SYNOPSIS

This case discussed the role of politics in large public projects and how these can influence the success or failure of a project. The author examines the interstate highway system and the superconducting supercollider projects in detail from political and public relations perspectives. The case develops general advise for the management of large public endeavors.

LEARNING OBJECTIVES -"THE POWER OF POLITICS: THE FOURTH DIMENSION OF MANAGING THE LARGE PUBLIC PROJECT"

In discussing this case, participants should gain a better understanding of:

- project critical success factors
- project stakeholders
- large public projects
- the power of politics

Discussion Point

- This case concludes with four main lessons learned from the analysis of the interstate highway project and the superconducting supercollider project.

- In SMALL Groups, discuss specific actions to implement these lessons. Apply these specific actions to the Supercollider case.

The Power Of Politics: The Fourth Dimension of Managing the Large Public Project

Bud Baker, Wright State University
Raj Menon, Wright State University

PMI Canada *Proceedings*, 1994, pp. 830–33

Synopsis

This paper discusses the role of politics in large public projects and how these can influence the success or failure of a project. The author examines the interstate highway system and the superconducting supercollider projects in detail from political and public relations perspectives. The case develops general advice for the management of large public endeavors.

Learning Objectives

After answering the questions, the students will gain a deeper understanding of:

- project critical success factors
- project stakeholders
- large public projects
- the power of politics.

Discussion Questions and Possible Answers

1. Besides politics there are numerous other factors that play a role in the success or failure of a project. Identify five to six of those elements and discuss the most critical among them.
   a. From O. Kharbanda and J. Pinto in *Successful Project Managers: Leading Your Team to Success*, Chapter 4, Project Critical Success Factors, identify the following critical success factors:
      - *Project Mission.* Including clearly defined goals and general directions.
      - *Top Management Support.* Willingness of top management to provide the necessary resources and authority/power for implementation success.
      - *Schedule Plan.* A detailed specification of the individual action steps for system implementation.
      - *Client Consultation.* Communication, consultation, and active listening to all parties impacted by the proposed project.

- *Personnel.* Recruitment, selection, and training of the necessary personnel for the implementation project team.
- *Technical Tasks.* Availability of the required technology and expertise to accomplish the specific technical action steps to bring the project online.
- *Client Acceptance.* The act of "selling" the final product to its ultimate intended users.
- *Monitoring and Feedback.* Timely provision of comprehensive control information at each stage in the implementation process.
- *Communication.* The provision of an appropriate network and necessary data to all key actors in the project implementation process.
- *Troubleshooting.* Ability to handle unexpected crises and deviations from the plan.

From a research project that that looked at over 400 projects and tried to assess the importance of the ten factors, Pinto and Slevin identified the mission as the most important factor in the study.

2. The paper states that the interstate highway system project was successful because, among other factors, "the act offered something to everyone, and aroused the ire of almost no one." The statement clearly refers to the project stakeholders. Develop a list of the common stakeholders of any project.
   a. O. Kharbanda and J. Pinto in *Successful Project Managers: Leading Your Team to Success*, Chapter 2, Stakeholder Analysis and Project Management, suggest that the project manager has to address two types of stakeholders: internal and external ones. Internal stakeholders include: top management, accountants, functional managers, and other employees. External stakeholders include: clients, competitors, suppliers, and environmental, political, and "interventor" groups.
   b. *PMBOK Guide*, Section 2.2, Project Stakeholders, presents as key stakeholders of every project: project manager, customer (final user of the result of the project), team members and their families, government agencies, media, lobbying organizations, individual citizens, and society at large.
3. What does the author mean by "the fourth dimension of managing?"
   a. Baker expands his discussion of "the fourth dimension of project management" in Political Strategies for Projects and Project Managers, (Cleland, David I., editor, *Field Guide to Project Management*). He states that "Astute project managers accept and understand the importance of politics as a key success factor in their efforts." He also lists and discusses six aspects of politics to consider in project management including active listening, project structure, coalitions building, dealing with government, setting expectations, and communicating with all stakeholders.
4. Aside from the superconducting supercollider, there are other examples of large projects that were terminated primarily because of political considerations. From your own experience or the literature find and discuss another example with the class. What could have prevented the termination of the project?
   a. Examples will vary but the discussion of prevention methods should focus on the six key factors cited in the instructor notes for question 3.

Additional Discussion Points:

The case concludes with four main lessons learned from the analysis of the interstate highway project and the superconducting supercollider project. In small groups, students should list and discuss specific actions to implement these lessons. The instructor may want to select a particular case to apply the lessons or use generalizations.

The Power of Politics: The Fourth Dimension of Managing the Large Public Project

Bud Baker, Wright State University
Raj Menon, Wright State University

PMI Canada *Proceedings*, 1994, pp. 830–33

INTRODUCTION

It is generally accepted that there exist three dimensions that determine the success or failure of a project: cost, schedule, and technical performance. In his book, *Successful Project Management*, Milton Rosenau calls this the "Triple Constraint," which requires "... accomplishing the performance specifications on or before the time limit and within the budgeted cost" (1).

Some authors have indicated that the conventional three-part model is incomplete, that there can be more to successful project management than just cost, schedule, and technical issues. Dr. Harold Kerzner, in his popular book, *Project Management: A Systems Approach to Planning, Scheduling, and Controlling*, has this to say on the subject: "Time, cost, and performance are the constraints on the project. If the project is to be accomplished for an outside customer, then the project has a fourth constraint: good customer relations" (2).

Kerzner goes on to explain that it's possible for an otherwise successful project to have such bad customer relations that any future business is impaired, or even impossible.

It is the position of this paper that, for large public projects, a critical aspect of customer relations involves "managing" the political system. Further, it is our position that politics is, in many cases, the most critical aspect of managing the large publicly visible project. We will show that politically astute project management can save an otherwise unsuccessful project, and also that unsound political maneuvering can kill a project that might have otherwise survived.

Successfully Managing the Political Interface

Contemporary examples exist in which politics have played a key role in project success. The recently completed English Channel tunnel project was only the most recent attempt to successfully connect England and the rest of the continent. The primary difference between the successful tunnel of today and the failed efforts of yesteryear is in the area of politics. After all, the tunnel was first proposed in 1802, and the project was actually begun in earnest as early as 1876. Technologically, the tunnel was feasible even then: more than a mile of tunnel was bored at each end. But the project ended because of politics: the British feared that the tunnel posed a threat to national security (3). Subsequent attempts also ended in failure: in 1930, again several years later,

and once again in 1975. Each time the cause was the same: lack of political support on the British side of the channel (4). It took until 1993—after nearly two centuries of political debate—for the tunnel to become a reality.

Here in North America the situation is no different. In the following pages we'll examine two public "mega-projects." One—monumentally successful—shaped the way Americans live, work, and play every day. The other—destined to be synonymous with project mismanagement—was recently terminated, largely because it had lost its political support.

President Eisenhower and the Interstate Highway System

Just forty years ago, on July 12, 1954, President Dwight David Eisenhower proposed a massive road-building plan, one which would bring a host of benefits to the American public. Among these benefits, Eisenhower mentioned increased national productivity, enhanced highway safety, and a strengthened defense establishment, necessary "should atomic war come" (5). Additionally, Eisenhower believed that the thousands of jobs created would help lift the United States out of the post-Korean War doldrums (6). The cost figure he used—$50 billion—was admittedly only "a good start on the highways the country will need for a population of 200,000,000" (7).

Despite Eisenhower's personal support, the project was quickly swamped with political problems, largely related to finances. Projected costs rose fast enough to shock even the most pessimistic observers. Within just four months, the cost estimates had grown 52 percent, to $76,000,000,000, and they further ballooned to $101,000,000,000 just two months after that (8).

But it wasn't the projected cost overrun that sidelined Eisenhower's first plan—it was politics. Truckers objected to increased taxes on tires and fuel. Western governors, faced with vast expanses of highways but few drivers, objected to the use of tolls as a financing source. Eisenhower's Democratic opponents wanted to keep road design standards at the county and state level and objected to the proposed financing methods as well. In the summer of 1955, Congress killed Eisenhower's plan and adjourned (9).

The setback, though, was only temporary. Early in 1956, Eisenhower adopted a more bipartisan approach. He reconciled with key Democrats, and the result was the Interstate Highway Act of 1956. The key principles behind the Act were these:

- There would be limited tax increases on the trucking industry.
- In return for federal design control, 90 percent of cost would be borne by the federal government.
- Urban areas—where the votes were—would receive most of the construction dollars.
- Contentious issues—e.g., the use of tolls as a financing tool—were intentionally avoided. Both sides agreed to postpone any decisions until the project was under way; not a sound concept for most projects, certainly, but necessary here (10).

In sum then, the Act offered something to everyone, and aroused the ire of almost no one. And therein lies the secret of political success. As Mark Rose, author of Interstate Express Highway Politics, 1941–1956, so eloquently put it:

> None of this agitated anyone ... Americans ... were optimistic about the natural congeniality of highway construction and economic growth. If traffic tangles were reduced, if

> billions were spent for more roads, the economy would prosper. Truckers and contractors then could look forward to personal wealth; economists and government officials, to steady economic growth; and farmers and urban motorists alike, to faster trips to market, to jobs, and to recreation areas (11).

Certainly some tactics—e.g., the intentional postponement of critical decisions—aren't applicable to every project. But politics is, as they say, "the art of the possible," and the rules are, of necessity, different. Following is another example, one in which the concepts of political project management were ignored, with predictably disastrous results.

The Superconducting Supercollider (SSC)

When questioned in the British Parliament about the usefulness of experiments about the "thing" called electricity, scientist Michael Faraday was quoted to have said: "One day you will be able to tax it!" But, regardless of potential usefulness, science projects fall within the discretionary part of the United States federal budget—the portion that annually requires a yes or no from Congress—in contrast to social security, veteran benefits, and other entitlements. Science projects only rarely gather popular support and capture public imagination.

The superconducting supercollider (SSC) is a classic example of the above. The objective of the $11 billion SSC was to validate the existence of the "Higgs Boson." A British theorist named Peter Higgs proposed a mechanism—called a Higgs field—that invisibly pervades all of space. Physicists believe that particles acquire their mass and their individual properties from this field through the Boson (from the Indian Scientist S. N. Bose). The SSC was designed to conduct experiments within a 54-mile underground circular chamber, accelerating subatomic particles to 99.9999 percent the speed of light and smashing them together at combined energies of 40 trillion electron volts. The thought was that this would provide answers to fundamental questions about the formation of the universe. While it is dangerous to predict how much society stood to gain from this research, many believe that the benefits could have been enormous. In their view, past, pure science research, like that of the first atom splitting, led to the discovery of nuclear energy, quantum theory, and most of the electrical and computer technology we take for granted today (12).

But all that will need to remain forever as mere speculation. On Oct. 19, 1993, Congress—after spending $2 billion on the SSC project—unceremoniously pulled the plug, ending eleven years of effort and putting 2,000 people out of work (13). Certainly there were problems with the SSC. Cost had ballooned, largely due to increasing technical specifications, and schedule was slipping correspondingly. But the real problem facing SSC management was not technical, or budgetary, or schedule related. The real problem was politics. Whatever one's view of the merits of the SSC, the budget review process of Congress is a messy affair in which politicians tend to view scientific projects as a type of pork to be parceled around the country. But the SSC seems never to have been understood, either by the public or Congress. It is interesting to note that in the 280 to 150 vote in the House to ax the SSC, not more than 20 percent of Congress had any understanding whatsoever of the technical aspects of the project (14).

Another political problem facing the SSC was the lack of support from the Clinton Administration. As Congressman Joe Barton, R-Texas, described what killed the SSC: "If you boil it down to one word, Clinton" (15).

There was never more than a lukewarm acceptance of the SSC from the Clinton Administration, and when the going got tough there was only concern for the budget deficit.

Part of successful project management involves managing the pertinent political interfaces. In this regard, SSC management was somewhat less than successful. SSC managers campaigned for good will at universities, schools, scientific meetings, and the like. This "preaching to the choir" failed to convey the benefits of the project to the real decision-makers: the Clinton Administration and the members of Congress. Even the few well-conceived public relations efforts ran into bad luck. For example, a procession of SSC luminaries assembled in Washington, including several Nobel laureates, for one last major media offensive. But their presentation turned out to be at the same moment as the historic Rabin-Arafat handshake signaling the possibility of peace in the Middle East. Not a single television camera turned up to cover the scientists (16).

The project also suffered from an identity crisis. It was difficult to figure out if this big science project was to make America first in basic science, or if it was a world science project. In 1987–88, under President Reagan, United States international specialists led discussions with friends and allies that led to foreign commitments to contribute as much as $1 billion to the SSC. But in the Bush Administration, the importance of an international approach to the SSC was ignored, and foreign investors, not surprisingly, pulled out.

For a project that would have cost only 0.2 percent of the national research budget (17), the SSC assumed a symbolic importance way beyond its economic significance. It became, in fact, a symbol of fiscal irresponsibility. For all the billions spent, the truth was that the SSC produced very few jobs, at very high cost, most in a very limited geographical area. The SSC was situated south of Dallas in Waxahachie, Texas, and was to generate about 2000 jobs at the cost of $4.7 million per job (18). With limited economic importance beyond Texas, the SSC had few backers in Congress. Without former Texas senator Lloyd Bentsen in the Senate to champion it, the SSC became a prime target of budget cutters, concerned with a $4 trillion deficit and unmoved by the SSC's limited appeal as a "Texas project."

The project's negative press wasn't helped by news of millions being spent on parties at ritzy hotels, liquor, plants, and to ensure art work (19). The widespread dislike of the senior SSC officials in the Clinton administration didn't help either. Energy Secretary Hazel O'Leary commented on the high sense of self importance and arrogance among the top SSC officials who were denying access to confidential information to auditors from federal agencies (20). Other scientists—perhaps jealous of the SSC budget—claimed that the SSC was undermining the credibility of all science. Worse still, J. Peter Grace's Citizens Against Government Waste picked the SSC from a list of hundreds of government projects and recommended its cancellation. The Grace group also enlisted the support of Friends of the Earth, the Senior Coalition, and other groups, not to mention a few high-profile scientists (21).

Lessons Learned

Projects can, and do, succeed because of politics. And they *fail* because of politics as well. The contrasting fates of the interstate highway system and

the superconducting supercollider provide lessons that apply to any large publicly funded program. Among those lessons are:

1. The need to tell the story of the project in a way that's clear not only to the techno-wizards, but to the masses as well. We can all understand a highway system. We could even all understand President Kennedy's call to put a man on the moon. But the concept of a 54-mile donut-atom-smasher? One that could tell us the origins of the universe? And one that's underground, no less? Perhaps Congress can be forgiven its inability to understand all the technical aspects of the SSC—very few nonphysicists, in Congress or not, seem able to grasp the concepts involved.

2. The need for top management to be fully behind the project. Eisenhower staked the credibility of the American presidency on the interstate system. Four decades later, President Clinton—distracted perhaps by health care and the North American Free Trade Agreement—barely lifted a hand to save the SSC. As is so often the case in the private sector, the support of top management is crucial. Such support does not guarantee success, but the lack of it can go a long way toward ensuring failure.

3. The need for project managers to "sell" their project to non-believers. In some ways, the tendency of SSC managers to talk to scientific audiences and college campuses is understandable; it's a great deal easier to market to those we believe are predisposed to our point of view. But while it may be understandable, it's exactly the wrong thing to do. Project managers must communicate with all their constituencies, especially the contentious ones. Those audiences are the show-stoppers, and you ignore them at your peril.

4. Benefits must be widespread. Contrast the interstate system, which can truly be said to have shaped nearly every American life over the past forty years, with the SSC: only a relative handful of jobs provided at great cost to people who were, by and large, readily employable elsewhere. The successful public project draws its support from the masses, and that support can most readily come when the benefit is most broadly based.

Final Thoughts

People without a sense of history are proclaiming an end to war, and thus to large defense projects, and others see the death of the SSC as the end of "big science." But both views are surely short-sighted. Large public projects have existed since the time of the Pharaohs, and it's unlikely that they're suddenly finished for all time. But whether in defense, or science, or public works, the lessons are the same: successful project management means successful political management as well.

* KEY

* Discuss!

References

1. Rosenau, Jr., M. D. 1992. *Successful Project Management* New York: Van Nostrand Reinhold, p. 15.

2. Kerzner, H. 1989. *Project Management: A Systems Approach to Planning, Scheduling and Controlling* (3rd Edition). New York: Van Nostrand Reinhold, pp. 5–6.

3. Morris, P. W. G., and G. H. Hough. 1987. *The Anatomy of Major Projects.* Chichester England: John Wiley & Sons, p. 21.

4. Ibid., pp. 21–22, 37–38.

5. "Eisenhower Bids States Join U.S. In Vast Road Plan," 1954. *New York Times*, July 13.

6. Rose, M. H. 1979. *Interstate Express Highway Politics, 1941–1956.* Lawrence, KS: The Regents Press of Kansas. p. 70.

7. "Eisenhower Bids States Join U.S. In Vast Road Plan." Op. cit.

8. "Clay Says Road Program Needs $26 Billion More Than Planned." 1954. *New York Times*, Nov. 12; also "Eisenhower Gets 101 Billion Federal-State Road Plan." 1955. *New York Times*, Jan. 12.

9. Rose, M. H. Op cit., pp. 80–83.

10. Ibid.

11. Ibid., pp. 91–93.

12. "Subatomic Secrets, Nobel Laureate Pens A Side-Splitting Physics, And The Planned Texas Supercollider." 1993. *San Jose Mercury News*, March 30.

13. "Smashing The Supercollider." 1993. *Newsweek*, Nov. 1.

14. "The Best Sitcom On TV: Congress And The Budget." 1993. *Detroit Free Press*, June 29.

15. "Lawmakers: Budget Cutting Mood, Scathing Criticism Brought Down Collider." 1993. Associated Press, Oct. 24.

16. "Superconducting Supercollider Project Hangs On Edge." 1993. *Boston Globe*, Sept. 27.

17. "Science's Newest Frontier." 1993. Lexington Herald (KY), Sept. 25.

18. "Texas Candidates Scramble In Race For U.S. Senate Seat." 1993. *Christian Science Monitor*, Mar. 31.

19. "Lawmakers: Budget Cutting Mood, Scathing Criticism Brought Down Collider." 1993. Associated Press, Oct. 24.

20. "Energy Secretary Says She's Planning Shakeup On Collider Project" 1993. *Fort-Worth Star-Telegram*, July 1.

21. "The Last Behemoth." 1993. *The Washington Post*, Aug. 4.

Study Questions

The Power of Politics: The Fourth Dimension of Managing the Large Public Project

1. Besides politics there are numerous other factors that play a role in the success or failure of a project. Identify five to six of those elements and discuss the most critical among them.

2. The paper states that the interstate highway system project was successful because, among other factors, "the act offered something to everyone, and aroused the ire of almost no one." The statement clearly refers to the project stakeholders. Develop a list of the common stakeholders of any project.

3. What does the author mean by "the fourth dimension of managing"?

4. Aside from the superconducting supercollider, there are other examples of large projects that were terminated primarily because of political considerations. From your own experience or the literature find and discuss another example with the class. What could have prevented the termination of the project?