

DEVELOPING A FRAMEWORK FOR SUCCESSFUL MODERNIZATION PROJECTS

A BLUEPRINT FOR GOVERNMENT AND INDUSTRY

HEALTH COMMUNITY OF INTEREST

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Synopsis

This paper was written by members of the ACT-IAC Health Community of Interest. It provides a roadmap to improve the success rate of federal projects by prescribing a systematic approach to the evaluation, selection, and prioritization of projects to minimize risks during implementation.

The framework explores the feasibility, marketability, scalability, and sustainability of proposed projects. It then provides methods to triage and prioritize the results and enable data-driven decisions regarding the best mix of projects to satisfy requirements and support the mission in the most cost-effective and timely manner.



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Introduction

This white paper is intended for government and industry stakeholders who will work together on federal government modernization efforts. Most federal projects are initiated upon an approved business case that provides a high-level overview of the business problem or opportunity with the projected benefits, costs, schedule, risks, and impacts on operations. They then proceed to implementation. The objective of this paper is to improve the rate of success by prescribing a systematic approach to the evaluation, selection, and prioritization of projects to minimize risks during implementation.

The sections below will help stakeholders arrive at feasibility, marketability, scalability, sustainability, and priority (FMSSP) decisions for projects of interest. To conduct a FMSSP Study, stakeholders must have a shared consensus of (1) the objectives of the project and (2) the outcomes to be achieved. Defined objectives and outcomes support the alignment between government and industry representatives to conduct FMSSP studies from the same vantage point.

Many times, the greatest challenge for executing successful federal government projects is identifying and mitigating risks across the five (5) FMSSP decision dimensions. A thorough evaluation of each component of FMSSP helps stakeholders to determine whether the project is worth the time and investment in additional resources. Other variables specific to government contracting efforts include federal and agency-specific regulations, laws, and policies.

This paper describes a process to investigate these dimensions by employing the following critical success factors:

- Engage the appropriate stakeholders from across the enterprise for each Study to garner feedback and provide a 360-degree view of the project;
- Employ an agreed-upon methodology and tools for gathering and analyzing data to ensure a consistent process for all projects being considered; and
- Apply a standard scoring system to objectively rate and prioritize projects.

Following this process will improve focus for the organization and the team, increase insight for better project decision-making decrease risk during project execution, and ultimately ensure successful project delivery.

"Understanding one business function domain is not enough to modernize, you must have a 360-degree view and understanding of all the domains and how they fit together." -Oki Mek, Senior Advisor to HHS CIO



Assumptions

This Case Study is based on the following assumptions:

- The focus is on federal government modernization projects;
- The project is in the Project Initiation phase of the project life cycle and has a completed and approved Business Case;
- The Studies discussed in this paper are completed sequentially, with Go/No-Go factors/decision being considered at each step;
- Appropriate stakeholders to include representatives from research and development (R&D), finance, procurement, information technology, operations, security, legal, industry, and academia – are identified to participate in an Integrated Project Team (IPT) and are engaged for each FMSSP Study as needed;
- An iterative approach will be used for any new product or service to obtain frequent stakeholder feedback to gather and validate requirements;
- Any project will follow agency specific project guidelines; and
- Go/No-Go criteria will be established and evaluated for each step in the process.

The remainder of this paper will feature an overview of the different types of Studies and the process for executing each.

Section 1: Feasibility Study

A Feasibility Study explores the viability of an idea. It is the foundation for determining the factors that will make a business opportunity or project a success. For any proposed product or service, a complete Feasibility Study comprises the following components: Economic, Technical, Legal, Operational, Schedule and Administrative Analysis. The following sections will explore each of these components and their considerations.

When doing a Feasibility Study, it is important to ask a series of questions throughout the process and establish metrics that enable a Go/No-Go decision.

Economic Feasibility

An Economic Feasibility Study or economic viability analysis is an important step in assessing the costs, benefits, risks, and Return on Investment (ROI) of a project. Economic Feasibility is determined for some projects through the Capital Planning and Investment Control (CPIC) process. The purpose of an Economic Feasibility Study is to demonstrate the net benefit of a proposed project and take into consideration all the reasonably expected benefits and costs to the agency, other agencies, and the general public. The results of this Study will help to plan operations, identify risk and rewards, and garner stakeholder support. A thorough Economic Feasibility Study considers all potential challenges, risks, and problems that were discovered in developing the business case. It must identify and describe the target market/segment for the



intended project to include how the end users will benefit from this product or service. Generally, the Study has two specific parts: a business case which will have already been completed and a cost benefit analysis. The business case provides an analysis of the business environment and the benefits of the proposed project while the cost benefit analysis summarizes the revenues and costs involved with the proposed project.

The steps to complete an Economic Feasibility Study include:

- Review and update the business case;
- Perform a cost benefit analysis;
- Describe the overall plan for the project to include requirements, rough order of magnitude costs, and benefit statement to the agency;
- Make ROI projections and/or cost savings for the base period and required out-years, typically three to five years; and
- Review the data and make a Go/No-Go decision.

Technical Feasibility

The Technical aspect to a Feasibility Study examines the details of the intended processes and technology to produce and deliver the proposed product or service. Additionally, it looks at whether the product or service aligns with enterprise objectives, and whether it will have security implications or any possible technical debt in the future.

Technical Feasibility focuses on the technical resources required to meet capacity and convert ideas into working systems. A cost-effective approach to determining technical feasibility is to focus on a high-fidelity prototype by implementing a proof of concept (POC) and/or minimal viable product (MVP). Early stakeholder involvement in the technical solution is critical to securing user buy-in. Focusing on visualization and design allows for validation, feedback, and verification. This key component informs the process and empowers stakeholder decisionmaking to either proceed forward with a successful POC or terminate an infeasible project. Tools such as wireframes, user-centered design (UI/UX), and clickable prototypes are great next steps to facilitate the ability to validate ideas, identify gaps or problems, and make adaptations in a low-risk environment.

A Technical Feasibility Study aims to determine the following:

- What functional capabilities are needed to meet the business requirements?
- Is the proposed product or service compatible with the current environment? (Including infrastructure, software and systems, and established processes.)
- Is the proposed product/service already available? If so, how will the solution improve on the concept and if not, how realistic and/or risky is it to introduce it to this market? *Tip: Consider exploring Commercial Off the Shelf (COTS) and Government Off the Shelf (GOTS) solutions and engaging agency Centers of Excellence/Shared Services groups.*



• What resources are required for completing this project and are the necessary resources available?

At a high level, conducting a Technical Feasibility Study involves the following:

- Develop a list of business and functional requirements;
- Develop use cases;
- Determine if current technology or solutions meet the requirements;
- Perform a build versus buy analysis, including high level design and resources required funding, personnel, technologies; and
- Review the data and make a Go/No-Go decision.

Legal Feasibility

A Legal Feasibility Study is done to assess whether the proposed project can conform to the necessary legal, ethical, and contractual requirements and obligations. It is important to consider other regulations, laws, and legislations, including the Federal Information Security Management Act (FISMA), Federal Information Technology Acquisition Reform Act (FITARA), Federal Acquisitions Regulations (FAR), and Health Insurance Portability and Accountability Act (HIPAA), the last for data protection and privacy laws and liabilities, especially for personally identifiable information (PII) and personal health information (PHI), information and personnel security, health and safety measures, and unions among other things. It specifies legal requirements that need to be considered through all stages of the development lifecycle.

To complete a Legal Feasibility Study:

- 1. Identify and analyze pertinent federal and state laws and regulations, agency-specific policies, and contractual terms that may affect the project.
- 2. Assess the legal readiness of the procuring authority does the promoting authority and other institutions involved have the legal authority to launch the project or proceed with the approval as needed?
- 3. Review the data and make a Go/No-Go decision.

Operational Feasibility

An Operational Feasibility Study analyzes the inside operations of how a given process will work and be implemented. It explores the urgency of the problem and the acceptability of any solution. There are Organizational Change Management (OCM) techniques that are vital to ensuring effective identification of business requirements for operational process reengineering that include transparency, communication, careful planning, cognitive diversity and stakeholder involvement. Operational feasibility studies include people and social issues pertaining to manpower/workforce challenges, labor objections, manager resistance, organizational conflicts and policies, social and cultural acceptability, and government regulations. Operational



feasibility studies address whether the project, in its proposed scope, meets the organization's needs by solving problems and/or taking advantage of identified opportunities.

Operational Feasibility studies generally address the following questions:

- Process: What is the proposed approach for implementing the product or service?
- Evaluation: Can the proposed product or service work within the organization?
- Implementation: What is the impact on stakeholder, manager, and end user processes and tasks?
- Resistance: What is the level of resistance to the proposed process or service among management and other personnel, and how will the resistance be addressed?
- In-house strategies: How will the work environment be affected? How much will it change?
- Adapt and review: How will the proposed product or service be implemented?

After answering the questions above, review the data and make a Go/No-Go decision.

Schedule Feasibility

A Schedule Feasibility Study, also referred to as time visibility, estimates how much time the project will take to complete and determines if the proposed timeline is reasonable when measured against existing projects and available resources. Schedule feasibility ensures that the project can be completed on-time.

A project schedule breaks projects into smaller, more manageable tasks. It typically includes due dates, dependencies, key milestones, and assigned resources. There are two methods commonly used together to illustrate a schedule:

- Gantt chart helps to visualize progress on a project as it is happening.
- PERT chart the Program, Evaluation, and Review Technique (PERT) illustrates the interdependency between project tasks.

For Agile projects in particular, burndown and velocity charts are also useful for forecasting and tracking progress.

Questions to ask during a Schedule Feasibility Study include:

- Can the team control the factors that affect schedule feasibility?
- Has management established a firm timetable for the project?
- What conditions must be satisfied during the development of the proposed solution?
- Will an accelerated schedule pose any risks? If so, are the risks acceptable?
- Will project management techniques be available to coordinate and control the project?

After answering the questions above, review the data and make a Go/No-Go decision.



Administrative Feasibility

Administrative Feasibility is defined as the analytical appraisal of external and internal factors and management systems affecting the success of strategy execution. The Administrative Feasibility Study or Administrative Analysis determines if an organization can effectively manage the execution of the proposed project. Administrative feasibility includes scenario planning and options analysis.

The questions that an Administrative Feasibility Study addresses include:

- What are the administrative needs of the project?
- Does the organization have the managerial skills needed or the ability to acquire them?

After answering the questions above, review the data and make a Go/No-Go decision.

Section 2: Marketability Study

A Marketability Study also be referred to as "Market Feasibility Study", determines if there is a perceived need for the proposed product or service. Typically, the Study explores geographic or demographic markets. Within a federal government environment however, the Marketability Study identifies market factors leading to project success such as competing offerings and user buy-in to include internal and sometimes external stakeholders, executives, middle managers, and the workforce. The outcome of this research is an understanding of whether the idea is viable as well as an understanding of who is the customer and do they want what you are proposing to offer them.

Marketability studies typically include the following factors: description of the industry, a current market analysis, information on the competition, and anticipated future market potential. Several tools can be used to perform a Marketability Study, including:

- PEST Analysis: Analyzes the Political, Economic, Sociocultural, and Technological (PEST) changes and other external factors that are out of a brand's control and can create opportunities or threats to a new product or service.
- SWOT Analysis: Analyzes the Strengths and Weaknesses internal to an organization, and the Opportunities and Threats from external factors.
- Porter's 5 Forces: Analyzes the five forces that make up the competitive environment including:
 - Competitive rivalry number and strength of competitors.
 - Supplier power how much power suppliers exert over the offering or price.
 - Buyer power how easy is it for buyers to switch to a rival.
 - Threat of substitution how likely it is that an agency will find a different way of doing what you do.
 - Threat of competing resources or priorities.



Market research should be an ongoing process but there are 3 specific timeframes in which gathering information is critical. Those timeframes are the 1) conception, when the idea is under consideration as a new product or service; 2) formation, when the idea is solidified and needs to be tested; and 3) introduction, when the product or service enters the market.

A Marketability Study will address the following questions:

- Does a market exist for the product or service?
- Will the agency benefit from such a product or service?
- Are the risks understood and acceptable?
- Is this product or service in line with the overall company strategy?
- What will it take to get buy-in from stakeholders and end-users?

After answering the questions above, review the data and make a Go/No-Go decision.

Section 3: Scalability Study

Scalability addresses the ability to increase capacity while maintaining acceptable costs, security, and performance levels. After determining a project is feasible through a successful proof of concept or MVP and establishing that demand exists for the product or service, an agency must determine if the product or service can be rolled out on an enterprise scale.

A Scalability Study evaluates the requirements and risks to support a broader implementation. Using a modular development approach, as recommended by the Office of Management and Budget¹, allows better risk management through the rapid delivery of incremental new functionality. Project teams should consider two aspects of scalability: vertical and horizontal. The objective is to expand the MVP or pilot program using a small-scale implementation methodology and allow for the transition and expansion of a product or project to its target environment and audience.

Vertical scalability ("scaling up") addresses the ability to add new features and capabilities of the product or service. Horizontal scalability ("scaling out") is the ability to share that new product or service across groups of users or the entire organization. Best practices dictate that both factors consider an iterative process of scaling to encourage innovation and embrace an agile "fail fast and iterate" mentality. This approach allows project teams to more easily identify and address issues, capture lessons learned, and incorporate continual process improvement, thereby enabling a successful outcome.

Questions to answer during a Scalability Study include:

¹ <u>https://obamawhitehouse.archives.gov/sites/default/files/omb/procurement/guidance/modular-approaches-for-information-technology.pdf</u>



- What are the engineering and/or infrastructure requirements to scale a project?
- What are the potential impediments to maintaining acceptable performance thresholds, including response times, throughput, and storage?
- What resources are required to support scaling, including end user devices, storage, security, load balancing, and help desk support?
- What policies and processes need to be addressed to enable scaling?
- What constraints need to be considered, including deadlines imposed by, or changes in, laws, regulations, and missions?
- Are there any complimentary or associated products or services that might need to be scaled as this is scaled? (Help Desk, software licenses, etc.)

After answering the questions above, review the data and make a Go/No-Go decision.

Section 4: Sustainability Study

A Sustainability Study evaluates the ability of an organization to continue a project well into the future.

The best approach for a Sustainability Study is to develop a detailed plan to identify, track, analyze, and report on metrics that will continually demonstrate benefits to the organization. A scorecard of metrics and Key Performance Indicators (KPIs) should cover the economic, strategic, technical, cybersecurity, and cultural impacts on the organizational ecosystem, including customers, stakeholders, suppliers, partners, regulators, and user communities. In addition, it should incorporate measures of the project's compliance with governance structures and legislative requirements such as FITARA² and Clinger-Cohen³. The results of these metrics provide leadership with the information needed to make informed decisions regarding budgets and resources.

High-level questions to consider during a Sustainability Study include:

- What are the acceptable thresholds for the established metrics?
- Are the metrics aligned to business requirements and agency goals?
- Do the projected funding needs include long-term costs for licenses, support, operations and maintenance, cyber security, Authority to Test (ATT), and/or Authority to Operate (ATO)?
- What support activities and resources are needed?
- What is the optimal allocation of resources?
- What managerial and operational resources are needed?

² <u>https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf#page=148%5D</u>

³ https://dodcio.defense.gov/Portals/0/Documents/ciodesrefvolone.pdf



Developing or using an established Sustainability Maturity Model provides an effective tool for capturing and objectively comparing the sustainability metrics across projects.

After answering the questions above, review the data and make a Go/No-Go decision.

Section 5: Priority

Faced with competing requirements and finite budgets, leaders in government and industry require information and tools that support objective data based decision-making⁴ on which projects to fund. Completing the studies described above narrows the focus to those projects that both bring the best value and have the highest chances of success. Applying a consistent, standardized process to triage and prioritize these potential projects allows Agencies to determine the best mix of projects that will satisfy requirements and support the mission in the most cost-effective and timely manner.

Triage

Triage involves gathering and assessing the resulting study information to ensure it is complete and accurate, and then analyzing the data in an objective manner. The outcome of the Triage phase is the basis for the Prioritize phase.

The stakeholders required to perform a triage is dependent on the size and scope of the project, but can include the following:

- Project sponsor
- Project Review Board
- Project Manager
- Key Decision Maker(s)

1. Gather Data

The data required for triage is a summary of the various studies performed along with other key data points to allow a full assessment of the impacts and potential outcomes of the project.

These key data points include:

- Completed Analysis of Alternatives;
- Who and what is impacted (enterprise, region, local site);
- Reasons for the project (mandated, cost reduction, cost avoidance, customer satisfaction);
- Benefits to the organization and/or specific stakeholders;
- Requested resources (funding/type, FTEs, offsets) for current and out years;

⁴ <u>https://www.whitehouse.gov/wp-content/uploads/2019/07/M-19-23.pdf</u>

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- Impact if not approved;
- Measures and methods proposed to validate success; and
- Needs/Lessons Learned.

Using standard templates and definitions to capture information helps decision-makers to do a fair comparison of projects.

2. Review and analyze the data

Developing a one page/slide overview of the data helps the project owner to focus on key decision factors and helps decision-makers to quickly ascertain the completeness of the data and the merits of the project. In addition, using a method to score and weight the critical success factors will normalize the data and reduce stakeholder bias.

Table 1. Project Triage Summary Example

1. Project Overview		3. Marketability	Go / No-Go
2. Feasibility	Go / No-Go	4. Scalability	Go / No-Go
Economic Feasibility:	Go / No-Go		
Technical Feasibility:	Go / No-Go		
		5. Sustainability	Go / No-Go
Legal Feasibility:	Go / No-Go		
	G0 / N0-G0		
Operational Feasibility:	Go / No-Go		
		6. Prioritize	
Schedule Feasibility:	Go / No-Go		



Administrative Feasibility:	Go / No-Go

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Methods to score and weight project data are listed in Table 2:

Table 2. Project Scoring and Weighting Example

Туре	Characteristics	Examples	Pros	Cons
Ad Hoc	Simple decision making	Voting, Checklist	Easy to use, works with groups	Can be time consuming, vulnerable to predictable errors
Comparative	Projects are systematically compared to one another	Paired Comparison, Q- sort	Systematic, works well for group decision making	Can be time consuming when there are many projects in consideration
Bidding	Stakeholders express preference via bids	Virtual markets	Captures strength of preferences, good for large groups	Can be time consuming when there are many projects being considered
Financial	Projects evaluated on established financial criteria	Net present value, Internal rate of return	Accounts for organizational impacts such as cash flow, widely used	Does not consider non- financial benefits
Formal Scoring	Deliberate process of selecting criteria and scales yielding and attractiveness metric	SMARTS, MACBETH	Easy to apply, more defensible than simple scoring	Limited defensibility
Cost- Benefit	Classic method for evaluating alternatives	Cost effectiveness analysis	Long history of use by organizations, flexible and credible	Not always possible to encompass all expressed preferences
Utility Based	Projects are chosen based on decision maker preference for alternatives	Fuzzy Logic	Often used by organization for highest stakes decisions	More demanding than many other methods
Modeling	Tools for estimating/forecasting project consequences	Decision Analysis, Multi-objective decision analysis, Artificial Intelligence	Results in decision aiding information which can account for financial, risk and other considerations	Stakeholders often not versed in model and requires pre-work
Constrained Optimization	Determines optimal set of project choices based on constraints and interdependencies	Linear programming, multi-objective programming	Accounts for interdependencies, can be used in conjunction with other methods computing benefit	Mathematical and complex. Requires a large set of inputs which may not be readily available

Prioritize

Prioritizing projects involves evaluating the results of the triage process. If a scoring/weighting method was used, then ranking projects is a matter of ordering projects according to their scores. Of course, executive decisions and other extenuating factors can impact this ranking.



Conclusion

FMSSP studies provide a framework to evaluate the short-term and long-term success factors of a project that:

- 1. Predict the potential impact of the project on the agency
- 2. Provide quantitative and qualitative data that supports the agency's decision-making process
- 3. Inform the implementation path toward modernization

While completing Feasibility, Marketability, Scalability, Sustainability and Priority (FMSSP) Studies may still leave stakeholders with some questions, doing this research upfront will help agencies and organizations understand what is required to be successful in the delivery of the project. We recommend that agencies and organizations use the defined objectives, outcomes, and data elements on hand through project execution to measure progress and assess next steps. Objectives and Key Results (OKRs) and KPIs are two metrics project teams may consider as they look to track the implementation and path forward. Ultimately, each of these studies can be tailored to collect different types of data and can provide valuable insights relevant to an agency's mission.



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References

- Assessing the Feasibility of a New Product, NPD Solutions, <u>www.npd-</u> <u>solutions.com/feasibility.html#:~:text=The%20following%20diagram%20represents%20the</u> <u>%20elements%20of%20this%20feasibility%20assessment</u>
- How to Write a Market Feasibility Study, The Balance Small Business, February 9, 2020, <u>www.thebalancesmb.com/how-to-write-a-market-feasibility-study-in-4-easy-lessons-</u> <u>3515137</u>
- How to Conduct a Feasibility Study, Project Manager, December 10, 2019, www.projectmanager.com/training/how-to-conduct-a-feasibility-study
- How a Feasibility Study Can Benefit Your Projects, The Blueprint, July 17, 2020, www.fool.com/the-blueprint/feasibility-study/



- Project Management Institute PMBOK Methodology
- Joe Taylor, Five-part Series on Project Feasibility Studies
- <u>www.Bizfluent.com</u>
- <u>www.projectmanager.com</u>
- <u>www.indeed.com</u>
- Selecting Projects to Manage the Project Pipeline, www.prioritysystem.com/reasons2dc.html
- The Use of Scoring Method for Prioritizing the Project Portfolio, Journal of Management Research ISSN 1941-899X 2014, Vol. 6, No. 1, <u>citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.866.7050&rep=rep1&type=pdf</u>
- 11 Project Selection Methods for Project Managers, Avantika Monnappa, www.simplilearn.com/project-selection-methods-article
- <u>https://obamawhitehouse.archives.gov/sites/default/files/omb/procurement/guidance/mo</u> <u>dular-approaches-for-information-technology.pdf</u>
- <u>https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf#page=148%5D</u>
- https://dodcio.defense.gov/Portals/0/Documents/ciodesrefvolone.pdf
- https://www.whitehouse.gov/wp-content/uploads/2019/07/M-19-23.pdf