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N/A

WaTech
Washington Technology Solutions

FEASIBILITY STUDY REQUIREMENTS FOR IT INVESTMENTS STANDARD

See Also:
RCW 43.105.054 WaTech Governance
RCW 43.105.205 (3) Higher Ed
RCW 43.105.020 (22) "State agency
RCW 43.105.255 Major technology projects and services-Approval
RCW 43.105.245 Planning, implementation and evaluation of major projects

1. **The goals of the Feasibility Study Requirements are to:**

    a. Streamline feasibility study creation, enhance decision-making based on agency planning and design outcomes.

    b. Highlight feasibility study's role in supporting resource requests for proposed information technology (IT) investments.

    c. Include financial measures like Net Present Value, Internal Rate of Return, and Breakeven Analysis, emphasizing time value of money.

    d. Provide formats for concise cost and benefit rationale to aid in investment evaluation.

2. **At an IT investment's onset, agency management must decide to either pursue resources for full-scale development and implementation, or halt activities if benefits (tangible or intangible) are unclear or risks are unacceptable.**

    a. The feasibility study is a systematic, modular process to collect information assisting stakeholders in crucial decisions and supporting decision packages submitted to the Office of Financial Management (OFM).

3. **An agency crafts the feasibility study once functional and technical designs are completed sufficiently to detail major IT investments and define the work required to achieve those objectives with high certainty.**

    a. This implies the agency has finished a Project Definition, Requirements Analysis, and a General Design. Consequently, the agency has far more information about the anticipated costs, benefits, and risks of a proposed project than at the Project Definition stage.

    b. It's essential to apply this new information for a "go/no go" decision before committing significant funds to an investment.

4. Feasibility studies are composed of the following components:

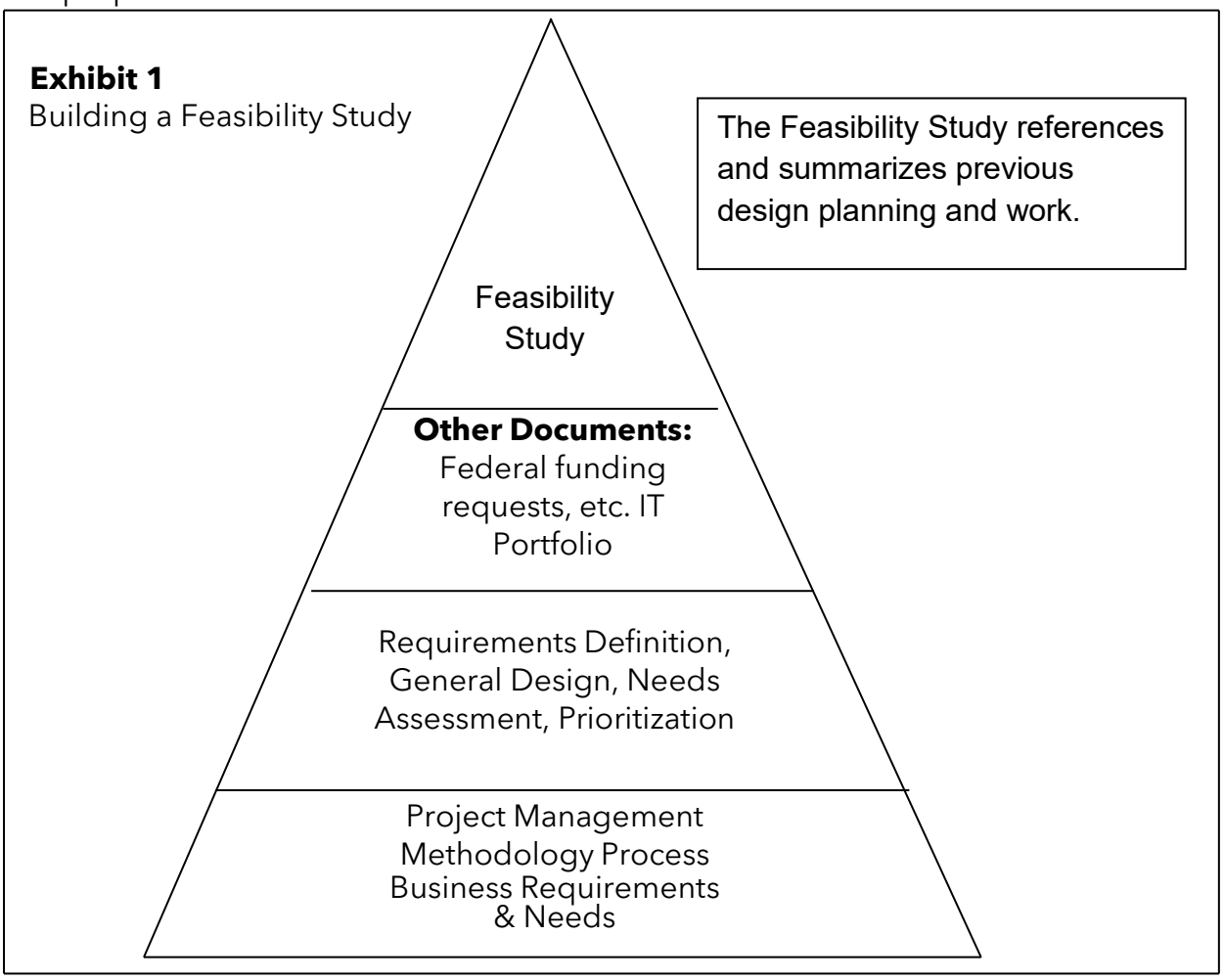
a. The feasibility study expands on the analyses and information collected by the agency during a project's initial stages (see Exhibit 1). As previously stated, the agency should have completed a Project Definition, Requirements Analysis, and General Design. The Project Definition will be updated and expanded as needed, with most of the supporting detail referenced in attached documents.

b. The feasibility study compiles findings from these project phases to enable informed decision-making.

c. For projects with non-state, funding sources (e.g., federal grants, federal financial participation, other grant funds), it's acceptable to use the funding sources' required documents and a crosswalk between the feasibility study content requirements and the funding request, ensuring the feasibility study content requirements are met. For instance, a federal Implementation Advance Planning Document (IAPD) may satisfy the feasibility study's information needs.

d. Each component's items offer guidance on the required information type. Agencies don't need to address non-applicable items for the proposed investment.

Exhibit 1
Building a Feasibility Study



5. Feasibility studies are composed of the following components:

a. Executive Summary

Provide a summary of the business objectives, approach, expected costs, benefits, and risks of the proposed investment.

b. Background and Needs Assessment:

Discuss the reasons for the proposal, such as:

i. Business environment.

ii. Business need(s).

iii. Business opportunities.

iv. Business service goals.

v. Statutory requirements.

vi. Other.

c. Objectives (as applicable)

Discuss the primary objectives of the investment, such as:

i. Problems to be solved / Opportunities to be gained.

ii. Service delivery enhancements.

iii. Response to statutory requirements.

iv. Other.

d. Impacts (as applicable)

Identify the entities which will be impacted by the proposed investment, such as:

i. Inter-agency.

ii. Intra-agency.

iii. Program(s).

iv. Subprogram(s).

v. Customers of agency activities (e.g., clients, constituencies, taxpayers, etc.)

vi. Other.

e. Organizational Effects (as applicable)

Discuss how implementation of the investment may affect the agency's organization, such as:

i. Impact on work processes.

ii. Training needs.

iii. Job content.

iv. Impact on organizational structure.

v. Other.

f. Proposed Solution

Describe the proposed solution that will meet the objectives outlined above. Present the solution in terms of:

i. Specific work products.

ii. Technical tools used to support the solution.

iii. Major functions to be provided.

iv. New organizational structures and processes necessary to support implementation.

g. Major Alternatives Considered

Present the major alternatives considered and compare these with the proposed solution. Note that the current state can be considered one alternative. Describe why the alternatives not chosen were rejected.

h. Conformity with Agency IT Portfolio

Discuss how the proposed project supports the agency IT Portfolio:

i. Strategic focus (business and IT goals).

ii. Effect on technology infrastructure.

iii. Other.

i. Project Management and Organization (including external resources)

Describe the project management approach:

i. Roles and responsibilities.

ii. Decision-making process.

iii. Management qualifications.

iv. Project team organization.

v. Quality assurance strategies.

j. Estimated Timeframe and Work Plan

i. Provide an estimated timeframe, by project phase, for the proposed investment through implementation.

ii. Identify major tasks and resources required for each project phase, including external and internal staff resources.

iii. Identify key milestones and decision points.

k. Cost Benefit Analysis (CBA)

i . Forms 1-5 are a suggested approach to the cost and benefit analysis (see Feasibility Study CBA Forms). They provide a structured, calculated method for delivering data in a usable format.

ii. In addition to Total Outflow, Total Inflow, Net Cash Flow, and Net Present Value, the cost and benefit analysis must be detailed for each viable option, for each fiscal year.

iii. The cost benefit analysis needs to include internal as well as external resources, as appropriate.

l. Incremental Costs:

i. Summarize the investment's incremental costs and provide the details using the CBA forms. Provide both development and operations cost estimates as appropriate. Costs should be presented for at least five years of operation after implementation or until breakeven and/or payback is achieved.

ii. The estimates of costs are expected to be stated with a very high degree of confidence. As a result, costs should be presented as a single point, not-to-exceed limits. Future dollars should reflect the best estimate of what the cost levels will be in the future periods. Net Present Value (effect of the projected costs and benefits stated in today's dollars), Internal Rate of Return, and breakeven period calculations will be derived from the projected future expenditures.

Note: Net Present Value is incorporated for financial decision-making purposes only and should not be used to define funding levels in future years of a project.

iii. Provide rationale for the cost estimates and reference documents

containing the detailed estimates and work breakdown structures. As appropriate, reference the costs incurred by similar investments in other states, comparative projects in Washington, etc.

m. Benefits

i. Summarize the investment's expected quantitative tangible and intangible benefits and provide the detail using the CBA forms. Future estimates should reflect the benefit levels actually expected in future periods. Net Present Value (effect of the projected costs and benefits stated in today's dollars), Internal Rate of Return, and break-even period calculations will be derived from these amounts. Provide justification rationale for the benefit estimates.

ii. Describe how a baseline and measurements will be established to confirm each benefit.

iii. Also provide a narrative of the intangible benefits associated with the project.

n. Risk Management

i. Assess the risk of the investment using the Portfolio-based Severity and Risk matrix located in the Managing IT Portfolios Standards. Risk criteria rank investments on four dimensions - organizational impact, development effort, technology, and organizational capability. Similarly, severity criteria rank investments on the four dimensions of impact on citizens, visibility to the public and Legislature, impact on state operations, and the consequences of doing nothing.

ii. Present the expected areas of medium or high risk to this investment and describe how these risks will be managed.

iii. Indicate whether the project will use external quality assurance and/or internal agency quality assurance.

REFERENCES

1. Feasibility Study CBA Forms
2. Definition of Terms Used in WaTech Policies and Reports

CONTACT

- For questions about this policy, please email the WaTech Policy Mailbox.
- For technical assistance, please email the WaTech Consultants Mailbox.