Challenges of Managing Government Projects/Programs

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Tell us about yourself:

Your current role:

1. Project/Program manager
2. Senior manager/executive
3. Government official
4. Project team member
5. Others
Tell us about yourself:

Your field:

1. Aerospace/defense
2. Construction
3. Energy, oil, gas, and petrochemical
4. Financial services
5. Government
6. Healthcare
7. IS/IT and Telecommunications
8. Pharmaceutical
9. Utility
10. Others
Introduction - Challenges to Government Projects and Programs

- Project objectives are not clearly identified
- Costs and benefits of the deliverables are difficult to justify and measure
- Long duration
- Large budget
- Multiple stakeholders
- Great deal of uncertainties (technology, resources, etc.)
Examples of Government Projects - US

- US DOD Base Realignment and Closure (BRAC)
  - Original: $35 billion. Actual: $57.1 billion
- US National Weather Service (NWS)
  - Original: 60 months. Actual: 120 months
  - Original: $2 billion. Actual: $4.5 billion
- Secure Border Initiative (SBiNet)
- Coast Guard’s Deepwater Project
- DOD Future Combat Systems
- New SF-Oakland Bay Bridge, CA
- California Hi-Speed Railway
- Many others…
Examples of Government Projects - UK & Australia

• UK LIBRA (Court system upgrade)
  – Original: 10.5 years. Actual: 14.5 years
  – Original: £184 million. Actual: £319 million

• UK National Programme for IT in National Health Service
  – Original budget: £2.3 billion. Actual cost £12.7 billion

• Australia Homeowner Insulation Program
  – Original: 35 months. Actual: 12 months — Cancelled
  – Original: $A 2.8 billion. Actual: $A 1.45 billion — Cancelled

• Many others…
Objectives

• The presentation and discussion will help practitioners understand key issues and make better decisions when they are involved in government projects and programs.

• Some recommendations for effectively managing governmental projects will be presented.
Questions and Discussions

- What are the key characteristics of projects and programs undertaken in governments?

- What should be done to successfully manage government projects and programs according to these characteristics?
Research Approach
Project Management Trends in the Public Sector

• From New Public Management (NPM) to Public Value Management (PVM)
• From generic to tailored PM frameworks
  – e.g., PMBOK® Guide’s Government Extension, etc.
• From a focus on efficient delivery of outputs (iron triangle / triple constraint) to benefit generation and realization
• From a single to multiple accountability (Zwikael and Smyrk, 2012)
Three Countries, Three Sectors

- Secondary data of 39 projects:
  - US Government Accountability Office (18)
  - UK National Audit Office (6)
  - Australian National Audit Office (15)

- Three Sectors
  - Transportation/infrastructure (43%)
  - Information systems IS/IT – ICT (30%)
  - Defense/space (27%)

- Average duration: 8.8 years, Average cost: US $13 Billion
Novelty-Complexity-Technology-Pace (NCTP) Framework (Shenhar & Dvir, 2007)
Project Category

- **Novelty**: 8 Derivative, 20 platform, 10 breakthrough
- **Complexity**: 2 assembly, 14 system, 21 array
- **Technology**: 6 low, 12 medium, 12 high, 8 super-high
- **Pace**: 13 regular, 14 fast, 10 time-critical, 1 blitz
Key Characteristics of Government Projects
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1. Pursuing non-financial benefits
2. Susceptible to political environment and dynamics
3. Following mandated project management process
4. Being a large and complex mega projects
5. Having a long product lifecycle, and
6. Dealing with multiple stakeholders

**Question:** Which characteristics do you think is the most important to be considered when managing government projects in your environment? 1, 2, 3, 4, 5, 6
Pursuing non-financial benefits

• Achieve national goals rather than ROI
• Benefits are formulated to support pre-determined project outputs
• Target benefits are often inflated:
  – Strategic misrepresentation
  – Optimism bias
• “there is a demonstrated, systemic, tendency for project appraisers to be overly optimistic…appraisers tend to overstate benefits” (UK HM Treasury, 2003)
Susceptible to political environment and dynamics

• Projects evolve around the preferences and expectations of owners
• Possible change in management/leadership/government
• Affected by political risk
• Uncertainty in economic policy (nationalization of project assets, government grants and permits, tax, etc.)
Following mandated project management process

- Mandatory use of formal processes
- Strict budgeting processes with different types of funds and budget codes
- Different countries and industries follow different sets of processes
- EVM is strongly recommended for projects over $20M in the US
- Strict internal audits and review processes
- Ineffective use of processes have been found
Being a large and complex mega projects

- “Projects that cost more than $1 billion, or projects of a significant cost that attract a high level of public attention or political interests because of substantial direct and indirect impacts on the community environment and budget”
- High risk, complexity, uncertainty, and long duration
Having a long product lifecycle

- Expected to be operational for many years after being launched
- Product durability, functionality, and flexibility are key
- High level of technological uncertainty involved in product design due to the anticipation of future needs
- Challenges in technology development and adoption
Dealing with multiple stakeholders

• Involve several stakeholders with various objectives and expectations
• May affect the progress of the project in political, social, or financial ways
• Distinguishing the potential purpose and impact
• Key or non-key stakeholders
Recommendations for Managing Projects with Regards to Characteristics
Non-Financial Benefits

1. Evaluate the impact of the project on the achievement of strategic goals
2. Identify clear non-financial benefits in the business case
3. Ensure that expected benefits are realistic and achievable
4. Establish an agreed evaluation methodology for project benefits
Political Environment and Dynamics

1. Consider legal consultation to ensure that proposed ideas are in line with current legislation
2. Consider financial consultation to improve understanding of the economic aspects of the project
3. Ensure that the project is aligned with agencies’ strategies
4. Consider Public Private Partnership (PPP) when appropriate and ensure PPPs are economically feasible
5. Provide project managers more authority
Project Management Process

1. Establish and follow government project management framework and processes
2. Follow formal planning and estimating processes that incorporate lessons learned
3. Follow a formal risk management process
4. Follow formal project monitoring and change management processes
5. Establish and follow project governance framework
Large and Complex Mega Projects

1. Develop a base cost estimate and Integrated Master Schedule (IMS)
2. Align the project cost with annual budget cycle
3. Consider off-the-shelf solutions than high risk new development when possible
4. Split programs into smaller manageable projects for tight project control
5. Develop contingency plan and monitor risks
6. Identify training needs for long projects
Long Product Lifecycle

1. Ensure robust design and quality management process
2. Reduce occasions of using unapproved (too advanced) technologies
Multiple Stakeholders

1. Engage procurement personnel to the project team
2. Consult the business community when relevant
3. Coordinate the project with existing operations
4. Establish interagency agreements for cross-agency projects
5. Ensure effective collaboration with procurement personnel and an effective acquisition process
Conclusion

1. Implementing sound PM processes and methodologies
   - Establishing formal and standard risk management process
   - Creating formal and standard change management process
2. Possessing project management competency
3. Project leadership
4. Identification and management of benefits
5. Ownership and accountability
6. Project governance
Questions?
Final Comments

Publications:

- Monograph is available: **Challenges and Best Practices of Managing Government Projects and Programs**
  - Sponsored Research monographs are available to members for free download.
  - Monographs can also be purchased at the PMI Store on PMI.org.

*This study was funded by the PMI Academic Resources Department. For more information, please visit:*

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