed by Mauro Maurovic, Australia Edited for the web by R. Max Wideman By Email 10/22/03. Updated for web presentation.

Case Study #1: The Case of the Never Ending Scope Creep

In 1999, the **XY Department** of the Federal Government reviewed its Year 2000 Date Turnover Computer Risks and found that its outdated computer systems for managing public clients needed replacing. A business case was prepared for funding the replacement while at the same time implementing some improvements. The total budget requested was \$2.3 million.

In view of a shortage of funds around at the time, government did not approve this amount. Only \$1.5 million was authorized. However, the **XY Department** accepted this amount after they decided that they could maybe do the work for around the \$1.5 m.

Accordingly, a project was scoped and planned, with specific milestones for implementing the hardware and, subsequently the software, across 87 sites within its jurisdiction. A final completion date of 30th June 2001 was projected. The original business case had loosely identified some risks to the project that were also included in the project plan. A project steering committee was established, with the department chief (CEO) as the sponsor, and representation by influential managers with differing outcome needs to suit their particular work environment. The project commenced in July 1999.

In view of the shortfall on its original budget request, the committee decided not to employ a project manager. Instead it assigned this responsibility to its Finance Manager, who would undertake the work along with his normal duties.

A Company, called "**Good Programs**" was contracted to supply the software and assist in the implementation. This company recognized the marketing opportunities of this project, as the **XY Department** was its biggest client in the region. As a result, they offered, free of charge, many more features that were not in the original scope, provided the department allowed them to be, in essence a research and development (R&D) site. This would assist **Good Programs** to more readily sell their products elsewhere around the world, while providing the **XY Department** with additional functionality and benefits.

Initially, the steering committee met regularly, but as new versions of the resulting software were being implemented regularly, meetings became less frequent and **Good Programs** were left to do more and more of the day to day management of the new version implementations.

These new versions were developed after consultation with the various individual managers to accommodate requested new features with little consultation amongst all of the managers. All the **XY**

Department and steering committee had to do was to identify problems with the software and to make the system testers available for new versions. However, the effect was an unanticipated overhead for the department.

Sometime after the original project was scoped and commenced, both the original CEO and finance manager had been moved out of the department and new officers have been appointed.

At this time, the new CEO has been advised that about \$185,000 more is needed for the project, which is not in his current budget. The original project has not been signed off, indeed, it is evident that it has not been completed. The new CEO of the department is not sure of the original scope of the project, what aspects have been implemented, nor what has been spent for which parts. There do not seem to be any reliable reports available as to original scope, scope changes, schedule or budget.

The CEO is concerned that the project has become more of a career than a project, with version 16.5 of the client management system now being tested with yet more features. In addition, there are some past software problems that are still outstanding. Nevertheless, **Good Systems** have promised that problems will be fixed in the next version . . .

Case Study #1: Assignment Questions

You are a senior consultant with **PM Right Track** (PMRT), a competent project management consulting company. The CEO has called you in for advice. The information is brief, but this is all the information that he and the new finance manager are able to provide. The CEO's mandate to you is to:

- 1. Report your assessment of the current project status.
- 2. Compare your assessment with sound project management practices.
- 3. Recommend steps to bring the project to a close.
- 4. Recommend improvements to the XY Department's future project management practices.
- 5. If a very similar project had to be done again, what attributes and/or skill sets would you recommend in selecting a project manager?
- 6. What other advice might you give to the CEO?

Case Study #2: The Case of the Unidentified Risks

This project takes place in South Australia. In September 2000, **ACME Fabricators** advised its staff that their new factory and offices out in semi-rural Angle Vale would be ready for completion by the end of April 2002. **ACME** was a responsible company and liked to keep their premises clean and tidy and their staff happy. The new premises at Angle Vale were developed on a 4.5-hectare site, previously used for grain crops. Consequently, **ACME** decided that significant landscaping would be required to enhance the amenity of the otherwise bare land.

The senior executive group pictured some land contouring with an attractive green lawn, and trees and shrubs to soften the impact of otherwise stark commercial buildings. Accordingly, they notionally allocated \$232,000 for the project, and developed a tender document that called for the work to be completed by the time they moved to the new premises. They then invited proposals for landscaping and quotes for the work.

A company called **Arbor Industries** submitted an artist's sketch for the **ACME** evaluation team to picture what the landscaping would look like. **Arbor** was selected with a bid of \$175,000, substantially lower than any other submission. **Arbor** then prepared a detailed landscaping plan based on existing drawings of the site provided in the tender. **Arbor** met with the **ACME** senior executives to agree project start date, access and security of plant and equipment, and a fixed price contract. A contract was duly signed.

The project was scoped and planned by **Arbor**, with specific milestones for site works, irrigation, turf laying, and tree and shrub planting. **Arbor** had undertaken many similar jobs on city sites in the past and based on the knowledge and skills of the project team, they did not think that a formal project management plan would be needed. All they wanted was agreement on the scope of the project and the key deliverable dates. From experience, they wanted to deal with only one person from **ACME** and it was agreed that the finance manager, a senior executive, would be responsible for the project.

Arbor commenced work on the 16th of November 2000 with site preparation including weed eradication. Work progressed smoothly until 20th of January 2001, when heavy vehicles delivering machinery, plant and equipment to the site significantly damaged the newly prepared and leveled ground for the lawn.

The **Arbor** project manager arranged his first meeting with the **ACME** finance manager to complain that he would have to re-do the site for the lawn which would take an extra 3-5 days. The finance manager agreed that it was not **Arbor's** fault and that work would have to be re-done, but as there was no more funding available he suggested that the project manager make the savings somewhere else from within the project. This was agreed but not documented.

By the end of January the landscaping site works were finished and the irrigation system was installed. Planting was to be done in three phases – shrubs, bushes and small trees first, then larger trees and finally the lawn. Shrub planting would take approximately 4 days, trees 7 days and the lawn would be laid in three separate operations over 2 days.

On the first day after the planting commenced, some of the project team noticed a few small plants seemed to be missing or broken off. These were quickly replaced. Within the first 3 days after the last planting, however, it was noted that around 35% of the plantings had been destroyed by rabbits or hares (as it was later determined. Remember, this is in Australia.) The Project Manager was very concerned and called another meeting with the **ACME** finance manager. Although sympathetic, the finance manager agreed that tree guards needed to be placed around trees but that was a contingency that the **Arbor** Company should have considered. The **Arbor** project manager indicated that pests were **ACME**'s problem and again the finance manager indicated that **Arbor** should make savings elsewhere within its contract.

The **Arbor** project manager reviewed his budget and costs and determined that the only way to re-coup the losses from having to replant the shrubs and protect them, was to plant fewer plants and smaller trees which came at a much lower cost. Another way to make some savings was to try and re-design the irrigation system using fewer sprinklers.

Instant lawn was tentatively ordered for around the middle of March 2001 so that delivery would miss the hottest part of the year. Unfortunately, the commercial lawn growers had heavy demand at that time and advised that the last shipment could only be made by mid-February 2001. This was necessary to allow them time to plant new lawn ready for winter and spring clients. **Arbor** had no choice but to accepted delivery in mid February 2001. As it turned out, it was particularly hot when the lawn delivery was made over the 2 days, with hot gusty northerly winds.

By the third week of February 2001, the project was ahead of schedule by about three weeks due to the early delivery of the lawn, although the larger trees and plants had yet to be been planted. Unfortunately, water coverage of the lawn proved to be barely enough in windy conditions and, with the sprinkler head reduction, did not fully water all areas. By this time **Arbor** was over-budget by about \$24,000.

Since the original project was scoped and started, the original finance manager had secured a new position with another company and was set to leave in the third week of February 2001, just as the lawn started to brown off and die in patches. The new finance manager, who started one week later, was asked by the company to continue in the role of her predecessor on the project.

The **Arbor** project manager, spotting an opportunity, advised the new finance manager that about \$25,000-\$30,000 more was needed for the project to be completed, as was agreed by the previous finance manager. The new **ACME** finance manager was not sure how to deal with this, having no background information on the project. She tried to contact the original finance manager but he was off on holiday prior to taking up his new position.

The new **ACME** finance manager reviewed the budget for the project and finding that there existed a fixed price contract with no contingency amounts, notified the **Arbor** project manager accordingly. The **Arbor** project manager informed her of the problems caused by the heavy vehicles earlier in the project and the devastation by wild animals. Because of the refusal to provide more money, the **Arbor** project

manager had reduced significantly the size of the larger trees that were to be planted later in March-April 2001 to try and contain the budget deficit and make savings.

The project concluded with Arbor being three weeks ahead of schedule, but \$25,100 (14.3%) over budget. The executives of **ACME** were not happy with the project at its conclusion. Through the finance manager, they indicate that the lawn was dead in patches, the plants were small and that as a result it was not like the drawing that they had been provided at tender stage. They insisted that either these issues be rectified or the contracted amount be reduced.

Arbor responded that a number of verbal agreements had been reached and that **Arbor** had fulfilled its obligations, indeed had lost money on the contract. The dispute was then referred to the respective legal representatives of each company for resolution, but the antagonism between the parties meant that the dispute could well end up in court.

Case Study #2: Assignment Questions

As a professional project manager, you have been requested by both legal representatives to conduct a Post-Project Review. Bear in mind that you are acting independently, may be asked to give evidence, and must reflect strict impartiality.

- 1. How would you set about conducting such a review?
- 2. How would you structure your report, i.e. on what basis?
- 3. Would you need to seek expert advice and, if so, in what areas?

Specific issues you have been asked to include:

- 4. Would the assignment of an ACME project manager have made a difference?
- 5. If so, in what way, and what specific skills would that manager have required?

If you had not been acting impartially, but on behalf of **ACME** alone:

- 6. What advice would you give to **ACME**?
- 7. In a similar way, what advice would you give to Arbor?